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Biology Direct <http://www.biology-direct.com/>

**1.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Enhanced immunogenicity of pneumococcal surface adhesin A (PsaA) in mice via fusion to recombinant human B lymphocyte stimulator (BLyS)**](http://www.biology-direct.com/content/6/1/9)**Gor DO, Ding X, Li Q, Sultana D, Mambula SS, Bram RJ, Greenspan NS***Biology Direct* 2011, **6**:9 (9 February 2011)  
[[Abstract](http://www.biology-direct.com/content/6/1/9/abstract)] [[Provisional PDF](http://www.biology-direct.com/content/pdf/1745-6150-6-9.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/21306646)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=21306646)]

**2.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Evolutionary patterns of phosphorylated serines**](http://www.biology-direct.com/content/6/1/8)**Kurmangaliyev YZ, Goland A, Gelfand MS***Biology Direct* 2011, **6**:8 (9 February 2011)  
[[Abstract](http://www.biology-direct.com/content/6/1/8/abstract)] [[Provisional PDF](http://www.biology-direct.com/content/pdf/1745-6150-6-8.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/21306633)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=21306633)]

**3.**   
**Opinion**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**The Multiple Personalities of Watson and Crick Strands**](http://www.biology-direct.com/content/6/1/7)**Cartwright RA, Graur D***Biology Direct* 2011, **6**:7 (8 February 2011)  
[[Abstract](http://www.biology-direct.com/content/6/1/7/abstract)] [[Provisional PDF](http://www.biology-direct.com/content/pdf/1745-6150-6-7.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/21303550)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=21303550)]

**4.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Gene gain and loss events in Rickettsia and Orientia species**](http://www.biology-direct.com/content/6/1/6)**Georgiades K, Merhej V, El Karkouri K, Raoult D, Pontarotti P***Biology Direct* 2011, **6**:6 (8 February 2011)  
[[Abstract](http://www.biology-direct.com/content/6/1/6/abstract)] [[Provisional PDF](http://www.biology-direct.com/content/pdf/1745-6150-6-6.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/21303508)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=21303508)]

**5.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Consequences of cell-to-cell P-glycoprotein transfer on acquired multidrug resistance in breast cancer: a cell population dynamics model**](http://www.biology-direct.com/content/6/1/5)**Pasquier J, Magal P, Boulangé-Lecomte C, Webb G, Le Foll F***Biology Direct* 2011, **6**:5 (26 January 2011)  
[[Abstract](http://www.biology-direct.com/content/6/1/5/abstract)] [[Full Text](http://www.biology-direct.com/content/6/1/5)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-6-5.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/21269489)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=21269489)]

**6.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Issues associated with the use of phosphospecific antibodies to localise active and inactive pools of GSK-3 in cells**](http://www.biology-direct.com/content/6/1/4)**Campa VM, Kypta RM***Biology Direct* 2011, **6**:4 (24 January 2011)  
[[Abstract](http://www.biology-direct.com/content/6/1/4/abstract)] [[Full Text](http://www.biology-direct.com/content/6/1/4)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-6-4.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/21261990)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=21261990)]

**7.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Modeling RNA polymerase competition: the effect of σ-subunit knockout and heat shock on gene transcription level**](http://www.biology-direct.com/content/6/1/3)**Lyubetsky VA, Zverkov OA, Rubanov LI, Seliverstov AV***Biology Direct* 2011, **6**:3 (21 January 2011)  
[[Abstract](http://www.biology-direct.com/content/6/1/3/abstract)] [[Full Text](http://www.biology-direct.com/content/6/1/3)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-6-3.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/21255416)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=21255416)]

**8.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Impact of Alu repeats on the evolution of human p53 binding sites**](http://www.biology-direct.com/content/6/1/2)**Cui F, Sirotin MV, Zhurkin VB***Biology Direct* 2011, **6**:2 (6 January 2011)  
[[Abstract](http://www.biology-direct.com/content/6/1/2/abstract)] [[Full Text](http://www.biology-direct.com/content/6/1/2)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-6-2.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/21208455)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=21208455)]

**9.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**The advantages and disadvantages of horizontal gene transfer and the emergence of the first species**](http://www.biology-direct.com/content/6/1/1)**Vogan AA, Higgs PG***Biology Direct* 2011, **6**:1 (3 January 2011)  
[[Abstract](http://www.biology-direct.com/content/6/1/1/abstract)] [[Full Text](http://www.biology-direct.com/content/6/1/1)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-6-1.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/21199581)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=21199581)]

**10.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Mitochondrial pathogenic mutations are population-specific**](http://www.biology-direct.com/content/5/1/68)**Breen MS, Kondrashov FA***Biology Direct* 2010, **5**:68 (31 December 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/68/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/68)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-68.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/21194457)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=21194457)]

**11.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Evolution of gene regulation of pluripotency - the case for wiki tracks at genome browsers**](http://www.biology-direct.com/content/5/1/67)**Fuellen G, Struckmann S***Biology Direct* 2010, **5**:67 (29 December 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/67/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/67)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-67.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/21190561)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=21190561)]

**12.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Bayesian classification of residues associated with protein functional divergence: Arf and Arf-like GTPases**](http://www.biology-direct.com/content/5/1/66)**Neuwald AF***Biology Direct* 2010, **5**:66 (3 December 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/66/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/66)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-66.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/21129209)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=21129209)]

**13.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**The scenario on the origin of translation in the RNA world: in principle of replication parsimony**](http://www.biology-direct.com/content/5/1/65)**Ma W***Biology Direct* 2010, **5**:65 (27 November 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/65/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/65)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-65.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/21110883)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=21110883)]

**14.**   
**Comment**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**The common ancestry of life**](http://www.biology-direct.com/content/5/1/64)**Koonin EV, Wolf YI***Biology Direct* 2010, **5**:64 (18 November 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/64/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/64)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-64.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/21087490)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=21087490)]

**15.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Modeling compositional dynamics based on GC and purine contents of protein-coding sequences**](http://www.biology-direct.com/content/5/1/63)**Zhang Z, Yu J***Biology Direct* 2010, **5**:63 (8 November 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/63/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/63)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-63.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/21059261)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=21059261)] [[1 comment](http://www.biology-direct.com/content/5/1/63/comments)]

**16.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**How many antiviral small interfering RNAs may be encoded by the mammalian genomes?**](http://www.biology-direct.com/content/5/1/62)**Zabolotneva A, Tkachev V, Filatov F, Buzdin A***Biology Direct* 2010, **5**:62 (8 November 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/62/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/62)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-62.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/21059241)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=21059241)]

**17.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Proteomic changes associated with deletion of the *Magnaporthe oryzae* conidial morphology-regulating gene *COM1***](http://www.biology-direct.com/content/5/1/61)**Bhadauria V, Wang LX, Peng YL***Biology Direct* 2010, **5**:61 (2 November 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/61/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/61)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-61.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/21040590)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=21040590)]

**18.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Riboswitches as hormone receptors: hypothetical cytokinin-binding riboswitches in *Arabidopsis thaliana***](http://www.biology-direct.com/content/5/1/60)**Grojean J, Downes B***Biology Direct* 2010, **5**:60 (20 October 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/60/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/60)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-60.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20961447)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20961447)]

**19.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**The calculation of information and organismal complexity**](http://www.biology-direct.com/content/5/1/59)**Jiang Y, Xu C***Biology Direct* 2010, **5**:59 (12 October 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/59/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/59)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-59.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20937149)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20937149)]

**20.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Application of computational approaches to study signalling networks of nuclear and Tyrosine kinase receptors**](http://www.biology-direct.com/content/5/1/58)**Choura M, Rebaï A***Biology Direct* 2010, **5**:58 (11 October 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/58/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/58)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-58.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20937105)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20937105)]

**21.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**The origin of Eastern European Jews revealed by autosomal, sex chromosomal and mtDNA polymorphisms**](http://www.biology-direct.com/content/5/1/57)**Zoossmann-Diskin A***Biology Direct* 2010, **5**:57 (6 October 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/57/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/57)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-57.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20925954)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20925954)]

**22.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Relating underrepresented genomic DNA patterns and tiRNAs: the rule behind the observation and beyond**](http://www.biology-direct.com/content/5/1/56)**Cserzo M, Turu G, Varnai P, Hunyady L***Biology Direct* 2010, **5**:56 (22 September 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/56/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/56)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-56.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20860791)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20860791)]

**23.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**The ancient function of RB-E2F Pathway: insights from its evolutionary history**](http://www.biology-direct.com/content/5/1/55)**Cao L, Peng B, Yao L, Zhang X, Sun K, Yang X, Yu L***Biology Direct* 2010, **5**:55 (20 September 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/55/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/55)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-55.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20849664)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20849664)]

**24.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Asymmetric and non-uniform evolution of recently duplicated human genes**](http://www.biology-direct.com/content/5/1/54)**Panchin AY, Gelfand MS, Ramensky VE, Artamonova II***Biology Direct* 2010, **5**:54 (8 September 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/54/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/54)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-54.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20825637)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20825637)]

**25.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Uniting sex and eukaryote origins in an emerging oxygenic world**](http://www.biology-direct.com/content/5/1/53)**Gross J, Bhattacharya D***Biology Direct* 2010, **5**:53 (23 August 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/53/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/53)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-53.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20731852)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20731852)]

**26.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Encoding the states of interacting proteins to facilitate biological pathways reconstruction**](http://www.biology-direct.com/content/5/1/52)**Termanini A, Tieri P, Franceschi C***Biology Direct* 2010, **5**:52 (13 August 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/52/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/52)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-52.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20707925)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20707925)]

**27.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Measuring gene expression divergence: the distance to keep**](http://www.biology-direct.com/content/5/1/51)**Glazko G, Mushegian A***Biology Direct* 2010, **5**:51 (6 August 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/51/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/51)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-51.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20691088)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20691088)]

**28.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**A kinetic model of TBP auto-regulation exhibits bistability**](http://www.biology-direct.com/content/5/1/50)**Gokhale SA, Roshan R, Khetan V, Pillai B, Gadgil CJ***Biology Direct* 2010, **5**:50 (5 August 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/50/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/50)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-50.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20687914)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20687914)]

**29.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Phylogenetic and regulatory region analysis of *Wnt5* genes reveals conservation of a regulatory module with putative implication in pancreas development**](http://www.biology-direct.com/content/5/1/49)**Kapasa M, Arhondakis S, Kossida S***Biology Direct* 2010, **5**:49 (4 August 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/49/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/49)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-49.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20684756)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20684756)]

**30.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Predicted class-I aminoacyl tRNA synthetase-like proteins in non-ribosomal peptide synthesis**](http://www.biology-direct.com/content/5/1/48)**Aravind L, de Souza RF, Iyer LM***Biology Direct* 2010, **5**:48 (2 August 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/48/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/48)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-48.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20678224)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20678224)]

**31.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Some considerations for analyzing biodiversity using integrative metagenomics and gene networks**](http://www.biology-direct.com/content/5/1/47)**Bittner L, Halary S, Payri C, Cruaud C, de Reviers B, Lopez P, Bapteste E***Biology Direct* 2010, **5**:47 (30 July 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/47/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/47)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-47.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20673351)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20673351)]

**32.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**The evolutionary rate variation among genes of HOG-signaling pathway in yeast genomes**](http://www.biology-direct.com/content/5/1/46)**Wu X, Chi X, Wang P, Zheng D, Ding R, Li Y***Biology Direct* 2010, **5**:46 (10 July 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/46/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/46)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-46.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20618989)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20618989)]

**33.**   
**Comment**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Opportunities and challenges for digital morphology**](http://www.biology-direct.com/content/5/1/45)**Ziegler A, Ogurreck M, Steinke T, Beckmann F, Prohaska S, Ziegler A***Biology Direct* 2010, **5**:45 (6 July 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/45/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/45)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-45.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20604956)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20604956)]

**34.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Save the tree of life or get lost in the woods**](http://www.biology-direct.com/content/5/1/44)**Valas RE, Bourne PE***Biology Direct* 2010, **5**:44 (1 July 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/44/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/44)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-44.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20594329)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20594329)]

**35.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Presence of a classical RRM-fold palm domain in Thg1-type 3'- 5'nucleic acid polymerases and the origin of the GGDEF and CRISPR polymerase domains**](http://www.biology-direct.com/content/5/1/43)**Anantharaman V, Iyer LM, Aravind L***Biology Direct* 2010, **5**:43 (30 June 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/43/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/43)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-43.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20591188)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20591188)]

**36.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Mitochondrial DNA, chloroplast DNA and the origins of development in eukaryotic organisms**](http://www.biology-direct.com/content/5/1/42)**Bendich AJ***Biology Direct* 2010, **5**:42 (29 June 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/42/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/42)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-42.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20587059)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20587059)]

**37.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**An age-dependent branching process model for the analysis of CFSE-labeling experiments**](http://www.biology-direct.com/content/5/1/41)**Hyrien O, Chen R, Zand MS***Biology Direct* 2010, **5**:41 (22 June 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/41/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/41)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-41.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20569476)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20569476)]

**38.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Co-lethality studied as an asset against viral drug escape: the HIV protease case**](http://www.biology-direct.com/content/5/1/40)**Brouillet S, Valere T, Ollivier E, Marsan L, Vanet A***Biology Direct* 2010, **5**:40 (17 June 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/40/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/40)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-40.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20565756)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20565756)]

**39.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Undetected antisense tRNAs in mitochondrial genomes?**](http://www.biology-direct.com/content/5/1/39)**Seligmann H***Biology Direct* 2010, **5**:39 (16 June 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/39/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/39)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-39.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20553583)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20553583)]

**40.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Spontaneous chiral symmetry breaking in early molecular networks**](http://www.biology-direct.com/content/5/1/38)**Kafri R, Markovitch O, Lancet D***Biology Direct* 2010, **5**:38 (27 May 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/38/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/38)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-38.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20507625)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20507625)]

**41.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Genome factor and gene pleiotropy hypotheses in protein evolution**](http://www.biology-direct.com/content/5/1/37)**Zeng Y, Gu X***Biology Direct* 2010, **5**:37 (24 May 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/37/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/37)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-37.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20497565)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20497565)]

**42.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**GTPases and the origin of the ribosome**](http://www.biology-direct.com/content/5/1/36)**Hartman H, Smith TF***Biology Direct* 2010, **5**:36 (20 May 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/36/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/36)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-36.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20487556)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20487556)]

**43.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Selection for the compactness of highly expressed genes in *Gallus gallus***](http://www.biology-direct.com/content/5/1/35)**Rao YS, Wang ZF, Chai XW, Wu GZ, Zhou M, Nie QH, Zhang XQ***Biology Direct* 2010, **5**:35 (14 May 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/35/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/35)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-35.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20465857)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20465857)]

**44.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Lack of conservation of bacterial type promoters in plastids of Streptophyta**](http://www.biology-direct.com/content/5/1/34)**Lyubetsky VA, Rubanov LI, Seliverstov AV***Biology Direct* 2010, **5**:34 (10 May 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/34/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/34)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-34.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20459727)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20459727)]

**45.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Two new families of the FtsZ-tubulin protein superfamily implicated in membrane remodeling in diverse bacteria and archaea**](http://www.biology-direct.com/content/5/1/33)**Makarova KS, Koonin EV***Biology Direct* 2010, **5**:33 (7 May 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/33/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/33)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-33.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20459678)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20459678)]

**46.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Modularity and anti-modularity in networks with arbitrary degree distribution**](http://www.biology-direct.com/content/5/1/32)**Hintze A, Adami C***Biology Direct* 2010, **5**:32 (6 May 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/32/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/32)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-32.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20459629)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20459629)]

**47.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Non-homologous isofunctional enzymes: A systematic analysis of alternative solutions in enzyme evolution**](http://www.biology-direct.com/content/5/1/31)**Omelchenko MV, Galperin MY, Wolf YI, Koonin EV***Biology Direct* 2010, **5**:31 (30 April 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/31/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/31)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-31.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20433725)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20433725)]

**48.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Locality versus globality in bacterial signalling: can local communication stabilize bacterial communities?**](http://www.biology-direct.com/content/5/1/30)**Venturi V, Kerényi , Reiz B, Bihary D, Pongor S***Biology Direct* 2010, **5**:30 (27 April 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/30/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/30)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-30.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20423483)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20423483)]

**49.**   
**Editorial**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Evolution and cancer: a mathematical biology approach**](http://www.biology-direct.com/content/5/1/29)**Kimmel M***Biology Direct* 2010, **5**:29 (20 April 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/29/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/29)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-29.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20406450)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20406450)]

**50.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**A mathematical model of bone remodeling dynamics for normal bone cell populations and myeloma bone disease**](http://www.biology-direct.com/content/5/1/28)**Ayati BP, Edwards CM, Webb GF, Wikswo JP***Biology Direct* 2010, **5**:28 (20 April 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/28/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/28)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-28.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20406449)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20406449)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/20406449)]

**51.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Oscillatory dynamics in a model of vascular tumour growth - implications for chemotherapy**](http://www.biology-direct.com/content/5/1/27)**Stamper IJ, Owen MR, Maini PK, Byrne HM***Biology Direct* 2010, **5**:27 (20 April 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/27/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/27)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-27.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20406447)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20406447)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/20406447)]

**52.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**A new stochastic and state space model of human colon cancer incorporating multiple pathways**](http://www.biology-direct.com/content/5/1/26)**Tan WY, Yan XW***Biology Direct* 2010, **5**:26 (20 April 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/26/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/26)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-26.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20406446)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20406446)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/20406446)]

**53.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**A theoretical quantitative model for evolution of cancer chemotherapy resistance**](http://www.biology-direct.com/content/5/1/25)**Silva AS, Gatenby RA***Biology Direct* 2010, **5**:25 (20 April 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/25/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/25)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-25.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20406443)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20406443)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/20406443)]

**54.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**The evolutionary impact of androgen levels on prostate cancer in a multi-scale mathematical model**](http://www.biology-direct.com/content/5/1/24)**Eikenberry SE, Nagy JD, Kuang Y***Biology Direct* 2010, **5**:24 (20 April 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/24/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/24)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-24.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20406442)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20406442)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/20406442)]

**55.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Tumor morphological evolution: directed migration and gain and loss of the self-metastatic phenotype**](http://www.biology-direct.com/content/5/1/23)**Enderling H, Hlatky L, Hahnfeldt P***Biology Direct* 2010, **5**:23 (20 April 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/23/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/23)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-23.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20406441)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20406441)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/20406441)]

**56.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Episodic, transient systemic acidosis delays evolution of the malignant phenotype: Possible mechanism for cancer prevention by increased physical activity**](http://www.biology-direct.com/content/5/1/22)**Smallbone K, Maini PK, Gatenby RA***Biology Direct* 2010, **5**:22 (20 April 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/22/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/22)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-22.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20406440)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20406440)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/20406440)]

**57.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Selection in spatial stochastic models of cancer: Migration as a key modulator of fitness**](http://www.biology-direct.com/content/5/1/21)**Thalhauser CJ, Lowengrub JS, Stupack D, Komarova NL***Biology Direct* 2010, **5**:21 (20 April 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/21/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/21)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-21.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20406439)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20406439)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/20406439)]

**58.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Disruption of a Quorum Sensing mechanism triggers tumorigenesis: a simple discrete model corroborated by experiments in mammary cancer stem cells**](http://www.biology-direct.com/content/5/1/20)**Agur Z, Kogan Y, Levi L, Harrison H, Lamb R, Kirnasovsky OU, Clarke RB***Biology Direct* 2010, **5**:20 (20 April 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/20/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/20)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-20.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20406437)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20406437)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/20406437)]

**59.**   
**Review**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Cancer models, genomic instability and somatic cellular Darwinian evolution**](http://www.biology-direct.com/content/5/1/19)**Little MP***Biology Direct* 2010, **5**:19 (20 April 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/19/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/19)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-19.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20406436)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20406436)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/20406436)]

**60.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Genome-wide analysis of transposable elements and tandem repeats in the compact placozoan genome**](http://www.biology-direct.com/content/5/1/18)**Wang S, Zhang L, Meyer E, Bao Z***Biology Direct* 2010, **5**:18 (15 April 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/18/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/18)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-18.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20398319)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20398319)]

**61.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**The archaeo-eukaryotic GINS proteins and the archaeal primase catalytic subunit PriS share a common domain**](http://www.biology-direct.com/content/5/1/17)**Swiatek A, MacNeill SA***Biology Direct* 2010, **5**:17 (12 April 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/17/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/17)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-17.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20385010)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20385010)]

**62.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**The transition from noncoded to coded protein synthesis: did coding mRNAs arise from stability-enhancing binding partners to tRNA?**](http://www.biology-direct.com/content/5/1/16)**Bernhardt HS, Tate WP***Biology Direct* 2010, **5**:16 (9 April 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/16/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/16)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-16.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20377916)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20377916)]

**63.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**The evolution and functional repertoire of translation proteins following the origin of life**](http://www.biology-direct.com/content/5/1/15)**Goldman AD, Samudrala R, Baross JA***Biology Direct* 2010, **5**:15 (8 April 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/15/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/15)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-15.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20377891)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20377891)]

**64.**   
**Opinion**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Biological species is the only possible form of existence for higher organisms: the evolutionary meaning of sexual reproduction**](http://www.biology-direct.com/content/5/1/14)**Shcherbakov VP***Biology Direct* 2010, **5**:14 (22 March 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/14/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/14)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-14.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20307287)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20307287)]

**65.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**OST-HTH: a novel predicted RNA-binding domain**](http://www.biology-direct.com/content/5/1/13)**Anantharaman V, Zhang D, Aravind L***Biology Direct* 2010, **5**:13 (19 March 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/13/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/13)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-13.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20302647)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20302647)]

**66.**   
**Opinion**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Community annotation in biology**](http://www.biology-direct.com/content/5/1/12)**Mazumder R, Natale DA, Julio JAE, Yeh LS, Wu CH***Biology Direct* 2010, **5**:12 (18 February 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/12/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/12)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-12.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20167071)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20167071)]

**67.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Proteome changes of *Caenorhabditis elegans* upon a *Staphylococcus aureus* infection**](http://www.biology-direct.com/content/5/1/11)**Bogaerts A, Beets I, Temmerman L, Schoofs L, Verleyen P***Biology Direct* 2010, **5**:11 (17 February 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/11/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/11)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-11.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20163716)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20163716)]

**68.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**'Genome order index' should not be used for defining compositional constraints in nucleotide sequences - a case study of the Z-curve**](http://www.biology-direct.com/content/5/1/10)**Elhaik E, Graur D, Josić K***Biology Direct* 2010, **5**:10 (17 February 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/10/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/10)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-10.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20158921)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20158921)]

**69.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Low level of polymorphism in two putative *NPR1* homologs in the *Vitaceae* family**](http://www.biology-direct.com/content/5/1/9)**Bergeault K, Bertsch C, Merdinoglu D, Walter B***Biology Direct* 2010, **5**:9 (5 February 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/9/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/9)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-9.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20137081)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20137081)]

**70.**   
**Comment**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**FOXP3 and GARP (LRRC32): the master and its minion**](http://www.biology-direct.com/content/5/1/8)**Probst-Kepper M, Buer J***Biology Direct* 2010, **5**:8 (5 February 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/8/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/8)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-8.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20137067)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20137067)]

**71.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Origin of the cell nucleus, mitosis and sex: roles of intracellular coevolution**](http://www.biology-direct.com/content/5/1/7)**Cavalier-Smith T***Biology Direct* 2010, **5**:7 (4 February 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/7/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/7)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-7.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20132544)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20132544)] [[1 comment](http://www.biology-direct.com/content/5/1/7/comments)]

**72.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Cooperativity within proximal phosphorylation sites is revealed from large-scale proteomics data**](http://www.biology-direct.com/content/5/1/6)**Schweiger R, Linial M***Biology Direct* 2010, **5**:6 (26 January 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/6/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/6)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-6.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20100358)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20100358)]

**73.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Rate of sequence divergence under constant selection**](http://www.biology-direct.com/content/5/1/5)**Kondrashov AS, Povolotskaya IS, Ivankov DN, Kondrashov FA***Biology Direct* 2010, **5**:5 (21 January 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/5/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/5)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-5.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20092641)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20092641)]

**74.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Including RNA secondary structures improves accuracy and robustness in reconstruction of phylogenetic trees**](http://www.biology-direct.com/content/5/1/4)**Keller A, Förster F, Müller T, Dandekar T, Schultz J, Wolf M***Biology Direct* 2010, **5**:4 (15 January 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/4/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/4)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-4.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20078867)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20078867)]

**75.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Predicting the pathway involved in post-translational modification of Elongation factor P in a subset of bacterial species**](http://www.biology-direct.com/content/5/1/3)**Bailly M, de Crécy-Lagard V***Biology Direct* 2010, **5**:3 (13 January 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/3/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/3)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-3.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20070887)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20070887)]

**76.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Elastic, not plastic species: Frozen plasticity theory and the origin of adaptive evolution in sexually reproducing organisms**](http://www.biology-direct.com/content/5/1/2)**Flegr J***Biology Direct* 2010, **5**:2 (13 January 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/2/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/2)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-2.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20067646)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20067646)]

**77.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Novel eukaryotic enzymes modifying cell-surface biopolymers**](http://www.biology-direct.com/content/5/1/1)**Anantharaman V, Aravind L***Biology Direct* 2010, **5**:1 (7 January 2010)  
[[Abstract](http://www.biology-direct.com/content/5/1/1/abstract)] [[Full Text](http://www.biology-direct.com/content/5/1/1)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-5-1.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20056006)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20056006)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/20056006)]

**78.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Evolution of DNA ligases of Nucleo-Cytoplasmic Large DNA viruses of eukaryotes: a case of hidden complexity**](http://www.biology-direct.com/content/4/1/51)**Yutin N, Koonin EV***Biology Direct* 2009, **4**:51 (18 December 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/51/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/51)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-51.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20021668)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20021668)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/20021668)]

**79.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Automated mass action model space generation and analysis methods for two-reactant combinatorially complex equilibriums: An analysis of ATP-induced ribonucleotide reductase R1 hexamerization data**](http://www.biology-direct.com/content/4/1/50)**Radivoyevitch T***Biology Direct* 2009, **4**:50 (9 December 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/50/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/50)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-50.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20003203)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20003203)]

**80.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Mass action models versus the Hill model: An analysis of tetrameric human thymidine kinase 1 positive cooperativity**](http://www.biology-direct.com/content/4/1/49)**Radivoyevitch T***Biology Direct* 2009, **4**:49 (9 December 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/49/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/49)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-49.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/20003201)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=20003201)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/20003201)]

**81.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Depauperate genetic variability detected in the American and European bison using genomic techniques**](http://www.biology-direct.com/content/4/1/48)**Pertoldi C, Tokarska M, Wójcik JM, Demontis D, Loeschcke V, Gregersen VR, Coltman D, Wilson GA, Randi E, Hansen MM, Bendixen C***Biology Direct* 2009, **4**:48 (8 December 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/48/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/48)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-48.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19995416)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19995416)]

**82.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Human γδ T cell Recognition of lipid A is predominately presented by CD1b or CD1c on dendritic cells**](http://www.biology-direct.com/content/4/1/47)**Cui Y, Kang L, Cui L, He W***Biology Direct* 2009, **4**:47 (1 December 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/47/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/47)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-47.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19948070)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19948070)]

**83.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Evolution by leaps: gene duplication in bacteria**](http://www.biology-direct.com/content/4/1/46)**Serres MH, Kerr ARW, McCormack TJ, Riley M***Biology Direct* 2009, **4**:46 (23 November 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/46/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/46)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-46.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19930658)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19930658)]

**84.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**In plants, expression breadth and expression level distinctly and non-linearly correlate with gene structure**](http://www.biology-direct.com/content/4/1/45)**Yang H***Biology Direct* 2009, **4**:45 (21 November 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/45/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/45)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-45.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19930585)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19930585)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/19930585)]

**85.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Exceptional error minimization in putative primordial genetic codes**](http://www.biology-direct.com/content/4/1/44)**Novozhilov AS, Koonin EV***Biology Direct* 2009, **4**:44 (19 November 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/44/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/44)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-44.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19925661)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19925661)]

**86.**   
**Review**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Trees and networks before and after Darwin**](http://www.biology-direct.com/content/4/1/43)**Ragan MA***Biology Direct* 2009, **4**:43 (16 November 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/43/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/43)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-43.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19917100)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19917100)] [[1 comment](http://www.biology-direct.com/content/4/1/43/comments)]

**87.**   
**Opinion**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Is evolution Darwinian or/and Lamarckian?**](http://www.biology-direct.com/content/4/1/42)**Koonin EV, Wolf YI***Biology Direct* 2009, **4**:42 (11 November 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/42/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/42)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-42.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19906303)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19906303)]

**88.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Network dynamics of eukaryotic LTR retroelements beyond phylogenetic trees**](http://www.biology-direct.com/content/4/1/41)**Llorens C, Muñoz-Pomer A, Bernad L, Botella H, Moya A***Biology Direct* 2009, **4**:41 (2 November 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/41/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/41)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-41.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19883502)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19883502)]

**89.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**CD44 expression positively correlates with Foxp3 expression and suppressive function of CD4+ Treg cells**](http://www.biology-direct.com/content/4/1/40)**Liu T, Soong L, Liu G, König R, Chopra AK***Biology Direct* 2009, **4**:40 (23 October 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/40/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/40)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-40.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19852824)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19852824)]

**90.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Identification of an ortholog of the eukaryotic RNA polymerase III subunit RPC34 in Crenarchaeota and Thaumarchaeota suggests specialization of RNA polymerases for coding and non-coding RNAs in Archaea**](http://www.biology-direct.com/content/4/1/39)**Blombach F, Makarova KS, Marrero J, Siebers B, Koonin EV, Oost J***Biology Direct* 2009, **4**:39 (14 October 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/39/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/39)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-39.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19828044)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19828044)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/19828044)]

**91.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Strong association between pseudogenization mechanisms and gene sequence length**](http://www.biology-direct.com/content/4/1/38)**Khachane AN, Harrison PM***Biology Direct* 2009, **4**:38 (6 October 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/38/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/38)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-38.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19807910)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19807910)]

**92.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Epigenetic hereditary transcription profiles III, evidence for an epigenetic network resulting in gender, tissue and age-specific variation in overall transcription**](http://www.biology-direct.com/content/4/1/37)**Simons JWIM***Biology Direct* 2009, **4**:37 (1 October 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/37/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/37)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-37.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19796384)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19796384)]

**93.**   
**Correction**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Hypothesis for heritable, anti-viral immunity in crustaceans and insects**](http://www.biology-direct.com/content/4/1/36)**Flegel TW***Biology Direct* 2009, **4**:36 (1 October 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/36/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/36)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-36.pdf)]

**94.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Inferring clocks when lacking rocks: the variable rates of molecular evolution in bacteria**](http://www.biology-direct.com/content/4/1/35)**Kuo CH, Ochman H***Biology Direct* 2009, **4**:35 (29 September 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/35/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/35)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-35.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19788732)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19788732)]

**95.**   
**Review**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Prokaryotic evolution and the tree of life are two different things**](http://www.biology-direct.com/content/4/1/34)**Bapteste E, O'Malley MA, Beiko RG, Ereshefsky M, Gogarten JP, Franklin-Hall L, Lapointe FJ, Dupré J, Dagan T, Boucher Y, Martin W***Biology Direct* 2009, **4**:34 (29 September 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/34/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/34)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-34.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19788731)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19788731)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/19788731)]

**96.**   
**Opinion**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**The fundamental units, processes and patterns of evolution, and the Tree of Life conundrum**](http://www.biology-direct.com/content/4/1/33)**Koonin EV, Wolf YI***Biology Direct* 2009, **4**:33 (29 September 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/33/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/33)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-33.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19788730)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19788730)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/19788730)]

**97.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Hypothesis for heritable, anti-viral immunity in crustaceans and insects**](http://www.biology-direct.com/content/4/1/32)**Flegel TW***Biology Direct* 2009, **4**:32 (2 September 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/32/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/32)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-32.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19725947)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19725947)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/19725947)] [[1 comment](http://www.biology-direct.com/content/4/1/32/comments)]

**98.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Multipotent adult germ-line stem cells, like other pluripotent stem cells, can be killed by cytotoxic T lymphocytes despite low expression of major histocompatibility complex class I molecules**](http://www.biology-direct.com/content/4/1/31)**Dressel R, Guan K, Nolte J, Elsner L, Monecke S, Nayernia K, Hasenfuss G, Engel W***Biology Direct* 2009, **4**:31 (28 August 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/31/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/31)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-31.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19715575)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19715575)] [[1 comment](http://www.biology-direct.com/content/4/1/31/comments)]

**99.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Structural analysis of polarizing indels: an emerging consensus on the root of the tree of life**](http://www.biology-direct.com/content/4/1/30)**Valas RE, Bourne PE***Biology Direct* 2009, **4**:30 (25 August 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/30/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/30)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-30.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19706177)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19706177)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/19706177)] [[1 comment](http://www.biology-direct.com/content/4/1/30/comments)]

**100.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Prokaryotic homologs of Argonaute proteins are predicted to function as key components of a novel system of defense against mobile genetic elements**](http://www.biology-direct.com/content/4/1/29)**Makarova KS, Wolf YI, van der Oost J, Koonin EV***Biology Direct* 2009, **4**:29 (25 August 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/29/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/29)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-29.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19706170)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19706170)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/19706170)]

**101.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**On the need for widespread horizontal gene transfers under genome size constraint**](http://www.biology-direct.com/content/4/1/28)**Isambert H, Stein RR***Biology Direct* 2009, **4**:28 (25 August 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/28/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/28)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-28.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19703318)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19703318)] [[1 comment](http://www.biology-direct.com/content/4/1/28/comments)]

**102.**   
  
http://www.biomedcentral.com/graphics/flashes/eval_on.gif  
[http://www.biomedcentral.com/graphics/flashes/f1000B_eval.gif](http://www.f1000biology.com/openurl?sid=biomedcentral&id=pmid:19703275)**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**On the origin of life in the Zinc world. 2. Validation of the hypothesis on the photosynthesizing zinc sulfide edifices as cradles of life on Earth**](http://www.biology-direct.com/content/4/1/27)**Mulkidjanian AY, Galperin MY***Biology Direct* 2009, **4**:27 (24 August 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/27/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/27)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-27.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19703275)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19703275)] [[F1000 Biology](http://www.f1000biology.com/openurl?sid=biomedcentral&id=pmid:19703275)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/19703275)]

**103.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**On the origin of life in the Zinc world: 1. Photosynthesizing, porous edifices built of hydrothermally precipitated zinc sulfide as cradles of life on Earth**](http://www.biology-direct.com/content/4/1/26)**Mulkidjanian AY***Biology Direct* 2009, **4**:26 (24 August 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/26/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/26)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-26.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19703272)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19703272)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/19703272)]

**104.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**The *Anabaena* sensory rhodopsin transducer defines a novel superfamily of prokaryotic small-molecule binding domains**](http://www.biology-direct.com/content/4/1/25)**De Souza RF, Iyer LM, Aravind L***Biology Direct* 2009, **4**:25 (14 August 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/25/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/25)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-25.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19682383)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19682383)] [[2 comments](http://www.biology-direct.com/content/4/1/25/comments)]

**105.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Identification of a crenarchaeal orthologue of Elf1: implications for chromatin and transcription in Archaea**](http://www.biology-direct.com/content/4/1/24)**Daniels JP, Kelly S, Wickstead B, Gull K***Biology Direct* 2009, **4**:24 (29 July 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/24/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/24)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-24.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19640276)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19640276)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/19640276)]

**106.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Divergent evolution and purifying selection of the *flaA* gene sequences in *Aeromonas***](http://www.biology-direct.com/content/4/1/23)**Farfán M, Miñana-Galbis D, Fusté MC, Lorén JG***Biology Direct* 2009, **4**:23 (21 July 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/23/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/23)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-23.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19622168)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19622168)]

**107.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Extensive sequence turnover of the signal peptides of members of the GDF/BMP family: exploring their evolutionary landscape**](http://www.biology-direct.com/content/4/1/22)**Veitia RA, Caburet S***Biology Direct* 2009, **4**:22 (16 July 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/22/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/22)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-22.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19607682)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19607682)]

**108.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Retention of the virus-derived sequences in the nuclear genome of grapevine as a potential pathway to virus resistance**](http://www.biology-direct.com/content/4/1/21)**Bertsch C, Beuve M, Dolja VV, Wirth M, Pelsy F, Herrbach E, Lemaire O***Biology Direct* 2009, **4**:21 (26 June 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/21/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/21)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-21.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19558678)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19558678)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/19558678)]

**109.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[***γ*-MYN: a new algorithm for estimating Ka and Ks with consideration of variable substitution rates**](http://www.biology-direct.com/content/4/1/20)**Wang DP, Wan HL, Zhang S, Yu J***Biology Direct* 2009, **4**:20 (16 June 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/20/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/20)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-20.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19531225)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19531225)]

**110.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Comprehensive comparative-genomic analysis of Type 2 toxin-antitoxin systems and related mobile stress response systems in prokaryotes**](http://www.biology-direct.com/content/4/1/19)**Makarova KS, Wolf YI, Koonin EV***Biology Direct* 2009, **4**:19 (3 June 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/19/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/19)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-19.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19493340)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19493340)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/19493340)]

**111.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Mapping the sequence mutations of the 2009 H1N1 influenza A virus neuraminidase relative to drug and antibody binding sites**](http://www.biology-direct.com/content/4/1/18)**Maurer-Stroh S, Ma J, Lee RTC, Sirota FL, Eisenhaber F***Biology Direct* 2009, **4**:18 (20 May 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/18/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/18)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-18.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19457254)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19457254)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/19457254)]

**112.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Chaotic expression dynamics implies pluripotency: when theory and experiment meet**](http://www.biology-direct.com/content/4/1/17)**Furusawa C, Kaneko K***Biology Direct* 2009, **4**:17 (15 May 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/17/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/17)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-17.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19445676)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19445676)]

**113.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**A four-column theory for the origin of the genetic code: tracing the evolutionary pathways that gave rise to an optimized code**](http://www.biology-direct.com/content/4/1/16)**Higgs PG***Biology Direct* 2009, **4**:16 (24 April 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/16/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/16)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-16.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19393096)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19393096)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/19393096)]

**114.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**A strain-variable bacteriocin in *Bacillus anthracis* and *Bacillus cereus* with repeated Cys-Xaa-Xaa motifs**](http://www.biology-direct.com/content/4/1/15)**Haft DH***Biology Direct* 2009, **4**:15 (21 April 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/15/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/15)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-15.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19383135)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19383135)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/19383135)]

**115.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Transcript length bias in RNA-seq data confounds systems biology**](http://www.biology-direct.com/content/4/1/14)**Oshlack A, Wakefield MJ***Biology Direct* 2009, **4**:14 (16 April 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/14/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/14)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-14.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19371405)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19371405)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/19371405)]

**116.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Massive comparative genomic analysis reveals convergent evolution of specialized bacteria**](http://www.biology-direct.com/content/4/1/13)**Merhej V, Royer-Carenzi M, Pontarotti P, Raoult D***Biology Direct* 2009, **4**:13 (10 April 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/13/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/13)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-13.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19361336)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19361336)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/19361336)]

**117.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Deciphering peculiar protein-protein interacting modules in *Deinococcus radiodurans***](http://www.biology-direct.com/content/4/1/12)**Mezhoud K, Sghaier H, Barkallah I***Biology Direct* 2009, **4**:12 (8 April 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/12/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/12)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-12.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19356244)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19356244)]

**118.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Evolution of DNA polymerases: an inactivated polymerase-exonuclease module in Pol ε and a chimeric origin of eukaryotic polymerases from two classes of archaeal ancestors**](http://www.biology-direct.com/content/4/1/11)**Tahirov TH, Makarova KS, Rogozin IB, Pavlov YI, Koonin EV***Biology Direct* 2009, **4**:11 (18 March 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/11/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/11)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-11.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19296856)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19296856)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/19296856)]

**119.**   
**Correction**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Pitfalls of the most commonly used models of context dependent substitution**](http://www.biology-direct.com/content/4/1/10)**Lindsay H, Yap VB, Ying H, Huttley GA***Biology Direct* 2009, **4**:10 (18 March 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/10/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/10)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-10.pdf)]

**120.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**The origins of phagocytosis and eukaryogenesis**](http://www.biology-direct.com/content/4/1/9)**Yutin N, Wolf MY, Wolf YI, Koonin EV***Biology Direct* 2009, **4**:9 (26 February 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/9/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/9)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-9.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19245710)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19245710)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/19245710)]

**121.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**A comparative genomics study of genetic products potentially encoding ladderane lipid biosynthesis**](http://www.biology-direct.com/content/4/1/8)**Rattray JE, Strous M, Op den Camp HJM, Schouten S, Jetten MSM, Damsté JSS***Biology Direct* 2009, **4**:8 (16 February 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/8/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/8)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-8.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19220888)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19220888)]

**122.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**A horizontal gene transfer at the origin of phenylpropanoid metabolism: a key adaptation of plants to land**](http://www.biology-direct.com/content/4/1/7)**Emiliani G, Fondi M, Fani R, Gribaldo S***Biology Direct* 2009, **4**:7 (16 February 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/7/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/7)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-7.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19220881)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19220881)]

**123.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**A simple model for the early events of quorum sensing in *Pseudomonas aeruginosa*: modeling bacterial swarming as the movement of an "activation zone"**](http://www.biology-direct.com/content/4/1/6)**Netotea S, Bertani I, Steindler L, Kerényi , Venturi V, Pongor S***Biology Direct* 2009, **4**:6 (12 February 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/6/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/6)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-6.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19216743)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19216743)]

**124.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Issues associated with assessing nuclear localization of N-terminally unphosphorylated β-catenin with monoclonal antibody 8E7**](http://www.biology-direct.com/content/4/1/5)**Maher MT, Flozak AS, Hartsell AM, Russell S, Beri R, Peled ON, Gottardi CJ***Biology Direct* 2009, **4**:5 (2 February 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/5/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/5)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-5.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19187541)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19187541)]

**125.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**One ancestor for two codes viewed from the perspective of two complementary modes of tRNA aminoacylation**](http://www.biology-direct.com/content/4/1/4)**Rodin AS, Szathmáry E, Rodin SN***Biology Direct* 2009, **4**:4 (27 January 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/4/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/4)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-4.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19173731)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19173731)]

**126.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Bioinformatic flowchart and database to investigate the origins and diversity of Clan AA peptidases**](http://www.biology-direct.com/content/4/1/3)**Llorens C, Futami R, Renaud G, Moya A***Biology Direct* 2009, **4**:3 (27 January 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/3/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/3)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-3.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19173708)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19173708)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/19173708)]

**127.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**The human Ago2 MC region does not contain an eIF4E-like mRNA cap binding motif**](http://www.biology-direct.com/content/4/1/2)**Kinch LN, Grishin NV***Biology Direct* 2009, **4**:2 (21 January 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/2/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/2)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-2.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19159466)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19159466)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/19159466)] [[1 comment](http://www.biology-direct.com/content/4/1/2/comments)]

**128.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Genomic analysis of an emerging multiresistant *Staphylococcus aureus* strain rapidly spreading in cystic fibrosis patients revealed the presence of an antibiotic inducible bacteriophage**](http://www.biology-direct.com/content/4/1/1)**Rolain JM, François P, Hernandez D, Bittar F, Richet H, Fournous G, Mattenberger Y, Bosdure E, Stremler N, Dubus JC, Sarles J, Reynaud-Gaubert M, Boniface S, Schrenzel J, Raoult D***Biology Direct* 2009, **4**:1 (13 January 2009)  
[[Abstract](http://www.biology-direct.com/content/4/1/1/abstract)] [[Full Text](http://www.biology-direct.com/content/4/1/1)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-4-1.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19144117)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19144117)]

**129.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**A DNA topoisomerase IB in Thaumarchaeota testifies for the presence of this enzyme in the last common ancestor of Archaea and Eucarya**](http://www.biology-direct.com/content/3/1/54)**Brochier-Armanet C, Gribaldo S, Forterre P***Biology Direct* 2008, **3**:54 (23 December 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/54/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/54)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-54.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19105819)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19105819)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/19105819)]

**130.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Evidence from glycine transfer RNA of a frozen accident at the dawn of the genetic code**](http://www.biology-direct.com/content/3/1/53)**Bernhardt HS, Tate WP***Biology Direct* 2008, **3**:53 (17 December 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/53/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/53)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-53.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19091122)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19091122)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/19091122)]

**131.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Pitfalls of the most commonly used models of context dependent substitution**](http://www.biology-direct.com/content/3/1/52)**Lindsay H, Yap VB, Ying H, Huttley GA***Biology Direct* 2008, **3**:52 (16 December 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/52/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/52)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-52.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19087239)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19087239)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/19087239)]

**132.**   
  
http://www.biomedcentral.com/graphics/flashes/eval_on.gif  
[http://www.biomedcentral.com/graphics/flashes/f1000B_eval.gif](http://www.f1000biology.com/openurl?sid=biomedcentral&id=pmid:19077245)**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**The evolution of domain-content in bacterial genomes**](http://www.biology-direct.com/content/3/1/51)**Molina N, van Nimwegen E***Biology Direct* 2008, **3**:51 (11 December 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/51/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/51)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-51.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19077245)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19077245)] [[F1000 Biology](http://www.f1000biology.com/openurl?sid=biomedcentral&id=pmid:19077245)]

**133.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Are we degenerate tetraploids? More genomes, new facts**](http://www.biology-direct.com/content/3/1/50)**Abbasi AA***Biology Direct* 2008, **3**:50 (10 December 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/50/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/50)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-50.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19077184)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19077184)] [[2 comments](http://www.biology-direct.com/content/3/1/50/comments)]

**134.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Activating and inhibiting connections in biological network dynamics**](http://www.biology-direct.com/content/3/1/49)**McDonald D, Waterbury L, Knight R, Betterton MD***Biology Direct* 2008, **3**:49 (4 December 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/49/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/49)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-49.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19055800)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19055800)]

**135.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Functional insight into Maelstrom in the germline piRNA pathway: a unique domain homologous to the DnaQ-H 3'–5' exonuclease, its lineage-specific expansion/loss and evolutionarily active site switch**](http://www.biology-direct.com/content/3/1/48)**Zhang D, Xiong H, Shan J, Xia X, Trudeau VL***Biology Direct* 2008, **3**:48 (25 November 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/48/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/48)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-48.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19032786)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19032786)]

**136.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**On the brink between extinction and persistence**](http://www.biology-direct.com/content/3/1/47)**Pertoldi C, Bach LA, Loeschcke V***Biology Direct* 2008, **3**:47 (19 November 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/47/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/47)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-47.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19019237)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19019237)]

**137.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Exon definition as a potential negative force against intron losses in evolution**](http://www.biology-direct.com/content/3/1/46)**Niu DK***Biology Direct* 2008, **3**:46 (13 November 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/46/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/46)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-46.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/19014515)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=19014515)]

**138.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Unraveling the biochemistry and provenance of pupylation: a prokaryotic analog of ubiquitination**](http://www.biology-direct.com/content/3/1/45)**Iyer LM, Burroughs AM, Aravind L***Biology Direct* 2008, **3**:45 (3 November 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/45/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/45)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-45.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18980670)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18980670)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18980670)]

**139.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Synaptic enrichment of microRNAs in adult mouse forebrain is related to structural features of their precursors**](http://www.biology-direct.com/content/3/1/44)**Smalheiser NR***Biology Direct* 2008, **3**:44 (29 October 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/44/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/44)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-44.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18957138)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18957138)]

**140.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Did RNA editing in plant organellar genomes originate under natural selection or through genetic drift?**](http://www.biology-direct.com/content/3/1/43)**Jobson RW, Qiu YL***Biology Direct* 2008, **3**:43 (21 October 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/43/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/43)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-43.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18939975)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18939975)]

**141.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**A new model defines the minimal set of polymorphism in HLA-DQ and -DR that determines susceptibility and resistance to autoimmune diabetes**](http://www.biology-direct.com/content/3/1/42)**Parry CS, Brooks BR***Biology Direct* 2008, **3**:42 (14 October 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/42/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/42)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-42.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18854049)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18854049)]

**142.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Transduplication resulted in the incorporation of two protein-coding sequences into the *Turmoil*-1 transposable element of *C. elegans***](http://www.biology-direct.com/content/3/1/41)**Sela N, Stern A, Makalowski W, Pupko T, Ast G***Biology Direct* 2008, **3**:41 (8 October 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/41/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/41)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-41.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18842128)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18842128)]

**143.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Comparable contributions of structural-functional constraints and expression level to the rate of protein sequence evolution**](http://www.biology-direct.com/content/3/1/40)**Wolf MY, Wolf YI, Koonin EV***Biology Direct* 2008, **3**:40 (7 October 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/40/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/40)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-40.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18840284)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18840284)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18840284)]

**144.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**A new family of polymerases related to superfamily A DNA polymerases and T7-like DNA-dependent RNA polymerases**](http://www.biology-direct.com/content/3/1/39)**Iyer LM, Abhiman S, Aravind L***Biology Direct* 2008, **3**:39 (4 October 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/39/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/39)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-39.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18834537)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18834537)]

**145.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**CAIcal: A combined set of tools to assess codon usage adaptation**](http://www.biology-direct.com/content/3/1/38)**Puigbò P, Bravo IG, Garcia-Vallve S***Biology Direct* 2008, **3**:38 (16 September 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/38/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/38)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-38.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18796141)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18796141)]

**146.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**An extension of the coevolution theory of the origin of the genetic code**](http://www.biology-direct.com/content/3/1/37)**Di Giulio M***Biology Direct* 2008, **3**:37 (5 September 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/37/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/37)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-37.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18775066)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18775066)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18775066)]

**147.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Same-strand overlapping genes in bacteria: compositional determinants of phase bias**](http://www.biology-direct.com/content/3/1/36)**Sabath N, Graur D, Landan G***Biology Direct* 2008, **3**:36 (21 August 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/36/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/36)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-36.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18717987)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18717987)]

**148.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**A nitty-gritty aspect of correlation and network inference from gene expression data**](http://www.biology-direct.com/content/3/1/35)**Klebanov LB, Yakovlev AY***Biology Direct* 2008, **3**:35 (20 August 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/35/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/35)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-35.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18715503)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18715503)]

**149.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Critical role for BIM in T cell receptor restimulation-induced death**](http://www.biology-direct.com/content/3/1/34)**Snow AL, Oliveira JB, Zheng L, Dale JK, Fleisher TA, Lenardo MJ***Biology Direct* 2008, **3**:34 (20 August 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/34/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/34)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-34.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18715501)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18715501)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18715501)]

**150.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**The evolution of strand preference in simulated RNA replicators with strand displacement: Implications for the origin of transcription**](http://www.biology-direct.com/content/3/1/33)**Takeuchi N, Salazar L, Poole AM, Hogeweg P***Biology Direct* 2008, **3**:33 (11 August 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/33/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/33)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-33.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18694481)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18694481)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18694481)]

**151.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**A highly conserved family of inactivated archaeal B family DNA polymerases**](http://www.biology-direct.com/content/3/1/32)**Rogozin IB, Makarova KS, Pavlov YI, Koonin EV***Biology Direct* 2008, **3**:32 (6 August 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/32/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/32)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-32.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18684330)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18684330)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18684330)]

**152.**   
  
http://www.biomedcentral.com/graphics/flashes/eval_on.gif  
[http://www.biomedcentral.com/graphics/flashes/f1000B_eval.gif](http://www.f1000biology.com/openurl?sid=biomedcentral&id=pmid:18652645)**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Origin of the nucleus and Ran-dependent transport to safeguard ribosome biogenesis in a chimeric cell**](http://www.biology-direct.com/content/3/1/31)**Jékely G***Biology Direct* 2008, **3**:31 (24 July 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/31/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/31)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-31.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18652645)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18652645)] [[F1000 Biology](http://www.f1000biology.com/openurl?sid=biomedcentral&id=pmid:18652645)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18652645)]

**153.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Accumulation of GC donor splice signals in mammals**](http://www.biology-direct.com/content/3/1/30)**Churbanov A, Winters-Hilt S, Koonin EV, Rogozin IB***Biology Direct* 2008, **3**:30 (9 July 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/30/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/30)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-30.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18613975)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18613975)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18613975)]

**154.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**The Last Universal Common Ancestor: emergence, constitution and genetic legacy of an elusive forerunner**](http://www.biology-direct.com/content/3/1/29)**Glansdorff N, Xu Y, Labedan B***Biology Direct* 2008, **3**:29 (9 July 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/29/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/29)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-29.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18613974)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18613974)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18613974)]

**155.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**A family of GFP-like proteins with different spectral properties in lancelet *Branchiostoma floridae***](http://www.biology-direct.com/content/3/1/28)**Baumann D, Cook M, Ma L, Mushegian A, Sanders E, Schwartz J, Yu CR***Biology Direct* 2008, **3**:28 (3 July 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/28/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/28)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-28.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18598356)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18598356)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18598356)]

**156.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Detection of co-eluted peptides using database search methods**](http://www.biology-direct.com/content/3/1/27)**Alves G, Ogurtsov AY, Kwok S, Wu WW, Wang G, Shen RF, Yu YK***Biology Direct* 2008, **3**:27 (2 July 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/27/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/27)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-27.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18597684)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18597684)]

**157.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Complete genome sequence of the extremely acidophilic methanotroph isolate V4, *Methylacidiphilum infernorum*, a representative of the bacterial phylum *Verrucomicrobia***](http://www.biology-direct.com/content/3/1/26)**Hou S, Makarova KS, Saw JHW, Senin P, Ly BV, Zhou Z, Ren Y, Wang J, Galperin MY, Omelchenko MV, Wolf YI, Yutin N, Koonin EV, Stott MB, Mountain BW, Crowe MA, Smirnova AV, Dunfield PF, Feng L, Wang L, Alam M***Biology Direct* 2008, **3**:26 (1 July 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/26/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/26)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-26.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18593465)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18593465)]

**158.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Genetic characterization of Hawaiian isolates of *Plasmodium relictum* reveals mixed-genotype infections**](http://www.biology-direct.com/content/3/1/25)**Jarvi SI, Farias MEM, Atkinson CT***Biology Direct* 2008, **3**:25 (25 June 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/25/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/25)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-25.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18578879)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18578879)]

**159.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[***In silico* regulatory analysis for exploring human disease progression**](http://www.biology-direct.com/content/3/1/24)**Holloway DT, Kon M, DeLisi C***Biology Direct* 2008, **3**:24 (18 June 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/24/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/24)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-24.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18564415)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18564415)] [[1 comment](http://www.biology-direct.com/content/3/1/24/comments)]

**160.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**On the necessity of different statistical treatment for Illumina BeadChip and Affymetrix GeneChip data and its significance for biological interpretation**](http://www.biology-direct.com/content/3/1/23)**Wong WC, Loh M, Eisenhaber F***Biology Direct* 2008, **3**:23 (3 June 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/23/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/23)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-23.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18522715)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18522715)]

**161.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Classifying transcription factor targets and discovering relevant biological features**](http://www.biology-direct.com/content/3/1/22)**Holloway DT, Kon M, DeLisi C***Biology Direct* 2008, **3**:22 (30 May 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/22/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/22)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-22.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18513408)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18513408)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18513408)] [[1 comment](http://www.biology-direct.com/content/3/1/22/comments)]

**162.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**cpRAS: a novel circularly permuted RAS-like GTPase domain with a highly scattered phylogenetic distribution**](http://www.biology-direct.com/content/3/1/21)**Elias M, Novotny M***Biology Direct* 2008, **3**:21 (29 May 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/21/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/21)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-21.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18510733)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18510733)]

**163.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Splign: algorithms for computing spliced alignments with identification of paralogs**](http://www.biology-direct.com/content/3/1/20)**Kapustin Y, Souvorov A, Tatusova T, Lipman D***Biology Direct* 2008, **3**:20 (21 May 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/20/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/20)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-20.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18495041)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18495041)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18495041)]

**164.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**U12 intron positions are more strongly conserved between animals and plants than U2 intron positions**](http://www.biology-direct.com/content/3/1/19)**Basu MK, Makalowski W, Rogozin IB, Koonin EV***Biology Direct* 2008, **3**:19 (14 May 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/19/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/19)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-19.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18479526)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18479526)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18479526)]

**165.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**The look-ahead effect of phenotypic mutations**](http://www.biology-direct.com/content/3/1/18)**Whitehead DJ, Wilke CO, Vernazobres D, Bornberg-Bauer E***Biology Direct* 2008, **3**:18 (14 May 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/18/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/18)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-18.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18479505)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18479505)]

**166.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**14-3-3 theta binding to cell cycle regulatory factors is enhanced by HIV-1 Vpr**](http://www.biology-direct.com/content/3/1/17)**Bolton DL, Barnitz RA, Sakai K, Lenardo MJ***Biology Direct* 2008, **3**:17 (29 April 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/17/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/17)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-17.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18445273)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18445273)]

**167.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**The origin and evolution of the ribosome**](http://www.biology-direct.com/content/3/1/16)**Smith TF, Lee JC, Gutell RR, Hartman H***Biology Direct* 2008, **3**:16 (22 April 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/16/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/16)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-16.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18430223)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18430223)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18430223)]

**168.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Erwin Schroedinger, Francis Crick and epigenetic stability**](http://www.biology-direct.com/content/3/1/15)**Ogryzko VV***Biology Direct* 2008, **3**:15 (17 April 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/15/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/15)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-15.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18419815)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18419815)] [[1 comment](http://www.biology-direct.com/content/3/1/15/comments)]

**169.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Occurrence of cancer at multiple sites: Towards distinguishing multigenesis from metastasis**](http://www.biology-direct.com/content/3/1/14)**Zhang WK, Zhang C, Zhang JJ, Liu SV***Biology Direct* 2008, **3**:14 (11 April 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/14/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/14)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-14.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18405362)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18405362)]

**170.**   
  
http://www.biomedcentral.com/graphics/flashes/eval_on.gif  
[http://www.biomedcentral.com/graphics/flashes/f1000B_eval.gif](http://www.f1000biology.com/openurl?sid=biomedcentral&id=pmid:18380897)**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Evolutionary primacy of sodium bioenergetics**](http://www.biology-direct.com/content/3/1/13)**Mulkidjanian AY, Galperin MY, Makarova KS, Wolf YI, Koonin EV***Biology Direct* 2008, **3**:13 (1 April 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/13/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/13)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-13.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18380897)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18380897)] [[F1000 Biology](http://www.f1000biology.com/openurl?sid=biomedcentral&id=pmid:18380897)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18380897)]

**171.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**An intragenic distribution bias of DNA uptake sequences in *Pasteurellaceae* and *Neisseriae***](http://www.biology-direct.com/content/3/1/12)**van Passel MWJ***Biology Direct* 2008, **3**:12 (27 March 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/12/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/12)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-12.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18371225)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18371225)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18371225)]

**172.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Evolution of complexity in RNA-like replicator systems**](http://www.biology-direct.com/content/3/1/11)**Takeuchi N, Hogeweg P***Biology Direct* 2008, **3**:11 (27 March 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/11/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/11)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-11.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18371199)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18371199)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18371199)]

**173.**   
**Editorial**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Dr. Andrei Yakovlev: Visionary, Leader, Iconoclast**](http://www.biology-direct.com/content/3/1/10)**Gusev Y, Hanin L, Klebanov L, Tsodikov A, Yanev NM, Zorin A***Biology Direct* 2008, **3**:10 (26 March 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/10/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/10)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-10.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18366793)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18366793)]

**174.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Endogenous retroviruses of the chicken genome**](http://www.biology-direct.com/content/3/1/9)**Huda A, Polavarapu N, Jordan IK, McDonald JF***Biology Direct* 2008, **3**:9 (24 March 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/9/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/9)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-9.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18361801)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18361801)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18361801)]

**175.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**MutL homologs in restriction-modification systems and the origin of eukaryotic MORC ATPases**](http://www.biology-direct.com/content/3/1/8)**Iyer LM, Abhiman S, Aravind L***Biology Direct* 2008, **3**:8 (17 March 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/8/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/8)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-8.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18346280)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18346280)]

**176.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Homoplasy in genome-wide analysis of rare amino acid replacements: the molecular-evolutionary basis for Vavilov's law of homologous series**](http://www.biology-direct.com/content/3/1/7)**Rogozin IB, Thomson K, Csürös M, Carmel L, Koonin EV***Biology Direct* 2008, **3**:7 (17 March 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/7/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/7)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-7.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18346278)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18346278)]

**177.**   
  
http://www.biomedcentral.com/graphics/flashes/eval_on.gif  
[http://www.biomedcentral.com/graphics/flashes/f1000B_eval.gif](http://www.f1000biology.com/openurl?sid=biomedcentral&id=pmid:18304352)**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**The control of CD4+CD25+Foxp3+ regulatory T cell survival**](http://www.biology-direct.com/content/3/1/6)**Pandiyan P, Lenardo MJ***Biology Direct* 2008, **3**:6 (27 February 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/6/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/6)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-6.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18304352)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18304352)] [[F1000 Biology](http://www.f1000biology.com/openurl?sid=biomedcentral&id=pmid:18304352)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18304352)]

**178.**   
**Review**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Molecular chaperones and selection against mutations**](http://www.biology-direct.com/content/3/1/5)**Tomala K, Korona R***Biology Direct* 2008, **3**:5 (26 February 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/5/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/5)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-5.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18298866)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18298866)]

**179.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Orphan SelD proteins and selenium-dependent molybdenum hydroxylases**](http://www.biology-direct.com/content/3/1/4)**Haft DH, Self WT***Biology Direct* 2008, **3**:4 (20 February 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/4/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/4)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-4.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18289380)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18289380)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18289380)] [[2 comments](http://www.biology-direct.com/content/3/1/4/comments)]

**180.**   
**Review**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Predicting the conformations of peptides and proteins in early evolution**](http://www.biology-direct.com/content/3/1/3)**Milner-White EJ, Russell MJ***Biology Direct* 2008, **3**:3 (28 January 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/3/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/3)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-3.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18226248)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18226248)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18226248)]

**181.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**The prokaryotic V4R domain is the likely ancestor of a key component of the eukaryotic vesicle transport system**](http://www.biology-direct.com/content/3/1/2)**Podar M, Wall MA, Makarova KS, Koonin EV***Biology Direct* 2008, **3**:2 (25 January 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/2/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/2)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-2.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18221539)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18221539)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18221539)]

**182.**   
**Editorial**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Mathematical Biology in *Biology Direct***](http://www.biology-direct.com/content/3/1/1)**Yakovlev A***Biology Direct* 2008, **3**:1 (16 January 2008)  
[[Abstract](http://www.biology-direct.com/content/3/1/1/abstract)] [[Full Text](http://www.biology-direct.com/content/3/1/1)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-3-1.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18199327)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18199327)]

**183.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Epigenetic hereditary transcription profiles II, aging revisited**](http://www.biology-direct.com/content/2/1/39)**Simons JWIM***Biology Direct* 2007, **2**:39 (28 December 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/39/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/39)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-39.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18163906)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18163906)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18163906)]

**184.**   
**Discovery notes**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Orthologs of the small RPB8 subunit of the eukaryotic RNA polymerases are conserved in hyperthermophilic Crenarchaeota and "Korarchaeota"**](http://www.biology-direct.com/content/2/1/38)**Koonin EV, Makarova KS, Elkins JG***Biology Direct* 2007, **2**:38 (14 December 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/38/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/38)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-38.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18081935)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18081935)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18081935)]

**185.**   
**Review**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Hox, Wnt, and the evolution of the primary body axis: insights from the early-divergent phyla**](http://www.biology-direct.com/content/2/1/37)**Ryan JF, Baxevanis AD***Biology Direct* 2007, **2**:37 (13 December 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/37/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/37)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-37.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18078518)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18078518)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18078518)]

**186.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Evolutionary history of bacteriophages with double-stranded DNA genomes**](http://www.biology-direct.com/content/2/1/36)**Glazko G, Makarenkov V, Liu J, Mushegian A***Biology Direct* 2007, **2**:36 (6 December 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/36/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/36)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-36.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18062816)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18062816)]

**187.**   
**Review**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Exosomal transfer of proteins and RNAs at synapses in the nervous system**](http://www.biology-direct.com/content/2/1/35)**Smalheiser NR***Biology Direct* 2007, **2**:35 (30 November 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/35/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/35)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-35.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18053135)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18053135)] [[1 comment](http://www.biology-direct.com/content/2/1/35/comments)]

**188.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Systematic analysis of mRNA 5' coding sequence incompleteness in *Danio rerio*: an automated EST-based approach**](http://www.biology-direct.com/content/2/1/34)**Frabetti F, Casadei R, Lenzi L, Canaider S, Vitale L, Facchin F, Carinci P, Zannotti M, Strippoli P***Biology Direct* 2007, **2**:34 (27 November 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/34/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/34)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-34.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18042283)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18042283)]

**189.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Clusters of orthologous genes for 41 archaeal genomes and implications for evolutionary genomics of archaea**](http://www.biology-direct.com/content/2/1/33)**Makarova KS, Sorokin AV, Novichkov PS, Wolf YI, Koonin EV***Biology Direct* 2007, **2**:33 (27 November 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/33/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/33)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-33.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18042280)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18042280)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18042280)]

**190.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Parameters of proteome evolution from histograms of amino-acid sequence identities of paralogous proteins**](http://www.biology-direct.com/content/2/1/32)**Axelsen JB, Yan KK, Maslov S***Biology Direct* 2007, **2**:32 (26 November 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/32/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/32)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-32.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18039386)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18039386)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18039386)]

**191.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Evaluating the protein coding potential of exonized transposable element sequences**](http://www.biology-direct.com/content/2/1/31)**Piriyapongsa J, Rutledge MT, Patel S, Borodovsky M, Jordan IK***Biology Direct* 2007, **2**:31 (26 November 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/31/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/31)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-31.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18036258)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18036258)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/18036258)]

**192.**   
**Review**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**The new biology: beyond the Modern Synthesis**](http://www.biology-direct.com/content/2/1/30)**Rose MR, Oakley TH***Biology Direct* 2007, **2**:30 (24 November 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/30/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/30)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-30.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18036242)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18036242)]

**193.**   
**Editorial**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Opening Pandora's Box: making biological discoveries through computational data exploration**](http://www.biology-direct.com/content/2/1/29)**Aravind L***Biology Direct* 2007, **2**:29 (20 November 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/29/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/29)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-29.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/18028542)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=18028542)]

**194.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Revisiting adverse effects of cross-hybridization in Affymetrix gene expression data: do they matter for correlation analysis?**](http://www.biology-direct.com/content/2/1/28)**Klebanov L, Chen L, Yakovlev A***Biology Direct* 2007, **2**:28 (7 November 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/28/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/28)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-28.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17988401)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17988401)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/17988401)]

**195.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Natural variation in SAR11 marine bacterioplankton genomes inferred from metagenomic data**](http://www.biology-direct.com/content/2/1/27)**Wilhelm LJ, Tripp HJ, Givan SA, Smith DP, Giovannoni SJ***Biology Direct* 2007, **2**:27 (7 November 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/27/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/27)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-27.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17988398)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17988398)]

**196.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Calibrating E-values for MS2 database search methods**](http://www.biology-direct.com/content/2/1/26)**Alves G, Ogurtsov AY, Wu WW, Wang G, Shen RF, Yu YK***Biology Direct* 2007, **2**:26 (5 November 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/26/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/26)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-26.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17983478)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17983478)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/17983478)]

**197.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**RAId\_DbS: Peptide Identification using Database Searches with Realistic Statistics**](http://www.biology-direct.com/content/2/1/25)**Alves G, Ogurtsov AY, Yu YK***Biology Direct* 2007, **2**:25 (25 October 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/25/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/25)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-25.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17961253)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17961253)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/17961253)]

**198.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Evolution of the genetic code: partial optimization of a random code for robustness to translation error in a rugged fitness landscape**](http://www.biology-direct.com/content/2/1/24)**Novozhilov AS, Wolf YI, Koonin EV***Biology Direct* 2007, **2**:24 (23 October 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/24/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/24)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-24.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17956616)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17956616)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/17956616)]

**199.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Gene-interleaving patterns of synteny in the *Saccharomyces cerevisiae* genome: are they proof of an ancient genome duplication event?**](http://www.biology-direct.com/content/2/1/23)**Martin N, Ruedi EA, LeDuc R, Sun FJ, Caetano-Anollés G***Biology Direct* 2007, **2**:23 (25 September 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/23/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/23)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-23.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17894859)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17894859)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/17894859)]

**200.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**A statistical analysis of the three-fold evolution of genomic compression through frame overlaps in prokaryotes**](http://www.biology-direct.com/content/2/1/22)**Lillo F, Krakauer DC***Biology Direct* 2007, **2**:22 (18 September 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/22/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/22)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-22.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17877818)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17877818)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/17877818)]

**201.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**The Biological Big Bang model for the major transitions in evolution**](http://www.biology-direct.com/content/2/1/21)**Koonin EV***Biology Direct* 2007, **2**:21 (20 August 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/21/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/21)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-21.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17708768)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17708768)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/17708768)] [[2 comments](http://www.biology-direct.com/content/2/1/21/comments)]

**202.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Extensive parallelism in protein evolution**](http://www.biology-direct.com/content/2/1/20)**Bazykin GA, Kondrashov FA, Brudno M, Poliakov A, Dubchak I, Kondrashov AS***Biology Direct* 2007, **2**:20 (16 August 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/20/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/20)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-20.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17705846)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17705846)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/17705846)]

**203.**   
**Review**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**The intracellular region of Notch ligands: does the tail make the difference?**](http://www.biology-direct.com/content/2/1/19)**Pintar A, De Biasio A, Popovic M, Ivanova N, Pongor S***Biology Direct* 2007, **2**:19 (10 July 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/19/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/19)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-19.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17623096)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17623096)]

**204.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Small but versatile: the extraordinary functional and structural diversity of the β-grasp fold**](http://www.biology-direct.com/content/2/1/18)**Burroughs AM, Balaji S, Iyer LM, Aravind L***Biology Direct* 2007, **2**:18 (2 July 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/18/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/18)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-18.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17605815)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17605815)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/17605815)]

**205.**   
  
http://www.biomedcentral.com/graphics/flashes/eval_on.gif  
[http://www.biomedcentral.com/graphics/flashes/f1000B_eval.gif](http://www.f1000biology.com/openurl?sid=biomedcentral&id=pmid:17598905)**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Neutral genetic drift can alter promiscuous protein functions, potentially aiding functional evolution**](http://www.biology-direct.com/content/2/1/17)**Bloom JD, Romero PA, Lu Z, Arnold FH***Biology Direct* 2007, **2**:17 (28 June 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/17/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/17)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-17.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17598905)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17598905)] [[F1000 Biology](http://www.f1000biology.com/openurl?sid=biomedcentral&id=pmid:17598905)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/17598905)]

**206.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**nuID: a universal naming scheme of oligonucleotides for Illumina, Affymetrix, and other microarrays**](http://www.biology-direct.com/content/2/1/16)**Du P, Kibbe WA, Lin SM***Biology Direct* 2007, **2**:16 (31 May 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/16/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/16)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-16.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17540033)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17540033)]

**207.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**The cosmological model of eternal inflation and the transition from chance to biological evolution in the history of life**](http://www.biology-direct.com/content/2/1/15)**Koonin EV***Biology Direct* 2007, **2**:15 (31 May 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/15/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/15)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-15.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17540027)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17540027)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/17540027)] [[1 comment](http://www.biology-direct.com/content/2/1/15/comments)]

**208.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**On the origin of the translation system and the genetic code in the RNA world by means of natural selection, exaptation, and subfunctionalization**](http://www.biology-direct.com/content/2/1/14)**Wolf YI, Koonin EV***Biology Direct* 2007, **2**:14 (31 May 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/14/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/14)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-14.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17540026)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17540026)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/17540026)]

**209.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**The stochastic behavior of a molecular switching circuit with feedback**](http://www.biology-direct.com/content/2/1/13)**Krishnamurthy S, Smith E, Krakauer D, Fontana W***Biology Direct* 2007, **2**:13 (31 May 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/13/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/13)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-13.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17540019)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17540019)]

**210.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Modelling evolution on design-by-contract predicts an origin of Life through an abiotic double-stranded RNA world**](http://www.biology-direct.com/content/2/1/12)**de Roos ADG***Biology Direct* 2007, **2**:12 (27 April 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/12/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/12)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-12.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17466073)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17466073)] [[2 comments](http://www.biology-direct.com/content/2/1/12/comments)]

**211.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Protecting exons from deleterious R-loops: a potential advantage of having introns**](http://www.biology-direct.com/content/2/1/11)**Niu DK***Biology Direct* 2007, **2**:11 (25 April 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/11/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/11)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-11.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17459149)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17459149)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/17459149)]

**212.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**The ability of natural tolerance to be applied to allogeneic tissue: determinants and limits**](http://www.biology-direct.com/content/2/1/10)**Chan WFN, Perez-Diez A, Razavy H, Anderson CC***Biology Direct* 2007, **2**:10 (16 April 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/10/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/10)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-10.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17437644)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17437644)]

**213.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**How high is the level of technical noise in microarray data?**](http://www.biology-direct.com/content/2/1/9)**Klebanov L, Yakovlev A***Biology Direct* 2007, **2**:9 (11 April 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/9/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/9)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-9.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17428341)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17428341)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/17428341)]

**214.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Retrospective analysis of protein kinase C-beta (PKC-β) expression in lymphoid malignancies and its association with survival in diffuse large B-cell lymphomas**](http://www.biology-direct.com/content/2/1/8)**Li S, Phong M, Lahn M, Brail L, Sutton S, Lin BK, Thornton D, Liao B***Biology Direct* 2007, **2**:8 (21 February 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/8/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/8)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-8.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17313671)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17313671)]

**215.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Conserved intron positions in ancient protein modules**](http://www.biology-direct.com/content/2/1/7)**de Roos ADG***Biology Direct* 2007, **2**:7 (8 February 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/7/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/7)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-7.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17288589)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17288589)]

**216.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Intron Evolution and Information processing in the DNA polymerase α gene in spirotrichous ciliates: A hypothesis for interconversion between DNA and RNA deletion**](http://www.biology-direct.com/content/2/1/6)**Chang WJ, Addis VM, Li AJ, Axelsson E, Ardell DH, Landweber LF***Biology Direct* 2007, **2**:6 (1 February 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/6/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/6)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-6.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17270054)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17270054)]

**217.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Resistance of the target islet tissue to autoimmune destruction contributes to genetic susceptibility in Type 1 diabetes**](http://www.biology-direct.com/content/2/1/5)**Hill NJ, Stotland A, Solomon M, Secrest P, Getzoff E, Sarvetnick N***Biology Direct* 2007, **2**:5 (25 January 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/5/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/5)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-5.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17254331)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17254331)]

**218.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**A novel superfamily containing the β-grasp fold involved in binding diverse soluble ligands**](http://www.biology-direct.com/content/2/1/4)**Burroughs AM, Balaji S, Iyer LM, Aravind L***Biology Direct* 2007, **2**:4 (24 January 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/4/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/4)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-4.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17250770)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17250770)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/17250770)]

**219.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Origin of phagotrophic eukaryotes as social cheaters in microbial biofilms**](http://www.biology-direct.com/content/2/1/3)**Jékely G***Biology Direct* 2007, **2**:3 (19 January 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/3/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/3)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-3.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17239231)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17239231)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/17239231)]

**220.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Component retention in principal component analysis with application to cDNA microarray data**](http://www.biology-direct.com/content/2/1/2)**Cangelosi R, Goriely A***Biology Direct* 2007, **2**:2 (17 January 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/2/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/2)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-2.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17229320)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17229320)]

**221.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**pkaPS: prediction of protein kinase A phosphorylation sites with the simplified kinase-substrate binding model**](http://www.biology-direct.com/content/2/1/1)**Neuberger G, Schneider G, Eisenhaber F***Biology Direct* 2007, **2**:1 (12 January 2007)  
[[Abstract](http://www.biology-direct.com/content/2/1/1/abstract)] [[Full Text](http://www.biology-direct.com/content/2/1/1)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-2-1.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17222345)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17222345)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/17222345)] [[1 comment](http://www.biology-direct.com/content/2/1/1/comments)]

**222.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Temporal order of evolution of DNA replication systems inferred by comparison of cellular and viral DNA polymerases**](http://www.biology-direct.com/content/1/1/39)**Koonin EV***Biology Direct* 2006, **1**:39 (18 December 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/39/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/39)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-39.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17176463)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17176463)]

**223.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**A computational analysis of the three isoforms of glutamate dehydrogenase reveals structural features of the isoform EC 1.4.1.4 supporting a key role in ammonium assimilation by plants**](http://www.biology-direct.com/content/1/1/38)**Jaspard E***Biology Direct* 2006, **1**:38 (15 December 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/38/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/38)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-38.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17173671)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17173671)]

**224.**   
  
http://www.biomedcentral.com/graphics/flashes/eval_on.gif  
[http://www.biomedcentral.com/graphics/flashes/f1000B_eval.gif](http://www.f1000biology.com/openurl?sid=biomedcentral&id=pmid:17156438)**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Proteomic and bioinformatic analysis of epithelial tight junction reveals an unexpected cluster of synaptic molecules**](http://www.biology-direct.com/content/1/1/37)**Tang VW***Biology Direct* 2006, **1**:37 (8 December 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/37/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/37)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-37.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17156438)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17156438)] [[F1000 Biology](http://www.f1000biology.com/openurl?sid=biomedcentral&id=pmid:17156438)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/17156438)]

**225.**   
**Comment**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Did group II intron proliferation in an endosymbiont-bearing archaeon create eukaryotes?**](http://www.biology-direct.com/content/1/1/36)**Poole AM***Biology Direct* 2006, **1**:36 (7 December 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/36/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/36)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-36.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17156426)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17156426)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/17156426)]

**226.**   
**Comment**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Did the last common ancestor have a biological membrane?**](http://www.biology-direct.com/content/1/1/35)**Jékely G***Biology Direct* 2006, **1**:35 (27 November 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/35/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/35)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-35.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17129384)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17129384)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/17129384)]

**227.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Long intervals of stasis punctuated by bursts of positive selection in the seasonal evolution of influenza A virus**](http://www.biology-direct.com/content/1/1/34)**Wolf YI, Viboud C, Holmes EC, Koonin EV, Lipman DJ***Biology Direct* 2006, **1**:34 (26 October 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/34/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/34)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-34.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17067369)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17067369)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/17067369)]

**228.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Too much data, but little inter-changeability: a lesson learned from mining public data on tissue specificity of gene expression**](http://www.biology-direct.com/content/1/1/33)**Li S, Li YH, Wei T, Su EW, Duffin K, Liao B***Biology Direct* 2006, **1**:33 (25 October 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/33/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/33)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-33.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17064414)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17064414)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/17064414)]

**229.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**The immune-body cytokine network defines a social architecture of cell interactions**](http://www.biology-direct.com/content/1/1/32)**Frankenstein Z, Alon U, Cohen IR***Biology Direct* 2006, **1**:32 (24 October 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/32/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/32)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-32.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17062134)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17062134)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/17062134)]

**230.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Evolution of glyoxylate cycle enzymes in Metazoa: evidence of multiple horizontal transfer events and pseudogene formation**](http://www.biology-direct.com/content/1/1/31)**Kondrashov FA, Koonin EV, Morgunov IG, Finogenova TV, Kondrashova MN***Biology Direct* 2006, **1**:31 (23 October 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/31/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/31)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-31.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17059607)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17059607)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/17059607)]

**231.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Mathematical modeling of tumor therapy with oncolytic viruses: effects of parametric heterogeneity on cell dynamics**](http://www.biology-direct.com/content/1/1/30)**Karev GP, Novozhilov AS, Koonin EV***Biology Direct* 2006, **1**:30 (3 October 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/30/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/30)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-30.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/17018145)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=17018145)]

**232.**   
  
http://www.biomedcentral.com/graphics/flashes/eval_on.gif  
[http://www.biomedcentral.com/graphics/flashes/f1000B_eval.gif](http://www.f1000biology.com/openurl?sid=biomedcentral&id=pmid:16984643)**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**The ancient Virus World and evolution of cells**](http://www.biology-direct.com/content/1/1/29)**Koonin EV, Senkevich TG, Dolja VV***Biology Direct* 2006, **1**:29 (19 September 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/29/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/29)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-29.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16984643)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16984643)] [[F1000 Biology](http://www.f1000biology.com/openurl?sid=biomedcentral&id=pmid:16984643)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/16984643)] [[1 comment](http://www.biology-direct.com/content/1/1/29/comments)]

**233.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Diverse bacterial genomes encode an operon of two genes, one of which is an unusual class-I release factor that potentially recognizes atypical mRNA signals other than normal stop codons**](http://www.biology-direct.com/content/1/1/28)**Baranov PV, Vestergaard B, Hamelryck T, Gesteland RF, Nyborg J, Atkins JF***Biology Direct* 2006, **1**:28 (13 September 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/28/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/28)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-28.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16970810)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16970810)] [[1 comment](http://www.biology-direct.com/content/1/1/28/comments)]

**234.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Generalization of DNA microarray dispersion properties: microarray equivalent of *t*-distribution**](http://www.biology-direct.com/content/1/1/27)**Novak JP, Kim SY, Xu J, Modlich O, Volsky DJ, Honys D, Slonczewski JL, Bell DA, Blattner FR, Blumwald E, Boerma M, Cosio M, Gatalica Z, Hajduch M, Hidalgo J, McInnes RR, Miller III MC, Penkowa M, Rolph MS, Sottosanto J, St-Arnaud R, Szego MJ, Twell D, Wang C***Biology Direct* 2006, **1**:27 (7 September 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/27/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/27)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-27.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16959036)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16959036)]

**235.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Refuting phylogenetic relationships**](http://www.biology-direct.com/content/1/1/26)**Bucknam J, Boucher Y, Bapteste E***Biology Direct* 2006, **1**:26 (6 September 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/26/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/26)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-26.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16956399)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16956399)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/16956399)]

**236.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**The signaling helix: a common functional theme in diverse signaling proteins**](http://www.biology-direct.com/content/1/1/25)**Anantharaman V, Balaji S, Aravind L***Biology Direct* 2006, **1**:25 (5 September 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/25/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/25)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-25.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16953892)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16953892)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/16953892)]

**237.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Codon insertion and deletion functions as a somatic diversification mechanism in human antibody repertoires**](http://www.biology-direct.com/content/1/1/24)**Reason DC, Zhou J***Biology Direct* 2006, **1**:24 (30 August 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/24/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/24)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-24.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16942619)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16942619)]

**238.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**A system for studying evolution of life-like virtual organisms**](http://www.biology-direct.com/content/1/1/23)**Neyfakh AA, Baranova NN, Mizrokhi LJ***Biology Direct* 2006, **1**:23 (17 August 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/23/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/23)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-23.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16916465)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16916465)]

**239.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**The origin of introns and their role in eukaryogenesis: a compromise solution to the introns-early versus introns-late debate?**](http://www.biology-direct.com/content/1/1/22)**Koonin EV***Biology Direct* 2006, **1**:22 (14 August 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/22/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/22)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-22.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16907971)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16907971)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/16907971)]

**240.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Phylogeographic support for horizontal gene transfer involving sympatric bruchid species**](http://www.biology-direct.com/content/1/1/21)**Alvarez N, Benrey B, Hossaert-McKey M, Grill A, McKey D, Galtier N***Biology Direct* 2006, **1**:21 (27 July 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/21/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/21)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-21.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16872524)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16872524)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/16872524)]

**241.**   
  
http://www.biomedcentral.com/graphics/flashes/eval_on.gif  
[http://www.biomedcentral.com/graphics/flashes/f1000B_eval.gif](http://www.f1000biology.com/openurl?sid=biomedcentral&id=pmid:16857058)**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Transposable element derived DNaseI-hypersensitive sites in the human genome**](http://www.biology-direct.com/content/1/1/20)**Mariño-Ramírez L, Jordan IK***Biology Direct* 2006, **1**:20 (20 July 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/20/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/20)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-20.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16857058)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16857058)] [[F1000 Biology](http://www.f1000biology.com/openurl?sid=biomedcentral&id=pmid:16857058)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/16857058)]

**242.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Rooting the tree of life by transition analyses**](http://www.biology-direct.com/content/1/1/19)**Cavalier-Smith T***Biology Direct* 2006, **1**:19 (11 July 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/19/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/19)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-19.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16834776)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16834776)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/16834776)]

**243.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Variation in fiberoptic bead-based oligonucleotide microarrays: dispersion characteristics among hybridization and biological replicate samples**](http://www.biology-direct.com/content/1/1/18)**Novak JP, Miller MC, Bell DA***Biology Direct* 2006, **1**:18 (20 June 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/18/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/18)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-18.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16787528)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16787528)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/16787528)]

**244.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Genome increase as a clock for the origin and evolution of life**](http://www.biology-direct.com/content/1/1/17)**Sharov AA***Biology Direct* 2006, **1**:17 (12 June 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/17/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/17)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-17.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16768805)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16768805)]

**245.**   
**Review**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Clinical applications of Genome Polymorphism Scans**](http://www.biology-direct.com/content/1/1/16)**Weber JL***Biology Direct* 2006, **1**:16 (6 June 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/16/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/16)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-16.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16756678)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16756678)]

**246.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Positive selection on the nonhomologous end-joining factor Cernunnos-XLF in the human lineage**](http://www.biology-direct.com/content/1/1/15)**Pavlicek A, Jurka J***Biology Direct* 2006, **1**:15 (2 June 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/15/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/15)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-15.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16749933)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16749933)]

**247.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Distinguishing HIV-1 drug resistance, accessory, and viral fitness mutations using conditional selection pressure analysis of treated versus untreated patient samples**](http://www.biology-direct.com/content/1/1/14)**Chen L, Lee C***Biology Direct* 2006, **1**:14 (31 May 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/14/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/14)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-14.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16737543)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16737543)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/16737543)]

**248.**   
  
http://www.biomedcentral.com/graphics/flashes/eval_on.gif  
[http://www.biomedcentral.com/graphics/flashes/f1000B_eval.gif](http://www.f1000biology.com/openurl?sid=biomedcentral&id=pmid:16734895)**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Similarity searches in genome-wide numerical data sets**](http://www.biology-direct.com/content/1/1/13)**Glazko G, Coleman M, Mushegian A***Biology Direct* 2006, **1**:13 (30 May 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/13/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/13)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-13.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16734895)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16734895)] [[F1000 Biology](http://www.f1000biology.com/openurl?sid=biomedcentral&id=pmid:16734895)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/16734895)]

**249.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Outer membrane protein genes and their small non-coding RNA regulator genes in *Photorhabdus luminescens***](http://www.biology-direct.com/content/1/1/12)**Papamichail D, Delihas N***Biology Direct* 2006, **1**:12 (22 May 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/12/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/12)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-12.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16716220)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16716220)]

**250.**   
**Review**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**A survey of motif discovery methods in an integrated framework**](http://www.biology-direct.com/content/1/1/11)**Sandve GK, Drabløs F***Biology Direct* 2006, **1**:11 (6 April 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/11/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/11)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-11.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16600018)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16600018)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/16600018)]

**251.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Method of predicting Splice Sites based on signal interactions**](http://www.biology-direct.com/content/1/1/10)**Churbanov A, Rogozin IB, Deogun JS, Ali H***Biology Direct* 2006, **1**:10 (3 April 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/10/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/10)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-10.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16584568)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16584568)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/16584568)]

**252.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Hereditary profiles of disorderly transcription?**](http://www.biology-direct.com/content/1/1/9)**Simons JWIM***Biology Direct* 2006, **1**:9 (2 April 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/9/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/9)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-9.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16579860)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16579860)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/16579860)]

**253.**   
  
http://www.biomedcentral.com/graphics/flashes/eval_on.gif  
[http://www.biomedcentral.com/graphics/flashes/f1000B_eval.gif](http://www.f1000biology.com/openurl?sid=biomedcentral&id=pmid:16556314)**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Origin and evolution of the peroxisomal proteome**](http://www.biology-direct.com/content/1/1/8)**Gabaldón T, Snel B, Zimmeren F, Hemrika W, Tabak H, Huynen MA***Biology Direct* 2006, **1**:8 (23 March 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/8/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/8)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-8.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16556314)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16556314)] [[F1000 Biology](http://www.f1000biology.com/openurl?sid=biomedcentral&id=pmid:16556314)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/16556314)]

**254.**   
  
http://www.biomedcentral.com/graphics/flashes/eval_on.gif  
[http://www.biomedcentral.com/graphics/flashes/f1000B_eval.gif](http://www.f1000biology.com/openurl?sid=biomedcentral&id=pmid:16545108)**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**A putative RNA-interference-based immune system in prokaryotes: computational analysis of the predicted enzymatic machinery, functional analogies with eukaryotic RNAi, and hypothetical mechanisms of action**](http://www.biology-direct.com/content/1/1/7)**Makarova KS, Grishin NV, Shabalina SA, Wolf YI, Koonin EV***Biology Direct* 2006, **1**:7 (16 March 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/7/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/7)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-7.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16545108)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16545108)] [[F1000 Biology](http://www.f1000biology.com/openurl?sid=biomedcentral&id=pmid:16545108)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/16545108)]

**255.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Mathematical modeling of tumor therapy with oncolytic viruses: Regimes with complete tumor elimination within the framework of deterministic models**](http://www.biology-direct.com/content/1/1/6)**Novozhilov AS, Berezovskaya FS, Koonin EV, Karev GP***Biology Direct* 2006, **1**:6 (17 February 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/6/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/6)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-6.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16542009)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16542009)]

**256.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Phylogenetic inference from homologous sequence data: minimum topological assumption, strict mutational compatibility consensus tree as the ultimate solution**](http://www.biology-direct.com/content/1/1/5)**Stankov SV***Biology Direct* 2006, **1**:5 (15 February 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/5/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/5)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-5.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16542008)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16542008)]

**257.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**The orthology of HLA-E and H2-Qa1 is hidden by their concerted evolution with other MHC class I molecules**](http://www.biology-direct.com/content/1/1/2)**Joly E, Rouillon V***Biology Direct* 2006, **1**:2 (31 January 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/2/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/2)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-2.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16542007)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16542007)] [[Cited on BioMed Central](http://www.biology-direct.com/search/citedby/16542007)]

**258.**   
**Research**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**Mutational hotspots in the *TP53* gene and, possibly, other tumor suppressors evolve by positive selection**](http://www.biology-direct.com/content/1/1/4)**Glazko GV, Babenko VN, Koonin EV, Rogozin IB***Biology Direct* 2006, **1**:4 (31 January 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/4/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/4)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-4.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16542006)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16542006)]

**259.**   
**Editorial**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)[http://www.biomedcentral.com/bmcimages/browse/highlyaccessed.gif](http://www.biomedcentral.com/info/about/mostviewed#highlyaccessed)  
[**A community experiment with fully open and published peer review**](http://www.biology-direct.com/content/1/1/1)**Koonin EV, Landweber LF, Lipman DJ***Biology Direct* 2006, **1**:1 (31 January 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/1/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/1)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-1.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16542032)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16542032)] [[2 comments](http://www.biology-direct.com/content/1/1/1/comments)]

**260.**   
**Hypothesis**    [http://www.biomedcentral.com/bmcimages/browse/OA.gif](http://www.biomedcentral.com/info/about/openaccess)  
[**Various hypotheses on MHC evolution suggested by the concerted evolution of CD94L and MHC class Ia molecules**](http://www.biology-direct.com/content/1/1/3)**Joly E***Biology Direct* 2006, **1**:3 (31 January 2006)  
[[Abstract](http://www.biology-direct.com/content/1/1/3/abstract)] [[Full Text](http://www.biology-direct.com/content/1/1/3)] [[PDF](http://www.biology-direct.com/content/pdf/1745-6150-1-3.pdf)] [[PubMed](http://www.biology-direct.com/pubmed/16542034)] [[Related articles](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Link&db=PubMed&dbFrom=PubMed&from_uid=16542034)]