*Seu modelo de prova está na página seguinte

Curso de Inglês Instrumental Online

preparatório para Provas de Proficiência do Mestrado e Doutorado com Certificado de Proficiência

SAIBA MAIS

EXAME DE PROFICIÊNCIA EM LEITURA EM LÍNGUA INGLESA

TEXTO 1

SCIENCE & TECHNOLOGY

Machine learning models predict how much time aging mice have left

BY Stephanie DutchenHMS Communications
September 15, 2020

How old are you for your age?

Scientists who study aging have begun to distinguish chronological age: how long it's been since a person was born, and so-called biological age: how much a body is "aged" and how close it is to the end of life. These researchers are uncovering ways to measure biological age, from grip strength to the lengths of protective caps on the ends of chromosomes, known as telomeres. Their goal: to construct a comprehensive set of metrics that predicts an individual's life span and health span — the number of healthy years **they** have left — and illuminates the drivers of, and treatments for, age-related diseases.

A team led by David Sinclair, professor of genetics in the Blavatnik Institute at Harvard Medical School, has just taken another step toward this goal by developing two artificial intelligence-based clocks that use established measures of frailty to gauge both chronological and biological age in mice. "**We** are working to predict mouse health spans so we can quickly assess the effectiveness of interventions intended to extend life and move toward doing the same one day in humans," said Sinclair, senior author of the study, published Sept. 15 in Nature Communications. The work marks the first time a study has tracked frailty for the duration of a mouse's life, the authors said. "It can take up to three years to complete a longevity study in mice to see if a particular drug or diet slows the aging process," said co-first author Alice Kane, Harvard Medical School (HMS) research fellow in genetics in the Sinclair lab. "Predictive biometrics can accelerate such research by indicating whether an intervention is likely to work."

The findings

The team tracked the health of 60 aging mice for more than a year, until **they** died naturally. Health was measured by a standard set of noninvasive tests that provides a frailty score. Such tests were first created for people before being adapted for mice. Examples include walking ability, back curvature, and hearing and vision loss. The researchers then trained two computer models to learn from the mouse data. The Frailty Inferred Geriatric Health Timeline, or FRIGHT, clock gauges how biologically old a mouse is based on its frailty status. The Analysis of Frailty and Death, or AFRAID, clock predicts how much longer an old mouse has to live, up to one year ahead of time. Predictions in the study were accurate to within two months. The researchers went on to track frailty in two groups of mice given treatments or diets shown to extend life or health span in previous mouse studies. The clocks accurately predicted whether each intervention would improve biological age or lead to longer life. The lab has made the clocks freely available for other researchers. The researchers also found that some measures of frailty correspond better to age and longevity than others. For instance, hearing loss and tremor were more strongly linked than vision and whisker loss. The authors propose giving certain factors more weight when calculating biological age. The team chose the model names because aging and death are frightening to many people. […]

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Source: Adapted from https://news.harvard.edu/gazette/story/2020/09/machine-learning-models-predict-mice-lifespan/

As perguntas 1 a 7 são em relação ao texto 1

1. Qual o objetivo geral do texto?

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_____
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2. Qual o objetivo da pesquisa descrita no texto, conforme descrito no primeiro parágrafo?

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3. De acordo com o texto, o que os pesquisadores descobriram com suas pesquisas?

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4. Segundo o texto, o que os relógios previram com precisão?

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5. O que significa a explicação dada nas linhas 35-39? Por que esta explicação é necessária neste texto?

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_____

6. Escreva em português os significados dos grupos nominais abaixo, no contexto do Texto 1.

a) a comprehensive set of metrics (linha 6)	
b) an individual's life span and health span(linha 6)	
c) age-related diseases (linha 7)	
d) a standard set of noninvasive tests (linha 21)	

7. Escreva em português a quem ou que se referem as expressões a seguir:

a. They (linha 7) -
b. We (linha 10) -
c. They (linha 20) -

Texto 2

Black History Month at Oxford

As Oxford University delivers another engaging and informative programme for Black History Month during October 2020, here we bring together talks, events, resources and initiatives all in one place for you.

Black History Month 2020 provides us with another opportunity to recognize and share the outstanding contributions people of African and Caribbean descent have made throughout history.

Oxford University will once again join in the event, exploring those contributions both globally and right here in our city and University.

Here you will find talks, clubs and events for the general public, staff and students as well as resources, further reading and projects to be part of during Black History Month and beyond.

The following events and talks are open for members of the public and University staff and students.

Live Online Event: Talking Afropean

Thursday 22 October (5pm-6pm)

Free event. Booking not required.

Johny Pitts in conversation with Elleke Boehmer and Simukai Chigudu about his award-winning book.

This Writers Make Worlds and TORCH panel discussion features the author Johny Pitts in conversation about his ground-breaking travelogue Afropean, his 2019 notes on a journey around contemporary Black Europe.

Johny Pitts will explore together with Oxford academics Simukai Chigudu and Elleke Boehmer questions of black history, hidden archives, decolonization and community, and what it is to be black in Europe today.

Ten-Minute Book Club

During August, the University of Oxford launched a digital project called Ten-Minute Book Club, releasing an extract from novels, essays, poems or short stories each week until October. As the name suggests, the extracts are short enough to be read in ten minutes.

Each extract, posted every Friday, has been chosen by Oxford academics, and is paired with free resources and an introduction by an expert suggesting themes or contexts to think about as you read, by yourself or in discussion with family, friends, colleagues, or anyone else you'd like to connect with.

It's an initiative by the English faculty at Oxford, led by Dr Alexandra Paddock, Professor Kirsten Shepherd-Barr and Dr Erica Lombard.

Books featured include: The Interesting Narrative by Olaudah Equiano

Who has the right to write their life? This, above all, is the question that Olaudah Equiano's Interesting Narrative poses. As a genre, autobiography rests on notions of authenticity, self-consciousness, and unique selfhood that for centuries have been claimed as exclusive characteristics of the white man. The very act of a black man – a freed enslaved man – writing his own life was radical when Equiano published The Interesting Narrative in 1789.

Source: https://www.ox.ac.uk/news-and-events/black-history-month

As perguntas 8 a 14 se referem ao texto 2.

8. Qual o objetivo do texto?

_____
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_____

9. Os eventos descritos no texto são abertos ao público em geral? Retire do texto uma frase que comprove sua resposta.

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10. De acordo com o texto, o que acontecerá no evento *Talking Afropean*?

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11. Segundo o texto, porque o evento *Ten-Minute Book Club* possui este nome?

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12. De quem é a iniciativa e quem está liderando o evento *Ten-Minute Book Club*?

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13. Segundo o texto, o que eventos como os descritos na publicação promovem?

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14. De qual gênero é o livro indicado, no texto 2, para o evento *Ten-Minute Book Club*? Quais são as características deste livro, segundo o texto?

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