

03-Groq.com API for full dev set

In this notebook, we will make API calls to Groq.com to summarize the article (up to 20k characters) in the full dev set (about 2,000 examples).

We would use Mixtral 8x7B as it has very good performance scores, and it's open source.

```
In [1]: # !pip install groq
```

```
In [2]: # Load api key
import json
import urllib.parse

with open('./data/credentials.json') as f:
    login = json.load(f)

api_key = login["GROQ_API_KEY"]
print(len(api_key))
```

56

```
In [3]: from groq import Groq

client = Groq(
    api_key=api_key,
)
```

```
In [4]: # test pause
import time
print("Hello")
time.sleep(2)
print("World")
```

Hello
World

```
In [5]: SLEEP_TIME = 10 # pause between requests
```

```
In [6]: def send_sumarize_request(content, model=client, min_words=250, max_words=500, quiet=False):
    """
        summarize the content
        input: context (text), model (groq_api client), max_words (int)
        output: summarized text
    """
    if not quiet:
        print("Sending request for text =", content[:100])

    result = ""
    prompt = f'Simplify and summarize in minimum {min_words} to maximum {max_words} words'
    try:
        completion = client.chat.completions.create(
            model="mixtral-8x7b-32768",
            prompt=prompt,
            max_tokens=max_words,
            min_tokens=min_words,
            temperature=0.1,
            top_p=0.95,
            stream=False,
        )
        result = completion.choices[0].text
    except Exception as e:
        print(f"Error: {e}")
    return result
```

```

        messages=[
            {
                "role": "user",
                "content": prompt
            },
        ],
        temperature=1,
        max_tokens=2048,
        top_p=1,
        stream=True,
        stop=None,
    )

    for chunk in completion:
        result += chunk.choices[0].delta.content or ""
    except Exception as err:
        print("Skipping, error : ", err)
        result = ""

    # pause to avoid hitting bandwidth limit (~ 14K token / minute)
    print(f"Completed. Pausing for {SLEEP_TIME} secs...", end="")
    time.sleep(SLEEP_TIME)
    print("OK")

    return result

```

In [7]: `import pandas as pd`

In [8]: `# Load in some data`

```

dev_df_filename = "../data/biolaysumm2024_data/eLife_val.jsonl"
df = pd.read_json(dev_df_filename,
                  orient="records",
                  lines=True
                  )

df.head()

```

Out[8]:

	lay_summary	article	headings	keywords	id
0	The DNA in genes encodes the basic information...	Cell-fate reprogramming is at the heart of deve...	[Abstract, Introduction, Results, Discussion, ...	[developmental biology]	elife-15477-v3
1	Klebsiella pneumoniae is a type of bacteria th...	Klebsiella pneumoniae is a respiratory , blood...	[Abstract, Introduction, Results, Discussion, ...	[microbiology and infectious disease, immunolo...	elife-56656-v2
2	Malaria is one of the world's most deadly infe...	Plasmodium vivax relapse infections occur foll...	[Abstract, Introduction, Results, Discussion, ...	[epidemiology and global health]	elife-04692-v2
3	The Amazon rainforest in South America is the ...	When 2 Mha of Amazonian forests are disturbed ...	[Abstract, Introduction, Results, Discussion, ...	[ecology]	elife-21394-v2
4	Neurons that arise in the adult nervous system...	Neurosphere formation is commonly used as a su...	[Abstract, Introduction, Results, Discussion, ...	[stem cells and regenerative medicine]	elife-02669-v2

In [9]:

```
# apply to all rows in eval miniset
text_cap = 20_000 # temporarily limit to 20k characters, set to -1 for full text

print("Summarization process started...")
df["groq_mistral_summary"] = df["article"].apply(lambda text: send_sumarize_request
print("Completed")
```

Summarization process started...

Sending request for text = Cell-fate reprogramming is at the heart of development , yet very little is known about the molecular

Completed. Pausing for 10 secs...OK

Sending request for text = Klebsiella pneumoniae is a respiratory , blood , liver , and bladder pathogen of significant clinical

Completed. Pausing for 10 secs...OK

Sending request for text = Plasmodium vivax relapse infections occur following activation of latent liver-stage parasites (hy

Completed. Pausing for 10 secs...OK

Sending request for text = When 2 Mha of Amazonian forests are disturbed by selective logging each year , more than 90 Tg of ca

Completed. Pausing for 10 secs...OK

Sending request for text = Neurosphere formation is commonly used as a surrogate for neural stem cell (NSC) function but the

Completed. Pausing for 10 secs...OK

Sending request for text = Piezo1 is a mechanically activated ion channel involved in sensing forces in various cell types and

Completed. Pausing for 10 secs...OK

Sending request for text = Many decisions are thought to arise via the accumulation of noisy evidence to a threshold or bound .

Completed. Pausing for 10 secs...OK

Sending request for text = The insulin-like signaling pathway maintains a relatively short wild-type lifespan in Caenorhabditis

Completed. Pausing for 10 secs...OK

Sending request for text = Motor sequences are formed through the serial execution of different movements , but how nervous sys

Completed. Pausing for 10 secs...OK

Sending request for text = Accurate chromosome segregation depends on coordination between cohesion resolution and kinetochore-

Completed. Pausing for 10 secs...OK

Sending request for text = The persistence of experience-dependent changes in brain connectivity requires RNA localization and

Completed. Pausing for 10 secs...OK

Sending request for text = Morphogenesis involves interactions of asymmetric cell populations to form complex multicellular pat

Completed. Pausing for 10 secs...OK

Sending request for text = Encoding precision in visual working memory decreases with the number of encoded items . Here , we p

Completed. Pausing for 10 secs...OK

Sending request for text = Plants use autophagy to safeguard against infectious diseases . However , how plant pathogens interf

Completed. Pausing for 10 secs...OK

Sending request for text = Upon cardiac pathological conditions such as ischemia , microenvironmental changes instruct a series

Completed. Pausing for 10 secs...OK

Sending request for text = Histone acetylation and deposition of H2A . Z variant are integral aspects of active transcription .

Completed. Pausing for 10 secs...OK

Sending request for text = Neuromuscular junction formation requires proper interaction between motoneurons and muscle cells .

Completed. Pausing for 10 secs...OK

Sending request for text = Force transduction at cell-cell adhesions regulates tissue development , maintenance and adaptation

Completed. Pausing for 10 secs...OK

Sending request for text = The polyglutamine expansion in huntingtin protein causes

Huntington's disease . Here , we investigat
Completed. Pausing for 10 secs...OK
Sending request for text = NCOA4 is a selective cargo receptor for the autophagic tu
rnover of ferritin , a process critical for
Completed. Pausing for 10 secs...OK
Sending request for text = Higher-level cognition depends on the lateral prefrontal
cortex (LPFC) , but its functional organi
Completed. Pausing for 10 secs...OK
Sending request for text = Cortical expansion and folding are often linked to the ev
olution of higher intelligence , but molecu
Completed. Pausing for 10 secs...OK
Sending request for text = Activation of systemic acquired resistance in plants is a
ssociated with transcriptome reprogramming
Completed. Pausing for 10 secs...OK
Sending request for text = In Arabidopsis thaliana , abundant 24 nucleotide small in
terfering RNAs (24 nt siRNA) guide the cy
Completed. Pausing for 10 secs...OK
Sending request for text = Mature neural networks synchronize and integrate spatiote
mporal activity patterns to support cogniti
Completed. Pausing for 10 secs...OK
Sending request for text = The coexistence of multiple independently circulating str
ains in pathogen populations that undergo s
Completed. Pausing for 10 secs...OK
Sending request for text = The deamidase OspI from enteric bacteria Shigella flexner
i deamidates a glutamine residue in the hos
Completed. Pausing for 10 secs...OK
Sending request for text = Bidirectional manipulations - activation and inactivation
- are widely used to identify the function
Completed. Pausing for 10 secs...OK
Sending request for text = Cognitive functions such as working memory (WM) are eme
rgent properties of large-scale network int
Completed. Pausing for 10 secs...OK
Sending request for text = Embryonic polarity of invertebrates , amphibians and fish
is specified largely by maternal determina
Completed. Pausing for 10 secs...OK
Sending request for text = Temporal experience of odor gradients is important in spa
tial orientation of animals . The fruit fly
Completed. Pausing for 10 secs...OK
Sending request for text = In flowering plants , seed development is initiated by th
e fusion of the maternal egg and central ce
Completed. Pausing for 10 secs...OK
Sending request for text = The interaction between a bacteriophage and its host is m
ediated by the phage's receptor binding pro
Completed. Pausing for 10 secs...OK
Sending request for text = Individuals with congenital amusia have a lifelong histor
y of unreliable pitch processing . Accordin
Completed. Pausing for 10 secs...OK
Sending request for text = Devil Facial Tumour 2 (DFT2) is a recently discovered c
ontagious cancer circulating in the Tasmani
Completed. Pausing for 10 secs...OK
Sending request for text = The granular retrosplenial cortex (RSG) is critical for
both spatial and non-spatial behaviors , b
Completed. Pausing for 10 secs...OK
Sending request for text = Traumatic brain injury (TBI) is a prominent risk factor
for dementias including tauopathies like c
Completed. Pausing for 10 secs...OK

Sending request for text = Brain connectivity is often considered in terms of the communication between functionally distinct b
Completed. Pausing for 10 secs...OK

Sending request for text = Change in the identity of the components of the transcription pre-initiation complex is proposed to
Completed. Pausing for 10 secs...OK

Sending request for text = Brain stimulation modulates the excitability of neural circuits and drives neuroplasticity . While t
Completed. Pausing for 10 secs...OK

Sending request for text = Lesions of primary visual cortex (V1) lead to loss of conscious visual perception with significant
Completed. Pausing for 10 secs...OK

Sending request for text = The ability to recognize foreign double-stranded (ds) DNA of pathogenic origin in the intracellular
Completed. Pausing for 10 secs...OK

Sending request for text = Spatially targeted optical microproteomics (STOMP) is a novel proteomics technique for interrogati
Completed. Pausing for 10 secs...OK

Sending request for text = Disruption of the Frizzled3 (Fz3) gene leads to defects in axonal growth in the VIIth and XIIth cr
Completed. Pausing for 10 secs...OK

Sending request for text = Transposable elements (TEs) are thought to have helped establish gene regulatory networks . Both t
Completed. Pausing for 10 secs...OK

Sending request for text = C4 photosynthesis has independently evolved from the ancestral C3 pathway in at least 60 plant line
Completed. Pausing for 10 secs...OK

Sending request for text = Hydrolysis of nucleoside triphosphates releases similar amounts of energy . However , ATP hydrolysis
Completed. Pausing for 10 secs...OK

Sending request for text = Leptin regulates energy balance and also exhibits neurotrophic effects during critical developmental
Completed. Pausing for 10 secs...OK

Sending request for text = The Arabidopsis immune receptor FLS2 perceives bacterial flagellin epitope flg22 to activate defense
Completed. Pausing for 10 secs...OK

Sending request for text = The Arabidopsis circadian clock orchestrates gene regulation across the day/night cycle . Although a
Completed. Pausing for 10 secs...OK

Sending request for text = In social settings , speech waveforms from nearby speakers mix together in our ear canals . Normally
Completed. Pausing for 10 secs...OK

Sending request for text = Tissue light scatter limits the visualization of the microvascular network deep inside the living ma
Completed. Pausing for 10 secs...OK

Sending request for text = Symbiosis Receptor-like Kinase (SYMRK) is indispensable for the development of phosphate-acquiring
Completed. Pausing for 10 secs...OK

Sending request for text = Quantitative behavioral measurements are important for answering questions across scientific discipl
Completed. Pausing for 10 secs...OK

Sending request for text = When innate immune cells such as macrophages are challenged with environmental stresses or infection
Completed. Pausing for 10 secs...OK

Sending request for text = Breast Cancer Associated proteins 1 and 2 (BRCA1 , -2) and Partner and Localizer of BRCA2 (PALB2

Completed. Pausing for 10 secs...OK
Sending request for text = Filaments of all actin-like proteins known to date are assembled from pairs of protofilaments that a
Completed. Pausing for 10 secs...OK
Sending request for text = Invariant floral forms are important for reproductive success and robust to natural perturbations .
Completed. Pausing for 10 secs...OK
Sending request for text = Biosynthesis of insulin - critical to metabolic homeostasis - begins with folding of the proinsulin
Completed. Pausing for 10 secs...OK
Sending request for text = SUV39H is the major histone H3 lysine 9 (H3K9) -specific methyltransferase that targets pericentri
Completed. Pausing for 10 secs...OK
Sending request for text = Grid cells in the entorhinal cortex allow for the precise decoding of position in space . Along with
Completed. Pausing for 10 secs...OK
Sending request for text = Progress in science requires standardized assays whose results can be readily shared , compared , and
Completed. Pausing for 10 secs...OK
Sending request for text = Proper function and repair of the digestive system are vital to most animals . Deciphering the mecha
Completed. Pausing for 10 secs...OK
Sending request for text = Adaptations to an organism's environment often involve sensory system modifications . In this study
Completed. Pausing for 10 secs...OK
Sending request for text = Bacteriophage BPP-1 infects and kills Bordetella species that cause whooping cough . Its diversity-g
Completed. Pausing for 10 secs...OK
Sending request for text = Dengue virus (DENV) cycles between mosquito and mammalian hosts . To examine how DENV populations
Completed. Pausing for 10 secs...OK
Sending request for text = Membrane nanodomains have been implicated in Ras signaling , but what these domains are and how they
Completed. Pausing for 10 secs...OK
Sending request for text = A morphogen gradient of Bone Morphogenetic Protein (BMP) signaling patterns the dorsoventral embryo
Completed. Pausing for 10 secs...OK
Sending request for text = Lysosomes are major sites for intracellular , acidic hydrolase-mediated proteolysis and cellular degradation
Completed. Pausing for 10 secs...OK
Sending request for text = Microtubule-based transport by the kinesin motors , powered by ATP hydrolysis , is essential for a w
Completed. Pausing for 10 secs...OK
Sending request for text = Maintaining the essential functions of mitochondria requires mechanisms to recognize and remove misf
Completed. Pausing for 10 secs...OK
Sending request for text = Extracellular signal-regulated kinase (ERK) is a key effector of many growth signalling pathways .
Completed. Pausing for 10 secs...OK
Sending request for text = Circadian rhythms are biological oscillations that schedule daily changes in physiology . Outside the
Completed. Pausing for 10 secs...OK
Sending request for text = Although cardio-vascular incidents and sudden cardiac death (SCD) are among the leading causes of
Completed. Pausing for 10 secs...OK
Sending request for text = Surface-attached bacterial communities called biofilms di

splay a diversity of morphologies . Although
Completed. Pausing for 10 secs...OK
Sending request for text = The mechanisms generating epileptic neuronal networks following insults such as severe seizures are
Completed. Pausing for 10 secs...OK
Sending request for text = Splitting sensory information into parallel pathways is a common strategy in sensory systems . Yet ,
Completed. Pausing for 10 secs...OK
Sending request for text = The M2 muscarinic receptor is the prototypic model of all oostery in GPCRs , yet the molecular and the
Completed. Pausing for 10 secs...OK
Sending request for text = Histone modifications establish the chromatin states that coordinate the DNA damage response . In th
Completed. Pausing for 10 secs...OK
Sending request for text = Missense variants are a major source of human genetic variation . Here we analyze a new mouse missen
Completed. Pausing for 10 secs...OK
Sending request for text = Mutations in members of the SWI/SNF chromatin remodeling family are common events in cancer , but th
Completed. Pausing for 10 secs...OK
Sending request for text = Many species use social networks to buffer the effects of stress . The mere absence of a social netw
Completed. Pausing for 10 secs...OK
Sending request for text = Hemoglobin (Hb) represents a model protein to study molecular adaptation in vertebrates . Although
Completed. Pausing for 10 secs...OK
Sending request for text = Malaria infection starts with injection of Plasmodium sporozoites by an Anopheles mosquito into the
Completed. Pausing for 10 secs...OK
Sending request for text = Cells are organized by functional modules , which typically contain components whose removal severely
Completed. Pausing for 10 secs...OK
Sending request for text = Neurobiologists have studied decisions by offering successive , independent choices between goods or
Completed. Pausing for 10 secs...OK
Sending request for text = Paraspeckles are nuclear bodies form around the long non-coding RNA , Neat1 , and RNA-binding proteins
Completed. Pausing for 10 secs...OK
Sending request for text = Presynaptic calcium channel function is critical for converting electrical information into chemical
Completed. Pausing for 10 secs...OK
Sending request for text = The shape and function of plant cells are often highly interdependent . The puzzle-shaped cells that
Completed. Pausing for 10 secs...OK
Sending request for text = Most human genes contain multiple introns , necessitating mechanisms to effectively define exons and
Completed. Pausing for 10 secs...OK
Sending request for text = Many membrane proteins fold inefficiently and require the help of enzymes and chaperones . Here we r
Completed. Pausing for 10 secs...OK
Sending request for text = Sex-based modulation of cognitive processes could set the stage for individual differences in vulnerability
Completed. Pausing for 10 secs...OK
Sending request for text = In endoplasmic reticulum-associated protein degradation (ERAD) , membrane proteins are ubiquitinated
Completed. Pausing for 10 secs...OK

Sending request for text = Extracellular Hedgehog (Hh) proteins induce transcriptional changes in target cells by inhibiting
Completed. Pausing for 10 secs...OK

Sending request for text = Nociceptive information is relayed through the spinal cord dorsal horn , a critical area in sensory
Completed. Pausing for 10 secs...OK

Sending request for text = Mutations in the gene encoding Ras-associated binding protein 23 (RAB23) cause Carpenter Syndrome
Completed. Pausing for 10 secs...OK

Sending request for text = Inheritance of gene expression states is fundamental for cells to 'remember' past events , such as e
Completed. Pausing for 10 secs...OK

Sending request for text = DnaK/Hsp70 chaperones form oligomers of poorly understood structure and functional significance . Si
Completed. Pausing for 10 secs...OK

Sending request for text = Flexible filamentous viruses include economically important plant pathogens . Their viral particles
Completed. Pausing for 10 secs...OK

Sending request for text = Antibody binding to cell surface proteins plays a crucial role in immunity , and the location of an
Completed. Pausing for 10 secs...OK

Sending request for text = Systemic vascular pressure in vertebrates is regulated by a range of factors: one key element of con
Completed. Pausing for 10 secs...OK

Sending request for text = We describe refinements in optogenetic methods for circuit mapping that enable measurements of function
Completed. Pausing for 10 secs...OK

Sending request for text = The mode of interaction of transcription factors (TFs) on eukaryotic genomes remains a matter of d
Completed. Pausing for 10 secs...OK

Sending request for text = Detecting pathogens and mounting immune responses upon infection is crucial for animal health . Howe
Completed. Pausing for 10 secs...OK

Sending request for text = The generation of naïve T lymphocytes is critical for immune function yet the mechanisms governing t
Completed. Pausing for 10 secs...OK

Sending request for text = A critical assumption of gene expression analysis is that mRNA abundances broadly correlate with pro
Completed. Pausing for 10 secs...OK

Sending request for text = Despite being an early event in ALS , it remains unclear whether the denervation of neuromuscular junctions
Completed. Pausing for 10 secs...OK

Sending request for text = Adjuvant tamoxifen therapy improves survival in breast cancer patients . Unfortunately , long-term toxicity
Completed. Pausing for 10 secs...OK

Sending request for text = ISG15 is an interferon-stimulated , linear di-ubiquitin-like protein , with anti-viral activity . The
Completed. Pausing for 10 secs...OK

Sending request for text = Single-molecule Förster Resonance energy transfer (smFRET) is an adaptable method for studying the
Completed. Pausing for 10 secs...OK

Sending request for text = Polycomb repressive complex-1 (PRC1) is essential for the epigenetic regulation of gene expression
Completed. Pausing for 10 secs...OK

Sending request for text = Regulation of translating ribosomes is a major component of gene expression control network . In Escherichia coli

Completed. Pausing for 10 secs...OK
Sending request for text = We provide the first measures of foveal cone density as a function of axial length in living eyes an
Completed. Pausing for 10 secs...OK
Sending request for text = Streptococcus pneumoniae is a leading cause of invasive disease in infants , especially in low-income
Completed. Pausing for 10 secs...OK
Sending request for text = Cardiac repolarization is determined in part by the slow delayed rectifier current (I_{Ks}) , through
Completed. Pausing for 10 secs...OK
Sending request for text = Cellular responses to injury are crucial for complete tissue regeneration , but their underlying processes
Completed. Pausing for 10 secs...OK
Sending request for text = Much of the molecular motion in the cytoplasm is diffusive , which possibly limits the tempo of processes
Completed. Pausing for 10 secs...OK
Sending request for text = Regeneration is widespread , but mechanisms that activate regeneration remain mysterious . Planarian
Completed. Pausing for 10 secs...OK
Sending request for text = DNA replication errors that persist as mismatch mutations make up the molecular fingerprint of mismatch
Completed. Pausing for 10 secs...OK
Sending request for text = Light-inducible dimerization protein modules enable precise temporal and spatial control of biological
Completed. Pausing for 10 secs...OK
Sending request for text = Ribosome stalling during translation has recently been shown to cause neurodegeneration , yet the signal
Completed. Pausing for 10 secs...OK
Sending request for text = Being taller is associated with enhanced longevity , and higher education and earnings . We reanalyzed
Completed. Pausing for 10 secs...OK
Sending request for text = The rates of opioid overdose in the United States quadrupled between 1999 and 2017 , reaching a staggering
Completed. Pausing for 10 secs...OK
Sending request for text = Human hepatitis B virus (HBV) infection and HBV-related diseases remain a major public health problem
Completed. Pausing for 10 secs...OK
Sending request for text = The global health burden due to sepsis and the associated cytokine storm is substantial . While early
Completed. Pausing for 10 secs...OK
Sending request for text = Long Interspersed Element-1 (LINE-1 or L1) retrotransposition poses a mutagenic threat to human genome
Completed. Pausing for 10 secs...OK
Sending request for text = Sensory experience plays an important role in shaping neural circuitry by affecting the synaptic connection
Completed. Pausing for 10 secs...OK
Sending request for text = This is an analysis of how magnetic fields affect biological molecules and cells . It was prompted by
Completed. Pausing for 10 secs...OK
Sending request for text = Stem cells can self-renew , differentiate , or enter quiescence . Understanding how stem cells switch
Completed. Pausing for 10 secs...OK
Sending request for text = Uncoating of the metastable HIV-1 capsid is a tightly regulated disassembly process required for replication
Completed. Pausing for 10 secs...OK
Sending request for text = Breast cancer is the most commonly diagnosed malignancy in

n women . Analysis of breast cancer genomic
Completed. Pausing for 10 secs...OK
Sending request for text = The pathways controlling cilium biogenesis in different cell types have not been fully elucidated .
Completed. Pausing for 10 secs...OK
Sending request for text = Class III myosins (Myo3) and actin-bundling protein Espin play critical roles in regulating the de
Completed. Pausing for 10 secs...OK
Sending request for text = Voltage-gated calcium channels control key functions of excitable cells , like synaptic transmission
Completed. Pausing for 10 secs...OK
Sending request for text = The ability of the adult brain to undergo plastic changes is of particular interest in medicine , es
Completed. Pausing for 10 secs...OK
Sending request for text = Signal transduction at vertebrate excitatory synapses involves the rapid activation of AMPA (α -amin
Completed. Pausing for 10 secs...OK
Sending request for text = Single cell isolation from helminth-infected murine intestines has been notoriously difficult , due
Completed. Pausing for 10 secs...OK
Sending request for text = Proteasomal protein degradation is a key determinant of protein half-life and hence of cellular proc
Completed. Pausing for 10 secs...OK
Sending request for text = The recycling of neurotransmitters is essential for sustained synaptic transmission . In Drosophila
Completed. Pausing for 10 secs...OK
Sending request for text = The precise roles that oxidants play in lifespan and aging are still unknown . Here , we report the
Completed. Pausing for 10 secs...OK
Sending request for text = The biological macromolecular world is homochiral and effective enforcement and perpetuation of this
Completed. Pausing for 10 secs...OK
Sending request for text = In CFTR , the chloride channel mutated in cystic fibrosis (CF) patients , ATP-binding-induced dime
Completed. Pausing for 10 secs...OK
Sending request for text = We present a mechanism for a generic , powerful force of assembly and mobility for transmembrane pro
Completed. Pausing for 10 secs...OK
Sending request for text = Fluorescent calcium indicators are often used to investigate neural dynamics , but the relationship
Completed. Pausing for 10 secs...OK
Sending request for text = We report a functional switching valve within the female genitalia of the Brazilian cave insect Neot
Completed. Pausing for 10 secs...OK
Sending request for text = Synaptic-soluble N-ethylmaleimide-sensitive factor attachment receptor (SNARE) proteins couple the
Completed. Pausing for 10 secs...OK
Sending request for text = How can the integrin adhesome get self-assembled locally , rapidly , and correctly as diverse cell-m
Completed. Pausing for 10 secs...OK
Sending request for text = Deep non-rapid eye movement sleep (NREM) and general anesthesia with propofol are prominent states
Completed. Pausing for 10 secs...OK
Sending request for text = Dynamic tubular extensions from chloroplasts called stromules have recently been shown to connect wi
Completed. Pausing for 10 secs...OK

Sending request for text = Do the amino acid sequence identities of residues that make contact across protein interfaces covary
Completed. Pausing for 10 secs...OK

Sending request for text = Interpreting visual scenes typically requires us to accumulate information from multiple locations i
Completed. Pausing for 10 secs...OK

Sending request for text = Nucleocytoplasmic transport is tightly regulated by the nuclear pore complex (NPC) . Among the tho
Completed. Pausing for 10 secs...OK

Sending request for text = The co-stimulatory molecule CD28 is essential for activation of helper T cells . Despite this critic
Completed. Pausing for 10 secs...OK

Sending request for text = Helical cell shape is necessary for efficient stomach colonization by Helicobacter pylori , but the
Completed. Pausing for 10 secs...OK

Sending request for text = Cdc48/p97 , a ubiquitin-selective chaperone , orchestrates the function of E3 ligases and deubiquity
Completed. Pausing for 10 secs...OK

Sending request for text = Is vision necessary for the development of the categorical organization of the Ventral Occipito-Temp
Completed. Pausing for 10 secs...OK

Sending request for text = Many microbes induce striking behavioral changes in their animal hosts , but how they achieve this i
Completed. Pausing for 10 secs...OK

Sending request for text = RNA degradation pathways enable RNA processing , the regulation of RNA levels , and the surveillance
Completed. Pausing for 10 secs...OK

Sending request for text = Temporal dynamics of gene expression underpin responses to internal and environmental stimuli . In e
Completed. Pausing for 10 secs...OK

Sending request for text = The epigenetic mechanisms that enable specialized astrocytes to retain neurogenic competence through
Completed. Pausing for 10 secs...OK

Sending request for text = Viruses modulate microbial communities and alter ecosystem functions . However , due to cultivation
Completed. Pausing for 10 secs...OK

Sending request for text = Cilia/flagella are assembled and maintained by the process of intraflagellar transport (IFT) , a h
Completed. Pausing for 10 secs...OK

Sending request for text = Lymphatic invasion and lymph node metastasis correlate with poor clinical outcome in melanoma . Howe
Completed. Pausing for 10 secs...OK

Sending request for text = MicroRNAs (miRNAs) are conserved noncoding RNAs that function as posttranscriptional regulators of
Completed. Pausing for 10 secs...OK

Sending request for text = Social visual engagement difficulties are hallmark early signs of autism (ASD) and are easily quan
Completed. Pausing for 10 secs...OK

Sending request for text = Virtually all species of coelomate animals contain blood cells that display a division of labor nece
Completed. Pausing for 10 secs...OK

Sending request for text = Aneuploidy is linked to myriad diseases but also facilitates organismal evolution . It remains uncle
Completed. Pausing for 10 secs...OK

Sending request for text = Animals detect light using opsin photopigments . Xenopsin , a recently classified subtype of opsin ,

Completed. Pausing for 10 secs...OK
Sending request for text = Spatial and temporal cues are required to specify neuronal diversity , but how these cues are integrated

Completed. Pausing for 10 secs...OK
Sending request for text = P2X receptors function by opening a transmembrane pore in response to extracellular ATP . Recent cry

Completed. Pausing for 10 secs...OK
Sending request for text = Cytokinesis , the physical division of one cell into two , is powered by constriction of an actomyos

Completed. Pausing for 10 secs...OK
Sending request for text = Bacterial flagella mediate host-microbe interactions through tissue tropism during colonization , as

Completed. Pausing for 10 secs...OK
Sending request for text = Genome instability is associated with mitotic errors and cancer . This phenomenon can lead to delete

Completed. Pausing for 10 secs...OK
Sending request for text = Latent Epstein-Barr virus (EBV) infection is causally linked to several human cancers . EBV expres

Completed. Pausing for 10 secs...OK
Sending request for text = Plants produce diverse metabolites to cope with the challenges presented by complex and ever-changing

Completed. Pausing for 10 secs...OK
Sending request for text = Apoptosis and its molecular mediators , the caspases , have long been regarded as tumor suppressors

Completed. Pausing for 10 secs...OK
Sending request for text = Communication through body gestures permeates our daily life . Efficient perception of the message t

Completed. Pausing for 10 secs...OK
Sending request for text = The interaction between the SARS-CoV-2 virus Spike protein receptor binding domain (RBD) and the A

Completed. Pausing for 10 secs...OK
Sending request for text = Gene-gene interactions shape complex phenotypes and modify the effects of mutations during developme

Completed. Pausing for 10 secs...OK
Sending request for text = Heterostyly is a wide-spread floral adaptation to promote outbreeding , yet its genetic basis and ev

Completed. Pausing for 10 secs...OK
Sending request for text = Kisspeptin (Kiss1) and neurokinin B (NKB) neurocircuits are essential for pubertal development a

Completed. Pausing for 10 secs...OK
Sending request for text = Bone morphogenic protein (BMP) signalling contributes towards maintenance of pluripotency and favo

Completed. Pausing for 10 secs...OK
Sending request for text = The two centrioles of the centrosome in quiescent cells are inherently asymmetric structures that di

Completed. Pausing for 10 secs...OK
Sending request for text = Neuron-glia interactions play a critical role in the maturation of neural circuits; however , little

Completed. Pausing for 10 secs...OK
Sending request for text = Establishing the time since death is critical in every death investigation , yet existing techniques

Completed. Pausing for 10 secs...OK
Sending request for text = Despite tremendous body form diversity in nature , bilaterian animals share common sets of developme

Completed. Pausing for 10 secs...OK
Sending request for text = Previous studies tracking AMPA receptor (AMPAR) diffusi

on at synapses observed a large mobile extr
Completed. Pausing for 10 secs...OK
Sending request for text = The mechanism for the earliest response of central neuron
s to hypoxia—an increase in voltage-gated s
Completed. Pausing for 10 secs...OK
Sending request for text = Thermal biology predicts that vector-borne disease transm
ission peaks at intermediate temperatures a
Completed. Pausing for 10 secs...OK
Sending request for text = Motor cortical beta oscillations have been reported for d
ecades , yet their behavioral correlates re
Completed. Pausing for 10 secs...OK
Sending request for text = TRAF2 is a component of TNF superfamily signalling comple
xes and plays an essential role in the regu
Completed. Pausing for 10 secs...OK
Sending request for text = The exocytosis of synaptic vesicles (SVs) elicited by p
otent stimulation is rapidly compensated by
Completed. Pausing for 10 secs...OK
Sending request for text = Glucocorticoids are among the most commonly prescribed dr
ugs , but there is no biomarker that can qu
Completed. Pausing for 10 secs...OK
Sending request for text = Amino acids are essential activators of mTORC1 via a comp
lex containing RAG GTPases , RAGULATOR and
Completed. Pausing for 10 secs...OK
Sending request for text = Antigen uptake by dendritic cells and intracellular routi
ng of antigens to specific compartments is
Completed. Pausing for 10 secs...OK
Sending request for text = Burkholderia thailandensis uses acyl-homoserine lactone-m
ediated quorum sensing systems to regulate
Completed. Pausing for 10 secs...OK
Sending request for text = The long-range coupling within prefrontal-hippocampal net
works that account for cognitive performanc
Completed. Pausing for 10 secs...OK
Sending request for text = Dynamic post-translational modification of RNA polymerase
II (RNAPII) coordinates the co-transcrip
Completed. Pausing for 10 secs...OK
Sending request for text = Skeletal muscle satellite cells in their niche are quiesc
ent and upon muscle injury , exit quiescenc
Completed. Pausing for 10 secs...OK
Sending request for text = Infants with defects in the interleukin 10 receptor (IL1
0R) develop very early onset inflammatory
Completed. Pausing for 10 secs...OK
Sending request for text = piRNAs play a critical role in the regulation of transpos
ons and other germline genes . In Caenorhab
Completed. Pausing for 10 secs...OK
Sending request for text = Purkinje neurons are central to cerebellar function and s
how membrane bistability when recorded in v
Completed. Pausing for 10 secs...OK
Sending request for text = Force generation by actin assembly shapes cellular membra
nes . An experimentally constrained multisc
Completed. Pausing for 10 secs...OK
Sending request for text = Macropinocytosis is a fundamental mechanism that allows c
ells to take up extracellular liquid into l
Completed. Pausing for 10 secs...OK
Sending request for text = The cohesin ring holds newly replicated sister chromatids
together until their separation at anaphas
Completed. Pausing for 10 secs...OK

Sending request for text = For hibernators , being born late in the active season may have important effects on growth and fatt
Completed. Pausing for 10 secs...OK

Sending request for text = ADAR proteins alter gene expression both by catalyzing adenosine (A) to inosine (I) RNA editing
Completed. Pausing for 10 secs...OK

Sending request for text = Host shutoff is a common strategy used by viruses to repress cellular mRNA translation and concomitant
Completed. Pausing for 10 secs...OK

Sending request for text = Gradients of signaling proteins are essential for inducing tissue morphogenesis . However , mechanisms
Completed. Pausing for 10 secs...OK

Sending request for text = Coiled coils are the best-understood protein fold , as their backbone structure can uniquely be described
Completed. Pausing for 10 secs...OK

Sending request for text = Epsin is an evolutionarily conserved endocytic clathrin adaptor whose most critical function (s) is
Completed. Pausing for 10 secs...OK

Sending request for text = Data on asthma aetiology in Africa are scarce . We investigated the risk factors for asthma among school
Completed. Pausing for 10 secs...OK

Sending request for text = Interactions between all three pigment cell types are required to form the stripe pattern of adult zebrafish
Completed. Pausing for 10 secs...OK

Sending request for text = The olfactory sense detects a plethora of behaviorally relevant odor molecules; gene families involved
Completed. Pausing for 10 secs...OK

Sending request for text = The global malaria burden has decreased over the last decade and many nations are attempting elimination
Completed. Pausing for 10 secs...OK

Sending request for text = Divergent morphology of species has largely been ascribed to genetic differences in the tissue-specific
Completed. Pausing for 10 secs...OK

Sending request for text = The extensive crosstalk between the developing heart and lung is critical to their proper morphogenesis
Completed. Pausing for 10 secs...OK

Sending request for text = While specific mutations allow organisms to adapt to stressful environments , most changes in an organism
Completed. Pausing for 10 secs...OK

Sending request for text = Metabolic adjustment to changing environmental conditions , particularly balancing of growth and development
Completed. Pausing for 10 secs...OK

Sending request for text = Synapses and nuclei are connected by bidirectional communication mechanisms that enable information
Completed. Pausing for 10 secs...OK

Sending request for text = Swi2/Snf2 ATPases remodel substrates such as nucleosomes and transcription complexes to control a wide
Completed. Pausing for 10 secs...OK

Sending request for text = Cyclic peptide natural products have evolved to exploit diverse protein targets , many of which contain
Completed. Pausing for 10 secs...OK

Sending request for text = Mutations in the inositol 5-phosphatase OCRL cause Lowe syndrome and Dent's disease . Although OCRL
Completed. Pausing for 10 secs...OK

Sending request for text = Aberrant activation of Wnt/ β -catenin signaling plays an unequivocal role in colorectal cancer , but

Completed. Pausing for 10 secs...OK
 Sending request for text = The neural control of transition between posture and movement encompasses the regulation of reflex-s
 Completed. Pausing for 10 secs...OK
 Sending request for text = The transcription factor RpaA is the master regulator of circadian transcription in cyanobacteria ,
 Completed. Pausing for 10 secs...OK
 Sending request for text = Transition metals , such as zinc , are essential micronutrients in all organisms , but also highly t
 Completed. Pausing for 10 secs...OK
 Sending request for text = In mammals , numerous autosomal genes are subject to mitotically stable monoallelic expression (MAE
 Completed. Pausing for 10 secs...OK
 Sending request for text = Ring-forming AAA+ chaperones exert ATP-fueled substrate unfolding by threading through a central por
 Completed. Pausing for 10 secs...OK
 Sending request for text = How stem cells specified during development keep their non-differentiated quiescent state , and how
 Completed. Pausing for 10 secs...OK
 Sending request for text = Certain neuron types fire spontaneously at high rates , and an ability that is crucial for their function
 Completed. Pausing for 10 secs...OK
 Sending request for text = Antibiotics from few culturable microorganisms have saved millions of lives since the 20th century .
 Completed. Pausing for 10 secs...OK
 Sending request for text = Tuberculous meningitis has high mortality , linked to excessive inflammation . However , adjunctive
 Completed. Pausing for 10 secs...OK
 Sending request for text = Growth cones navigate axonal projection in response to guidance cues . However , it is unclear how t
 Completed. Pausing for 10 secs...OK
 Sending request for text = How hummingbirds hum is not fully understood , but its biophysical origin is encoded in the acoustic
 Completed. Pausing for 10 secs...OK
 Sending request for text = The roles of chance , contingency , and necessity in evolution are unresolved because they have never
 Completed. Pausing for 10 secs...OK
 Sending request for text = Similarity between two individuals in the combination of genetic markers along their chromosomes and
 Completed. Pausing for 10 secs...OK
 Sending request for text = Early development of many animals is characterized by rapid cleavages that dramatically decrease cell
 Completed. Pausing for 10 secs...OK
 Sending request for text = Gene control systems sometimes interpret multiple signals to set the expression levels of the genes
 Completed. Pausing for 10 secs...OK
 Sending request for text = The number of neurotransmitter-filled vesicles released into the synaptic cleft with each action potential
 Completed. Pausing for 10 secs...OK
 Sending request for text = HIV-1 Gag selects and packages a dimeric , unspliced viral RNA in the context of a large excess of c
 Completed. Pausing for 10 secs...OK
 Completed

```
In [10]: # check how many rows have blank result (some errors)
empty_df = df.query("groq_mistral_summary.str.strip() == '')
```



```
print(len(empty_df))
```

0

```
In [11]: df.head()
```

```
Out[11]:
```

	lay_summary	article	headings	keywords	id	groq_mistral_summary
0	The DNA in genes encodes the basic information...	Cell-fate reprogramming is at the heart of deve...	[Abstract, Introduction, Results, Discussion, ...	[developmental biology]	elife-15477-v3	Cell-fate decisions are regulated by intercell...
1	Klebsiella pneumoniae is a type of bacteria th...	Klebsiella pneumoniae is a respiratory , blood...	[Abstract, Introduction, Results, Discussion, ...	[microbiology and infectious disease, immunolo...	elife-56656-v2	Klebsiella pneumoniae is a dangerous pathogen ...
2	Malaria is one of the world's most deadly infe...	Plasmodium vivax relapse infections occur foll...	[Abstract, Introduction, Results, Discussion, ...	[epidemiology and global health]	elife-04692-v2	The paper discusses the development of a withi...
3	The Amazon rainforest in South America is the ...	When 2 Mha of Amazonian forests are disturbed ...	[Abstract, Introduction, Results, Discussion, ...	[ecology]	elife-21394-v2	Selective logging in Amazonian forests, which ...
4	Neurons that arise in the adult nervous system...	Neurosphere formation is commonly used as a su...	[Abstract, Introduction, Results, Discussion, ...	[stem cells and regenerative medicine]	elife-02669-v2	Neural stem cells (NSCs) in the adult mammalia...

```
In [12]: output_path = "./data/output/full_dev_set/"
output_filename = "elife_groq_mistral_summary.csv"

print("Writing to file ", output_filename)
df.to_csv(output_path+output_filename,
          index = False
          )
print("Completed")
```

Writing to file elife_groq_mistral_summary.csv
Completed

```
In [13]: output_filename = "elife_groq_mistral_summary.json"

print("Writing to file ", output_filename)
df.to_json(output_path+output_filename,
          orient="records",
```

```
)  
print("Completed")
```

Writing to file elife_groq_mistral_summary.json
Completed

```
In [14]: # process the PLOS dataset:  
dev_df_filename = "../../../data/biolaysumm2024_data/PLOS_val.jsonl"  
df = pd.read_json(dev_df_filename,  
                  orient="records",  
                  lines=True  
                  )  
df.head()
```

```
Out[14]:
```

	lay_summary	article	headings	keywords	i
0	Messenger RNAs carry the instructions necessar...	Gene expression varies widely between individu...	[Abstract, Introduction, Results, Discussion, ...	[genetics, biology, genomics, genetics and gen...	journal.pgen.100288
1	Annually , more than two million people are in...	The live attenuated simian immunodeficiency vi...	[Abstract, Introduction, Materials and Methods...	[]	journal.ppat.100463
2	The opportunistic pathogen Candida albicans is...	Mucosal infections with Candida albicans belon...	[Abstract, Introduction, Results, Discussion, ...	[blood cells, cell motility, medicine and heal...	journal.ppat.100588
3	Lymphatic filariasis (LF) , commonly known a...	Between 2000–2007 , the Global Programme to El...	[Abstract, Introduction, Methods, Results, Dis...	[infectious diseases/neglected tropical diseas...	journal.pntd.000070
4	Parkinson’s disease (PD) is a neurodegenerat...	Homozygous mutations in the glucocerebrosidase...	[Abstract, Introduction, Results, Discussion, ...	[]	journal.pgen.100506

```
In [15]: # apply to all rows in eval miniset  
text_cap = 20_000 # temporarily limit to 20k characters, set to -1 for full text  
  
print("Summarization process started...")  
df["groq_mistral_summary"] = df["article"].apply(lambda text: send_sumarize_request  
print("Completed")
```

Summarization process started...

Sending request for text = Gene expression varies widely between individuals of a population , and regulatory change can underl

Completed. Pausing for 10 secs...OK

Sending request for text = The live attenuated simian immunodeficiency virus (LASIV) vaccine SIVΔnef is one of the most effec

Completed. Pausing for 10 secs...OK

Sending request for text = Mucosal infections with Candida albicans belong to the most frequent forms of fungal diseases . Host

Completed. Pausing for 10 secs...OK

Sending request for text = Between 2000–2007 , the Global Programme to Eliminate Lymphatic Filariasis (GPELF) delivered more

Completed. Pausing for 10 secs...OK

Sending request for text = Homozygous mutations in the glucocerebrosidase (GBA) gene result in Gaucher disease (GD) , the m

Completed. Pausing for 10 secs...OK

Sending request for text = Listeria monocytogenes is a facultative intracellular pathogen capable of inducing a robust cell-med

Completed. Pausing for 10 secs...OK

Sending request for text = Glaucoma is a leading cause of blindness worldwide . Primary open-angle glaucoma (POAG) is the mos

Completed. Pausing for 10 secs...OK

Sending request for text = In the human intestinal pathogen Clostridium difficile , flagella promote adherence to intestinal ep

Completed. Pausing for 10 secs...OK

Sending request for text = Endospore formation is an ancient bacterial developmental program that culminates with the differentiati

Completed. Pausing for 10 secs...OK

Sending request for text = We explore a framework to model the dose response of allosteric multisite phosphorylation proteins u

Completed. Pausing for 10 secs...OK

Sending request for text = Quorum sensing (QS) enables bacterial multicellularity and selective advantage for communicating p

Completed. Pausing for 10 secs...OK

Sending request for text = Malaria burden remains high in the sub-Saharan region where helminths are prevalent and where childr

Completed. Pausing for 10 secs...OK

Sending request for text = Inflammation is known to be necessary for promoting , sustaining , and tuning CD8+ T cell responses

Completed. Pausing for 10 secs...OK

Sending request for text = In the current context of high fatality rates associated with American visceral leishmaniasis (VL)

Completed. Pausing for 10 secs...OK

Sending request for text = In Algeria , the treatment of visceral and cutaneous leishmanioses (VL and CL) has been and contin

Completed. Pausing for 10 secs...OK

Sending request for text = Crohn's disease (CD) is a chronic inflammatory condition of diverse etiology . Exposure to foodbor

Completed. Pausing for 10 secs...OK

Sending request for text = In flowering plants , the egg and sperm cells form within haploid gametophytes . The female gametoph

Completed. Pausing for 10 secs...OK

Sending request for text = The role of footwear in protection against a range of Neglected Tropical Diseases (NTDs) is gainin

Completed. Pausing for 10 secs...OK

Sending request for text = The pseudorabies virus (PRV) Us9 protein plays a centra

l role in targeting viral capsids and glyco
Completed. Pausing for 10 secs...OK
Sending request for text = Genetically identical cells exhibit extensive phenotypic
variation even under constant and benign co
Completed. Pausing for 10 secs...OK
Sending request for text = Chikungunya virus (CHIKV) , an alphavirus and member of
the Togaviridae family , is capable of cau
Completed. Pausing for 10 secs...OK
Sending request for text = The mTOR signaling pathways regulate cell growth and are
involved in multiple human diseases . Here
Completed. Pausing for 10 secs...OK
Sending request for text = The functions of the majority of trypanosomatid-specific
proteins are unknown , hindering our unders
Completed. Pausing for 10 secs...OK
Sending request for text = Tuberculosis is commonly considered a chronic lung diseas
e , however , extrapulmonary infection can
Completed. Pausing for 10 secs...OK
Sending request for text = Microsporidia are fungi-related intracellular pathogens t
hat may infect virtually all animals , but
Completed. Pausing for 10 secs...OK
Sending request for text = Chemokine receptors , a subclass of G protein coupled rec
eptors (GPCRs) , play essential roles in
Completed. Pausing for 10 secs...OK
Sending request for text = Systemic leishmaniasis has been known to present with pro
longed fever , hepatosplenomegaly and wasti
Completed. Pausing for 10 secs...OK
Sending request for text = The millions of mutations and polymorphisms that occur in
human populations are potential predictors
Completed. Pausing for 10 secs...OK
Sending request for text = Within the human host , the malaria parasite Plasmodium f
alciparum is exposed to multiple selection
Completed. Pausing for 10 secs...OK
Sending request for text = Long-term delivery of potent broadly-neutralizing antibod
ies is a promising approach for the prevent
Completed. Pausing for 10 secs...OK
Sending request for text = The assumption of linear response of protein molecules to
thermal noise or structural perturbations
Completed. Pausing for 10 secs...OK
Sending request for text = Several studies have suggested crosstalk between differen
t clathrin-independent endocytic pathways .
Completed. Pausing for 10 secs...OK
Sending request for text = Two-component signaling systems are ubiquitous in bacteri
a , Archaea and plants and play important r
Completed. Pausing for 10 secs...OK
Sending request for text = Oncolytic herpes simplex viruses (oHSVs) showed efficac
y in clinical trials and practice . Most of
Completed. Pausing for 10 secs...OK
Sending request for text = The concerns raised from adenovirus 5 (Ad5) -based HIV
vaccine clinical trials , where excess HIV
Completed. Pausing for 10 secs...OK
Sending request for text = X inactivation—the transcriptional silencing of one X chr
omosome copy per female somatic cell—is uni
Completed. Pausing for 10 secs...OK
Sending request for text = CCCH-type zinc-finger antiviral protein (ZAP) is a host
factor that restricts the infection of man
Completed. Pausing for 10 secs...OK

Sending request for text = Rift Valley fever virus (RVFV) is a major human and animal pathogen associated with severe disease
Completed. Pausing for 10 secs...OK
Sending request for text = Chemotherapeutic resistance in triple-negative breast cancer (TNBC) has brought great challenges
Completed. Pausing for 10 secs...OK
Sending request for text = Toxoplasma gondii is an obligate intracellular parasite that can infect virtually all nucleated cells
Completed. Pausing for 10 secs...OK
Sending request for text = The origin recognition complex (ORC) coordinates a series of events that lead to initiation of DNA
Completed. Pausing for 10 secs...OK
Sending request for text = Brucellosis is one of the most common zoonoses globally , and Central Asia remains a Brucella hotspot
Completed. Pausing for 10 secs...OK
Sending request for text = Chromosome and genome stability are important for normal cell function as instability often correlates
Completed. Pausing for 10 secs...OK
Sending request for text = Prompt post-exposure prophylaxis (PEP) is essential in preventing the fatal onset of disease in people
Completed. Pausing for 10 secs...OK
Sending request for text = Toxoplasma is an obligate intracellular parasite that replicates in mammalian cells within a parasitophorous vacuole
Completed. Pausing for 10 secs...OK
Sending request for text = Increased reports of human infections have led to fascioliasis , a widespread disease of cattle and sheep
Completed. Pausing for 10 secs...OK
Sending request for text = The visual system transmits information about fast and slow changes in light intensity through separate pathways
Completed. Pausing for 10 secs...OK
Sending request for text = Deeper exploration of the brain's vast synaptic networks will require new tools for high-throughput screening
Completed. Pausing for 10 secs...OK
Sending request for text = Zinc is a vital trace element crucial for the proper function of some 3 , 000 cellular proteins . Sp
Completed. Pausing for 10 secs...OK
Sending request for text = Replication fork integrity , which is essential for the maintenance of genome stability , is monitored
Completed. Pausing for 10 secs...OK
Sending request for text = The role of plasmacytoid dendritic cells (pDC) in human immunodeficiency virus type 1 (HIV-1) infection
Completed. Pausing for 10 secs...OK
Sending request for text = Marburg virus , the Kaposi's sarcoma-associated herpesvirus (KSHV) and Dengue virus all activate ,
Completed. Pausing for 10 secs...OK
Sending request for text = Geohelminth infections are common in rural western Kenya , but risk factors and effects among pregnant women
Completed. Pausing for 10 secs...OK
Sending request for text = Mycolactone is a macrolide produced by the skin pathogen Mycobacterium ulcerans , with cytotoxic ,
Completed. Pausing for 10 secs...OK
Sending request for text = Human African trypanosomiasis (HAT) , a lethal disease induced by Trypanosoma brucei gambiense , has
Completed. Pausing for 10 secs...OK
Sending request for text = South Asia possesses a significant amount of genetic diversity due to considerable intergroup differences

Completed. Pausing for 10 secs...OK
Sending request for text = Burkholderia pseudomallei is intrinsically resistant to aminoglycosides and macrolides , mostly due
Completed. Pausing for 10 secs...OK
Sending request for text = During eukaryotic development , the induction of a lineage-specific transcription factor typically d
Completed. Pausing for 10 secs...OK
Sending request for text = C . elegans PAQR-2 is homologous to the insulin-sensitizing adiponectin receptors in mammals , and e
Completed. Pausing for 10 secs...OK
Sending request for text = Herpes viruses are prevalent and well characterized human pathogens . Despite extensive study , much
Completed. Pausing for 10 secs...OK
Sending request for text = Parasitic helminths evade , skew and dampen human immune responses through numerous mechanisms . Suc
Completed. Pausing for 10 secs...OK
Sending request for text = Neuronal stimulation causes ~30% shrinkage of the extracellular space (ECS) between neurons and su
Completed. Pausing for 10 secs...OK
Sending request for text = Eukaryotic genomes contain significant amounts of transposons and repetitive DNA elements , which ,
Completed. Pausing for 10 secs...OK
Sending request for text = While the roles of rpoS^{Bb} and RpoS-dependent genes have been studied extensively within the mammal ,
Completed. Pausing for 10 secs...OK
Sending request for text = Precise coordination between stamen and pistil development is essential to make a fertile flower . M
Completed. Pausing for 10 secs...OK
Sending request for text = Dietary restriction (DR) extends lifespan in various species and also slows the onset of age-related
Completed. Pausing for 10 secs...OK
Sending request for text = Transcription factor binding , chromatin modifications and large scale chromatin re-organization and
Completed. Pausing for 10 secs...OK
Sending request for text = Endogenous retroviruses (ERVs) are remnants of ancient retroviral infections of the host germline
Completed. Pausing for 10 secs...OK
Sending request for text = The diagnosis of schistosomiasis currently relies on microscopic detection of schistosome eggs in stool
Completed. Pausing for 10 secs...OK
Sending request for text = Machine learning has been used for estimation of potential energy surfaces to speed up molecular dynamics
Completed. Pausing for 10 secs...OK
Sending request for text = Central Africa is a “hotspot” for emerging infectious diseases (EIDs) of global and local importance
Completed. Pausing for 10 secs...OK
Sending request for text = Type III effectors are virulence factors of Gram-negative bacterial pathogens delivered directly into
Completed. Pausing for 10 secs...OK
Sending request for text = The RV254 cohort of HIV-infected very early acute (4th stage 1 and 2) (stage 1/2) and late acute
Completed. Pausing for 10 secs...OK
Sending request for text = Schistosomiasis is a tropical parasitic disease afflicting ~200 million people worldwide and current
Completed. Pausing for 10 secs...OK
Sending request for text = The primordial organization of the metazoan body is achieved

ved during gastrulation by the establishmen
Completed. Pausing for 10 secs...OK
Sending request for text = The number of diagnosed cases of Autism Spectrum Disorder
s (ASD) has increased dramatically over t
Completed. Pausing for 10 secs...OK
Sending request for text = Leishmaniasis is endemic in 98 countries with an estimate
d 350 million people at risk and approximat
Skipping, error : Error code: 429 - {'error': {'message': 'Rate limit reached for m
odel `mixtral-8x7b-32768` in organization `org_01ht1dgjfcej6vgd7m1qqbgj05` on tokens
per minute (TPM): Limit 18000, Used 18198, Requested ~5045. Please try again in 17.4
77333333s. Visit <https://console.groq.com/docs/rate-limits> for more information.',
'type': 'tokens', 'code': 'rate_limit_exceeded'}}
Completed. Pausing for 10 secs...OK
Sending request for text = As dengue spreads to new geographical regions and the for
ce of infection changes in existing endemic
Completed. Pausing for 10 secs...OK
Sending request for text = In contrast to HIV infection in humans and SIV in macaque
s , SIV infection of natural hosts includin
Completed. Pausing for 10 secs...OK
Sending request for text = The contribution of MEF2 TFs to the tumorigenic process i
s still mysterious . Here we clarify that M
Completed. Pausing for 10 secs...OK
Sending request for text = Hydrophobins represent an important group of proteins fro
m both a biological and nanotechnological s
Completed. Pausing for 10 secs...OK
Sending request for text = Aminoacyl tRNA synthetases are central enzymes required f
or protein synthesis . These enzymes are th
Completed. Pausing for 10 secs...OK
Sending request for text = Viral infection of mammalian cells triggers the innate im
mune response through non-self recognition
Completed. Pausing for 10 secs...OK
Sending request for text = It has become increasingly clear that the functions of eo
sinophils extend beyond host defense and al
Completed. Pausing for 10 secs...OK
Sending request for text = Genome-wide replication timing studies have suggested tha
t mammalian chromosomes consist of megabase
Completed. Pausing for 10 secs...OK
Sending request for text = Our nervous system can efficiently recognize objects in s
pite of changes in contextual variables suc
Completed. Pausing for 10 secs...OK
Sending request for text = Understanding intrinsic and acquired resistance is crucia
l to overcoming cancer chemotherapy failure
Completed. Pausing for 10 secs...OK
Sending request for text = Rickettsioses are endemic in sub-Saharan Africa . Burden o
f disease , risk factors and transmission a
Completed. Pausing for 10 secs...OK
Sending request for text = Fatty acids affect a number of physiological processes ,
in addition to forming the building blocks
Completed. Pausing for 10 secs...OK
Sending request for text = Riboswitches are regulatory elements modulating gene expr
ession in response to specific metabolite b
Completed. Pausing for 10 secs...OK
Sending request for text = To elucidate how gaze informs the construction of mental
space during wayfinding in visual species l
Completed. Pausing for 10 secs...OK
Sending request for text = The isthmus organizer mediating differentiation of mid- a

nd hindbrain during vertebrate development
Completed. Pausing for 10 secs...OK
Sending request for text = The apicomplexan parasite *Theileria annulata* transforms i
nfected host cells , inducing uncontrolled
Completed. Pausing for 10 secs...OK
Sending request for text = Broken replication forks result in DNA breaks that are no
rmally repaired via homologous recombination
Completed. Pausing for 10 secs...OK
Sending request for text = Onchocerciasis , an infection caused by the filarial nema
tode *Onchocerca volvulus* , is a major publi
Completed. Pausing for 10 secs...OK
Sending request for text = Intermittent iron-folic acid supplementation and regular
de-worming are effective initiatives to red
Completed. Pausing for 10 secs...OK
Sending request for text = Cell-mediated immunity plays a key role in host control o
f viral infection . This is exemplified by
Completed. Pausing for 10 secs...OK
Sending request for text = The translocated actin recruiting phosphoprotein (Tarp)
is conserved among all pathogenic chlamydi
Completed. Pausing for 10 secs...OK
Sending request for text = *Schistosomiasis japonica* is a zoonosis with a number of m
ammalian species acting as reservoir hosts
Completed. Pausing for 10 secs...OK
Sending request for text = Mutations in the genes encoding cartilage associated prot
ein (CRTAP) and prolyl 3-hydroxylase 1 (
Completed. Pausing for 10 secs...OK
Sending request for text = In a classic example of the invasion of a species by a se
lfish genetic element , the P-element was h
Completed. Pausing for 10 secs...OK
Sending request for text = Recent interest in male-based sterile insect technique (
SIT) and incompatible insect technique (I
Completed. Pausing for 10 secs...OK
Sending request for text = Bacterial superantigens , a diverse family of toxins , in
duce an inflammatory cytokine storm that ca
Completed. Pausing for 10 secs...OK
Sending request for text = Understanding the mechanisms regulating cell cycle , prol
iferation and potency of pluripotent stem c
Completed. Pausing for 10 secs...OK
Sending request for text = Dengue displays a broad spectrum of clinical manifestatio
ns that may vary from asymptomatic to sever
Completed. Pausing for 10 secs...OK
Sending request for text = The immune response to *Mycobacterium tuberculosis* (Mtb)
infection is complex . Experimental eviden
Completed. Pausing for 10 secs...OK
Sending request for text = Gene retroposition leads to considerable genetic variatio
n between individuals . Recent studies reve
Completed. Pausing for 10 secs...OK
Sending request for text = Neurocysticercosis (NCC) , infection of the central ner
vous system by *Taenia solium* cysticerci , i
Completed. Pausing for 10 secs...OK
Sending request for text = Yaws , caused by *Treponema pallidum* ssp . *pertenue* , is r
eportedly endemic in Ghana . Mass distribut
Completed. Pausing for 10 secs...OK
Sending request for text = Despite advances in the treatment of HIV infection with A
RT , elucidating strategies to overcome HIV
Completed. Pausing for 10 secs...OK

Sending request for text = *Spodoptera exigua* microarray was used to determine genes differentially expressed in *S. exigua* cell
Completed. Pausing for 10 secs...OK

Sending request for text = Apomixis , or asexual clonal reproduction through seeds , is of immense interest due to its potential
Completed. Pausing for 10 secs...OK

Sending request for text = The prioritization of candidate disease-causing genes is a fundamental challenge in the post-genomic
Completed. Pausing for 10 secs...OK

Sending request for text = We develop a flexible , two-locus model for the spread of insecticide resistance applicable to mosquito
Completed. Pausing for 10 secs...OK

Sending request for text = Triatomines are hematophagous insects that act as vectors of Chagas disease . *Rhodnius neglectus* is
Completed. Pausing for 10 secs...OK

Sending request for text = With the post-genomic era came a dramatic increase in high-throughput technologies , of which transcriptomics
Completed. Pausing for 10 secs...OK

Sending request for text = A critical event in mammalian embryo development is construction of an inner cell mass surrounded by
Completed. Pausing for 10 secs...OK

Sending request for text = Structural flexibility in germline gene-encoded antibodies allows promiscuous binding to diverse antigens
Completed. Pausing for 10 secs...OK

Sending request for text = Locusts exhibit two interconvertible behavioral phases , solitary and gregarious . While solitary
Completed. Pausing for 10 secs...OK

Sending request for text = Viral membrane fusion proceeds through a sequence of steps that are driven by triggered conformation
Completed. Pausing for 10 secs...OK

Sending request for text = It is widely recognized that we are entering an extinction event on a scale approaching the mass extinction
Completed. Pausing for 10 secs...OK

Sending request for text = Phagocytosis of the opportunistic fungal pathogen *Candida albicans* by cells of the innate immune system
Completed. Pausing for 10 secs...OK

Sending request for text = Rift Valley fever (RVF) is a vector-borne disease affecting ruminants and humans . Madagascar was
Completed. Pausing for 10 secs...OK

Sending request for text = Prions are self-propagating protein conformations . Transmission of the prion state between non-identical
Completed. Pausing for 10 secs...OK

Sending request for text = Given genomic variation data from multiple individuals , computing the likelihood of complex population
Completed. Pausing for 10 secs...OK

Sending request for text = Persistent expression of high-risk HPV oncogenes is necessary for the development of anogenital and
Completed. Pausing for 10 secs...OK

Sending request for text = The Southern Chiapas focus of onchocerciasis in Southern Mexico represents one of the major onchocerciasis
Completed. Pausing for 10 secs...OK

Sending request for text = *Listeria monocytogenes* is a Gram-positive facultative intracellular bacterial pathogen that invades
Completed. Pausing for 10 secs...OK

Sending request for text = Bacterial pathogens are highly adaptable organisms , a quality that enables them to overcome changing

Completed. Pausing for 10 secs...OK
Sending request for text = Mlh1-Mlh3 is an endonuclease hypothesized to act in meiosis to resolve double Holliday junctions
Completed. Pausing for 10 secs...OK
Sending request for text = Intense use of antibiotics for the treatment of diseases such as tuberculosis , malaria , Staphylococcus
Completed. Pausing for 10 secs...OK
Sending request for text = Autism spectrum disorders (ASDs) are highly heritable and characterised by deficits in social interaction
Completed. Pausing for 10 secs...OK
Sending request for text = There is significant evidence that brain-infiltrating CD8 + T cells play a central role in the development
Completed. Pausing for 10 secs...OK
Sending request for text = Tungiasis is a parasitic disease caused by the sand flea Tunga penetrans also known as jigger flea .
Completed. Pausing for 10 secs...OK
Sending request for text = An auxin maximum is positioned along the xylem axis of the Arabidopsis root tip . The pattern depends
Completed. Pausing for 10 secs...OK
Sending request for text = Gene expression changes in neural systems are essential for environment-induced behavioral plasticity
Completed. Pausing for 10 secs...OK
Sending request for text = The earliest stages of development in most metazoans are driven by maternally deposited proteins and
Skipping, error : Error code: 429 - {'error': {'message': 'Rate limit reached for model `mixtral-8x7b-32768` in organization `org_01ht1dgjfcj6vkd7m1qqbgj05` on tokens per minute (TPM): Limit 18000, Used 17323, Requested ~5048. Please try again in 14.569333333s. Visit <https://console.groq.com/docs/rate-limits> for more information.', 'type': 'tokens', 'code': 'rate_limit_exceeded'}}
Completed. Pausing for 10 secs...OK
Sending request for text = Essentially all biological processes depend on protein-protein interactions (PPIs) . Timing of such
Completed. Pausing for 10 secs...OK
Sending request for text = Nematode polyprotein allergens (NPAs) are an unusual class of lipid-binding proteins found only in
Completed. Pausing for 10 secs...OK
Sending request for text = Ciguatera is a type of fish poisoning that occurs throughout the tropics , particularly in vulnerable
Completed. Pausing for 10 secs...OK
Sending request for text = Chagas disease is caused by Trypanosoma cruzi . The persistence of the parasite is associated with treatment
Completed. Pausing for 10 secs...OK
Sending request for text = Phosphoinositides represent important lipid signals in the plant development and stress response .
Completed. Pausing for 10 secs...OK
Sending request for text = Reductionism assumes that causation in the physical world occurs at the micro level , excluding the
Skipping, error : Error code: 429 - {'error': {'message': 'Rate limit reached for model `mixtral-8x7b-32768` in organization `org_01ht1dgjfcj6vkd7m1qqbgj05` on tokens per minute (TPM): Limit 18000, Used 16831, Requested ~5060. Please try again in 12.969s. Visit <https://console.groq.com/docs/rate-limits> for more information.', 'type': 'tokens', 'code': 'rate_limit_exceeded'}}
Completed. Pausing for 10 secs...OK
Sending request for text = Reactive oxygen species (ROS) produced in the mitochondrial respiratory chain (RC) are primary sources
Completed. Pausing for 10 secs...OK

Sending request for text = Intracellular transport is an essential function in eucaryotic cells , facilitated by motor proteins
Completed. Pausing for 10 secs...OK

Sending request for text = Behavioral experiments are usually designed to tap into a specific cognitive function , but animals
Completed. Pausing for 10 secs...OK

Sending request for text = Aedes aegypti mosquitoes infected with Wolbachia bacteria are currently being released for arbovirus
Completed. Pausing for 10 secs...OK

Sending request for text = Adenoviruses are important human pathogens that have been developed as vectors for gene therapies an
Completed. Pausing for 10 secs...OK

Sending request for text = The eukaryotic genome is packaged into a nucleus in the form of chromatin . The fundamental structur
Completed. Pausing for 10 secs...OK

Sending request for text = Environmental insults such as oxidative stress can damage cell membranes . Lysosomes are particularl
Completed. Pausing for 10 secs...OK

Sending request for text = Phlebotomus orientalis Parrot (Diptera: Psychodidae) is the main vector of visceral leishmaniasis
Completed. Pausing for 10 secs...OK

Sending request for text = The Chinese government lists advanced schistosomiasis as a leading healthcare priority due to its se
Completed. Pausing for 10 secs...OK

Sending request for text = Human African Trypanosomiasis (HAT) , also referred to as sleeping sickness , and African Animal T
Completed. Pausing for 10 secs...OK

Sending request for text = Hexamethylene bisacetamide (HMBA) is a potent inducer of cell differentiation and HIV production i
Completed. Pausing for 10 secs...OK

Sending request for text = Patients suffering from cutaneous leishmaniasis (CL) caused by New World Leishmania (Viannia) sp
Completed. Pausing for 10 secs...OK

Sending request for text = Enteropathogenic and enterohemorrhagic Escherichia coli (EPEC and EHEC) are closely-related pathog
Completed. Pausing for 10 secs...OK

Sending request for text = Robust protocols for the isolation of extracellular vesicles (EVs) from the rest of their excretor
Completed. Pausing for 10 secs...OK

Sending request for text = Systems biology proceeds through repeated cycles of experiment and modeling . One way to implement t
Completed. Pausing for 10 secs...OK

Sending request for text = Rotavirus is a major cause of diarrhea worldwide and exhibits a pronounced small intestinal epitheli
Completed. Pausing for 10 secs...OK

Sending request for text = We report on results from whole-exome sequencing (WES) of 1 , 039 subjects diagnosed with autism s
Completed. Pausing for 10 secs...OK

Sending request for text = Madurella mycetomatis is the most prevalent causative agent of eumycetoma in Sudan , an infection ch
Completed. Pausing for 10 secs...OK

Sending request for text = Herpes simplex virus (HSV) has provided the prototype for viral latency with previously well-defin
Completed. Pausing for 10 secs...OK

Sending request for text = Misfolding and aggregation of host proteins are important features of the pathogenesis of neurodegen

Completed. Pausing for 10 secs...OK
Sending request for text = The 3D organization of chromosomes is crucial for regulating gene expression and cell function . Man
Completed. Pausing for 10 secs...OK
Sending request for text = Genetic variants in cis-regulatory elements or trans-acting regulators frequently influence the quan
Completed. Pausing for 10 secs...OK
Sending request for text = Over the last decade , multiple broadly neutralizing monoclonal antibodies (bN-mAbs) to the HIV-1
Completed. Pausing for 10 secs...OK
Sending request for text = Parasitic nematodes are responsible for devastating illnesses that plague many of the world's poorest
Completed. Pausing for 10 secs...OK
Sending request for text = Cancers exhibit spatially heterogeneous , unique vascular architectures across individual samples ,
Completed. Pausing for 10 secs...OK
Sending request for text = HIV is known to spread efficiently both in a cell-free state and from cell to cell , however the rel
Completed. Pausing for 10 secs...OK
Sending request for text = Visual attention has many effects on neural responses , producing complex changes in firing rates ,
Completed. Pausing for 10 secs...OK
Sending request for text = The posterior signalling centre (PSC) , a small group of specialised cells , controls hemocyte (b
Completed. Pausing for 10 secs...OK
Sending request for text = Genetic recombination is an important process during the evolution of many virus species and occurs
Completed. Pausing for 10 secs...OK
Sending request for text = Nucleosomes , the basic repeat units of eukaryotic chromatin , have been suggested to influence the
Completed. Pausing for 10 secs...OK
Sending request for text = Conformational diversity of the native state plays a central role in modulating protein function . T
Completed. Pausing for 10 secs...OK
Sending request for text = Metabolic pathways used by Mycobacterium tuberculosis (Mtb) to establish and maintain infections a
Completed. Pausing for 10 secs...OK
Sending request for text = Two-cysteine peroxiredoxins are ubiquitous peroxidases that play various functions in cells . In Lei
Completed. Pausing for 10 secs...OK
Sending request for text = The Histoplasma urine antigen (HUAg) is the preferred method to diagnose progressive disseminated
Completed. Pausing for 10 secs...OK
Sending request for text = Worldwide , approximately 1 . 8 million children die from diarrhea annually , and millions more suff
Completed. Pausing for 10 secs...OK
Sending request for text = Aedes-borne arboviruses continue to precipitate epidemics worldwide . In Dominican Republic , the ap
Completed. Pausing for 10 secs...OK
Sending request for text = Poly (ADP-ribose) polymerases (PARPs) catalyze the transfer of multiple poly (ADP-ribose) unit
Completed. Pausing for 10 secs...OK
Sending request for text = The Pam/Highwire/RPM-1 (PHR) proteins are conserved intracellular signaling hubs that regulate syn
Completed. Pausing for 10 secs...OK
Sending request for text = A subset of transcription factors like Gli2 and Oct1 are

bipotentia – they can activate or repress

Completed. Pausing for 10 secs...OK

Sending request for text = A recent measure of 'integrated information' , Φ DM , quantifies the extent to which a system generat

Completed. Pausing for 10 secs...OK

Sending request for text = The persistent spread of Rhodesian human African trypanosomiasis (HAT) in Uganda in recent years h

Completed. Pausing for 10 secs...OK

Sending request for text = The consensus that complexity begets stability in ecosystems was challenged in the seventies , a res

Completed. Pausing for 10 secs...OK

Sending request for text = Evidence suggests that the intracellular bacterial pathogen *Coxiella burnetii* (which causes Q fever

Completed. Pausing for 10 secs...OK

Sending request for text = Genome sequences are available for the human blood flukes , *Schistosoma japonicum* , *S . mansonii* and

Completed. Pausing for 10 secs...OK

Sending request for text = Heart valve disease is a major clinical problem worldwide . Cardiac valve development and homeostasi

Completed. Pausing for 10 secs...OK

Sending request for text = Since the initial description of the genomic patterns expected under models of positive selection ac

Completed. Pausing for 10 secs...OK

Sending request for text = Female *Aedes aegypti* mosquitoes are the principal vector for dengue fever , causing 50–100 million i

Completed. Pausing for 10 secs...OK

Sending request for text = Schistosomiasis is a parasitic disease and its distribution , in space and time , can be influenced

Skipping, error : Error code: 429 - {'error': {'message': 'Rate limit reached for model `mixtral-8x7b-32768` in organization `org_01ht1dgjfcej6vgd7m1qqbgj05` on tokens per minute (TPM): Limit 18000, Used 17448, Requested ~5054. Please try again in 15.005999999s. Visit <https://console.groq.com/docs/rate-limits> for more information.', 'type': 'tokens', 'code': 'rate_limit_exceeded'}}

Completed. Pausing for 10 secs...OK

Sending request for text = *Streptococcus pneumoniae* (pneumococcal) meningitis is a common bacterial infection of the brain .

Completed. Pausing for 10 secs...OK

Sending request for text = Human papillomaviruses (HPVs) are DNA viruses associated with major human cancers . As such there

Completed. Pausing for 10 secs...OK

Sending request for text = *Penicillium marneffei* is the most important thermal dimorphic fungus causing systemic mycosis in Chi

Completed. Pausing for 10 secs...OK

Sending request for text = In 2013 , Zika virus (ZIKV) emerged in French Polynesia and spread through the Pacific region betw

Completed. Pausing for 10 secs...OK

Sending request for text = The long non-coding RNA (lncRNA) Xist is a master regulator of X-chromosome inactivation in mammal

Completed. Pausing for 10 secs...OK

Sending request for text = An increasing number of genetic variants have been identified for many complex diseases . However ,

Completed. Pausing for 10 secs...OK

Sending request for text = Diagnosis and treatment are central elements of strategies to control *Trypanosoma brucei gambiense* h

Completed. Pausing for 10 secs...OK

Sending request for text = Chagas disease , a neglected tropical disease that affect

s millions of Latin Americans , has been ef
Completed. Pausing for 10 secs...OK
Sending request for text = *Citrobacter rodentium* is a natural mouse pathogen that ca
uses attaching and effacing (A/E) lesions
Completed. Pausing for 10 secs...OK
Sending request for text = Stochastic fluctuations in gene expression give rise to d
istributions of protein levels across cell
Completed. Pausing for 10 secs...OK
Sending request for text = Monkeypox virus (MPXV) is the etiological agent of huma
n (MPX) . It is an emerging orthopoxvirus
Completed. Pausing for 10 secs...OK
Sending request for text = 5'-3' decay is the major mRNA decay pathway in many eukar
yotes , including trypanosomes . After dead
Completed. Pausing for 10 secs...OK
Sending request for text = Recently , it was demonstrated that pancreatic new-born g
lucagon-producing cells can regenerate and
Completed. Pausing for 10 secs...OK
Sending request for text = Eukaryotic cells must inhibit re-initiation of DNA replic
ation at each of the thousands of origins i
Completed. Pausing for 10 secs...OK
Sending request for text = Invasive amebic diseases caused by *Entamoeba histolytica*
are increasing among men who have sex with
Completed. Pausing for 10 secs...OK
Sending request for text = Gambian sleeping sickness or HAT (human African trypanos
omiasis) is a neglected tropical disease c
Completed. Pausing for 10 secs...OK
Sending request for text = Imported strongyloidiasis is increasingly being diagnosed
in non-endemic areas . The aim of this stu
Completed. Pausing for 10 secs...OK
Sending request for text = Vaccination is an effective method to protect against inf
ectious diseases . An important considerati
Completed. Pausing for 10 secs...OK
Sending request for text = Under nitrogen deprivation , filaments of the cyanobacter
ium *Anabaena* undergo a process of developme
Completed. Pausing for 10 secs...OK
Sending request for text = Japanese encephalitis virus (JEV) genotype dominance ha
s shifted to genotype I (GI) from genotyp
Completed. Pausing for 10 secs...OK
Sending request for text = Biofilm formation by *Candida albicans* is a key aspect of
its pathobiology and is regulated by an int
Completed. Pausing for 10 secs...OK
Sending request for text = A growing interest in asparagine (Asn) metabolism has c
urrently been observed in cancer and infect
Completed. Pausing for 10 secs...OK
Sending request for text = To gain further insight on the association between human
toxocariasis and epilepsy in light of the n
Completed. Pausing for 10 secs...OK
Sending request for text = ATM plays a critical role in cellular responses to DNA do
uble-strand breaks (DSBs) . We describe a
Completed. Pausing for 10 secs...OK
Sending request for text = When it comes to interpreting others' behaviour , we almo
st irrepressibly engage in the attribution
Completed. Pausing for 10 secs...OK
Sending request for text = Biological networks provide additional information for th
e analysis of human diseases , beyond the t
Completed. Pausing for 10 secs...OK

Sending request for text = Slowly varying activity in the striatum , the main Basal Ganglia input structure , is important for
Completed. Pausing for 10 secs...OK

Sending request for text = Polarized growth is maintained by both polarized exocytosis , which transports membrane components
Completed. Pausing for 10 secs...OK

Sending request for text = Acetaminophen-induced liver injury in mice is a model for drug-induced liver injury in humans . A pr
Completed. Pausing for 10 secs...OK

Sending request for text = According to the Chagas congenital transmission guides , the diagnosis of infants , born to Trypanos
Completed. Pausing for 10 secs...OK

Sending request for text = We propose a biophysical model of Escherichia coli that predicts growth rate and an effective cellu
Completed. Pausing for 10 secs...OK

Sending request for text = MYB transcription factors are involved in many biological processes , including metabolism , develop
Completed. Pausing for 10 secs...OK

Sending request for text = Mitochondrial complex I , the largest and most complicated proton pump of the respiratory chain , li
Completed. Pausing for 10 secs...OK

Sending request for text = Fever is a regulated increase of the body temperature resulting from both infectious and non-infecti
Completed. Pausing for 10 secs...OK

Sending request for text = Actomyosin-based cortical flow is a fundamental engine for cellular morphogenesis . Cortical flows a
Completed. Pausing for 10 secs...OK

Sending request for text = Seedling establishment is inhibited on media containing high levels (~6%) of glucose or fructose .
Completed. Pausing for 10 secs...OK

Sending request for text = The molecular basis of second messenger signaling relies on an array of proteins that synthesize , d
Completed. Pausing for 10 secs...OK

Sending request for text = Humans can learn and store multiple visuomotor mappings (dual-adaptation) when feedback for each i
Completed. Pausing for 10 secs...OK

Sending request for text = The inferior olivary nucleus provides one of the two main inputs to the cerebellum: the so-called cl
Completed. Pausing for 10 secs...OK

Sending request for text = Iron is essential for all known life due to its redox properties; however , these same properties ca
Completed. Pausing for 10 secs...OK

Sending request for text = The nuclear pore complex (NPC) regulates molecular traffic across the nuclear envelope (NE) . Se
Completed. Pausing for 10 secs...OK

Sending request for text = The nonhuman primate (NHP) model is often the best experimental model for testing interventions de
Completed. Pausing for 10 secs...OK

Sending request for text = Sensory systems adapt their neural code to changes in the sensory environment , often on multiple ti
Completed. Pausing for 10 secs...OK

Sending request for text = Previous studies identified two mammalian prion protein (PrP) polybasic domains that bind the dise
Completed. Pausing for 10 secs...OK

Sending request for text = Animals are able to reach a desired state in an environment by controlling various behavioral patter

Completed. Pausing for 10 secs...OK
Sending request for text = Haptophytes are recognized as seminal players in aquatic ecosystem function . These algae are import
Completed. Pausing for 10 secs...OK
Sending request for text = Breast cancers that are “triple-negative” for the clinical markers ESR1 , PGR , and HER2 typically b
Completed. Pausing for 10 secs...OK
Sending request for text = Aedes aegypti (L .) is the primary vector of dengue , the most important arboviral infection globally
Completed. Pausing for 10 secs...OK
Sending request for text = Animals integrate external cues with information about internal conditions such as metabolic state
Completed. Pausing for 10 secs...OK
Sending request for text = Understanding the transcriptional regulation of pluripotent cells is of fundamental interest and will
Completed. Pausing for 10 secs...OK
Sending request for text = Replication of non-segmented negative-strand RNA viruses requires the continuous supply of the nucle
Completed. Pausing for 10 secs...OK
Sending request for text = Understanding the computational implications of specific synaptic connectivity patterns is a fundame
Completed. Pausing for 10 secs...OK
Sending request for text = Enterovirus 71 (EV71) is one of the major causative agents of hand , foot , and mouth disease , a
Completed. Pausing for 10 secs...OK
Sending request for text = Leishmaniasis is a serious global health problem affecting many people worldwide . While patients wi
Completed. Pausing for 10 secs...OK
Sending request for text = Natural transformation is the widespread biological process by which “competent” bacteria take up fr
Completed. Pausing for 10 secs...OK
Sending request for text = In fungal cells cytokinesis requires coordinated closure of a contractile actomyosin ring (CAR) an
Completed. Pausing for 10 secs...OK
Sending request for text = Glanders , caused by the gram-negative bacterium Burkholderia mallei , is a highly infectious zoonot
Completed. Pausing for 10 secs...OK
Sending request for text = American cutaneous leishmaniasis (ACL) is a complicated disease producing about 67 . 000 new cases
Completed. Pausing for 10 secs...OK
Sending request for text = In Escherichia coli , the biosynthetic pathways of several small iron-scavenging molecules known as
Completed. Pausing for 10 secs...OK
Sending request for text = A fundamental task in sequence analysis is to calculate the probability of a multiple alignment give
Completed. Pausing for 10 secs...OK
Sending request for text = The mechanism by which immunity to Herpes Simplex Virus (HSV) is initiated is not completely defin
Skipping, error : Error code: 429 - {'error': {'message': 'Rate limit reached for model `mixtral-8x7b-32768` in organization `org_01ht1dgjfcej6vgd7m1qqbgj05` on tokens per minute (TPM): Limit 18000, Used 17458, Requested ~5044. Please try again in 15.006s. Visit <https://console.groq.com/docs/rate-limits> for more information.', 'type': 'tokens', 'code': 'rate_limit_exceeded'}}
Completed. Pausing for 10 secs...OK
Sending request for text = An important area in the cell biology of intracellular parasitism is the customization of parasitoph

Skipping, error : Error code: 429 - {'error': {'message': 'Rate limit reached for model `mixtral-8x7b-32768` in organization `org_01ht1dgjfcej6vgd7m1qqbgj05` on tokens per minute (TPM): Limit 18000, Used 18608, Requested ~5051. Please try again in 18.866333333s. Visit <https://console.groq.com/docs/rate-limits> for more information.'}, 'type': 'tokens', 'code': 'rate_limit_exceeded'}}

Completed. Pausing for 10 secs...OK

Sending request for text = Homology-directed repair is a powerful mechanism for maintaining and altering genomic structure . We

Skipping, error : Error code: 429 - {'error': {'message': 'Rate limit reached for model `mixtral-8x7b-32768` in organization `org_01ht1dgjfcej6vgd7m1qqbgj05` on tokens per minute (TPM): Limit 18000, Used 18302, Requested ~5083. Please try again in 17.950333333s. Visit <https://console.groq.com/docs/rate-limits> for more information.'}, 'type': 'tokens', 'code': 'rate_limit_exceeded'}}

Completed. Pausing for 10 secs...OK

Sending request for text = The cerebellum allows us to rapidly adjust motor behavior to the needs of the situation . It is comm

Completed. Pausing for 10 secs...OK

Sending request for text = Amyotrophic lateral sclerosis (ALS) is a devastating neurodegenerative disease characterized by se

Completed. Pausing for 10 secs...OK

Sending request for text = Chagas disease is still a major public health issue in many Latin American countries . One of the cu

Completed. Pausing for 10 secs...OK

Sending request for text = Rabies in bats is considered enzootic throughout the New World , but few comparative data are availa

Completed. Pausing for 10 secs...OK

Sending request for text = Posttranslational modification of histones is known to regulate chromatin structure and transcriptio

Completed. Pausing for 10 secs...OK

Sending request for text = Mitochondria originated from proteobacterial endosymbionts , and their transition to organelles was

Completed. Pausing for 10 secs...OK

Sending request for text = Inappropriate activation or inadequate regulation of CD4+ and CD8+ T cells may contribute to the ini

Completed. Pausing for 10 secs...OK

Sending request for text = Socio-cultural and economic factors constitute real barriers for uptake of screening and treatment o

Completed. Pausing for 10 secs...OK

Sending request for text = Since December 2009 , Médecins Sans Frontières has diagnosed and treated patients with visceral leish

Completed. Pausing for 10 secs...OK

Sending request for text = Gyrase catalyzes negative supercoiling of DNA in an ATP-dependent reaction that helps condense bacte

Completed. Pausing for 10 secs...OK

Sending request for text = The intracellular protozoan Leishmania replicates in parasitophorous vacuoles (PV) that share many

Completed. Pausing for 10 secs...OK

Sending request for text = The mechanisms and treatment of psychomotor retardation , which includes motor and cognitive impairm

Completed. Pausing for 10 secs...OK

Sending request for text = Human cytomegalovirus (HCMV) is a ubiquitous virus that is a major pathogen in newborns and immuno

Completed. Pausing for 10 secs...OK

Sending request for text = Mitochondrial DNA (mtDNA) sequence variants segregate in mutation and tissue-specific manners , bu

Completed. Pausing for 10 secs...OK

Sending request for text = Buruli ulcer (BU) is a geographically-restricted infection caused by *Mycobacterium ulcerans*; completed. Pausing for 10 secs...OK

Sending request for text = Several proteins that play key roles in cholesterol synthesis , regulation , trafficking and signaling completed. Pausing for 10 secs...OK

Sending request for text = Ophthalmo-acromelic syndrome (OAS) , also known as Waardenburg Anophthalmia syndrome , is defined completed. Pausing for 10 secs...OK

Sending request for text = Treatment of human cells with Type 1 interferons restricts HIV replication . Here we report that the completed. Pausing for 10 secs...OK

Sending request for text = Mutualisms are interspecific interactions in which both partners benefit . Explaining their maintenance completed. Pausing for 10 secs...OK

Sending request for text = Vertical growth of plants is a dynamic process that is influenced by genetic and environmental factors completed. Pausing for 10 secs...OK

Sending request for text = The wetlands of the Brazilian Pantanal host large concentrations of diverse wildlife species and hem completed. Pausing for 10 secs...OK

Sending request for text = Scabies is one of the commonest dermatological conditions globally; however it is a largely underexplored completed. Pausing for 10 secs...OK

Sending request for text = Many important cellular processes are performed by molecular machines , composed of multiple protein completed. Pausing for 10 secs...OK

Sending request for text = *Burkholderia pseudomallei* is a mostly saprophytic bacterium , but can infect humans where it causes completed. Pausing for 10 secs...OK

Sending request for text = Understanding cellular function requires accurate , comprehensive representations of metabolism . Generated completed. Pausing for 10 secs...OK

Sending request for text = Differentiating cells interact with their extracellular environment over time . Chondrocytes embedded completed. Pausing for 10 secs...OK

Sending request for text = Heterochromatic homology ensures the segregation of achiasmate chromosomes during meiosis I in *Drosophila* completed. Pausing for 10 secs...OK

Sending request for text = Visceral leishmaniasis (VL) is a zoonosis of great importance . Limitations in current VL control completed. Pausing for 10 secs...OK

Sending request for text = X chromosomes are unusual in many regards , not least of which is their nonrandom gene content . The completed. Pausing for 10 secs...OK

Sending request for text = Both anatomically modern humans and the gastric pathogen *Helicobacter pylori* originated in Africa , completed. Pausing for 10 secs...OK

Sending request for text = Dengue virus NS5 is the most highly conserved amongst the viral non-structural proteins and is responsible for viral RNA replication completed. Pausing for 10 secs...OK

Sending request for text = Vertical control and elimination programs focused on specific neglected tropical diseases (NTDs) completed. Pausing for 10 secs...OK

Sending request for text = In *Saccharomyces cerevisiae* , the conserved phosphatase Cdc14 is required for the exit from mitosis

Completed. Pausing for 10 secs...OK
Sending request for text = An important research problem in computational biology is the identification of expression programs
Completed. Pausing for 10 secs...OK
Sending request for text = Memory type 1 T helper (TH1) cells are characterized by the stable expression of interferon (IFN
Completed. Pausing for 10 secs...OK
Sending request for text = Pathogen-associated secretion systems translocate numerous effector proteins into eukaryotic host cells
Completed. Pausing for 10 secs...OK
Sending request for text = The pattern of viral diversification in newly infected individuals provides information about the host
Completed. Pausing for 10 secs...OK
Sending request for text = We introduce and analyze a minimal model of epigenetic silencing in budding yeast , built upon known
Completed. Pausing for 10 secs...OK
Sending request for text = Severe acute malnutrition (SAM) among children remains a major health problem in many developing countries
Completed. Pausing for 10 secs...OK
Sending request for text = In yeast , as in humans , telomere length varies among individuals and is controlled by multiple loci
Completed. Pausing for 10 secs...OK
Sending request for text = Understanding the cognitive and neural processes that underlie human decision making requires the study of
Completed. Pausing for 10 secs...OK
Sending request for text = Hereditary nasal parakeratosis (HNPK) , an inherited monogenic autosomal recessive skin disorder ,
Completed. Pausing for 10 secs...OK
Sending request for text = Genetic reassortment between influenza A viruses (IAVs) facilitate emergence of pandemic strains ,
Completed. Pausing for 10 secs...OK
Sending request for text = Offspring of Schistosoma mansoni-infected women in schistosomiasis-endemic areas may be sensitised to
Completed. Pausing for 10 secs...OK
Sending request for text = Following an infectious challenge , macrophages have to be activated in order to allow efficient clearance
Completed. Pausing for 10 secs...OK
Sending request for text = There is renewed vigour in efforts to eliminate neglected tropical diseases including sleeping sickness
Completed. Pausing for 10 secs...OK
Sending request for text = Recombination is a fundamental biological process with profound evolutionary implications . Theory predicts
Completed. Pausing for 10 secs...OK
Sending request for text = IDN2/RDM12 has been previously identified as a component of the RNA-directed DNA methylation (RdDM
Completed. Pausing for 10 secs...OK
Sending request for text = Neutrophils are the first line of defense against invading pathogens and are rapidly recruited to the site
Completed. Pausing for 10 secs...OK
Sending request for text = Vaccination for the control of bovine tuberculosis (BTB) in cattle is not currently used within an
Completed. Pausing for 10 secs...OK
Sending request for text = Trichuris trichiura is a human parasitic whipworm infecting around 500 million people globally , damaging
Completed. Pausing for 10 secs...OK
Sending request for text = The idea of “date” and “party” hubs has been influential

in the study of protein-protein interaction
Completed. Pausing for 10 secs...OK
Sending request for text = Recent years have seen the development of numerous methodologies for reconstructing transmission trees
Completed. Pausing for 10 secs...OK
Sending request for text = X chromosome inactivation (XCI) silences most genes on one X chromosome in female mammals , but so
Completed. Pausing for 10 secs...OK
Sending request for text = Multiple cysteine proteases of malaria parasites are required for maintenance of parasite metabolic
Completed. Pausing for 10 secs...OK
Sending request for text = The unique capability of acetogens to ferment a broad range of substrates renders them ideal candidates
Completed. Pausing for 10 secs...OK
Sending request for text = Current genome-wide association studies (GWAS) are moving towards the use of large cohorts of prim
Completed. Pausing for 10 secs...OK
Sending request for text = *Saccharomyces eubayanus* is the non-*S. cerevisiae* parent of the lager-brewing hybrid *S. pastorianus*
Completed. Pausing for 10 secs...OK
Sending request for text = The variants of human influenza virus have caused , and continue to cause , substantial morbidity and
Completed. Pausing for 10 secs...OK
Sending request for text = The Asian soybean rust fungus , *Phakopsora pachyrhizi* , is an obligate biotrophic pathogen causing soybean rust
Completed. Pausing for 10 secs...OK
Sending request for text = The obligate intracellular bacterium *Chlamydia trachomatis* invades into host cells to replicate inside
Completed. Pausing for 10 secs...OK
Sending request for text = Since the first experimental evidences of active conductances in dendrites , most neurons have been
Completed. Pausing for 10 secs...OK
Sending request for text = The inference of regulatory interactions and quantitative models of gene regulation from time-series
Skipping, error : The read operation timed out
Completed. Pausing for 10 secs...OK
Sending request for text = Hotspot detection and characterization has played an increasing role in understanding the maintenance of
Completed. Pausing for 10 secs...OK
Sending request for text = Distinguishing mutations that determine an organism's phenotype from (near-neutral) 'hitchhikers'
Completed. Pausing for 10 secs...OK
Sending request for text = A two-step , high-throughput RNAi silencing screen was used to identify host cell factors required for viral replication
Completed. Pausing for 10 secs...OK
Sending request for text = Black Sigatoka or black leaf streak disease , caused by the Dothideomycete fungus *Pseudocercospora fijiensis*
Completed. Pausing for 10 secs...OK
Sending request for text = Changes in cis-regulatory element composition that result in novel patterns of gene expression are thought to be important in evolution
Completed. Pausing for 10 secs...OK
Sending request for text = For most species , light represents the principal environmental signal for entraining the endogenous circadian clock
Completed. Pausing for 10 secs...OK
Sending request for text = Parasites causing malaria need to migrate in order to penetrate tissue barriers and enter host cells

Completed. Pausing for 10 secs...OK
Sending request for text = Amphotericin B is an increasingly important tool in efforts to reduce the global disease burden posed

Completed. Pausing for 10 secs...OK
Sending request for text = The encoding of sensory information in the human brain is thought to be optimised by two principal pathways

Completed. Pausing for 10 secs...OK
Sending request for text = The three sub-species of *Trypanosoma brucei* are important pathogens of sub-Saharan Africa . T . b .

Completed. Pausing for 10 secs...OK
Sending request for text = DNA methylation of retroviral promoters and enhancers localized in the provirus 5' long terminal repeat

Completed. Pausing for 10 secs...OK
Sending request for text = Understanding the relationship between genetic and phenotypic variation is one of the great outstanding

Completed. Pausing for 10 secs...OK
Sending request for text = The rectified surface EMG signal is commonly used as an estimator of the neural drive to muscles and

Completed. Pausing for 10 secs...OK
Sending request for text = Auxin is necessary for the inhibition of root growth induced by aluminium (Al) stress , however the

Completed. Pausing for 10 secs...OK
Sending request for text = Natural killer (NK) cell responses in primates are regulated in part through interactions between

Completed. Pausing for 10 secs...OK
Sending request for text = Bacterial pathogens must sense , respond and adapt to a myriad of dynamic microenvironmental stresses

Completed. Pausing for 10 secs...OK
Sending request for text = The control over iron homeostasis is critical in host-pathogen-interaction . Iron plays not only multiple

Completed. Pausing for 10 secs...OK
Sending request for text = Proteins frequently accomplish their biological function by collective atomic motions . Yet the identity

Completed. Pausing for 10 secs...OK
Sending request for text = Nuclear genes of euglenids and marine diplomonads harbor atypical , nonconventional introns which are

Completed. Pausing for 10 secs...OK
Sending request for text = Coxsackievirus B (CVB) is an enterovirus that most commonly causes a self-limited febrile illness

Completed. Pausing for 10 secs...OK
Sending request for text = The cytosolic pathogen *Burkholderia pseudomallei* and causative agent of melioidosis has been shown to

Completed. Pausing for 10 secs...OK
Sending request for text = Pollen-stigma interactions are essential for pollen germination . The highly regulated process of pollen

Completed. Pausing for 10 secs...OK
Sending request for text = RNase III-related enzymes play key roles in cleaving double-stranded RNA in many biological systems

Completed. Pausing for 10 secs...OK
Sending request for text = The filarial nematode *Brugia malayi* is an etiological agent of Lymphatic Filariasis . The capability

Completed. Pausing for 10 secs...OK
Sending request for text = Scabies and impetigo are common , important and treatable skin conditions . Reports from several Pacific

Completed. Pausing for 10 secs...OK
Sending request for text = Neurogenesis continues through the adult life of mice in

the subgranular zone of the dentate gyrus i
Completed. Pausing for 10 secs...OK
Sending request for text = Chagas disease is a major health problem in Latin America
, and an emerging infectious disease in th
Completed. Pausing for 10 secs...OK
Sending request for text = Genome-wide association studies (GWAS) have been fruitf
ul in identifying disease susceptibility lo
Completed. Pausing for 10 secs...OK
Sending request for text = Memory CD8+ T cells in the circulation rapidly infiltrate
non-lymphoid tissues following infection a
Completed. Pausing for 10 secs...OK
Sending request for text = In neurons polarized trafficking of vesicle-bound membran
e proteins gives rise to the distinct molec
Completed. Pausing for 10 secs...OK
Sending request for text = Sex-determining mechanisms are diverse among animal linea
ges and can be broadly divided into two maj
Completed. Pausing for 10 secs...OK
Sending request for text = A genital herpes vaccine is urgently needed to prevent pa
in and suffering , reduce the incidence of
Completed. Pausing for 10 secs...OK
Sending request for text = Segmental duplications and other highly repetitive region
s of genomes contribute significantly to ce
Completed. Pausing for 10 secs...OK
Sending request for text = Schistosomiasis affects 218 million people worldwide , wi
th most infections in Africa . Prevalence s
Completed. Pausing for 10 secs...OK
Sending request for text = Ribosomal DNA is one of the most variable regions in the
human genome with respect to copy number .
Completed. Pausing for 10 secs...OK
Sending request for text = Mechanistic determinants of bacterial growth , death , an
d spread within mammalian hosts cannot be f
Completed. Pausing for 10 secs...OK
Sending request for text = It is shown that existing processing schemes of 3D motion
perception such as interocular velocity di
Completed. Pausing for 10 secs...OK
Sending request for text = The O-acetylation of polysaccharides is a common modifica
tion used by pathogenic organisms to protec
Completed. Pausing for 10 secs...OK
Sending request for text = Candida albicans is among the most common causes of human
fungal infections and is an important sour
Completed. Pausing for 10 secs...OK
Sending request for text = Alzheimer's disease (AD) and related dementias are a ma
jor public health challenge and present a t
Completed. Pausing for 10 secs...OK
Sending request for text = After decades of using urea as denaturant , the kinetic r
ole of this molecule in the unfolding proce
Completed. Pausing for 10 secs...OK
Sending request for text = A systematic literature review was conducted to describe
the epidemiology of dengue disease in Colom
Completed. Pausing for 10 secs...OK
Sending request for text = Tegumentary leishmaniasis (TL) is a disease of skin an
d/or mucosal tissues caused by Leishmania pa
Completed. Pausing for 10 secs...OK
Sending request for text = Genetic variation in the major histocompatibility complex
(MHC) affects CD4:CD8 lineage commitment
Completed. Pausing for 10 secs...OK

Sending request for text = After the United States , Spain comes second in the list of countries receiving migrants from Latin
Completed. Pausing for 10 secs...OK

Sending request for text = Hundreds of genetic markers have shown associations with various complex diseases , yet the “missing
Completed. Pausing for 10 secs...OK

Sending request for text = Agenesis of the corpus callosum (ACC) , cerebellar hypoplasia (CBLH) , and polymicrogyria (PMG
Completed. Pausing for 10 secs...OK

Sending request for text = Regeneration requires the precise integration of cues that initiate proliferation , direct different
Completed. Pausing for 10 secs...OK

Sending request for text = Exosomes can transfer genetic materials between cells . Their roles in viral infections are beginning
Completed. Pausing for 10 secs...OK

Sending request for text = PTEN-induced kinase 1 (PINK1) , which is required for mitochondrial homeostasis , is a gene product
Completed. Pausing for 10 secs...OK

Sending request for text = Buruli ulcer (BU) , caused by infection with Mycobacterium ulcerans , is a chronic necrotizing human
Completed. Pausing for 10 secs...OK

Sending request for text = Increased production of reactive oxygen species (ROS) in mitochondria underlies major systemic disease
Completed. Pausing for 10 secs...OK

Sending request for text = The early embryo of Drosophila melanogaster provides a powerful model system to study the role of genes
Completed. Pausing for 10 secs...OK

Sending request for text = Brucellosis is an important zoonotic disease causing huge economic losses worldwide . Currently no effective
Completed. Pausing for 10 secs...OK

Sending request for text = The cyclin-dependent kinases (CDKs) that promote cell-cycle progression are targets for negative regulation
Completed. Pausing for 10 secs...OK

Sending request for text = Turning genetic discoveries identified in genome-wide association (GWA) studies into biological mechanisms
Completed. Pausing for 10 secs...OK

Sending request for text = The mechanism (s) of action of most commonly used pharmacological blockers of voltage-gated ion channels
Completed. Pausing for 10 secs...OK

Sending request for text = MicroRNAs play key roles in tumor metastasis . Here , we describe the regulation and function of miRNAs
Completed. Pausing for 10 secs...OK

Sending request for text = Despite the well-documented effects of plasma lipid lowering regimes halting atherosclerosis lesion
Completed. Pausing for 10 secs...OK

Sending request for text = The cell envelope of Gram-negative bacteria is a formidable barrier that is difficult for antimicrobials
Completed. Pausing for 10 secs...OK

Sending request for text = Dynamical processes in biology are studied using an ever-increasing number of techniques , each of which
Completed. Pausing for 10 secs...OK

Sending request for text = Snake venom hemorrhagic metalloproteinases (SVMPs) of the PI , PII and PIII classes were compared
Completed. Pausing for 10 secs...OK

Sending request for text = The homeotic genes in Drosophila melanogaster are aligned on the chromosome in the order of the body

Completed. Pausing for 10 secs...OK
Sending request for text = Focal seizures are episodes of pathological brain activity that appear to arise from a localised area
Completed. Pausing for 10 secs...OK
Sending request for text = In contrast to animals and lower plant species, sperm cells of flowering plants are non-motile and
Completed. Pausing for 10 secs...OK
Sending request for text = Oncolytic viruses aim to specifically kill tumor cells. A major challenge is the effective targeting
Completed. Pausing for 10 secs...OK
Sending request for text = Duplication of centrosomes once per cell cycle is essential for bipolar spindle formation and genome
Completed. Pausing for 10 secs...OK
Sending request for text = The precise role of viral protein R (Vpr), an HIV-1-encoded protein, during HIV-1 infection and
Completed. Pausing for 10 secs...OK
Sending request for text = Vivax malaria was successfully eliminated in the Republic of Korea (South Korea) in the late 1970s
Completed. Pausing for 10 secs...OK
Sending request for text = Enhancement of transcription by a splicing-competent intron is an evolutionarily conserved feature
Completed. Pausing for 10 secs...OK
Sending request for text = A single nucleotide substitution in intron 3 of IGF2 in pigs abrogates a binding site for a repressor
Completed. Pausing for 10 secs...OK
Sending request for text = Understanding of the RNA editing process has been broadened considerably by the next generation sequencing
Completed. Pausing for 10 secs...OK
Sending request for text = Several studies have reported optimal population decoding of sensory responses in two-alternative visual
Completed. Pausing for 10 secs...OK
Sending request for text = Piwi-interacting RNAs (piRNAs) fulfill a critical, conserved role in defending the genome against
Completed. Pausing for 10 secs...OK
Sending request for text = Brucella species replicate within host cells in the form of endoplasmic reticulum (ER) -derived vacuoles
Completed. Pausing for 10 secs...OK
Sending request for text = Tombusviruses depend on subversions of multiple host factors and retarget cellular pathways to support
Completed. Pausing for 10 secs...OK
Sending request for text = Transmission of dengue virus (DENV) from humans to mosquitoes represents a critical component of the
Completed. Pausing for 10 secs...OK
Sending request for text = Many chemotherapeutic drugs are differentially effective from one patient to the next. Understanding
Completed. Pausing for 10 secs...OK
Sending request for text = The genetics of lifespan determination is poorly understood. Most research has been done on short-lived
Completed. Pausing for 10 secs...OK
Sending request for text = Among the strategies targeting vector control, the exploitation of the endosymbiont Wolbachia to prevent
Completed. Pausing for 10 secs...OK
Sending request for text = Many biological responses to intra- and extracellular stimuli are regulated through complex networks
Completed. Pausing for 10 secs...OK
Sending request for text = Environmental enteropathy (EE) is associated with growth

h failure , micronutrient malabsorption and
Completed. Pausing for 10 secs...OK
Sending request for text = Diverse animal and plant viruses block the re-infection o
f host cells by the same or highly similar
Completed. Pausing for 10 secs...OK
Sending request for text = Immunization of mice with the Trypanosoma cruzi trans-sia
lidase (TS) gene using plasmid DNA , aden
Completed. Pausing for 10 secs...OK
Sending request for text = The Polo-like kinase homolog in Trypanosoma brucei , TbPL
K , plays essential roles in basal body seg
Completed. Pausing for 10 secs...OK
Sending request for text = DEXD/H box RNA helicases , such as the RIG-I-like recepto
rs (RLR) , are important components of th
Completed. Pausing for 10 secs...OK
Sending request for text = A biophysical model of receptor potential generation in t
he male moth olfactory receptor neuron is p
Completed. Pausing for 10 secs...OK
Sending request for text = Cellular stresses activate the tumor suppressor p53 prote
in leading to selective binding to DNA resp
Completed. Pausing for 10 secs...OK
Sending request for text = Synthetic biology aims to design de novo biological syste
ms and reengineer existing ones . These eff
Completed. Pausing for 10 secs...OK
Sending request for text = From bacteria to humans , individual cells within isogeni
c populations can show significant variatio
Completed. Pausing for 10 secs...OK
Sending request for text = African trypanosomiasis is caused by the protozoan parasi
te Trypanosoma brucei , transmitted between
Completed. Pausing for 10 secs...OK
Sending request for text = For most organisms , chemosensation is critical for survi
val and is mediated by large families of ch
Completed. Pausing for 10 secs...OK
Sending request for text = Studies of human trisomies indicate a remarkable relation
ship between abnormal meiotic recombination
Completed. Pausing for 10 secs...OK
Sending request for text = Blood-feeding arthropods—like mosquitoes , sand flies , a
nd ticks—transmit many diseases that impose
Completed. Pausing for 10 secs...OK
Sending request for text = Leishmaniasis is an important disease that affects 12 mil
lion people in 88 countries , with 2 millio
Completed. Pausing for 10 secs...OK
Sending request for text = AID (Activation Induced Deaminase) deaminates cytosines
in DNA to initiate immunoglobulin gene div
Completed. Pausing for 10 secs...OK
Sending request for text = Microbial metabolism of plant polysaccharides is an impor
tant part of environmental carbon cycling ,
Completed. Pausing for 10 secs...OK
Sending request for text = 1974–2005 studies across Sierra Leone showed onchocercias
is endemicity in 12 of 14 health districts
Completed. Pausing for 10 secs...OK
Sending request for text = High-throughput sequencing based techniques , such as 16S
rRNA gene profiling , have the potential t
Completed. Pausing for 10 secs...OK
Sending request for text = The abundance of lysozyme on mucosal surfaces suggests th
at successful colonizers must be able to ev
Completed. Pausing for 10 secs...OK

Sending request for text = Dengue is the most important arthropod borne viral disease worldwide in terms of morbidity and mortality
Completed. Pausing for 10 secs...OK

Sending request for text = Multiple Myeloma (MM) is a plasma cell malignancy with significantly greater incidence and mortality
Completed. Pausing for 10 secs...OK

Sending request for text = The vast majority of mutations in the exome of cancer cells are passengers , which do not affect the
Completed. Pausing for 10 secs...OK

Sending request for text = Polyglutamine (polyQ) expansion in exon1 (XN1) of the huntingtin protein is linked to Huntington
Completed. Pausing for 10 secs...OK

Sending request for text = CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats) loci , together with cas (CRIS
Completed. Pausing for 10 secs...OK

Sending request for text = Most organisms have an endogenous circadian clock that is synchronized to environmental signals such
Completed. Pausing for 10 secs...OK

Sending request for text = The *Saccharomyces cerevisiae* RAD3 gene is the homolog of human XPD , an essential gene encoding a DNA
Completed. Pausing for 10 secs...OK

Sending request for text = During persistent infection , optimal expression of bacterial factors is required to match the ever-
Completed. Pausing for 10 secs...OK

Sending request for text = High-risk human papillomavirus (HPV) must evade innate immune surveillance to establish persistent
Completed. Pausing for 10 secs...OK

Sending request for text = *Salmonella enterica* serotype Typhi can colonize and persist in the biliary tract of infected individuals
Completed. Pausing for 10 secs...OK

Sending request for text = In order to study the role played by cellular RNA pools produced by homologous genomic loci in defining
Completed. Pausing for 10 secs...OK

Sending request for text = Hematophagous mosquitoes and ticks avoid host hemostatic system through expression of enzyme inhibitors
Completed. Pausing for 10 secs...OK

Sending request for text = The mucosa of the intestinal tract represents a finely tuned system where tissue structure strongly
Completed. Pausing for 10 secs...OK

Sending request for text = Traditional vector control approaches such as source reduction and insecticide spraying have limited
Completed. Pausing for 10 secs...OK

Sending request for text = Poxviruses employ sophisticated , but incompletely understood , signaling pathways that engage cellular
Completed. Pausing for 10 secs...OK

Sending request for text = Secondary amphiphilicity is inherent to the secondary structural elements of proteins . By forming the
Completed. Pausing for 10 secs...OK

Sending request for text = Human herpesvirus 6A (HHV-6A) and 6B (HHV-6B) are ubiquitous betaherpesviruses that infect humans
Completed. Pausing for 10 secs...OK

Sending request for text = In contrast to most enveloped viruses , poxviruses produce infectious particles that do not acquire
Completed. Pausing for 10 secs...OK

Sending request for text = Observations gained from model organisms are essential , yet it remains unclear to which degree they

Completed. Pausing for 10 secs...OK
Sending request for text = Understanding why genes evolve at different rates is fundamental to evolutionary thinking . In speci
Completed. Pausing for 10 secs...OK
Sending request for text = Activation of I- κ B kinases (IKKs) and NF- κ B by the human T lymphotropic virus type 1 (HTLV-1) tr
Completed. Pausing for 10 secs...OK
Sending request for text = The frontal lobes subserve decision-making and executive control—that is , the selection and coordin
Completed. Pausing for 10 secs...OK
Sending request for text = The field of medical systems biology aims to advance understanding of molecular mechanisms that driv
Completed. Pausing for 10 secs...OK
Sending request for text = Why are sensory signals and motor command signals combined in the neurons of origin of the spino cere
Completed. Pausing for 10 secs...OK
Sending request for text = Application of genomics and Next Generation sequencing has led to the identification of new class of
Completed. Pausing for 10 secs...OK
Sending request for text = Cystic echinococcosis (CE) is a globally distributed parasitic infection of humans and livestock .
Completed. Pausing for 10 secs...OK
Sending request for text = Mouse polyomavirus (MPyV) lytically infects mouse cells , transforms rat cells in culture , and is
Completed. Pausing for 10 secs...OK
Sending request for text = Each year in the past three decades has seen hundreds of thousands of runners register to run a major
Completed. Pausing for 10 secs...OK
Sending request for text = Most isolates of Toxoplasma from Europe and North America fall into one of three genetically distinct
Completed. Pausing for 10 secs...OK
Sending request for text = Recombination in enteroviruses provides an evolutionary mechanism for acquiring extensive regions of
Completed. Pausing for 10 secs...OK
Sending request for text = Being of white adipose tissue (WAT) is a particularly appealing target for therapeutics in the t
Completed. Pausing for 10 secs...OK
Sending request for text = The heterochromatin-enriched HP1 proteins play a critical role in regulation of transcription . These
Completed. Pausing for 10 secs...OK
Sending request for text = RNA molecules will tend to adopt a folded conformation through the pairing of bases on a single strand
Completed. Pausing for 10 secs...OK
Sending request for text = Host cells use an intricate signaling system to respond to invasions by pathogenic microorganisms .
Completed. Pausing for 10 secs...OK
Sending request for text = Successful embryo implantation requires a receptive endometrium . Poor uterine receptivity can account
Completed. Pausing for 10 secs...OK
Sending request for text = Geographical mapping of dengue in resource-limited settings is crucial for targeting control interventions
Completed. Pausing for 10 secs...OK
Sending request for text = When introduced into a novel environment , mammals establish in it a preferred place marked by the host
Completed. Pausing for 10 secs...OK
Sending request for text = Invasive infections by fungal pathogens cause more deaths

than malaria worldwide . We found the ergo
Completed. Pausing for 10 secs...OK
Sending request for text = The treatment and control of schistosomiasis , an often neglected tropical disease that exacerbates
Completed. Pausing for 10 secs...OK
Sending request for text = Podoconiosis is a non-filarial elephantiasis , which causes massive swelling of the lower legs . It
Completed. Pausing for 10 secs...OK
Sending request for text = Stem cells have an innate ability to occupy their stem cell niche , which in turn , is optimized to
Completed. Pausing for 10 secs...OK
Sending request for text = The UL97 protein of human cytomegalovirus (HCMV , or HHV-5 (human herpesvirus 5)) , is a kinase
Completed. Pausing for 10 secs...OK
Sending request for text = Burkholderia pseudomallei , a Tier 1 Select Agent and the cause of melioidosis , is a Gram-negative
Completed. Pausing for 10 secs...OK
Sending request for text = The mechanism of membrane fusion by “class II” viral fusion proteins follows a pathway that involves
Completed. Pausing for 10 secs...OK
Sending request for text = Global estimates for cholera annually approximate 4 million cases worldwide with 95 , 000 deaths . R
Completed. Pausing for 10 secs...OK
Sending request for text = Intense investigation has identified an elaborate protein network controlling epithelial polarity .
Completed. Pausing for 10 secs...OK
Sending request for text = The mode of reproduction in Leishmania spp has been argued to be essentially clonal . However , recent
Completed. Pausing for 10 secs...OK
Sending request for text = Visceral leishmaniasis (VL) caused by Leishmania donovani is a major health problem in Ethiopia .
Completed. Pausing for 10 secs...OK
Sending request for text = Recombinant HIV-1 genomes contribute significantly to the diversity of variants within the HIV/AIDS
Completed. Pausing for 10 secs...OK
Sending request for text = Computational modeling plays an important role in modern neuroscience research . Much previous research
Completed. Pausing for 10 secs...OK
Sending request for text = Rhombomeres (r) contribute to brainstem auditory nuclei during development . Hox genes are determined
Completed. Pausing for 10 secs...OK
Sending request for text = The marine bacterium Saccharophagus degradans strain 2-40 (Sde 2-40) is emerging as a vanguard of
Completed. Pausing for 10 secs...OK
Sending request for text = Japanese Encephalitis virus (JEV) is a zoonotic flavivirus that represents the most significant etiological
Completed. Pausing for 10 secs...OK
Sending request for text = Dengue infection is the fastest spreading mosquito-borne viral disease , which affects people living
Completed. Pausing for 10 secs...OK
Sending request for text = Individuals choose their mates so as to maximize reproductive success , and one important component
Completed. Pausing for 10 secs...OK
Sending request for text = The Ebola virus disease (EVD) epidemic in West Africa in 2013-2015 spread heterogeneously across the
Completed. Pausing for 10 secs...OK

Sending request for text = What factors determine a protein's rate of evolution are actively debated . Especially unclear is th
Completed. Pausing for 10 secs...OK

Sending request for text = Polycomb repressive complex 2 (PRC2) trimethylates lysine 27 of histone H3 (H3K27me3) to regulat
Completed. Pausing for 10 secs...OK

Sending request for text = Food and feeding-state dependent changes in chemoreceptor gene expression may allow Caenorhabditis e
Completed. Pausing for 10 secs...OK

Sending request for text = Buruli ulcer (BU) is a destructive skin condition caused by infection with the environmental bacteri
Completed. Pausing for 10 secs...OK

Sending request for text = The rat demyelination (dmy) mutation serves as a unique model system to investigate the maintenance
Completed. Pausing for 10 secs...OK

Sending request for text = Microarray gene expression signatures hold great promise to improve diagnosis and prognosis of disease
Completed. Pausing for 10 secs...OK

Sending request for text = Curli amyloid fibrils secreted by Enterobacteriaceae mediate host cell adhesion and contribute to bio
Completed. Pausing for 10 secs...OK

Sending request for text = Japanese encephalitis virus (JEV) is an important cause of encephalitis in most of Asia , with high
Completed. Pausing for 10 secs...OK

Sending request for text = The evolutionary origins of genetic robustness are still under debate: it may arise as a consequence
Completed. Pausing for 10 secs...OK

Sending request for text = Schistosoma infection is associated with immune modulation that can influence responses to non-schisto
Completed. Pausing for 10 secs...OK

Sending request for text = The evolution of bacterial populations has recently become considerably better understood due to large
Completed. Pausing for 10 secs...OK

Sending request for text = Cortical rhythms have been thought to play crucial roles in our cognitive abilities . Rhythmic activity
Completed. Pausing for 10 secs...OK

Sending request for text = Stochastic transmission dynamic models are especially useful for studying the early emergence of novel
Completed. Pausing for 10 secs...OK

Sending request for text = Every instant of perception depends on a cascade of brain processes calibrated to the history of sensory
Completed. Pausing for 10 secs...OK

Sending request for text = The Clock-Cycle (CLK-CYC) heterodimer constitutes a key circadian transcription complex in Drosophila
Completed. Pausing for 10 secs...OK

Sending request for text = Horizontally acquired genes typically function as autonomous units conferring new abilities when integrated
Completed. Pausing for 10 secs...OK

Sending request for text = The differentiation of embryonic stem cells is initiated by a gradual loss of pluripotency-associated
Completed. Pausing for 10 secs...OK

Sending request for text = Groupwise functional analysis of gene variants is becoming standard in next-generation sequencing studies
Completed. Pausing for 10 secs...OK

Sending request for text = In an effort to prevent continued increases in obesity and diabetes , in January 2014 , the Mexican

Completed. Pausing for 10 secs...OK
Sending request for text = Power laws describe brain functions at many levels (from biophysics to psychophysics) . It is ther
Completed. Pausing for 10 secs...OK
Sending request for text = Cameroon is endemic for Buruli ulcer (BU) and organised institutional BU control began in 2002 . T
Completed. Pausing for 10 secs...OK
Sending request for text = The ability to correctly estimate the probability of on e's choices being correct is fundamental to o
Completed. Pausing for 10 secs...OK
Sending request for text = Among the four non-structural proteins of alphaviruses th e function of nsP3 is the least well unders
Completed. Pausing for 10 secs...OK
Sending request for text = The human mutilating disease chromoblastomycosis is cause d by melanized members of the order Chaetot
Completed. Pausing for 10 secs...OK
Sending request for text = The DNA damage response (DDR) is an essential signaling pathway that detects DNA lesions , which c
Completed. Pausing for 10 secs...OK
Sending request for text = The human HSV-1 and -2 are common pathogens of human dise ases . Both host and viral factors are invo
Completed. Pausing for 10 secs...OK
Sending request for text = We aim to understand the microbial ecology of noma (canc rum oris) , a devastating ancient illness
Completed. Pausing for 10 secs...OK
Sending request for text = Bacteria use quorum sensing to coordinate adaptation prop erties , cell fate or commitment to sporula
Completed. Pausing for 10 secs...OK
Sending request for text = Infection with HIV cannot currently be cured; however it can be controlled by combination treatment
Completed. Pausing for 10 secs...OK
Sending request for text = The mechanism of eukaryotic chemotaxis remains unclear de spite intensive study . The most frequently
Completed. Pausing for 10 secs...OK
Sending request for text = Fleas can transmit Yersinia pestis by two mechanisms , ea rly-phase transmission (EPT) and biofilm-
Completed. Pausing for 10 secs...OK
Sending request for text = Positive correlations in the activity of neurons are wide ly observed in the brain . Previous studies
Completed. Pausing for 10 secs...OK
Sending request for text = Vibrio cholerae is the cause of cholera , a severe watery diarrhea . Protection against cholera is s
Completed. Pausing for 10 secs...OK
Sending request for text = Immunochromatographic card test (ICT) is a tool to map the distribution of Wuchereria bancrofti .
Completed. Pausing for 10 secs...OK
Sending request for text = Positive-strand RNA viruses , a large group including hum an pathogens such as SARS-coronavirus (SAR
Completed. Pausing for 10 secs...OK
Sending request for text = Though central to our understanding of how roots perform their vital function of scavenging water an
Completed. Pausing for 10 secs...OK
Sending request for text = The single photon response (SPR) in vertebrate phototra nsduction is regulated by the dynamics of R
Completed. Pausing for 10 secs...OK
Sending request for text = The dynamics of stochastic reaction networks within cells

are inevitably modulated by factors consid

Completed. Pausing for 10 secs...OK

Sending request for text = Much progress has been made in brain-machine interfaces (BMI) using decoders such as Kalman filter

Completed. Pausing for 10 secs...OK

Sending request for text = Redundancies and correlations in the responses of sensory neurons may seem to waste neural resources

Completed. Pausing for 10 secs...OK

Sending request for text = Genetic interactions occur when a combination of mutation s results in a surprising phenotype . These

Completed. Pausing for 10 secs...OK

Sending request for text = The BRCA Challenge is a long-term data-sharing project in itiated within the Global Alliance for Geno

Completed. Pausing for 10 secs...OK

Sending request for text = Malaria , caused by the apicomplexan parasite Plasmodium , still represents a major threat to human

Completed. Pausing for 10 secs...OK

Sending request for text = PUMA , which belongs to the BH3-only protein family , is an intrinsically disordered protein (IDP)

Completed. Pausing for 10 secs...OK

Sending request for text = Polycomb group (PcG) proteins are conserved chromatin f actors that maintain silencing of key devel

Completed. Pausing for 10 secs...OK

Sending request for text = Somatic mutations of mtDNA are implicated in the aging pr ocess , but there is no universally accepte

Completed. Pausing for 10 secs...OK

Sending request for text = The anaerobic bacterium *Fusobacterium nucleatum* uses glut amate decarboxylation to generate a transme

Completed. Pausing for 10 secs...OK

Sending request for text = $\alpha\beta$ T cell receptor (TCR) recognition of foreign peptide s bound to major histocompatibility complex

Completed. Pausing for 10 secs...OK

Sending request for text = The ascomycetous fungus *Nectria haematococca* , (asexual name *Fusarium solani*) , is a member of a g

Completed. Pausing for 10 secs...OK

Sending request for text = Egress of newly assembled herpesvirus particles from infe cted cells is a highly dynamic process invo

Completed. Pausing for 10 secs...OK

Sending request for text = Previous studies on the association of enterobiasis and c hronic inflammatory diseases have revealed

Completed. Pausing for 10 secs...OK

Sending request for text = Efforts to identify loci underlying complex traits genera lly assume that most genetic variance is ad

Completed. Pausing for 10 secs...OK

Sending request for text = Inherited mitochondrial DNA (mtDNA) mutations have emer ged as a common cause of human disease , wi

Completed. Pausing for 10 secs...OK

Sending request for text = In cancer metastasis , embryonic development , and wound healing , cells can coordinate their motion

Completed. Pausing for 10 secs...OK

Sending request for text = The dissociation mechanism of the thioredoxin (Trx) mix ed disulfide complexes is unknown and has b

Completed. Pausing for 10 secs...OK

Sending request for text = The weight with which a specific outcome feature contribu tes to preference quantifies a person's 'ta

Completed. Pausing for 10 secs...OK

Sending request for text = An important emerging question in the area of signal transduction is how information from different
Completed. Pausing for 10 secs...OK

Sending request for text = Changes in gene expression have been hypothesized to play an important role in the evolution of dive
Completed. Pausing for 10 secs...OK

Sending request for text = The schistosoma egg represents an attractive developmental stage at which to target transgenes because
Completed. Pausing for 10 secs...OK

Sending request for text = Large macromolecular assemblies are often important for biological processes in cells . Allosteric c
Completed. Pausing for 10 secs...OK

Sending request for text = The physiological role of fungal galectins has remained elusive . Here , we show that feeding of a m
Completed. Pausing for 10 secs...OK

Sending request for text = The existence of long-lived reservoirs of latently infected CD4+ T cells is the major barrier to cure
Completed. Pausing for 10 secs...OK

Sending request for text = Many viruses encode proteins whose major function is to evade or disable the host T cell response .
Completed. Pausing for 10 secs...OK

Sending request for text = Leprosy Type 1 reactions are a major cause of nerve damage and the preventable disability that result
Completed. Pausing for 10 secs...OK

Sending request for text = We , and others , have reported that in the HIV-negative settings , regulatory CD4+CD25highFoxP3+ T
Completed. Pausing for 10 secs...OK

Sending request for text = Lymphatic filarial parasites survive within the lymphatic vessels for years despite the complex immune
Completed. Pausing for 10 secs...OK

Sending request for text = CRISPR-Cas9 technologies have transformed genome-editing of experimental organisms and have immense
Completed. Pausing for 10 secs...OK

Sending request for text = The stomatal pores are located on the plant leaf epidermis and regulate CO₂ uptake for photosynthesis
Completed. Pausing for 10 secs...OK

Sending request for text = In eukaryotes , RNA polymerase II (PolII) dependent gene expression requires accessory factors termed
Completed. Pausing for 10 secs...OK

Sending request for text = An animal's ability to navigate through space rests on its ability to create a mental map of its environment
Completed. Pausing for 10 secs...OK

Sending request for text = The current model of hepatitis C virus (HCV) production involves the assembly of virions on or near
Completed. Pausing for 10 secs...OK

Sending request for text = Imprinted genes are expressed from only one parental allele and heterozygous loss involving the expressed
Completed. Pausing for 10 secs...OK

Sending request for text = Learning to predict threat from environmental cues is a fundamental skill in changing environments .
Completed. Pausing for 10 secs...OK

Sending request for text = The septation initiation network (SIN) , composed of a conserved SepH (Cdc7p) kinase cascade , plus
Completed. Pausing for 10 secs...OK

Sending request for text = Tegumentary Leishmaniasis (TL) is endemic in Latin America , and Brazil contributes approximately

Completed. Pausing for 10 secs...OK
Sending request for text = Streptococcus pneumoniae infection is a leading cause of bacterial pneumonia , sepsis and meningitis
Completed. Pausing for 10 secs...OK
Sending request for text = Neural networks with a single plastic layer employing reward modulated spike time dependent plasticity
Completed. Pausing for 10 secs...OK
Sending request for text = During pregnancy , the ETS transcription factor ELF5 establishes the milk-secreting alveolar cell lineage
Completed. Pausing for 10 secs...OK
Sending request for text = According to recent experimental evidence , the interaction between chromatin loops , which can be controlled
Completed. Pausing for 10 secs...OK
Sending request for text = Metabolic engineering increasingly depends upon RNA technology to customarily rewire the metabolism to
Completed. Pausing for 10 secs...OK
Sending request for text = Transient associations among neurons are thought to underlie memory and behavior . However , little
Completed. Pausing for 10 secs...OK
Sending request for text = Nuclear size correlates with cell size , but the mechanism by which this scaling is achieved is not
Completed. Pausing for 10 secs...OK
Sending request for text = Deep brain stimulation (DBS) is known to be an effective treatment for a variety of neurological disorders
Completed. Pausing for 10 secs...OK
Sending request for text = Schistosomiasis remains one of the most common endemic parasitic diseases affecting over 230 million
Completed. Pausing for 10 secs...OK
Sending request for text = Reported as a public health problem since the 1960s in Sri Lanka , dengue has become a high priority
Completed. Pausing for 10 secs...OK
Sending request for text = The relative contributions to modern European populations of Paleolithic hunter-gatherers and Neolithic
Completed. Pausing for 10 secs...OK
Sending request for text = It has recently been suggested that movement variability directly increases the speed of motor learning
Completed. Pausing for 10 secs...OK
Sending request for text = NF- κ B plays a vital role in cellular immune and inflammatory response , survival , and proliferation
Completed. Pausing for 10 secs...OK
Sending request for text = Gene set analysis methods , which consider predefined groups of genes in the analysis of genomic data
Completed. Pausing for 10 secs...OK
Sending request for text = Current understanding of the spatial epidemiology and geographical distribution of Plasmodium vivax
Completed. Pausing for 10 secs...OK
Sending request for text = Staphylococcus aureus expresses a number of cell wall-anchored proteins that mediate adhesion and invasion
Completed. Pausing for 10 secs...OK
Sending request for text = To achieve the 90-90-90 goals set by UNAIDS , the number of new HIV infections needs to decrease to
Completed. Pausing for 10 secs...OK
Sending request for text = Hepatitis C virus (HCV) induces autophagy to enhance its replication . However , how HCV regulates
Completed. Pausing for 10 secs...OK
Sending request for text = Cyclin Y-like 1 (Ccnyl1) is a newly-identified member of

f the cyclin family and is highly similar i

Completed. Pausing for 10 secs...OK

Sending request for text = Enterohemorrhagic Escherichia coli (EHEC) strains cause diarrhea and hemolytic uremic syndrome res

Completed. Pausing for 10 secs...OK

Sending request for text = Transcript elongation by RNA polymerase II (RNAPII) is accompanied by conserved patterns of histon

Completed. Pausing for 10 secs...OK

Sending request for text = Yellow fever virus (YFV) remains the cause of severe morbidity and mortality in South America and

Completed. Pausing for 10 secs...OK

Sending request for text = Herein , we studied a virulent isolate of the leading bacterial pathogen Streptococcus pneumoniae in

Completed. Pausing for 10 secs...OK

Sending request for text = Phlebotomus orientalis is a vector of Leishmania donovani , the causative agent of life threatening

Completed. Pausing for 10 secs...OK

Sending request for text = IncC conjugative plasmids and Salmonella genomic island 1 (SGI1) and relatives are frequently asso

Completed. Pausing for 10 secs...OK

Sending request for text = The Saccharomyces cerevisiae polo-like kinase Cdc5 promotes adaptation to the DNA damage checkpoint

Completed. Pausing for 10 secs...OK

Sending request for text = Many pathological conditions , such as seizures , stroke , and spreading depression , are associated

Completed. Pausing for 10 secs...OK

Sending request for text = A budget proposal to stop the U . S . Centers for Disease Control and Prevention (CDC) funding in

Completed. Pausing for 10 secs...OK

Sending request for text = Dengue is an emerging infectious disease of global significance . Suspected dengue , especially in c

Completed. Pausing for 10 secs...OK

Sending request for text = Plant-parasitic nematodes are destructive pests causing losses of billions of dollars annually . An

Completed. Pausing for 10 secs...OK

Sending request for text = Miltefosine , an anti-cancer drug that has been successfully repositioned for treatment of Leishmani

Completed. Pausing for 10 secs...OK

Sending request for text = In host-pathogen interactions , the struggle for iron may have major consequences on the outcome of

Completed. Pausing for 10 secs...OK

Sending request for text = The principal pacemaker of the circadian clock of the cyanobacterium S . elongatus is a protein phospho

Completed. Pausing for 10 secs...OK

Sending request for text = Hepatitis B virus (HBV) suppresses innate immune signaling to establish persistent infection . Alt

Completed. Pausing for 10 secs...OK

Sending request for text = T cell responses to enteric bacteria are important in inflammatory bowel disease . I2 , encoded by t

Completed. Pausing for 10 secs...OK

Sending request for text = Nanog is a principal pluripotency regulator exhibiting a dispersed distribution within stem cell popu

Completed. Pausing for 10 secs...OK

Sending request for text = The costs and benefits of protein expression are balanced through evolution . Expression of un-utili

Completed. Pausing for 10 secs...OK

Sending request for text = Recent large genome-wide association studies (GWAS) have identified multiple loci which harbor genes
Completed. Pausing for 10 secs...OK

Sending request for text = The nuclear division takes place in the daughter cell in the basidiomycetous budding yeast *Cryptococcus*
Completed. Pausing for 10 secs...OK

Sending request for text = Synonymous mutations continue to be filtered out from most large-scale cancer genome studies , but some
Completed. Pausing for 10 secs...OK

Sending request for text = Metagenomic sequencing of patient samples is a very promising method for the diagnosis of human infections
Completed. Pausing for 10 secs...OK

Sending request for text = While Human African Trypanosomiasis (HAT) is in decline on the continent of Africa , the disease is
Completed. Pausing for 10 secs...OK

Sending request for text = Thioredoxin-interacting protein (TXNIP) has multiple functions , including tumor suppression and insulin
Completed. Pausing for 10 secs...OK

Sending request for text = Germline mutations in DNA repair genes are linked to tumor progression . Furthermore , failure in either
Completed. Pausing for 10 secs...OK

Sending request for text = During tissue development , multipotent progenitors differentiate into specific cell types in characteristic
Completed. Pausing for 10 secs...OK

Sending request for text = In mouse models of influenza , T cells can confer broad protection against multiple viral subtypes with
Completed. Pausing for 10 secs...OK

Sending request for text = Q fever is the most widespread zoonosis , and domestic animals are the most common sources of transmission
Completed. Pausing for 10 secs...OK

Sending request for text = Cancers often display gene expression profiles resembling those of undifferentiated cells . The mechanism
Completed. Pausing for 10 secs...OK

Sending request for text = Natural selection drives populations towards higher fitness , but crossing fitness valleys or plateaus
Completed. Pausing for 10 secs...OK

Sending request for text = We describe the first comprehensive analysis of the midgut metabolome of *Aedes aegypti* , the primary
Completed. Pausing for 10 secs...OK

Sending request for text = Elucidating the underlying mechanisms of fatal cardiac arrhythmias requires a tight integration of electrophysiology
Completed. Pausing for 10 secs...OK

Sending request for text = During the sexual cycle of the ciliate *Paramecium* , assembly of the somatic genome includes the processing
Completed. Pausing for 10 secs...OK

Sending request for text = Sudden death has been considered the main cause of death in patients with Chagas heart disease . Nevertheless
Completed. Pausing for 10 secs...OK

Sending request for text = The NIK-interacting kinase (NIK) receptor-mediated defense pathway has been identified recently as
Completed. Pausing for 10 secs...OK

Sending request for text = *Paracoccidioides brasiliensis* is a human thermal dimorphic pathogenic fungus . Survival of *P. brasiliensis*
Completed. Pausing for 10 secs...OK

Sending request for text = Episodic-like memory is thought to be supported by attractor dynamics in the hippocampus . A possible

Completed. Pausing for 10 secs...OK
Sending request for text = Entamoeba histolytica , a microaerophilic enteric protozoan parasite , causes amebic colitis and ext

Completed. Pausing for 10 secs...OK
Sending request for text = IKAROS is a critical regulator of hematopoietic cell fate and its dynamic expression pattern is requ

Completed. Pausing for 10 secs...OK
Sending request for text = Bat rabies is an emerging disease of public health significance in the Americas . The Caribbean isla

Completed. Pausing for 10 secs...OK
Sending request for text = The cerebral cortex is divided into many functionally distinct areas . The emergence of these areas

Completed. Pausing for 10 secs...OK
Sending request for text = Polycomb group (PcG) proteins control organism development by regulating the expression of develop

Completed. Pausing for 10 secs...OK
Sending request for text = Pregnancy-induced noncoding RNA (PINC) and retinoblastoma-associated protein 46 (RbAp46) are upr

Completed. Pausing for 10 secs...OK
Sending request for text = PML (Promyelocytic Leukemia protein) , also known as TRIM19 , belongs to the family of tripartite

Completed. Pausing for 10 secs...OK
Sending request for text = Even when there is agreement on what measure a protein multiple structure alignment should be optimi

Completed. Pausing for 10 secs...OK
Sending request for text = Entry into mitosis is triggered by activation of Cdk1 and inactivation of its counteracting phosphat

Completed. Pausing for 10 secs...OK
Sending request for text = One aim for an HIV vaccine is to elicit neutralizing antibodies (Nab) that can limit replication o

Completed. Pausing for 10 secs...OK
Sending request for text = The extent that both positive and negative selection vary across different portions of plant genomes

Completed. Pausing for 10 secs...OK
Sending request for text = Epstein-Barr Virus (EBV) transforms resting B-lymphocytes into proliferating lymphoblasts to estab

Completed. Pausing for 10 secs...OK
Sending request for text = Aedes aegypti is the main mosquito vector of the four serotypes of dengue virus (DENV) . Previous

Completed. Pausing for 10 secs...OK
Sending request for text = The bacterial replication cycle is driven by the DnaA protein which cycles between the active ATP-bo

Completed. Pausing for 10 secs...OK
Sending request for text = Oscillatory activity plays a critical role in regulating biological processes at levels ranging from

Completed. Pausing for 10 secs...OK
Sending request for text = Inferring the ancestry at each locus in the genome of recently admixed individuals (e . g . , Latin

Completed. Pausing for 10 secs...OK
Sending request for text = In mammals , circadian periodicity has been described for gene expression in the hypothalamus and mu

Completed. Pausing for 10 secs...OK
Sending request for text = Recombination is an engine of genetic diversity and therefore constitutes a key process in evolution

Completed. Pausing for 10 secs...OK
Sending request for text = Repeat-proteins are made up of near repetitions of 20- to

40-amino acid stretches . These polypeptid
Completed. Pausing for 10 secs...OK
Sending request for text = Viral hepatitis , obesity , and alcoholism all represent
major risk factors for hepatocellular carci
Completed. Pausing for 10 secs...OK
Sending request for text = Leishmania aethiopica is the etiological agent of cutaneo
us leishmaniasis (CL) in Ethiopia and can
Completed. Pausing for 10 secs...OK
Sending request for text = A biochemical oscillator can be reconstituted in vitro wi
th three purified proteins , that displays
Completed. Pausing for 10 secs...OK
Sending request for text = It is well known that even under identical task condition
s , there is a tremendous amount of trial-t
Completed. Pausing for 10 secs...OK
Sending request for text = Sexual development is a key evolutionary innovation of eu
karyotes . In many species , mating involve
Completed. Pausing for 10 secs...OK
Sending request for text = Chagas disease is the most important vector-borne disease
in Latin America . Regional initiatives ba
Completed. Pausing for 10 secs...OK
Sending request for text = Feathers are arranged in a precise pattern in avian skin
. They first arise during development in a
Completed. Pausing for 10 secs...OK
Sending request for text = The 2013-15 Ebola outbreak was unprecedented due to susta
ined transmission within urban environments
Completed. Pausing for 10 secs...OK
Sending request for text = The voltage trace of neuronal activities can follow multi
ple timescale dynamics that arise from corr
Completed. Pausing for 10 secs...OK
Sending request for text = The ability of Paracoccidioides to defend itself against
reactive oxygen species (ROS) produced by
Completed. Pausing for 10 secs...OK
Sending request for text = Intrinsically disordered/unstructured proteins (IDPs) a
re extremely sensitive to proteolysis in vi
Completed. Pausing for 10 secs...OK
Sending request for text = The Drosophila genes spalt major (salm) and spalt-relat
ed (salr) encode Zn-finger transcription
Completed. Pausing for 10 secs...OK
Sending request for text = In humans perturbations of centriole number are associate
d with tumorigenesis and microcephaly , the
Completed. Pausing for 10 secs...OK
Sending request for text = Leishmaniasis is a rapidly expanding zoonosis that shows
increasing urbanization . Concern exists re
Completed. Pausing for 10 secs...OK
Sending request for text = MicroRNAs (miRNAs) are a family of small RNA molecules
that negatively regulate the expression of
Completed. Pausing for 10 secs...OK
Sending request for text = We present ggsashimi , a command-line tool for the visual
ization of splicing events across multiple
Completed. Pausing for 10 secs...OK
Sending request for text = Cross-species comparison has emerged as a powerful paradi
gm for predicting cis-regulatory modules (
Completed. Pausing for 10 secs...OK
Sending request for text = Transposons and other selfish DNA elements can be found i
n all phyla , and mobilization of these ele
Completed. Pausing for 10 secs...OK

Sending request for text = Over the past 30 years , Zaire and Sudan ebolaviruses have been responsible for large hemorrhagic fe
Completed. Pausing for 10 secs...OK

Sending request for text = There have been several reports on the varying rates of progression among Alzheimer's Disease (AD)
Completed. Pausing for 10 secs...OK

Sending request for text = Recently , we presented a study of adult neurogenesis in a simplified hippocampal memory model . The
Completed. Pausing for 10 secs...OK

Sending request for text = African trypanosomes express three virtually identical non-selenium glutathione peroxidase (Px) -t
Completed. Pausing for 10 secs...OK

Sending request for text = PMEL is an amyloidogenic protein that appears to be exclusively expressed in pigment cells and forms
Completed. Pausing for 10 secs...OK

Sending request for text = Vector control remains the primary method to prevent dengue infections . Environmental interventions
Completed. Pausing for 10 secs...OK

Sending request for text = Identifying small molecules that inhibit protein synthesis by selectively stalling the ribosome cons
Completed. Pausing for 10 secs...OK

Sending request for text = Regulation of messenger RNA (mRNA) stability plays critical roles in controlling gene expression ,
Completed. Pausing for 10 secs...OK

Sending request for text = The type III interferon (IFN λ) receptor IL-28R is abundantly expressed in the respiratory tract and
Completed. Pausing for 10 secs...OK

Sending request for text = We conducted a retrospective study on mortality trends and risk factors in 781 naïve cases of advanced
Completed. Pausing for 10 secs...OK

Sending request for text = Isolation profoundly influences social behavior in all animals . In humans , isolation has serious effects
Completed. Pausing for 10 secs...OK

Sending request for text = The emergence of mobile technology offers new opportunities to improve clinical guideline adherence
Completed. Pausing for 10 secs...OK

Sending request for text = The complexity of host-parasite interactions makes it difficult to predict how host-parasite systems
Completed. Pausing for 10 secs...OK

Sending request for text = GABAergic interneurons play an important role in shaping the activity of excitatory pyramidal cells
Completed. Pausing for 10 secs...OK

Sending request for text = Microbiota contribute to many dimensions of host phenotype , including disease . To link specific microbiota
Completed. Pausing for 10 secs...OK

Sending request for text = Pathogen replication and transmission in Wolbachia infected insects are currently studied using three
Completed. Pausing for 10 secs...OK

Sending request for text = Cilia are microtubule-based cellular organelles that mediate signal transduction . Cilia are organized
Completed. Pausing for 10 secs...OK

Sending request for text = The development and regeneration of myelin by oligodendrocytes , the myelin-forming cells of the central
Completed. Pausing for 10 secs...OK

Sending request for text = Streptolysin S (SLS) is a bacteriocin-like haemolytic and cytotoxic virulence factor that plays a

Completed. Pausing for 10 secs...OK
Sending request for text = Mycetoma is a persistent , progressive granulomatous inflammatory disease caused either by fungi or
Completed. Pausing for 10 secs...OK
Sending request for text = Molecular recognition by intrinsically disordered proteins (IDPs) commonly involves specific local
Completed. Pausing for 10 secs...OK
Sending request for text = The canonical ATP-dependent protease Lon participates in an assortment of biological processes in bacteria
Completed. Pausing for 10 secs...OK
Sending request for text = Fc gamma receptor (FcγR) -mediated antibody functions play a crucial role in preventing HIV infection
Completed. Pausing for 10 secs...OK
Sending request for text = Even though human hookworm infection is highly endemic in many countries throughout the world , its
Completed. Pausing for 10 secs...OK
Sending request for text = The mechanisms of hypoxic injury to the developing human brain are poorly understood , despite being
Completed. Pausing for 10 secs...OK
Sending request for text = Human paracoccidioidomycosis (PCM) is an endemic fungal disease of pulmonary origin . Follow-up of
Completed. Pausing for 10 secs...OK
Sending request for text = In areas endemic for visceral leishmaniasis (VL) , a large number of infected individuals mount a
Completed. Pausing for 10 secs...OK
Sending request for text = Gastrointestinal infections caused by enteric yersiniae can become persistent and complicated by relapse
Completed. Pausing for 10 secs...OK
Sending request for text = For successful colonization and further reproduction in host plants , pathogens need to overcome the
Completed. Pausing for 10 secs...OK
Sending request for text = Mapping the distribution of schistosomiasis is essential to determine where control programs should
Completed. Pausing for 10 secs...OK
Sending request for text = The mechanisms that guide motile sperm through the female reproductive tract to oocytes are not well
Completed. Pausing for 10 secs...OK
Sending request for text = The immunogenicity of biotherapeutics can bottleneck development pipelines and poses a barrier to wider
Completed. Pausing for 10 secs...OK
Sending request for text = For most eukaryotes , sexual reproduction is a fundamental process that requires meiosis . In turn ,
Completed. Pausing for 10 secs...OK
Sending request for text = The profusion of high-throughput instruments and the explosion of new results in the scientific literature
Completed. Pausing for 10 secs...OK
Sending request for text = Helminth parasites secrete extracellular vesicles (EVs) that can be internalised by host immune cells
Completed. Pausing for 10 secs...OK
Sending request for text = The precise regulation of microRNA (miRNA) transcription and processing is important for eukaryotes
Completed. Pausing for 10 secs...OK
Sending request for text = Folliculogenesis is a progressive and highly regulated process , which is essential to provide ova for
Completed. Pausing for 10 secs...OK
Sending request for text = The RNA polymerase II (Pol II) is a eukaryotic enzyme that

hat catalyzes the synthesis of the messenger
Completed. Pausing for 10 secs...OK
Sending request for text = Disease incidence data are needed to guide decision-making for public health interventions . Although
Completed. Pausing for 10 secs...OK
Sending request for text = Understanding the mechanisms that help promote protective immune responses to pathogens is a major concern
Completed. Pausing for 10 secs...OK
Sending request for text = In eukaryotes , 45S rRNA genes are arranged in tandem arrays in copy numbers ranging from several hundred to thousands
Completed. Pausing for 10 secs...OK
Sending request for text = Histone deacetylation plays a pivotal role in regulating human cytomegalovirus gene expression . In
Completed. Pausing for 10 secs...OK
Sending request for text = Respiratory Syncytial Virus (RSV) is the major cause of pneumonia among infants . Here we elucidate
Completed. Pausing for 10 secs...OK
Sending request for text = Filariidae are parasitic nematodes that are transmitted to their definitive host as third-stage larvae
Completed. Pausing for 10 secs...OK
Sending request for text = The Global Program to Eliminate Lymphatic Filariasis (LFP) relies on rapid diagnostic tests (RDTs)
Completed. Pausing for 10 secs...OK
Sending request for text = Primary cilia are specialised sensory and developmental signalling devices extending from the surface
Completed. Pausing for 10 secs...OK
Sending request for text = An important task of the brain is to represent the outside world . It is unclear how the brain may do this
Completed. Pausing for 10 secs...OK
Sending request for text = Viral fulminant hepatitis (FH) is a severe disease with high mortality resulting from excessive inflammation
Completed. Pausing for 10 secs...OK
Sending request for text = Hookworm infections are an important cause of (severe) anemia and iron deficiency in children in tropical regions
Completed. Pausing for 10 secs...OK
Sending request for text = Successful completion of meiosis requires the induction and faithful repair of DNA double-strand breaks
Completed. Pausing for 10 secs...OK
Sending request for text = Burkholderia pseudomallei causes melioidosis , a common source of pneumonia and sepsis in Southeast Asia
Completed. Pausing for 10 secs...OK
Sending request for text = Activation of cyclin B1-cyclin-dependent kinase 1 (Cdk1) , triggered by a positive feedback loop and
Completed. Pausing for 10 secs...OK
Sending request for text = HIV-1 vaccines designed to date have failed to elicit neutralizing antibodies (Nabs) that are capable
Completed. Pausing for 10 secs...OK
Sending request for text = Congenital human cytomegalovirus (HCMV) infection is the leading cause of neurological disabilities
Completed. Pausing for 10 secs...OK
Sending request for text = To better characterize how variation in regulatory sequences drives divergence in gene expression ,
Completed. Pausing for 10 secs...OK
Sending request for text = Monitoring and evaluation guidelines of the programme to eliminate lymphatic filariasis require implementation
Completed. Pausing for 10 secs...OK

Sending request for text = The application of the organophosphate larvicide temephos to water storage containers is one of the
Completed. Pausing for 10 secs...OK

Sending request for text = The cohesin complex holds sister chromatids together from the time of their duplication in S phase u
Completed. Pausing for 10 secs...OK

Sending request for text = Dengue virus (DENV) is the most widespread arbovirus with an estimated 100 million infections occu
Completed. Pausing for 10 secs...OK

Sending request for text = Research on Neglected Tropical Diseases (NTDs) has increased in recent decades , and significant n
Completed. Pausing for 10 secs...OK

Sending request for text = Lymphatic filariasis (LF) and soil-transmitted helminths (STH) have been targeted since 2000 in
Completed. Pausing for 10 secs...OK

Sending request for text = In all domains of life , proper regulation of the cell cycle is critical to coordinate genome replic
Completed. Pausing for 10 secs...OK

Sending request for text = Francisella tularensis is a highly infectious bacterium causing the zoonotic disease tularemia . Its
Completed. Pausing for 10 secs...OK

Sending request for text = Protozoan parasites of the genus Leishmania alternate between flagellated , elongated extracellular
Completed. Pausing for 10 secs...OK

Sending request for text = Eliciting broad tier 2 neutralizing antibodies (nAbs) is a major goal of HIV-1 vaccine research .
Completed. Pausing for 10 secs...OK

Sending request for text = While traditionally surgery has dominated the clinical management of Buruli ulcer (BU) , the intro
Completed. Pausing for 10 secs...OK

Sending request for text = Matching energy supply and demand is critical in the bioenergetic homeostasis of all cells . This is
Completed. Pausing for 10 secs...OK

Sending request for text = Spondylocarpotarsal synostosis (SCT) is an autosomal recessive disorder characterized by progressi
Completed. Pausing for 10 secs...OK

Sending request for text = Viruses have evolved a plethora of mechanisms to target host antiviral responses . Here , we propose
Completed. Pausing for 10 secs...OK

Sending request for text = Human parvovirus B19 (B19V) infection of primary human erythroid progenitor cells (EPCs) arrests
Completed. Pausing for 10 secs...OK

Sending request for text = Dengue virus (DENV) is the most prevalent , medically important mosquito-borne virus . Disease ran
Completed. Pausing for 10 secs...OK

Sending request for text = The first step towards cytokinesis in budding yeast is the assembly of a septin ring at the future s
Completed. Pausing for 10 secs...OK

Sending request for text = Humans inhabit a remarkably diverse range of environments , and adaptation through natural selection
Completed. Pausing for 10 secs...OK

Sending request for text = The short QT syndrome (SQTs) is a genetically heterogeneous condition characterized by abbreviated
Completed. Pausing for 10 secs...OK

Sending request for text = A variety of simple models has been proposed to understand the collective motion of animals . These

Completed. Pausing for 10 secs...OK
Sending request for text = Drug resistant HIV is a major threat to the long-term efficacy of antiretroviral treatment . Around
Completed. Pausing for 10 secs...OK
Sending request for text = The Elongator complex , including the histone acetyl transferase Sin3/Elp3 , was isolated as an RNA
Completed. Pausing for 10 secs...OK
Sending request for text = Primate lentivirus nef is required for sustained virus replication in vivo and accelerated progression
Completed. Pausing for 10 secs...OK
Sending request for text = Bithynia siamensis goniomphalos is the snail intermediate host of the liver fluke , Opisthorchis viv
Completed. Pausing for 10 secs...OK
Sending request for text = Pathophysiological mechanisms are still incompletely understood for leprosy , an urgent public health
Completed. Pausing for 10 secs...OK
Sending request for text = Metabolomic profiling and the integration of whole-genome genetic association data has proven to be
Completed. Pausing for 10 secs...OK
Sending request for text = Genome-scale metabolic networks provide a comprehensive structural framework for modeling genotype-p
Completed. Pausing for 10 secs...OK
Sending request for text = Landscape may affect the distribution of infectious diseases by influencing the population density a
Completed. Pausing for 10 secs...OK
Sending request for text = The heptalaminate-covered , syncytial tegument is an important anatomical adaptation that enables sc
Completed. Pausing for 10 secs...OK
Sending request for text = Cells in the Drosophila retina have well-defined morphologies that are attained during tissue morpho
Completed. Pausing for 10 secs...OK
Sending request for text = MT1-MMP is a potent invasion-promoting membrane protease employed by aggressive cancer cells . MT1-M
Completed. Pausing for 10 secs...OK
Sending request for text = The process by which drug-resistant HIV-1 arises and spreads spatially within an infected individual
Completed. Pausing for 10 secs...OK
Sending request for text = Feedback regulation of cell lineage progression plays an important role in tissue size homeostasis ,
Completed. Pausing for 10 secs...OK
Sending request for text = Myopia , or nearsightedness , is the most common eye disorder , resulting primarily from excess elongation
Completed. Pausing for 10 secs...OK
Sending request for text = Like other animals , lampreys have a central pattern generator (CPG) circuit that activates muscle
Completed. Pausing for 10 secs...OK
Sending request for text = Outside Africa , the global phylogeography of HIV is characterized by compartmentalized local epidemics
Completed. Pausing for 10 secs...OK
Sending request for text = The organization of muscle is the product of functional adaptation over several length scales spanning
Completed. Pausing for 10 secs...OK
Sending request for text = The symbiotic bacterium Wolbachia is currently being trialled as a biocontrol agent in several countries
Completed. Pausing for 10 secs...OK
Sending request for text = Histone lysine methylation is an important epigenetic modification

ification in regulating chromatin structure
Completed. Pausing for 10 secs...OK
Sending request for text = The HIV-1 capsid is involved in all infectious steps from reverse transcription to integration site
Completed. Pausing for 10 secs...OK
Sending request for text = The mosquito *Aedes aegypti* transmits some of the most important human arboviruses , including dengue
Completed. Pausing for 10 secs...OK
Sending request for text = The mosquito *Aedes aegypti* , vector of dengue , chikungunya and yellow fever viruses , is an important
Completed. Pausing for 10 secs...OK
Sending request for text = The human cytidine deaminase APOBEC3G (A3G) is a potent inhibitor of retroviruses and transposable
Completed. Pausing for 10 secs...OK
Sending request for text = Many agriculturally , evolutionarily , and medically important characters vary in a quantitative fashion
Completed. Pausing for 10 secs...OK
Sending request for text = *Streptococcus pneumoniae* (pneumococcus) has remained a persistent cause of invasive and mucosal disease
Completed. Pausing for 10 secs...OK
Sending request for text = Poliovirus IRES-mediated translation requires the functions of certain canonical as well as non-canonical
Completed. Pausing for 10 secs...OK
Sending request for text = The neural crest (NC) is a population of embryonic stem cells that gives rise to numerous cell types
Completed. Pausing for 10 secs...OK
Sending request for text = Numerous factors may influence *Schistosoma* infection intensity and prevalence within endemic communities
Completed. Pausing for 10 secs...OK
Sending request for text = Stool examination by counting eggs per gram of feces (EPGs) is the best method to estimate worm burden
Completed. Pausing for 10 secs...OK
Sending request for text = Drug resistance is a rapidly emerging concern , thus prompting the development of novel therapeutics
Completed. Pausing for 10 secs...OK
Sending request for text = At the culmination of poliovirus (PV) multiplication , membranes are observed that contain phospholipids
Completed. Pausing for 10 secs...OK
Sending request for text = A multi-step cascade strategy using integrated ligand- and target-based virtual screening methods was used
Completed. Pausing for 10 secs...OK
Sending request for text = Attenuated yellow fever (YF) virus 17D/17DD vaccines are the only available protection from YF infection
Completed. Pausing for 10 secs...OK
Sending request for text = Chitin utilization by the cholera pathogen *Vibrio cholerae* is required for its persistence and evolution
Completed. Pausing for 10 secs...OK
Sending request for text = We present a nonlinear programming (NLP) framework for the scalable solution of parameter estimation problems
Completed. Pausing for 10 secs...OK
Sending request for text = The ability to track changes in gene expression following viral infection is paramount to understanding
Completed. Pausing for 10 secs...OK
Sending request for text = In Mozambique , the majority of rabies outbreaks are unreported and data on the epidemiological features are limited
Completed. Pausing for 10 secs...OK

Sending request for text = A follow-up study of a large Utah family with significant linkage to chromosome 2q24 led us to ident
Completed. Pausing for 10 secs...OK

Sending request for text = A major problem in biology is to understand how complex t
issue shapes may arise through growth . In
Completed. Pausing for 10 secs...OK

Sending request for text = During early human immunodeficiency virus (HIV) infecti
on multiple CD8+ T cell responses are elici
Completed. Pausing for 10 secs...OK

Sending request for text = The 5-year survival of non-small cell lung cancer patient
s can be as low as 1% in advanced stages .
Completed. Pausing for 10 secs...OK

Sending request for text = High levels of antibiotic tolerance are a hallmark of bac
terial biofilms . In contrast to well-chara
Completed. Pausing for 10 secs...OK

Sending request for text = All pathogenesis and death associated with Plasmodium fal
ciparum malaria is due to parasite-infected
Completed. Pausing for 10 secs...OK

Sending request for text = The soil-transmitted threadworm , Strongyloides stercoral
is , is one of the most neglected among the
Completed. Pausing for 10 secs...OK

Sending request for text = Stochastic noise at the cellular level has been shown to
play a fundamental role in circadian oscill
Completed. Pausing for 10 secs...OK

Sending request for text = The recent increase in antibiotic resistance in pathogeni
c bacteria calls for new approaches to drug
Completed. Pausing for 10 secs...OK

Sending request for text = Lens epithelium derived growth factor (LEDGF) , also kn
own as PC4 and SFRS1 interacting protein 1
Completed. Pausing for 10 secs...OK

Sending request for text = Cells of different organs at different ages have an intri
nsic set of kinetics that dictates their be
Completed. Pausing for 10 secs...OK

Sending request for text = Many zoonotic , novel infectious diseases in humans appea
r as sporadic infections with spatially and
Completed. Pausing for 10 secs...OK

Sending request for text = Wild birds have been implicated in the emergence of human
and livestock influenza . The successful p
Completed. Pausing for 10 secs...OK

Sending request for text = The hemagglutinin (HA) of influenza A viruses has been
classified into sixteen distinct subtypes (
Completed. Pausing for 10 secs...OK

Sending request for text = To assess the effect of treatment with ivermectin on the
prevalence of S . stercoralis infection in
Completed. Pausing for 10 secs...OK

Sending request for text = Prion diseases are caused by a misfolded isoform of the p
rion protein , PrPSc . Prion strains are hy
Completed. Pausing for 10 secs...OK

Sending request for text = Intrinsically disordered proteins/regions (IDPs/IDRs) a
re prevalent in allosteric regulation . It
Completed. Pausing for 10 secs...OK

Sending request for text = Prostate cancer is a major cause of male death in the Wes
tern world , but few frequent genetic alter
Completed. Pausing for 10 secs...OK

Sending request for text = Currently there is increasing recognition of the need for
research in developing countries where dis

Completed. Pausing for 10 secs...OK
Sending request for text = Cell proliferation is the common characteristic of all biological systems . The immune system insure
Completed. Pausing for 10 secs...OK
Sending request for text = About half of the mitochondrial DNA (mtDNA) mutations causing diseases in humans occur in tRNA gen
Completed. Pausing for 10 secs...OK
Sending request for text = In mammals , dosage compensation is achieved by doubling expression of X-linked genes in both sexes
Completed. Pausing for 10 secs...OK
Sending request for text = Evolutionary pressures on proteins are often quantified by the ratio of substitution rates at non-sy
Completed. Pausing for 10 secs...OK
Sending request for text = A major goal in evolutionary biology is to understand how natural selection has shaped patterns of g
Completed. Pausing for 10 secs...OK
Sending request for text = Phosphorylation is a pivotal regulatory mechanism for protein stability and activity in circadian cl
Completed. Pausing for 10 secs...OK
Sending request for text = Trypanosoma cruzi is the etiological agent of Chagas' disease . Cysteine peptidases are relevant to
Completed. Pausing for 10 secs...OK
Sending request for text = Cytoplasmic dynein is a microtubule-dependent motor protein that functions in mitotic cells during c
Completed. Pausing for 10 secs...OK
Sending request for text = During somatic differentiation , physiological DNA double-strand breaks (DSB) can drive programmed
Completed. Pausing for 10 secs...OK
Sending request for text = Prion diseases typically have long pre-clinical incubation periods during which time the infectious
Completed. Pausing for 10 secs...OK
Sending request for text = Experimental visceral leishmaniasis , caused by infection of mice with the protozoan parasite Leishm
Completed. Pausing for 10 secs...OK
Sending request for text = The transcriptional regulatory machinery of a gene can be viewed as a computational device , with tr
Completed. Pausing for 10 secs...OK
Sending request for text = Chikungunya virus (CHIKV) is an RNA virus from the Togaviridae family transmitted by mosquitoes in
Completed. Pausing for 10 secs...OK
Sending request for text = Horizontal acquisition of DNA by bacteria dramatically increases genetic diversity and hence success
Completed. Pausing for 10 secs...OK
Sending request for text = Genome sequencing of Leishmania species that give rise to a range of disease phenotypes in the host
Completed. Pausing for 10 secs...OK
Sending request for text = Amphimeriasis is a fish-borne disease caused by the liver fluke Amphimerus spp . that has recently b
Completed. Pausing for 10 secs...OK
Sending request for text = The autophagosomal SNARE Syntaxin17 (Syx17) forms a complex with Snap29 and Vamp7/8 to promote aut
Completed. Pausing for 10 secs...OK
Sending request for text = Antimicrobial peptides (AMPs) contribute to host innate immune defense and are a critical component
Completed. Pausing for 10 secs...OK
Sending request for text = Several key transcription factors have unusually short ha

lf-lives compared to other cellular protein
Completed. Pausing for 10 secs...OK
Sending request for text = We have recently demonstrated that MAP kinase phosphatase 2 (MKP-2) deficient C57BL/6 mice , unlik
Completed. Pausing for 10 secs...OK
Sending request for text = The mammalian pancreas is a branched organ that does not exhibit stereotypic branching patterns , si
Completed. Pausing for 10 secs...OK
Sending request for text = Kinesin motor proteins drive intracellular transport by coupling ATP hydrolysis to conformational ch
Completed. Pausing for 10 secs...OK
Sending request for text = The bacterial Lux system is used as a gene expression reporter . It is fast , sensitive and non-destructive
Completed. Pausing for 10 secs...OK
Sending request for text = The replication of enterovirus 71 (EV71) and coxsackievirus A16 (CVA16) , which are the major causes of
Completed. Pausing for 10 secs...OK
Sending request for text = The humoral response to fungal and Gram-positive infections is regulated by the serpin-family inhibitors
Completed. Pausing for 10 secs...OK
Sending request for text = Nodal and BMP signals are important for establishing left-right (LR) asymmetry in vertebrates . In
Completed. Pausing for 10 secs...OK
Sending request for text = The onset of human cytomegalovirus (HCMV) lytic infection is strictly synchronized with the host cell cycle
Completed. Pausing for 10 secs...OK
Sending request for text = The majority of HIV-1 elite controllers (EC) restrict HIV-1 replication through highly functional
Completed. Pausing for 10 secs...OK
Sending request for text = Obesity has a strong genetic component , but few of the genes that predispose to obesity are known .
Completed. Pausing for 10 secs...OK
Sending request for text = Asymmetric cell division is essential to generate cellular diversity . In many animal cells , the cell cycle
Completed. Pausing for 10 secs...OK
Sending request for text = The evolution of new gene networks is a primary source of genetic innovation that allows bacteria to
Completed. Pausing for 10 secs...OK
Sending request for text = Sequence analysis of the genome of the strict intracellular pathogen Chlamydia trachomatis revealed
Completed. Pausing for 10 secs...OK
Sending request for text = Stature is a classical and highly heritable complex trait , with 80%-90% of variation explained by genetic factors
Completed. Pausing for 10 secs...OK
Sending request for text = Monocyte (MO) subpopulations display distinct phenotypes and functions which can drastically change
Completed. Pausing for 10 secs...OK
Sending request for text = Schistosoma mansoni infection has been associated with an increased HIV prevalence in humans and SHI
Completed. Pausing for 10 secs...OK
Sending request for text = Filarial nematodes maintain a mutualistic relationship with the endosymbiont Wolbachia . Depletion of
Completed. Pausing for 10 secs...OK
Sending request for text = The malaria-causing blood stage of Plasmodium falciparum requires extracellular pantothenate for proliferation
Completed. Pausing for 10 secs...OK

Sending request for text = The PR interval on the electrocardiogram reflects atrial and atrioventricular nodal conduction time
Completed. Pausing for 10 secs...OK

Sending request for text = Tomato mosaic virus (ToMV) , like other eukaryotic positive-strand RNA viruses , replicates its genome
Completed. Pausing for 10 secs...OK

Sending request for text = Inhibitory interneurons play critical roles in shaping the firing patterns of principal neurons in the mouse
Completed. Pausing for 10 secs...OK

Sending request for text = The definitive diagnosis of rabies infection (including rabies) in animals and humans is based on
Completed. Pausing for 10 secs...OK

Sending request for text = An outbreak of tsetse-transmitted trypanosomiasis resulted in more than 50% losses of domestic pigs
Completed. Pausing for 10 secs...OK

Sending request for text = There is a growing movement to encourage reproducibility and transparency practices in the scientific community
Completed. Pausing for 10 secs...OK

Sending request for text = Inhalation of Yersinia pestis causes primary pneumonic plague , a highly lethal syndrome with mortality
Completed. Pausing for 10 secs...OK

Sending request for text = One of the most important drawbacks in visceral leishmaniasis (VL) population studies is the difficulty
Completed. Pausing for 10 secs...OK

Sending request for text = Retrotransposons are highly prevalent in mammalian genomes due to their ability to amplify in pluripotent cells
Completed. Pausing for 10 secs...OK

Sending request for text = Arabidopsis thaliana cryptochrome 2 (CRY2) mediates light control of flowering time . CIB1 (CRY2-interacting basic helix-loop-helix protein)
Completed. Pausing for 10 secs...OK

Sending request for text = Many U . S . -bound refugees travel from countries where intestinal parasites (hookworm , Trichuris) are common
Completed. Pausing for 10 secs...OK

Sending request for text = Microbial pathogens often establish infection within particular niches of their host for replication
Completed. Pausing for 10 secs...OK

Sending request for text = The Cockayne syndrome complementation group B (CSB) protein is essential for transcription-coupled DNA repair
Completed. Pausing for 10 secs...OK

Sending request for text = While population studies have resulted in detailed maps of genetic variation in humans , to date the genetic architecture of complex traits remains unclear
Completed. Pausing for 10 secs...OK

Sending request for text = Serological tests for IgM and IgG are routinely used in clinical laboratories for the rapid diagnosis of infectious diseases
Completed. Pausing for 10 secs...OK

Sending request for text = The prediction of functional RNA structures has attracted increased interest , as it allows us to study gene expression and regulation
Completed. Pausing for 10 secs...OK

Sending request for text = Plant immunity protects plants from numerous potentially pathogenic microbes . The biological network underlying plant immunity is complex and dynamic
Completed. Pausing for 10 secs...OK

Sending request for text = The central nervous system develops from monolayered neuroepithelial sheets . In a first step patterned by morphogens
Completed. Pausing for 10 secs...OK

Sending request for text = Ever since the discovery of endogenous host defense antimicrobial peptides it has been discussed how they contribute to innate immunity

Completed. Pausing for 10 secs...OK
Sending request for text = Lowe syndrome and Dent-2 disease are caused by mutation of the inositol 5-phosphatase OCRL1 . Despite

Completed. Pausing for 10 secs...OK
Sending request for text = In recent years , evidence of Rift Valley fever (RVF) transmission during inter-epidemic periods is

Completed. Pausing for 10 secs...OK
Sending request for text = Trypanosoma cruzi is the etiologic agent of Chagas disease . Although this is not a free-living organism

Completed. Pausing for 10 secs...OK
Sending request for text = This phase III clinical trial compared the immunogenicity and safety of a purified chick-embryo cell

Completed. Pausing for 10 secs...OK
Sending request for text = One of the most fundamental features of the human brain is its ability to detect and attend to salient

Completed. Pausing for 10 secs...OK
Sending request for text = Nonenveloped viruses are generally released by the timely lysis of the host cell by a poorly understood

Completed. Pausing for 10 secs...OK
Sending request for text = Dengue virus (DENV) is spread through most tropical and subtropical areas of the world and represents

Completed. Pausing for 10 secs...OK
Sending request for text = In Gram-positive bacteria , cell-to-cell communication mainly relies on extracellular signaling peptides

Completed. Pausing for 10 secs...OK
Sending request for text = While the pentameric ligand-gated ion channel ELIC has recently provided first insight into the arch

Completed. Pausing for 10 secs...OK
Sending request for text = Asthma is a common allergic lung disease frequently affecting individuals with a prior history of ec

Completed. Pausing for 10 secs...OK
Sending request for text = The generation of genome-scale data is becoming more routine , yet the subsequent analysis of omics

Completed. Pausing for 10 secs...OK
Sending request for text = Visual object recognition and sensitivity to image features are largely influenced by contextual input

Completed. Pausing for 10 secs...OK
Sending request for text = Cooperation based on the production of costly common goods is observed throughout nature . This is possible

Completed. Pausing for 10 secs...OK
Sending request for text = For opportunistic pathogens such as Pseudomonas aeruginosa , the mucosal barrier represents a formidable

Completed. Pausing for 10 secs...OK
Sending request for text = The Drosophila embryonic gonad is assembled from two distinct cell types , the Primordial Germ Cells

Completed. Pausing for 10 secs...OK
Sending request for text = If future HIV vaccine design strategies are to succeed , improved understanding of the mechanisms underlying

Completed. Pausing for 10 secs...OK
Sending request for text = There is evidence that the sharing of intentions was an important factor in the evolution of humans'

Completed. Pausing for 10 secs...OK
Sending request for text = Male fertility requires the continuous production of high quality motile spermatozoa in abundance .

Completed. Pausing for 10 secs...OK
Sending request for text = Although Escherichia coli Nissle 1917 (EcN) has been used

ed therapeutically for over a century , the
Completed. Pausing for 10 secs...OK
Sending request for text = Cryptococcus neoformans , an AIDS-defining opportunistic
pathogen , is the leading cause of fungal m
Completed. Pausing for 10 secs...OK
Sending request for text = After many years of general neglect , interest has grown
and efforts came under way for the mapping
Completed. Pausing for 10 secs...OK
Sending request for text = Chronic helminth infections induce a Th2 immune shift and
establish an immunoregulatory milieu . As
Completed. Pausing for 10 secs...OK
Sending request for text = Insects utilize diverse families of ion channels to respo
nd to environmental cues and control mating
Completed. Pausing for 10 secs...OK
Sending request for text = Mitochondria from diverse phyla , including protozoa , fu
ngi , higher plants , and humans , import t
Completed. Pausing for 10 secs...OK
Sending request for text = Diabetes is an increasing problem worldwide; almost 30 mi
llion people , nearly 10% of the population
Completed. Pausing for 10 secs...OK
Sending request for text = Mitogen-activated protein (MAP) kinase signaling cascad
es play important roles in the regulation o
Completed. Pausing for 10 secs...OK
Sending request for text = Infectious diseases are one of the primary healthcare pro
blems worldwide , leading to millions of de
Completed. Pausing for 10 secs...OK
Sending request for text = Rift Valley fever (RVF) is an important mosquito-borne
viral zoonosis in Africa and the Middle Eas
Completed. Pausing for 10 secs...OK
Sending request for text = We assessed spatial and temporal changes in the occurrenc
e of human anthrax in Azerbaijan during 198
Completed. Pausing for 10 secs...OK
Sending request for text = Voltage-gated potassium (KV) channels are membrane prot
eins that respond to changes in membrane po
Completed. Pausing for 10 secs...OK
Sending request for text = The protozoan parasite Cryptosporidium parvum is responsi
ble for significant disease burden among ch
Completed. Pausing for 10 secs...OK
Sending request for text = Tooth development is a highly heritable process which rel
ates to other growth and developmental proc
Completed. Pausing for 10 secs...OK
Sending request for text = The trisomy of human chromosome 21 (Hsa21) , which caus
es Down syndrome (DS) , is the most commo
Completed. Pausing for 10 secs...OK
Sending request for text = G protein-gated K⁺ channels (GIRK; Kir3) , activated by
Gβγ subunits derived from Gi/o proteins ,
Completed. Pausing for 10 secs...OK
Sending request for text = Plant-pathogenic Xanthomonas bacteria secrete transcripti
on activator-like effectors (TALEs) into
Completed. Pausing for 10 secs...OK
Sending request for text = 24 , 189 are all the possible non-synonymous amino acid c
hanges potentially affecting the human mito
Completed. Pausing for 10 secs...OK
Sending request for text = Dengue virus (DENV) infection , the most common mosquit
o-transmitted viral infection , can cause a
Completed. Pausing for 10 secs...OK

Sending request for text = We performed a mathematical analysis of the dynamic control loops regulating the vasomotor tone of v
Completed. Pausing for 10 secs...OK

Sending request for text = Thromboembolic disease is a leading cause of morbidity and mortality worldwide . In the last several
Completed. Pausing for 10 secs...OK

Sending request for text = Invariant natural killer T (iNKT) cells are activated during infection , but how they limit microb
Completed. Pausing for 10 secs...OK

Sending request for text = Interactions between colonizing commensal microorganisms and their hosts play important roles in hea
Completed. Pausing for 10 secs...OK

Sending request for text = Immunization with irradiated sporozoites is currently the most effective vaccination strategy against
Completed. Pausing for 10 secs...OK

Sending request for text = Most treatments of leishmaniasis require hospitalization and present side effects or parasite resist
Completed. Pausing for 10 secs...OK

Sending request for text = In Brazil , lethality from visceral leishmaniasis (VL) is high and few studies have addressed prog
Completed. Pausing for 10 secs...OK

Sending request for text = Plants rely heavily on receptor-like kinases (RLKs) for perception and integration of external and
Completed. Pausing for 10 secs...OK

Sending request for text = The antiproliferative response to anticancer treatment is the result of concurrent responses in all
Completed. Pausing for 10 secs...OK

Sending request for text = Coenzyme Q (CoQ) is an essential electron carrier in the respiratory chain whose deficiency has be
Completed. Pausing for 10 secs...OK

Sending request for text = All forms of life are confronted with environmental and genetic perturbations , making phenotypic ro
Completed. Pausing for 10 secs...OK

Sending request for text = Phenomics has the potential to facilitate significant advances in biology but requires the developme
Completed. Pausing for 10 secs...OK

Sending request for text = Malaria parasites (Plasmodium spp .) encounter markedly different (nutritional) environments dur
Completed. Pausing for 10 secs...OK

Sending request for text = From the timing of amoeba development to the maintenance of stem cell pluripotency , many biological
Completed. Pausing for 10 secs...OK

Sending request for text = Scrub typhus is a leading cause of serious febrile illnesses in rural Southeast Asia . The causative a
Completed. Pausing for 10 secs...OK

Sending request for text = Morbidity due to schistosomiasis is currently controlled by treatment of schistosome infected people
Completed. Pausing for 10 secs...OK

Sending request for text = Oncogenic mutations in the small GTPase Ras contribute to ~30% of human cancers . However , Ras muta
Completed. Pausing for 10 secs...OK

Sending request for text = Meiotic drivers are selfish alleles that subvert gametogenesis to increase their transmission into p
Completed. Pausing for 10 secs...OK

Sending request for text = Many genetic variants that are significantly correlated to gene expression changes across human indi

Completed. Pausing for 10 secs...OK
Sending request for text = Malarial infections are often genetically diverse , leading to competitive interactions between para
Completed. Pausing for 10 secs...OK
Sending request for text = DNA replication errors are a major driver of evolution—from single nucleotide polymorphisms to large
Completed. Pausing for 10 secs...OK
Sending request for text = Translation can initiate at alternate , non-canonical start codons in response to stressful stimuli
Completed. Pausing for 10 secs...OK
Sending request for text = Enteric bacterial pathogens cause food borne disease , which constitutes an enormous economic and he
Completed. Pausing for 10 secs...OK
Sending request for text = Transcription factor (TF) binding to its DNA target site is a fundamental regulatory interaction .
Completed. Pausing for 10 secs...OK
Sending request for text = Adrenergic α_2C receptor (ADRA2C) is an inhibitory modulator of the sympathetic nervous system . Kn
Completed. Pausing for 10 secs...OK
Sending request for text = With at least 60 independent origins spanning monocotyledons and dicotyledons , the C4 photosynthetic
Completed. Pausing for 10 secs...OK
Sending request for text = An unprecedented Ebola virus (EBOV) epidemic occurred in 2013–2016 in West Africa . Over this time
Completed. Pausing for 10 secs...OK
Sending request for text = Machupo virus (MACV) , a New World arenavirus , is the etiological agent of Bolivian hemorrhagic fever
Completed. Pausing for 10 secs...OK
Sending request for text = The centromeric histone 3 variant (CENH3 , aka CENP-A) is essential for the segregation of sister
Completed. Pausing for 10 secs...OK
Sending request for text = The role of alternative splicing in self-renewal , pluripotency and tissue lineage specification of
Completed. Pausing for 10 secs...OK
Sending request for text = Trehalose biosynthesis is considered an attractive target for the development of antimicrobials against
Completed. Pausing for 10 secs...OK
Sending request for text = Chagas' disease , caused by the protozoan parasite Trypanosoma cruzi (T . cruzi) , is a life-threatening
Completed. Pausing for 10 secs...OK
Sending request for text = Inducible and reversible regulation of gene expression is a powerful approach for uncovering gene function
Completed. Pausing for 10 secs...OK
Sending request for text = Congenital infection of Trypanosoma cruzi allows transmission of this parasite through generations .
Completed. Pausing for 10 secs...OK
Sending request for text = Polyarthritides and rash caused by Sindbis virus (SINV) , was first recognised in northern Europe about
Completed. Pausing for 10 secs...OK
Sending request for text = Neural circuits exploit numerous strategies for encoding information . Although the functional significance
Completed. Pausing for 10 secs...OK
Sending request for text = Environmental exposures filtered through the genetic make-up of each individual alter the transcript
Completed. Pausing for 10 secs...OK
Sending request for text = Molecular genetic studies in the circadian model organism

Synechococcus have revealed that the KaiC
Completed. Pausing for 10 secs...OK
Sending request for text = The low pathogenicity and replicative potential of HIV-2
are still poorly understood . We investigat
Completed. Pausing for 10 secs...OK
Sending request for text = Visuospatial attention produces myriad effects on the act
ivity and selectivity of cortical neurons .
Completed. Pausing for 10 secs...OK
Sending request for text = Atrial fibrillation (AF) is a morbid and heritable arrh
ythmia . Over 35 genes have been reported t
Completed. Pausing for 10 secs...OK
Sending request for text = Alveolar echinococcosis (AE) caused by Echinococcus mul
tilocularis infections is a dangerous old d
Completed. Pausing for 10 secs...OK
Sending request for text = Commensal microbes , whether they are beneficial or patho
genic , are sensitive to host processes tha
Completed. Pausing for 10 secs...OK
Sending request for text = Rift Valley fever (RVF) is a vector-borne zoonotic dise
ase that causes high morbidity and mortalit
Completed. Pausing for 10 secs...OK
Sending request for text = Within the last century , increases in human movement and
globalization of trade have facilitated th
Completed. Pausing for 10 secs...OK
Sending request for text = Infection with Schistosoma mansoni negatively impact chil
dren's physical health and may influence th
Completed. Pausing for 10 secs...OK
Sending request for text = Leptospirosis is a zoonosis found worldwide that is cause
d by a spirochete . The main reservoirs of
Completed. Pausing for 10 secs...OK
Sending request for text = Sepsis is a progressive disease manifesting excessive inf
lammatory responses , severe tissue injury
Completed. Pausing for 10 secs...OK
Sending request for text = HIV-1 infection of macrophages plays a key role in viral
pathogenesis and progression to AIDS . Poly
Completed. Pausing for 10 secs...OK
Sending request for text = Most organisms use daily light/dark cycles as timing cues
to control many essential physiological pr
Completed. Pausing for 10 secs...OK
Sending request for text = Technologies based on RNA interference may be used for in
sect control . Sustainable strategies are n
Completed. Pausing for 10 secs...OK
Sending request for text = Fever in pregnancy is dangerous for both mother and foetu
s . In the 1980's malaria was the leading c
Completed. Pausing for 10 secs...OK
Sending request for text = In humans , chromosome-number abnormalities have been ass
ociated with altered recombination and incr
Completed. Pausing for 10 secs...OK
Sending request for text = Development of vaccines against opportunistic infections
is difficult as patients most at risk of de
Completed. Pausing for 10 secs...OK
Sending request for text = Polycomb repressive complexes (PRCs) play crucial roles
in transcriptional repression and developm
Completed. Pausing for 10 secs...OK
Sending request for text = The active sites of multisubunit RNA polymerases have a
“trigger loop” (TL) that multitasks in sub
Completed. Pausing for 10 secs...OK

Sending request for text = The majority of rabies virus (RV) infections are caused by bites or scratches from rabid carnivore
Completed. Pausing for 10 secs...OK

Sending request for text = The H1N1 subtype of influenza A virus has caused substantial morbidity and mortality in humans , fir
Completed. Pausing for 10 secs...OK

Sending request for text = Nicotine exerts its reinforcing action by stimulating nicotinic acetylcholine receptors (nAChRs) a
Completed. Pausing for 10 secs...OK

Sending request for text = Anthroponotic cutaneous leishmaniasis (CL) due to Leishmania (L .) tropica infection is a chroni
Completed. Pausing for 10 secs...OK

Sending request for text = The small GTPase RAS is among the most prevalent oncogenes . The evolutionarily conserved RAF-MEK-MA
Completed. Pausing for 10 secs...OK

Sending request for text = To gain a more detailed picture of cryptococcosis in Thailand , a retrospective study of 498 C . neo
Completed. Pausing for 10 secs...OK

Sending request for text = Differences in transcriptional regulatory networks underlie much of the phenotypic variation observe
Completed. Pausing for 10 secs...OK

Sending request for text = Serotype-specific PCR assays targeting Salmonella enterica serotypes Typhi and Paratyphi A , the cau
Completed. Pausing for 10 secs...OK

Sending request for text = The protective immune response to intracellular parasites involves in most cases the differentiation
Completed. Pausing for 10 secs...OK

Sending request for text = Individuals living in sub-Saharan Africa represent 10% of the world's population but almost 2/3 of a
Completed. Pausing for 10 secs...OK

Sending request for text = Acetylcholine (ACh) is a regulator of neural excitability and one of the neurochemical substrates
Completed. Pausing for 10 secs...OK

Sending request for text = Esophageal adenocarcinoma (EAC) develops in an inflammatory microenvironment with reduced microbia
Completed. Pausing for 10 secs...OK

Sending request for text = The sense of taste is of critical importance to animal survival . Although studies of taste signal t
Completed. Pausing for 10 secs...OK

Sending request for text = Rice is an important monocotyledonous crop worldwide; it differs from the dicotyledonous plant Arabi
Completed. Pausing for 10 secs...OK

Sending request for text = Incidences of nontuberculous mycobacteria (NTM) causing pulmonary and extrapulmonary diseases are
Completed. Pausing for 10 secs...OK

Sending request for text = Upon starvation for glucose or any other macronutrient , yeast cells exit from the mitotic cell cycl
Completed. Pausing for 10 secs...OK

Sending request for text = Rapid antigenic evolution enables the persistence of seasonal influenza A and B viruses in human pop
Completed. Pausing for 10 secs...OK

Sending request for text = Reverse rate dependence is a problematic property of antiarrhythmic drugs that prolong the cardiac a
Completed. Pausing for 10 secs...OK

Sending request for text = Phenome-Wide Association Studies (PheWAS) investigate whether genetic polymorphisms associated wit

Completed. Pausing for 10 secs...OK
Sending request for text = Spinal cord injury (SCI) is a devastating condition that causes substantial morbidity and mortality
Completed. Pausing for 10 secs...OK
Sending request for text = Soil-transmitted helminth (STH) infections (i . e . , Ascaris lumbricoides , hookworm , and Trich
Completed. Pausing for 10 secs...OK
Sending request for text = Nonalcoholic fatty liver disease (NAFLD) is associated with metabolic syndromes spanning a wide sp
Completed. Pausing for 10 secs...OK
Sending request for text = The olfactory system faces the difficult task of identifying an enormous variety of odors independent
Completed. Pausing for 10 secs...OK
Sending request for text = The broadly neutralizing HIV monoclonal antibodies (bnMAbs) PG9 , PG16 , PGT151 , and PGT152 have
Completed. Pausing for 10 secs...OK
Sending request for text = Cancer cells share several metabolic traits , including aerobic production of lactate from glucose (
Completed. Pausing for 10 secs...OK
Sending request for text = The physiological environment which hosts the conformational conversion of the cellular prion protein
Completed. Pausing for 10 secs...OK
Sending request for text = Respiratory virus infections , such as influenza , typically induce a robust type I (pro-inflammatory
Completed. Pausing for 10 secs...OK
Sending request for text = Invasive non-typhoidal Salmonella (iNTS) infections are now a well-described cause of morbidity and
Completed. Pausing for 10 secs...OK
Sending request for text = Phages play critical roles in the survival and pathogenicity of their hosts , via lysogenic conversion
Completed. Pausing for 10 secs...OK
Sending request for text = Kaposi's sarcoma-associated herpesvirus (KSHV) is one of the few oncogenic human viruses known to
Completed. Pausing for 10 secs...OK
Sending request for text = Convulsions with fever in children are a common neurological emergency in the tropics , and determining
Completed. Pausing for 10 secs...OK
Sending request for text = Drought causes substantial reductions in crop yields worldwide . Therefore , we set out to identify
Completed. Pausing for 10 secs...OK
Sending request for text = To further investigate the importance of insulin signaling in the growth , development , sexual maturation
Completed. Pausing for 10 secs...OK
Sending request for text = Lymphatic filariasis (LF) is a leading cause of disability in South Pacific regions , where >96% of
Completed. Pausing for 10 secs...OK
Sending request for text = Human African trypanosomiasis is a severely neglected vector-borne disease that is always fatal if untreated
Completed. Pausing for 10 secs...OK
Sending request for text = The cytoplasmic peptide:N-glycanase (Ngly1 in mammals) is a de-N-glycosylating enzyme that is highly
Completed. Pausing for 10 secs...OK
Sending request for text = Positional information in developing embryos is specified by spatial gradients of transcriptional repressors
Completed. Pausing for 10 secs...OK
Sending request for text = Hybridization between humans and Neanderthals has resulted

d in a low level of Neanderthal ancestry sc
Completed. Pausing for 10 secs...OK
Sending request for text = The HIV promoter within the viral long terminal repeat (LTR) orchestrates many aspects of the vira
Completed. Pausing for 10 secs...OK
Sending request for text = Accurate genome-wide identification of orthologs is a central problem in comparative genomics , a fa
Completed. Pausing for 10 secs...OK
Sending request for text = The development of novel therapeutics is urgently required for diseases where existing treatments are
Completed. Pausing for 10 secs...OK
Sending request for text = Transcription factors are central components of the intracellular regulatory networks that control g
Completed. Pausing for 10 secs...OK
Sending request for text = In 2012 the World Health Assembly adopted resolution WHA65 . 21 on elimination of schistosomiasis ,
Completed. Pausing for 10 secs...OK
Sending request for text = Heterosexual transmission of HIV-1 is characterized by a genetic bottleneck that selects a single vi
Completed. Pausing for 10 secs...OK
Sending request for text = Even in the absence of an adaptive immune system in murine models , lymphatic dilatation and dysfunction
Completed. Pausing for 10 secs...OK
Sending request for text = Since only a small fraction of environmental bacteria are amenable to laboratory culture , there is
Completed. Pausing for 10 secs...OK
Sending request for text = Several viruses from the genus Orthohantavirus are known to cause lethal disease in humans . Sigmund
Completed. Pausing for 10 secs...OK
Sending request for text = BCL2 family proteins including pro-survival proteins , BH3-only proteins and BAX/BAK proteins control
Completed. Pausing for 10 secs...OK
Sending request for text = The global economic impact of canine rabies has been estimated by several studies . Asia bears a disproportionate
Completed. Pausing for 10 secs...OK
Sending request for text = The Type II Secretion System (T2SS) is a molecular machine that drives the secretion of fully-folded
Completed. Pausing for 10 secs...OK
Sending request for text = Pathogenic *Leptospira* spp . shed in the urine of reservoir hosts into freshwater can be transmitted
Completed. Pausing for 10 secs...OK
Sending request for text = A few broadly neutralizing antibodies , isolated from HIV-1 infected individuals , recognize epitopes
Completed. Pausing for 10 secs...OK
Sending request for text = Mass treatment with ivermectin controls onchocerciasis as a public health problem , but it was not known
Completed. Pausing for 10 secs...OK
Sending request for text = Non-enveloped viruses must deliver their viral genome across a cell membrane without the advantage of
Completed. Pausing for 10 secs...OK
Sending request for text = *Francisella tularensis* (Ft) is a highly infectious Gram-negative bacterium and the causative agent
Completed. Pausing for 10 secs...OK
Sending request for text = Ribosome assembly cofactors are widely conserved across all domains of life . One such group , the ribosome
Completed. Pausing for 10 secs...OK

Sending request for text = Anthrax lethal toxin (LT) induces vascular insufficiency in experimental animals through unknown mechanism
Completed. Pausing for 10 secs...OK

Sending request for text = Parasitic nematodes infect over 1 billion people worldwide and cause some of the most common neglected diseases
Completed. Pausing for 10 secs...OK

Sending request for text = The well established phenomenon of ribosome drop-off plays crucial roles in translational accuracy and fidelity
Completed. Pausing for 10 secs...OK

Sending request for text = The current World Health Organization strategy to address soil-transmitted helminth (STH) infections
Completed. Pausing for 10 secs...OK

Sending request for text = Protective immunity against cholera is serogroup specific . Serogroup specificity in *Vibrio cholerae*
Completed. Pausing for 10 secs...OK

Sending request for text = Bacterial-fungal interactions have important physiologic and medical ramifications , but the mechanisms are unclear
Completed. Pausing for 10 secs...OK

Sending request for text = Escape mutant (EM) virus that evades CD8+ T cell recognition is frequently observed following infection
Completed. Pausing for 10 secs...OK

Sending request for text = Various types of genetic modification and selective forces have been implicated in the process of adaptation
Completed. Pausing for 10 secs...OK

Sending request for text = Many solid cancers are known to exhibit a high degree of heterogeneity in their deregulation of differentiation
Completed. Pausing for 10 secs...OK

Sending request for text = Stress-induced DNA duplex destabilization (SIDD) analysis exploits the known structural and energetic properties
Completed. Pausing for 10 secs...OK

Sending request for text = High-mobility group (HMG) B proteins are eukaryotic DNA-binding proteins characterized by the HMG-box
Completed. Pausing for 10 secs...OK

Sending request for text = The 2013-2016 West African Ebola virus disease epidemic was unprecedented in terms of the number of cases
Completed. Pausing for 10 secs...OK

Sending request for text = Sensory systems have evolved to respond to input stimuli of certain statistical properties , and to process them
Completed. Pausing for 10 secs...OK

Sending request for text = The life-long supply of blood cells depends on the long-term function of hematopoietic stem cells (HSCs)
Completed. Pausing for 10 secs...OK

Sending request for text = Approximately one-third of the world's population suffers from chronic helminth infections with no effective treatment
Completed. Pausing for 10 secs...OK

Sending request for text = Chromosome breakage is a major threat to genome integrity . The most accurate way to repair DNA double-strand breaks
Completed. Pausing for 10 secs...OK

Sending request for text = People living in areas with active vector-borne transmission of Chagas disease have multiple contact points
Completed. Pausing for 10 secs...OK

Sending request for text = Hyperendemic circulation of all four types of dengue viruses (DENV-1-4) has expanded globally , fueling outbreaks
Completed. Pausing for 10 secs...OK

Sending request for text = Morphogens are classically defined as molecules that control patterning by acting at a distance to regulate gene expression

Completed. Pausing for 10 secs...OK
Sending request for text = The mechanisms by which ethanol and inhaled anesthetics influence the nervous system are poorly understood
Completed. Pausing for 10 secs...OK
Sending request for text = The *Anopheles gambiae* immune response against *Plasmodium falciparum*, an etiological agent of human malaria
Completed. Pausing for 10 secs...OK
Sending request for text = Bone marrow-derived mesenchymal stem cells (BMSCs) have been considered as a promising therapy in fracture repair
Completed. Pausing for 10 secs...OK
Sending request for text = The recent geographical expansion of phlebotomine vectors of *Leishmania infantum* in the Mediterranean
Completed. Pausing for 10 secs...OK
Sending request for text = *Orientia tsutsugamushi* is the causal agent of scrub typhus, a public health problem in the Asia-Pacific
Completed. Pausing for 10 secs...OK
Sending request for text = Ants, like many other animals, use visual memory to follow extended routes through complex environments
Completed. Pausing for 10 secs...OK
Sending request for text = Plants utilize an innate immune system to protect themselves from disease. While many molecular components of the immune system have been identified, the mechanisms of defense are still poorly understood
Completed. Pausing for 10 secs...OK
Sending request for text = Detection of image motion direction begins in the retina, with starburst amacrine cells (SACs) playing a key role
Completed. Pausing for 10 secs...OK
Sending request for text = The number of pathogens that are required to infect a host, termed infective dose, varies dramatically
Completed. Pausing for 10 secs...OK
Sending request for text = Schistosomes are parasitic helminths that cause schistosomiasis, a disease affecting circa 200 million people
Completed. Pausing for 10 secs...OK
Sending request for text = A large number of SARS-related coronaviruses (SARSr-CoV) have been detected in horseshoe bats since 2012
Completed. Pausing for 10 secs...OK
Sending request for text = Current efforts to control human soil-transmitted helminth (STH) infections involve the periodic mass deworming of school children
Completed. Pausing for 10 secs...OK
Sending request for text = The tree-like structure of the mammalian lung is generated from branching morphogenesis, a reiterated process
Completed. Pausing for 10 secs...OK
Sending request for text = Paired-end sequencing is emerging as a key technique for assessing genome rearrangements and structural variants
Completed. Pausing for 10 secs...OK
Sending request for text = Chemotaxis involves the coordinated action of separable but interrelated processes: motility, gradient sensing, and adhesion
Completed. Pausing for 10 secs...OK
Sending request for text = Tudor domain-containing protein 6 (TDRD6) is a male germ line-specific protein essential for chromatoid body formation
Completed. Pausing for 10 secs...OK
Sending request for text = Bacterial populations that colonize a host can play important roles in host health, including serving as a reservoir for antibiotic resistance
Completed. Pausing for 10 secs...OK
Sending request for text = Plants continuously generate new organs through the activity of populations of stem cells called meristems
Completed. Pausing for 10 secs...OK
Sending request for text = The search for diagnostic biomarkers has been profiting from advances in genomics and proteomics

rom a growing number of high quality sequen
Completed. Pausing for 10 secs...OK
Sending request for text = Caseating granulomas are often associated with a mycobact
erial infection (TB) and are thought to b
Completed. Pausing for 10 secs...OK
Sending request for text = Polygenic type 2 diabetes in mouse models is associated w
ith obesity and results from a combination
Completed. Pausing for 10 secs...OK
Sending request for text = Alternative cell differentiation pathways are believed to
arise from the concerted action of signall
Completed. Pausing for 10 secs...OK
Sending request for text = Transcription factors that drive complex patterns of gene
expression during animal development bind
Completed. Pausing for 10 secs...OK
Sending request for text = One of the major issues in developmental biology is about
having a better understanding of the mecha
Completed. Pausing for 10 secs...OK
Sending request for text = Reversible phosphorylation is one of the major mechanisms
of signal transduction , and signaling net
Completed. Pausing for 10 secs...OK
Sending request for text = The evolution of heteromorphic sex chromosomes (e . g .
, XY in males or ZW in females) has repeat
Completed. Pausing for 10 secs...OK
Sending request for text = Citrobacter rodentium infection is a mouse model for the
important human diarrheal infection caused
Completed. Pausing for 10 secs...OK
Sending request for text = Measuring the overlap between two populations is , in pri
nciple , straightforward . Upon fully sampl
Completed. Pausing for 10 secs...OK
Sending request for text = Eukaryotic protein kinases regulate most cellular functio
ns by phosphorylating targeted protein subs
Completed. Pausing for 10 secs...OK
Sending request for text = Under the Global Programme to Eliminate Lymphatic Filaria
sis (LF) , American Samoa conducted seven
Completed. Pausing for 10 secs...OK
Sending request for text = Although the zebrafish is a major model organism , how th
ey determine sex is not well understood . I
Completed. Pausing for 10 secs...OK
Sending request for text = Hox proteins play fundamental roles in controlling morpho
genetic diversity along the anterior-poster
Completed. Pausing for 10 secs...OK
Sending request for text = Plants react to pathogen attack via recognition of , and
response to , pathogen-specific molecules a
Completed. Pausing for 10 secs...OK
Sending request for text = The SU (VAR) 3-9 homolog SUVH9 and the double-stranded
RNA-binding protein IDN2 were thought to be
Completed. Pausing for 10 secs...OK
Sending request for text = Compromised heat shock protein 90 (Hsp90) function reve
als cryptic phenotypes in flies and plants
Completed. Pausing for 10 secs...OK
Sending request for text = Protein modifications play a major role for most biologic
al processes in living organisms . Amino-te
Completed. Pausing for 10 secs...OK
Sending request for text = The ability of RNA polymerase (RNAP) III to efficiently
recycle from termination to reinitiation i
Completed. Pausing for 10 secs...OK

Sending request for text = Current experiments likely cover only a fraction of all protein-protein interactions . Here , we dev
Completed. Pausing for 10 secs...OK

Sending request for text = The accumulation of amyloidogenic proteins is a pathological hallmark of neurodegenerative disorders
Completed. Pausing for 10 secs...OK

Sending request for text = Heterocyst differentiation in cyanobacteria filaments is one of the simplest examples of cellular di
Completed. Pausing for 10 secs...OK

Sending request for text = The fight against onchocerciasis in Africa has boomed thanks to the Community Directed Treatment wit
Completed. Pausing for 10 secs...OK

Sending request for text = Associations between epigenetic alterations and disease status have been identified for many disease
Completed. Pausing for 10 secs...OK

Sending request for text = Natural killer (NK) cells are implicated as important anti-viral immune effectors in varicella zos
Completed. Pausing for 10 secs...OK

Sending request for text = Two stimuli alternately presented at different locations can evoke a percept of a stimulus continuous
Completed. Pausing for 10 secs...OK

Sending request for text = The HTLV-1 oncoprotein Tax plays a key role in CD4+ T cell transformation by promoting cell proliferation
Completed. Pausing for 10 secs...OK

Sending request for text = A consistent determinant of the establishment success of alien species appears to be the number of i
Completed. Pausing for 10 secs...OK

Sending request for text = Interleukin 17A (IL-17) , a mediator implicated in chronic and severe inflammatory diseases , enhances
Completed. Pausing for 10 secs...OK

Sending request for text = Uganda has active foci of both chronic and acute HAT with the acute zoonotic form of disease classic
Completed. Pausing for 10 secs...OK

Sending request for text = MOF is the major histone H4 lysine 16-specific (H4K16) acetyltransferase in mammals and Drosophila
Completed. Pausing for 10 secs...OK

Sending request for text = Facioscapulohumeral dystrophy (FSHD) is a progressive muscular dystrophy caused by decreased epigenetic
Completed. Pausing for 10 secs...OK

Sending request for text = Malaria vaccine candidate Apical Membrane Antigen-1 (AMA1) induces protection , but only against pre
Completed. Pausing for 10 secs...OK

Sending request for text = The displacement of the mitotic spindle to one side of a cell is important for many cells to divide
Completed. Pausing for 10 secs...OK

Sending request for text = High-altitude hypoxia (reduced inspired oxygen tension due to decreased barometric pressure) exerts
Completed. Pausing for 10 secs...OK

Sending request for text = Double strand DNA breaks (DSBs) are dangerous events that can result from various causes including
Completed. Pausing for 10 secs...OK

Sending request for text = Pseudomonas aeruginosa is an opportunistic pathogen capable of causing both acute and chronic infection
Completed. Pausing for 10 secs...OK

Sending request for text = Certain genes exhibit notable diversity in their expression patterns both within and between species

Completed. Pausing for 10 secs...OK
Sending request for text = Transcription of the switch (S) regions of immunoglobulin genes in B cells generates stable R-loop
Completed. Pausing for 10 secs...OK
Sending request for text = Coordination between cell division and chromosome replication is essential for a cell to produce via
Completed. Pausing for 10 secs...OK
Sending request for text = Epitope-based vaccines (EVs) have a wide range of applications: from therapeutic to prophylactic a
Completed. Pausing for 10 secs...OK
Sending request for text = The majority of HIV-1 infections in women occur through vaginal intercourse , in which virus-containing
Completed. Pausing for 10 secs...OK
Sending request for text = RNA interference (RNAi) controls arbovirus infections in mosquitoes . Two different RNAi pathways
Completed. Pausing for 10 secs...OK
Sending request for text = There have been several recent changes in the taxonomy of *Sporothrix schenckii* as well as new observations
Completed. Pausing for 10 secs...OK
Sending request for text = A series of reports over the last few years have indicated that a much larger portion of the mammalian
Completed. Pausing for 10 secs...OK
Sending request for text = The ability to design thermostable proteins offers enormous potential for the development of novel proteins
Completed. Pausing for 10 secs...OK
Sending request for text = Sand flies (Diptera , Psychodidae , Phlebotominae) in the genus *Lutzomyia* are the predominant vectors
Completed. Pausing for 10 secs...OK
Sending request for text = The devastating clinical consequences associated with human cytomegalovirus (HCMV) infection and reactivation
Completed. Pausing for 10 secs...OK
Sending request for text = The production of ribosomes is ubiquitous and fundamental to life . As such , it is surprising that
Completed. Pausing for 10 secs...OK
Sending request for text = Leptospirosis is a widespread zoonotic disease worldwide . The lack of an adequate laboratory test is
Completed. Pausing for 10 secs...OK
Sending request for text = Mosquito immunity studies have focused mainly on characterizing immune effector mechanisms elicited
Completed. Pausing for 10 secs...OK
Sending request for text = Dengue virus host factors (DENV HFs) that are essential for the completion of the infection cycle
Completed. Pausing for 10 secs...OK
Sending request for text = Cell volume changes are ubiquitous in normal and pathological activity of the brain . Nevertheless ,
Completed. Pausing for 10 secs...OK
Sending request for text = *Paracoccidioides brasiliensis* is the etiologic agent of paracoccidioidomycosis (PCM) , the most prevalent
Completed. Pausing for 10 secs...OK
Sending request for text = *Toxoplasma gondii* , a common brain-tropic parasite , is capable of infecting most nucleated cells ,
Completed. Pausing for 10 secs...OK
Sending request for text = To understand shapes and movements of cells undergoing lamellipodial motility , we systematically examined
Completed. Pausing for 10 secs...OK
Sending request for text = Understanding complex networks of protein-protein interactions

tions (PPIs) is one of the foremost chall
Completed. Pausing for 10 secs...OK
Sending request for text = More than 20 human neurological and neurodegenerative dis
eases are caused by simple DNA repeat expan
Completed. Pausing for 10 secs...OK
Sending request for text = Soft rot disease is economically one of the most devastat
ing bacterial diseases affecting plants wor
Completed. Pausing for 10 secs...OK
Sending request for text = The mitochondrial protein repertoire varies depending on
the cellular state . Protein component modi
Completed. Pausing for 10 secs...OK
Sending request for text = The molecular machinery of life relies on complex multist
ep processes that involve numerous individu
Completed. Pausing for 10 secs...OK
Sending request for text = Our understanding of basic evolutionary processes in bact
eria is still very limited . For example ,
Completed. Pausing for 10 secs...OK
Sending request for text = Photoreception in the mammalian retina is not restricted
to rods and cones but extends to a subset o
Completed. Pausing for 10 secs...OK
Sending request for text = HIV-1 infection is associated with an early and profound
depletion of mucosal memory CD4+ T cells ,
Completed. Pausing for 10 secs...OK
Sending request for text = Populations of species in ecosystems are often constraine
d by availability of resources within their
Completed. Pausing for 10 secs...OK
Sending request for text = Chemotactic movement of Escherichia coli is one of the mo
st thoroughly studied paradigms of simple b
Completed. Pausing for 10 secs...OK
Sending request for text = Medullary thymic epithelial cells (mTECs) are essential
for establishing central tolerance by expr
Completed. Pausing for 10 secs...OK
Sending request for text = Clostridium difficile is an emergent pathogen , and the m
ost common cause of nosocomial diarrhea . I
Completed. Pausing for 10 secs...OK
Sending request for text = The liver-specific microRNA miR-122 , which has essential
roles in liver development and metabolism
Completed. Pausing for 10 secs...OK
Sending request for text = Trypanosomes cause disease in humans and livestock throug
hout sub-Saharan Africa . Although various
Completed. Pausing for 10 secs...OK
Sending request for text = The role that mechanistic mathematical modeling and syste
ms biology will play in molecular medicine
Completed. Pausing for 10 secs...OK
Sending request for text = Phage therapy is the use of bacteriophages as antimicrobi
al agents for the control of pathogenic and
Completed. Pausing for 10 secs...OK
Sending request for text = Schistosomiasis , a devastating disease caused by parasit
ic flatworms of the genus Schistosoma , aff
Completed. Pausing for 10 secs...OK
Sending request for text = Aedes mosquitoes severely affect the health and wellbeing
of human populations by transmitting infec
Completed. Pausing for 10 secs...OK
Sending request for text = The success of Mycobacterium tuberculosis as a pathogen d
erives from its facile adaptation to the in
Completed. Pausing for 10 secs...OK

Sending request for text = Crossover recombination and the formation of chiasmata normally ensure the proper segregation of hom
Completed. Pausing for 10 secs...OK

Sending request for text = Aedes albopictus is a tropical invasive species which in the last decades spread worldwide , also co
Completed. Pausing for 10 secs...OK

Sending request for text = Phthiocerol dimycocerosates (DIM) are major virulence factors of Mycobacterium tuberculosis (Mtb
Completed. Pausing for 10 secs...OK

Sending request for text = Mean-field approximations are a powerful tool for studying large neural networks . However , they do
Completed. Pausing for 10 secs...OK

Sending request for text = The clinical and epidemiological significance of Leishmania DNA in extralesional sites is obscured b
Completed. Pausing for 10 secs...OK

Sending request for text = In metazoans , each cell type follows a characteristic , spatio-temporally regulated DNA replication
Completed. Pausing for 10 secs...OK

Sending request for text = Dengue virus and its four serotypes (DENV-1 to DENV-4) infect 390 million people and are implicate
Completed. Pausing for 10 secs...OK

Sending request for text = Understanding how neural populations encode sensory information thereby leading to perception and be
Completed. Pausing for 10 secs...OK

Sending request for text = Over repeat presentations of the same stimulus , sensory neurons show variable responses . This “noi
Completed. Pausing for 10 secs...OK

Sending request for text = Chronic coinfections of Staphylococcus aureus and Pseudomonas aeruginosa frequently fail to respond
Completed. Pausing for 10 secs...OK

Sending request for text = Thrombocytopenia and platelet dysfunction are commonly observed in patients with dengue virus (DENV
Completed. Pausing for 10 secs...OK

Sending request for text = A “bidirectional gene pair” comprises two adjacent genes whose transcription start sites are neighbor
Completed. Pausing for 10 secs...OK

Sending request for text = Many species groups , including mammals and many insects , determine sex using heteromorphic sex chr
Completed. Pausing for 10 secs...OK

Sending request for text = Zika virus (ZIKV) is an emerging mosquito-borne pathogen . ZIKV infection is linked to the develop
Completed. Pausing for 10 secs...OK

Sending request for text = Although several studies have associated Mycobacterium ulcerans (MU) infection , Buruli ulcer (BU
Completed. Pausing for 10 secs...OK

Sending request for text = Alien species are a major component of human-induced environmental change . Variation in the numbers
Completed. Pausing for 10 secs...OK

Sending request for text = Upstream Binding Factor (UBF) is a unique multi-HMGB-box protein first identified as a co-factor i
Completed. Pausing for 10 secs...OK

Sending request for text = Signal transduction activated by Wingless/Wnt ligands directs cell proliferation and fate specification
Completed. Pausing for 10 secs...OK

Sending request for text = Recruitment of the serine protease plasmin is central to the pathogenesis of many bacterial species

Completed. Pausing for 10 secs...OK
Sending request for text = Colonization of the human stomach by *Helicobacter pylori* is an important risk factor for development
Completed. Pausing for 10 secs...OK
Sending request for text = Bovine tuberculosis (bTB) is a chronic disease of cattle caused by *Mycobacterium bovis* , a member
Completed. Pausing for 10 secs...OK
Sending request for text = Non-centrosomal microtubule organizing centers (ncMTOCs) are found in most differentiated cells ,
Completed. Pausing for 10 secs...OK
Sending request for text = Humans are a diploid species that inherit one set of chromosomes paternally and one homologous set o
Completed. Pausing for 10 secs...OK
Sending request for text = Type-III protein secretion systems are utilized by gram-negative pathogens to secrete building block
Completed. Pausing for 10 secs...OK
Sending request for text = Bistability plays a central role in the gene regulatory networks (GRNs) controlling many essential
Completed. Pausing for 10 secs...OK
Sending request for text = Orofacial clefting is amongst the most common of birth defects , with both genetic and environmental
Completed. Pausing for 10 secs...OK
Sending request for text = Sound detection by inner ear hair cells requires tip links that interconnect mechanosensory stereocilia
Completed. Pausing for 10 secs...OK
Sending request for text = Dengue virus (DENV) is the most prevalent arbovirus leading to an estimated 100 million symptomatic
Completed. Pausing for 10 secs...OK
Sending request for text = The metabolic pathway of purine nucleotides in parasitic protozoa is a potent drug target for treatment
Completed. Pausing for 10 secs...OK
Sending request for text = Sodium channel blockers are used to control electrical excitability in cells as a treatment for epilepsy
Completed. Pausing for 10 secs...OK
Sending request for text = MyD88-mediated signaling downstream of Toll-like receptors and the IL-1 receptor family is critical
Completed. Pausing for 10 secs...OK
Sending request for text = Onchocerciasis is targeted for elimination in Africa through annual or biannual ivermectin mass drug
Completed. Pausing for 10 secs...OK
Sending request for text = We have reported that properties of prion strains may change when propagated in different environments
Completed. Pausing for 10 secs...OK
Sending request for text = All biological evolution takes place in a space of possible genotypes and their phenotypes . The structure
Completed. Pausing for 10 secs...OK
Sending request for text = The population genetics of *Triatoma dimidiata* haplogroups was analyzed at landscape and sub-regional
Completed. Pausing for 10 secs...OK
Sending request for text = Hemorrhagic fever with renal syndrome (HFRS) is a rodent-borne disease caused mainly by two hantaviruses
Completed. Pausing for 10 secs...OK
Sending request for text = Costello syndrome (CS) may be caused by activating mutations in codon 12/13 of the HRAS proto-oncogene
Completed. Pausing for 10 secs...OK
Sending request for text = N6-methyladenosine (m6A) RNA methylation is the most abundant

undant modification on mRNAs and plays impo
Completed. Pausing for 10 secs...OK
Sending request for text = Transcription factors are proteins that regulate gene exp
ression by binding to cis-regulatory sequen
Completed. Pausing for 10 secs...OK
Sending request for text = A reciprocal translocation involving chromosomes 8 and 21
generates the AML1/ETO oncogenic transcrip
Completed. Pausing for 10 secs...OK
Sending request for text = Chromatin modifications affect several processes . In inv
estigating the Leishmania donovani histone
Completed. Pausing for 10 secs...OK
Sending request for text = Inferring on others' (potentially time-varying) intenti
ons is a fundamental problem during many so
Completed. Pausing for 10 secs...OK
Sending request for text = Scrub typhus is an endemic disease in Asia . It has been
a rural disease , but indigenous urban case
Completed. Pausing for 10 secs...OK
Sending request for text = RNA interference (RNAi) -related pathways affect gene a
ctivity by sequence-specific recruitment of
Completed. Pausing for 10 secs...OK
Sending request for text = Over half of all proteins are glycosylated , and alterati
ons in glycosylation have been observed in
Completed. Pausing for 10 secs...OK
Sending request for text = Centromeres are the attachment points between the genome
and the cytoskeleton: centromeres bind to k
Completed. Pausing for 10 secs...OK
Sending request for text = GWAS identified variants associated with birth weight (B
W) , childhood obesity (CO) and childhoo
Completed. Pausing for 10 secs...OK
Sending request for text = Post Kala-azar Dermal Leishmaniasis (PKDL) is a chronic
but not life-threatening disease; patients
Completed. Pausing for 10 secs...OK
Sending request for text = Bacteria have evolved various inducible genetic programs
to face many types of stress that challenge
Completed. Pausing for 10 secs...OK
Sending request for text = The human papillomavirus type 16 (HPV16) L2 protein act
s as a chaperone to ensure that the viral g
Completed. Pausing for 10 secs...OK
Sending request for text = We present a method to measure the relative transmissibil
ity ("transmission fitness") of one strai
Completed. Pausing for 10 secs...OK
Sending request for text = Light is one of the most important environmental cues reg
ulating multiple aspects of plant growth an
Completed. Pausing for 10 secs...OK
Sending request for text = The Mediator complex is an essential co-regulator of RNA
polymerase II that is conserved throughout
Completed. Pausing for 10 secs...OK
Sending request for text = Bacteria in biofilms have higher antibiotic tolerance tha
n their planktonic counterparts . A major o
Completed. Pausing for 10 secs...OK
Sending request for text = Most biological systems are difficult to analyse due to a
multitude of interacting components and th
Completed. Pausing for 10 secs...OK
Sending request for text = The National Program for Chagas disease was implemented i
n Bolivia in 2006 , and it greatly decrease
Completed. Pausing for 10 secs...OK

Sending request for text = *Neisseria meningitidis* is the primary causative agent of bacterial meningitis . The genome is rich i
Completed. Pausing for 10 secs...OK

Sending request for text = LaeA and VeA coordinate secondary metabolism and differentiation in response to light signals in *Asp*
Completed. Pausing for 10 secs...OK

Sending request for text = Crystal structures of several bacterial Nav channels have been recently published and molecular dyna
Completed. Pausing for 10 secs...OK

Sending request for text = Studies of the furious and paralytic forms of canine rabies at the early stage of disease have shown
Completed. Pausing for 10 secs...OK

Sending request for text = Insulator or enhancer-blocking elements are proposed to play an important role in the regulation of
Completed. Pausing for 10 secs...OK

Sending request for text = For several decades , molecular recognition has been considered one of the most fundamental processes
Completed. Pausing for 10 secs...OK

Sending request for text = The thalamus is the primary gateway that relays sensory information to the cerebral cortex . While a
Completed. Pausing for 10 secs...OK

Sending request for text = The biological roles of nucleic acid methylation , other than at the C5-position of cytosines in CpG
Completed. Pausing for 10 secs...OK

Sending request for text = Human cytomegalovirus (HCMV) is a ubiquitous pathogen that can cause disability in newborns and se
Completed. Pausing for 10 secs...OK

Sending request for text = Autoregulation of transcription factors and cross-antagonism between lineage-specific transcription
Completed. Pausing for 10 secs...OK

Sending request for text = The genus Orthobunyavirus within the family Bunyaviridae constitutes an expanding group of emerging
Completed. Pausing for 10 secs...OK

Sending request for text = Anterior chamber depth (ACD) is a key anatomical risk factor for primary angle closure glaucoma (
Completed. Pausing for 10 secs...OK

Sending request for text = The identification of homologies , whether morphological , molecular , or genetic , is fundamental t
Completed. Pausing for 10 secs...OK

Sending request for text = While influenza virus diversity and antigenic drift have been well characterized on a global scale ,
Completed. Pausing for 10 secs...OK

Sending request for text = Visceral leishmaniasis (VL) caused by the protozoan parasite *Leishmania donovani* causes severe dis
Completed. Pausing for 10 secs...OK

Sending request for text = Despite their genetic similarities , enteric and respiratory enteroviruses (EVs) have highly heter
Completed. Pausing for 10 secs...OK

Sending request for text = The Herpes Simplex Virus 1 (HSV-1) glycoprotein gE-gI is a transmembrane Fc receptor found on the
Completed. Pausing for 10 secs...OK

Sending request for text = Cystic hydatid disease (CHD) is caused by the larval stages of the cestode and affects humans and
Completed. Pausing for 10 secs...OK

Sending request for text = The assimilation of nitrate , a most important soil nitrogen source , is tightly regulated in microo

Completed. Pausing for 10 secs...OK
Sending request for text = We study how functional constraints bound and shape evolution through an analysis of mammalian volta
Completed. Pausing for 10 secs...OK
Sending request for text = It is generally recognised that novel antiviral drugs , less prone to resistance , would be a desirable
Completed. Pausing for 10 secs...OK
Sending request for text = Snake envenomation has been estimated to affect 1 . 8 million people annually with about 94 , 000 deaths
Completed. Pausing for 10 secs...OK
Sending request for text = Host-adapted strains of *Salmonella enterica* cause systemic infections and have the ability to persist
Completed. Pausing for 10 secs...OK
Sending request for text = Community acquired-methicillin resistant *Staphylococcus aureus* (CA-MRSA) is a socially problematic
Completed. Pausing for 10 secs...OK
Sending request for text = Epidemiological studies have reported that most of the severe dengue cases occur upon a secondary infection
Completed. Pausing for 10 secs...OK
Sending request for text = Still today , more than 30 years after the beginning of the process of visceral leishmaniasis' urban
Completed. Pausing for 10 secs...OK
Sending request for text = Inhalation of *Francisella tularensis* (Ft) causes acute and fatal pneumonia . The lung cytokine milieu
Completed. Pausing for 10 secs...OK
Sending request for text = Invasive species represent a global concern for their rapid spread and the possibility of infectious
Completed. Pausing for 10 secs...OK
Sending request for text = While much is known about acute infection pathogenesis , the understanding of chronic infections has
Completed. Pausing for 10 secs...OK
Sending request for text = Chronic hydrocele is the most common manifestation of bancroftian filariasis , an endemic disease in
Completed. Pausing for 10 secs...OK
Sending request for text = *Trichinella spiralis* is a zoonotic parasitic nematode that causes trichinellosis , a disease that has
Completed. Pausing for 10 secs...OK
Sending request for text = The cysteine protease cruzipain is considered to be a validated target for therapeutic intervention
Completed. Pausing for 10 secs...OK
Sending request for text = Maize (*Zea mays* L .) is one of the most important cereal crops and a model for the study of genetics
Completed. Pausing for 10 secs...OK
Sending request for text = Prions are the proteinaceous infectious agents responsible for Transmissible Spongiform Encephalopathies
Completed. Pausing for 10 secs...OK
Sending request for text = We present a novel neurally based model for estimating angular velocity (AV) in the bee brain , calcium
Completed. Pausing for 10 secs...OK
Sending request for text = The final outcome of infection by *Trypanosoma brucei gambiense* , the main agent of sleeping sickness
Completed. Pausing for 10 secs...OK
Sending request for text = Identification and characterization of mutations that drive cancer evolution constitute a major focus
Completed. Pausing for 10 secs...OK
Sending request for text = Protease inhibitors have important function during homeostasis

tasis , inflammation and tissue injury . In
Completed. Pausing for 10 secs...OK
Sending request for text = Eukaryotic transmembrane helical (TMH) proteins perform
a wide diversity of critical cellular func
Completed. Pausing for 10 secs...OK
Sending request for text = *Listeria monocytogenes* causes listeriosis , a foodborne d
isease that poses serious risks to fetuses
Completed. Pausing for 10 secs...OK
Sending request for text = Sequences of higher frequency A and lower frequency B ton
es repeating in an ABA- triplet pattern are
Completed. Pausing for 10 secs...OK
Sending request for text = Parasite-specific IgE is thought to correlate with protec
tion against *Schistosoma mansoni* infection
Completed. Pausing for 10 secs...OK
Sending request for text = Sexual reproduction allows transposable elements (TEs)
to proliferate , leading to rapid divergenc
Completed. Pausing for 10 secs...OK
Sending request for text = Fragile X Tremor Ataxia Syndrome (FXTAS) is a common in
herited neurodegenerative disorder caused b
Completed. Pausing for 10 secs...OK
Sending request for text = Effective CD8 T cell responses are vital for the control
of chronic viral infections . Many factors
Completed. Pausing for 10 secs...OK
Sending request for text = Anthrax is a global re-emerging zoonotic disease and is a
n endemic disease in China , especially in
Completed. Pausing for 10 secs...OK
Sending request for text = Enterohemorrhagic *Escherichia coli* and related food and w
aterborne pathogens pose significant threat
Completed. Pausing for 10 secs...OK
Sending request for text = Translation initiation is a critical early step in the re
plication cycle of the positive-sense , sin
Completed. Pausing for 10 secs...OK
Sending request for text = Genes encoding proteins in a common pathway are often fou
nd near each other along bacterial chromoso
Completed. Pausing for 10 secs...OK
Sending request for text = Malaria , caused by the parasite *Plasmodium falciparum* ,
is responsible for substantial morbidity ,
Completed. Pausing for 10 secs...OK
Sending request for text = Infection with dengue viruses (DENV) leads to a spectru
m of disease outcomes . The pathophysiology
Completed. Pausing for 10 secs...OK
Sending request for text = Herpesviruses are ubiquitous pathogens that cause much di
sease . The difficulty of clearing their es
Completed. Pausing for 10 secs...OK
Sending request for text = Invasion of epithelial cells by *Salmonella enterica* requi
res expression of genes located in the path
Completed. Pausing for 10 secs...OK
Sending request for text = The expansion of CAG/CTG repeats is responsible for many
diseases , including Huntington's disease (
Completed. Pausing for 10 secs...OK
Sending request for text = Enterovirus 71 (EV71) is one of the most virulent enter
oviruses , but the specific molecular featu
Completed. Pausing for 10 secs...OK
Sending request for text = Natural transformation , or competence , is an ability in
herent to bacteria for the uptake of extrac
Completed. Pausing for 10 secs...OK

Sending request for text = Eukaryotic centromeres are maintained at specific chromosomal sites over many generations . In the b
Completed. Pausing for 10 secs...OK

Sending request for text = Back pain is the #1 cause of years lived with disability worldwide , yet surprisingly little is know
Completed. Pausing for 10 secs...OK

Sending request for text = Taenia solium cysticercosis is an important zoonosis in many developing countries . Human neurocysti
Completed. Pausing for 10 secs...OK

Sending request for text = Staphylococcus aureus produces a high number of RNAs for which the functions are poorly understood .
Completed. Pausing for 10 secs...OK

Sending request for text = Disassembly of the cone-shaped HIV-1 capsid in target cells is a prerequisite for establishing a lif
Completed. Pausing for 10 secs...OK

Sending request for text = Oligonucleotide usage in archaeal and bacterial genomes can be linked to a number of properties , in
Completed. Pausing for 10 secs...OK

Sending request for text = Meiotic recombination ensures the correct segregation of homologous chromosomes during gamete format
Completed. Pausing for 10 secs...OK

Sending request for text = Exposure to environmental chemicals and drugs may have a negative effect on human health . A better
Completed. Pausing for 10 secs...OK

Sending request for text = Cortical sensory neurons are commonly characterized using the receptive field , the linear dependenc
Completed. Pausing for 10 secs...OK

Sending request for text = Intracellular circadian clocks , composed of clock genes that act in transcription-translation feedb
Completed. Pausing for 10 secs...OK

Sending request for text = Bile possesses antibacterial activity because bile salts disrupt membranes , denature proteins , and
Completed. Pausing for 10 secs...OK

Sending request for text = The E . coli chromosome is compacted by segregation into 400-500 supercoiled domains by both active
Completed. Pausing for 10 secs...OK

Sending request for text = Primaquine (PQ) is the only currently licensed antimalarial that prevents Plasmodium vivax (Pv)
Completed. Pausing for 10 secs...OK

Sending request for text = The Rho family of GTPases control actin organization during diverse cellular responses (migration ,
Completed. Pausing for 10 secs...OK

Sending request for text = Monitoring and evaluation (M&E) programmes are used to collect data which are required to assess t
Completed. Pausing for 10 secs...OK

Sending request for text = Temporal lobe epilepsy (TLE) is a prevalent neurological disorder resulting in disruptive seizures
Completed. Pausing for 10 secs...OK

Sending request for text = Viral replication efficiency is in large part governed by the ability of viruses to counteract pro-a
Completed. Pausing for 10 secs...OK

Sending request for text = The healthy lung maintains a steady state of immune readiness to rapidly respond to injury from inva
Completed. Pausing for 10 secs...OK

Sending request for text = Leishmania (Viannia) braziliensis is the species most frequently implicated with cutaneous and muc

Completed. Pausing for 10 secs...OK
Sending request for text = Genome-wide association studies (GWAS) have identified over 40 loci that affect risk of coronary a

Completed. Pausing for 10 secs...OK
Sending request for text = As highly trachoma-endemic countries approach elimination , some districts will have prevalences of

Completed. Pausing for 10 secs...OK
Sending request for text = Nucleotide-binding domain leucine-rich repeat (NLR) protein complexes sense infections and trigger

Completed. Pausing for 10 secs...OK
Sending request for text = Much of the developing world , particularly sub-Saharan Africa , exhibits high levels of morbidity a

Completed. Pausing for 10 secs...OK
Sending request for text = Generally , the antagonism between host restriction factors and viral countermeasures decides on cel

Completed. Pausing for 10 secs...OK
Sending request for text = Amyotrophic lateral sclerosis (ALS) is a devastating neurodegenerative disease that results in pro

Completed. Pausing for 10 secs...OK
Sending request for text = Currently , our understanding of mechanisms underlying cell-mediated immunity and particularly of me

Completed. Pausing for 10 secs...OK
Sending request for text = Cytosine-5 methyltransferases of the Dnmt2 family function as DNA and tRNA methyltransferases . Insi

Completed. Pausing for 10 secs...OK
Sending request for text = Mosquito borne pathogens are transmitted to humans via saliva during blood feeding . Mosquito saliva

Completed. Pausing for 10 secs...OK
Sending request for text = Mitochondria contain an independently maintained genome that encodes several proteins required for c

Completed. Pausing for 10 secs...OK
Sending request for text = Rheumatic heart disease (RHD) poses a major disease burden among disadvantaged populations globall

Completed. Pausing for 10 secs...OK
Sending request for text = Even a single mutation can cause a marked change in a protein's properties . When the mutant protein

Completed. Pausing for 10 secs...OK
Sending request for text = Primary Amoebic Meningoencephalitis (PAM) is caused by Naegleria fowleri , a free-living amoeba th

Completed. Pausing for 10 secs...OK
Sending request for text = There is currently no vaccine against parasitic nematodes and the knowledge on the mechanisms by whi

Completed. Pausing for 10 secs...OK
Sending request for text = As humans move and alter habitats , they change the disease risk for themselves , their commensal an

Completed. Pausing for 10 secs...OK
Sending request for text = The long noncoding MALAT1 RNA is upregulated in cancer tissues and its elevated expression is associ

Completed. Pausing for 10 secs...OK
Sending request for text = Juvenile hormone (JH) , a sesquiterpenoid produced by the corpora allata , coordinates insect grow

Completed. Pausing for 10 secs...OK
Sending request for text = While prednisolone is commonly used to treat recent nerve function impairment (NFI) in leprosy pat

Completed. Pausing for 10 secs...OK
Sending request for text = Male Rocky Mountain elk (Cervus elaphus nelsoni) produc

e loud and high fundamental frequency bugle
Completed. Pausing for 10 secs...OK
Sending request for text = Chromatin immunoprecipitation followed by high-throughput sequencing (ChIP-seq) is rapidly replaci
Completed. Pausing for 10 secs...OK
Sending request for text = The control or elimination of neglected tropical diseases (NTDs) has targets defined by the WHO fo
Completed. Pausing for 10 secs...OK
Sending request for text = The notion that neurons with higher selectivity carry mor
e information about external sensory inputs
Completed. Pausing for 10 secs...OK
Sending request for text = During acute viral infections , clearance of the pathogen
is followed by the contraction of the anti
Completed. Pausing for 10 secs...OK
Sending request for text = Examples of animals evolving similar traits despite the a
bsence of that trait in the last common anc
Completed. Pausing for 10 secs...OK
Sending request for text = During development of the cerebral cortex , neural stem c
ells (NSCs) divide symmetrically to proli
Completed. Pausing for 10 secs...OK
Sending request for text = Among more than 20 , 000 species of hermaphroditic tremat
odes , Schistosomatidae are unusual since t
Completed. Pausing for 10 secs...OK
Sending request for text = Large-scale annotation efforts typically involve several
experts who may disagree with each other .
Completed. Pausing for 10 secs...OK
Sending request for text = Andes virus (ANDV) and ANDV-like viruses are responsibl
e for most hantavirus pulmonary syndrome (
Completed. Pausing for 10 secs...OK
Sending request for text = Changes in genomic DNA methylation patterns are generally
assumed to play an important role in the e
Completed. Pausing for 10 secs...OK
Sending request for text = Time-locked sequences of neural activity can be found thr
oughout the vertebrate forebrain in various
Completed. Pausing for 10 secs...OK
Sending request for text = Evolutionarily conserved mechanisms that control aging ar
e predicted to have prereproductive functio
Completed. Pausing for 10 secs...OK
Sending request for text = The first critical stage in salamander or teleost appenda
ge regeneration is creation of a specialize
Completed. Pausing for 10 secs...OK
Sending request for text = Approaches based on linear mixed models (LMMs) have rec
ently gained popularity for modelling popul
Completed. Pausing for 10 secs...OK
Sending request for text = The development of new drugs against Chagas disease is a
priority since the currently available medi
Completed. Pausing for 10 secs...OK
Sending request for text = Currently , molecular xenomonitoring efforts for lymphati
c filariasis rely on PCR or real-time PCR-b
Completed. Pausing for 10 secs...OK
Sending request for text = Elastomeric proteins have evolved independently multiple
times through evolution . Produced as monom
Completed. Pausing for 10 secs...OK
Sending request for text = Ebolaviruses , highly lethal zoonotic pathogens , possess
longer genomes than most other non-segment
Completed. Pausing for 10 secs...OK

Sending request for text = Genome instability plays a key role in multiple biological processes and diseases , including cancer
Completed. Pausing for 10 secs...OK

Sending request for text = We studied infection by Trypanosomatidae in bats captured in two areas with different degradation levels
Completed. Pausing for 10 secs...OK

Sending request for text = Ticks are the most common arthropod vectors of both human and animal diseases in Europe , and the Ixodes ricinus
Completed. Pausing for 10 secs...OK

Sending request for text = Hematopoietic stem cell lineage choices are decided by genetic networks that are turned ON/OFF in a cell-specific manner
Completed. Pausing for 10 secs...OK

Sending request for text = Enterococcus faecalis is an opportunistic pathogen with an intrinsically high resistance to lysozyme
Completed. Pausing for 10 secs...OK

Sending request for text = Gene expression is a combinatorial function of genetic/epigenetic factors such as copy number variations
Completed. Pausing for 10 secs...OK

Sending request for text = Even though the fungal kingdom contains more than 3 million species , little is known about the biology of many fungi
Completed. Pausing for 10 secs...OK

Sending request for text = Three waves of H2AX phosphorylation (γ H2AX) have been observed in male meiotic prophase I: the first wave occurs at the onset of synapsis
Completed. Pausing for 10 secs...OK

Sending request for text = Alteration of early haematopoietic development is thought to be responsible for the onset of immunodeficiency
Completed. Pausing for 10 secs...OK

Sending request for text = Schistosomiasis remains a major public health concern in Sudan , particularly Schistosoma haematobium
Completed. Pausing for 10 secs...OK

Sending request for text = Paramyxoviruses are known to replicate in the cytoplasm and bud from the plasma membrane . Matrix is involved in the budding process
Completed. Pausing for 10 secs...OK

Sending request for text = Viruses initiate infection by transferring their genetic material across a cellular membrane and into the nucleus
Completed. Pausing for 10 secs...OK

Sending request for text = Dengue fever continues to be a major public health problem in Cambodia , with significant impact on the population
Completed. Pausing for 10 secs...OK

Sending request for text = Filarial nematodes cause chronic and profoundly debilitating diseases in both humans and animals . A major goal is to develop vaccines
Completed. Pausing for 10 secs...OK

Sending request for text = Tyrosine kinases of the Src-family are large allosteric enzymes that play a key role in cellular signalling
Completed. Pausing for 10 secs...OK

Sending request for text = The molecular mechanisms underlying lethality of F1 hybrids between diverged parents are one target for genetic improvement
Completed. Pausing for 10 secs...OK

Sending request for text = Emerging bacterial zoonoses in bats and rodents remain relatively understudied . We conduct the first study on the role of bats in the transmission of zoonotic bacteria
Completed. Pausing for 10 secs...OK

Sending request for text = A fundamental issue in locomotion is to understand how muscle forcing produces apparently complex movements
Completed. Pausing for 10 secs...OK

Sending request for text = Genetic recombination between pathogens derived from humans and livestock has the potential to create new strains

Completed. Pausing for 10 secs...OK
Sending request for text = Diabetes is caused by dysfunction to β -cells in the islets of Langerhans , disrupting insulin secretion
Completed. Pausing for 10 secs...OK
Sending request for text = Predicting the dynamic behavior of a large network from that of the composing modules is a central problem
Completed. Pausing for 10 secs...OK
Sending request for text = The pseudoautosomal region (PAR) is a short region of homology between the mammalian X and Y chromosomes
Completed. Pausing for 10 secs...OK
Sending request for text = In proliferating myoblasts , muscle specific genes are silenced by epigenetic modifications at their promoters
Completed. Pausing for 10 secs...OK
Sending request for text = Of the three diseases targeted for eradication by WHO , two are so-called Neglected Tropical Diseases
Completed. Pausing for 10 secs...OK
Sending request for text = The carboxy-terminal domain of the BBK32 protein from *Borrelia burgdorferi sensu stricto* , termed BBK32
Completed. Pausing for 10 secs...OK
Sending request for text = The opportunistic human fungal pathogen , *Candida albicans* , undergoes morphological and transcriptional changes
Completed. Pausing for 10 secs...OK
Sending request for text = The human pathogenic parasite *Trypanosoma brucei* possess both de novo and salvage routes for the biosynthesis of purines
Completed. Pausing for 10 secs...OK
Sending request for text = The initiation of translation is a fundamental and highly regulated process in gene expression . Translational control
Completed. Pausing for 10 secs...OK
Sending request for text = The skin disorder Post Kala-Azar Dermal Leishmaniasis (PKDL) occurs in up to 10% of patients treated with antileishmanial drugs
Completed. Pausing for 10 secs...OK
Sending request for text = Prevention of Chagas disease depends mainly on control of the insect vectors that transmit infection
Completed. Pausing for 10 secs...OK
Sending request for text = Effects of polyomavirus SV40 microRNA on pathogenesis of viral infections in vivo are not known . Studies are ongoing
Completed. Pausing for 10 secs...OK
Sending request for text = Genome-wide scans for positively selected genes (PSGs) in mammals have provided insight into the diversification of species
Completed. Pausing for 10 secs...OK
Sending request for text = *Staphylococcus aureus* is an opportunistic pathogen that colonizes the skin and mucosal surfaces of mammals
Completed. Pausing for 10 secs...OK
Sending request for text = *Trypanosoma cruzi* parasite , the causative agent of Chagas disease , infects about six million individuals
Completed. Pausing for 10 secs...OK
Sending request for text = Chikungunya virus (CHIKV) is an arthritogenic alphavirus that acutely causes fever as well as severe joint pain
Completed. Pausing for 10 secs...OK
Sending request for text = Recent studies have applied dimensionality reduction methods to understand how the multi-dimensional data is generated
Completed. Pausing for 10 secs...OK
Sending request for text = Increasing evidence indicates that bacterial quorum sensing (QS) signals are important mediators of bacterial communication
Completed. Pausing for 10 secs...OK
Sending request for text = Mammalian genomes comprise many active and fossilized ret

roelements . The obligate requirement for r

Completed. Pausing for 10 secs...OK

Sending request for text = YbeY , a highly conserved protein , is an RNase in E . co

li and plays key roles in both processing o

Completed. Pausing for 10 secs...OK

Sending request for text = Many developmental , physiological , and behavioral proce

sses depend on the precise expression of ge

Completed. Pausing for 10 secs...OK

Sending request for text = The manner in which populations of inhibitory (INH) and

excitatory (EXC) neocortical neurons col

Completed. Pausing for 10 secs...OK

Sending request for text = Synthetic biology aims at (re-) programming living cell

s like computers to perform new functions f

Completed. Pausing for 10 secs...OK

Sending request for text = Cytosolic 5'-nucleotidase II (cN-II) regulates the intr

acellular nucleotide pools within the cell

Completed. Pausing for 10 secs...OK

Sending request for text = Since prion infectivity had never been reported in milk ,

dairy products originating from transmissi

Completed. Pausing for 10 secs...OK

Sending request for text = An outbreak of Ebola virus disease (EVD) in Liberia beg

an in March 2014 and ended in January 2016

Completed. Pausing for 10 secs...OK

Sending request for text = Tyrosinase (EC 1 . 14 . 18 . 1) , a copper-containing m

onoxygenase , catalyzes the conversion of

Completed. Pausing for 10 secs...OK

Sending request for text = The early steps of the production of the large ribosomal

subunit are probably the least understood s

Completed. Pausing for 10 secs...OK

Sending request for text = Adaptive behavior in a changing world requires flexibly a

dapting one's rate of learning to the rate

Completed. Pausing for 10 secs...OK

Sending request for text = Infectious diseases still represent a major challenge for

humanity . In this context , their surveil

Completed. Pausing for 10 secs...OK

Sending request for text = A key feature of multicellular systems is the ability of

cells to function collectively in response

Completed. Pausing for 10 secs...OK

Sending request for text = Respiratory syncytial virus (RSV) is the major cause of

lower respiratory tract disease in infants

Completed. Pausing for 10 secs...OK

Sending request for text = During embryonic development , a number of genetic cues a

ct to generate neuronal diversity . While i

Completed. Pausing for 10 secs...OK

Sending request for text = Abundance of substrate receptor subunits of Cullin-RING u

biquitin ligases (CRLs) is tightly contro

Completed. Pausing for 10 secs...OK

Sending request for text = Kinesin-3 motors drive the transport of synaptic vesicles

and other membrane-bound organelles in neu

Completed. Pausing for 10 secs...OK

Sending request for text = To investigate the regulation of seed metabolism and to e

stimate the degree of metabolic natural var

Completed. Pausing for 10 secs...OK

Sending request for text = Vibrio cholerae is a bacterial pathogen that colonizes th

e chitinous exoskeleton of zooplankton as w

Completed. Pausing for 10 secs...OK

Sending request for text = Chronic T cell activation is a hallmark of pulmonary tuberculosis (PTB) . The mechanisms underpin
Completed. Pausing for 10 secs...OK

Sending request for text = PrP^C , a host protein which in prion-infected animals is converted to PrP^{Sc} , is linked to the cell
Completed. Pausing for 10 secs...OK

Sending request for text = The BMP signaling pathway has a conserved role in dorsal-ventral axis patterning during embryonic development
Completed. Pausing for 10 secs...OK

Sending request for text = In Tunisia , cases of zoonotic cutaneous leishmaniasis caused by *Leishmania major* are increasing and
Completed. Pausing for 10 secs...OK

Sending request for text = Current global helminth control guidelines focus on regular deworming of targeted populations for morbidity
Completed. Pausing for 10 secs...OK

Sending request for text = Lectin-like bacteriotoxic proteins , identified in several plant-associated bacteria , are able to
Completed. Pausing for 10 secs...OK

Sending request for text = Sporulation in *Bacillus subtilis* involves two cells that follow separate but coordinately regulated
Completed. Pausing for 10 secs...OK

Sending request for text = Although a highly heritable and disabling disease , bipolar disorder's (BD) genetic variants have
Completed. Pausing for 10 secs...OK

Sending request for text = Understanding cell proliferation mechanisms has been a long-lasting goal of the scientific community
Completed. Pausing for 10 secs...OK

Sending request for text = Cystic echinococcosis (CE) can affect the heart and the vena cava but few cases are reported . A
Completed. Pausing for 10 secs...OK

Sending request for text = Toll/interleukin-1 receptor (TIR) domains in Toll-like receptors are essential for initiating and
Completed. Pausing for 10 secs...OK

Sending request for text = Evolutionary innovations can be driven by spatial and temporal changes in gene expression . Several
Completed. Pausing for 10 secs...OK

Sending request for text = *Haemophilus ducreyi* and *Treponema pallidum* subsp . *pertenue* are major causes of leg ulcers in children
Completed. Pausing for 10 secs...OK

Sending request for text = Bioinformatics is recognized as part of the essential knowledge base of numerous career paths in biology
Completed. Pausing for 10 secs...OK

Sending request for text = The infectious form of many parasitic nematodes , which afflict over one billion people globally , is
Completed. Pausing for 10 secs...OK

Sending request for text = Humans are frequently exposed to bacterial genotoxins involved in digestive cancers , colibactin and
Completed. Pausing for 10 secs...OK

Sending request for text = Facial deformation as a sequela of leprosy is caused not only by a saddle nose but also by regression
Completed. Pausing for 10 secs...OK

Sending request for text = Identifying behaviorally relevant sounds in the presence of background noise is one of the most important
Completed. Pausing for 10 secs...OK

Sending request for text = Network analysis became a powerful tool giving new insights to the understanding of cellular behavior

Completed. Pausing for 10 secs...OK
Sending request for text = Chagas disease is a neglected chronic condition caused by Trypanosoma cruzi , with high prevalence a
Completed. Pausing for 10 secs...OK
Sending request for text = Season is a major determinant of infectious disease rates , including arboviruses spread by mosquito
Completed. Pausing for 10 secs...OK
Sending request for text = For many emerging and re-emerging infectious diseases , definitive solutions via sterilizing adaptiv
Completed. Pausing for 10 secs...OK
Sending request for text = Effective population size (N_e) determines the strength of genetic drift and the frequency of co-in
Completed. Pausing for 10 secs...OK
Sending request for text = The majority of expression quantitative trait locus (eQTL) studies have been carried out in single
Completed. Pausing for 10 secs...OK
Sending request for text = When exposed to tumor necrosis factor (TNF) or TNF-related apoptosis-inducing ligand (TRAIL) , a
Completed. Pausing for 10 secs...OK
Sending request for text = During pregnancy , the placenta protects the fetus against the maternal immune response , as well as
Completed. Pausing for 10 secs...OK
Sending request for text = The spirochete bacterium Treponema pallidum ssp . pallidum is the etiological agent of syphilis , a
Completed. Pausing for 10 secs...OK
Sending request for text = Protein Kinase A (PKA) is the major receptor for the cyclic adenosine monophosphate (cAMP) second
Completed. Pausing for 10 secs...OK
Sending request for text = The interferon (IFN) -stimulated gene 15 (ISG15) encodes one of the most abundant proteins induced
Completed. Pausing for 10 secs...OK
Sending request for text = Viral protein U (Vpu) of HIV-1 has two known functions in replication of the virus: degradation of
Completed. Pausing for 10 secs...OK
Sending request for text = Development produces correctly patterned tissues under a wide range of conditions that alter the rate
Completed. Pausing for 10 secs...OK
Sending request for text = In highly polarised cells , like fungal hyphae , early endosomes function in both endocytosis as well
Completed. Pausing for 10 secs...OK
Sending request for text = Many bacterial mRNAs are regulated at the transcriptional or translational level by ligand-binding events
Completed. Pausing for 10 secs...OK
Sending request for text = Transcription initiation that involves the use of a 2- to ~4-nt oligoribonucleotide primer , "primer
Completed. Pausing for 10 secs...OK
Sending request for text = In mammals and in plants , parental genome dosage imbalance deregulates embryo growth and might be involved
Completed. Pausing for 10 secs...OK
Sending request for text = Recordings of ongoing neural activity with EEG and MEG exhibit oscillations of specific frequencies
Completed. Pausing for 10 secs...OK
Sending request for text = Using ~60 , 000 SNPs selected for minimal linkage disequilibrium , we perform population structure analysis
Completed. Pausing for 10 secs...OK
Sending request for text = Histone chaperones CAF-1 and Asf1 function to deposit new

ly synthesized histones onto replicating DN
Completed. Pausing for 10 secs...OK
Sending request for text = Manually curating biomedical knowledge from publications
is necessary to build a knowledge based ser
Completed. Pausing for 10 secs...OK
Sending request for text = Gain-of-function mutations in KCNJ2-encoded Kir2 . 1 chan
nels underlie variant 3 (SQT3) of the sho
Completed. Pausing for 10 secs...OK
Sending request for text = Chagas disease , caused by the protozoan Trypanosoma cruz
i (T . cruzi) , is a complex disease ende
Completed. Pausing for 10 secs...OK
Sending request for text = In infected mammalian cells , Leishmania parasites reside
within specialized compartments called par
Completed. Pausing for 10 secs...OK
Sending request for text = Beyond its role in genomic organization and compaction ,
the nucleosome is believed to participate i
Completed. Pausing for 10 secs...OK
Sending request for text = Cell cycle progression , including genome duplication , i
s orchestrated by cyclin-dependent kinases
Completed. Pausing for 10 secs...OK
Sending request for text = Meiosis produces haploid cells essential for sexual repro
duction . In yeast , entry into meiosis act
Completed. Pausing for 10 secs...OK
Sending request for text = Fragile X-associated tremor/ataxia syndrome (FXTAS) is
a neurodegenerative disorder seen in Fragil
Completed. Pausing for 10 secs...OK
Sending request for text = Virtually all cells living in multicellular structures su
ch as tissues and organs are encased in an
Completed. Pausing for 10 secs...OK
Sending request for text = Pancreatic ductal adenocarcinoma (PDAC) has the worst p
rognosis among solid malignancies and impro
Completed. Pausing for 10 secs...OK
Sending request for text = Genetic factors play an important role in the etiology of
both sporadic and familial breast cancer .
Completed. Pausing for 10 secs...OK
Sending request for text = Cryptococcal meningitis is a major cause of mortality thr
oughout the developing world , yet little i
Completed. Pausing for 10 secs...OK
Sending request for text = The way in which signal transduction pathways evolve rema
ins a mystery , primarily because we have f
Completed. Pausing for 10 secs...OK
Sending request for text = The genomic GC-content of bacteria varies dramatically ,
from less than 20% to more than 70% . This
Completed. Pausing for 10 secs...OK
Sending request for text = Implementation of control of parasitic diseases requires
accurate , contemporary maps that provide i
Completed. Pausing for 10 secs...OK
Sending request for text = Cellular immunity to Mycobacterium tuberculosis (Mtb) r
equires a coordinated response between the
Completed. Pausing for 10 secs...OK
Sending request for text = In many cases protein assemblies are stabilized by covale
nt bonds , one example of which is the form
Completed. Pausing for 10 secs...OK
Sending request for text = Opisthorchis viverrini is a food-borne trematode species
that might give rise to biliary diseases an
Completed. Pausing for 10 secs...OK

Sending request for text = Dar es Salaam has an extensive drain network , mostly with inadequate water flow , blocked by waste
 Completed. Pausing for 10 secs...OK
 Sending request for text = Dengue is the most common mosquito-borne viral disease in humans . Changes of lipid-related metabolism
 Completed. Pausing for 10 secs...OK
 Sending request for text = Functional rearrangements in biomolecular assemblies result from diffusion across an underlying energy landscape
 Completed. Pausing for 10 secs...OK
 Sending request for text = The genetic landscape of medullary thyroid cancer (MTC) is not yet fully understood , although some studies suggest that
 Completed. Pausing for 10 secs...OK
 Sending request for text = Asymptomatic leishmaniasis may drive the epidemic and an important challenge to reach the goal of elimination
 Completed. Pausing for 10 secs...OK
 Sending request for text = Aneuploidy and gross chromosomal rearrangements (GCRs) can lead to genetic diseases and the development of cancer
 Completed. Pausing for 10 secs...OK
 Sending request for text = Similarly to protein folding , the association of two proteins is driven by a free energy funnel , and the folding of a protein is driven by a free energy funnel
 Completed. Pausing for 10 secs...OK
 Completed

In [16]: `df.head()`

Out[16]:

	lay_summary	article	headings	keywords	i
0	Messenger RNAs carry the instructions necessary for protein synthesis	Gene expression varies widely between individuals	[Abstract, Introduction, Results, Discussion, ...]	[genetics, biology, genomics, genetics and gen...	journal.pgen.100288
1	Annually , more than two million people are infected	The live attenuated simian immunodeficiency virus	[Abstract, Introduction, Materials and Methods...		journal.ppat.100463
2	The opportunistic pathogen Candida albicans is...	Mucosal infections with Candida albicans belong...	[Abstract, Introduction, Results, Discussion, ...]	[blood cells, cell motility, medicine and heal...	journal.ppat.100588
3	Lymphatic filariasis (LF) , commonly known as...	Between 2000–2007 , the Global Programme to Eliminate...	[Abstract, Introduction, Methods, Results, Dis...	[infectious diseases/neglected tropical diseases...	journal.pntd.000070
4	Parkinson's disease (PD) is a neurodegenerative...	Homozygous mutations in the glucocerebrosidase...	[Abstract, Introduction, Results, Discussion, ...]		journal.pgen.100506

```
In [44]: # check how many rows have blank result (some errors)
empty_df = df.query("groq_mistral_summary.str.strip() == ''")
print(len(empty_df))
```

0

```
In [46]: # attempt to retry for blank rows (due to some errors)
retry = True
if retry:
    print("Retrying for empty results...")
    for i in range(len(df)):
        item = df.iloc[i]
        if item["groq_mistral_summary"] == "":
            print("Item =", i)
            text = item["article"]
            df.at[i, "groq_mistral_summary"] = send_sumarize_request(text[:text_cap]
            print("Completed")
```

Retrying for empty results...
Completed

```
In [42]: output_path = "./data/output/full_dev_set/"
output_filename = "plos_groq_mistral_summary.csv"

print("Writing to file ", output_filename)
df.to_csv(output_path+output_filename,
          index = False
          )
print("Completed")
```

Writing to file plos_groq_mistral_summary.csv
Completed

```
In [43]: output_filename = "plos_groq_mistral_summary.json"

print("Writing to file ", output_filename)
df.to_json(output_path+output_filename,
           orient="records",
           )
print("Completed")
```

Writing to file plos_groq_mistral_summary.json
Completed

In []: