

# Journal Scan October 2008

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## ArXiv

## Bioinformatics

1. Viviane Galvão, José Garcia Vivas Miranda and Ricardo Ribeiro-dos-Santos  
Development of a two-dimensional agent-based model for chronic chagasic cardiomyopathy after stem cell transplantation (<http://bioinformatics.oxfordjournals.org/cgi/content/abstract/24/18/2051>)
2. Juan Cui, Qi Liu, David Puett and Ying Xu  
Computational prediction of human proteins that can be secreted into the bloodstream (<http://bioinformatics.oxfordjournals.org/cgi/content/abstract/24/20/2370>)

## Biophysical Journal

1. Z. Tshiprut, J. Klafter and M. Urbakh  
Single-Molecule Pulling Experiments: When the Stiffness of the Pulling Device Matters (<http://www.biophysj.org/cgi/content/full/95/6/L42>)
2. Joshua S. Weitz, Yuriy Mileyko, Richard I. Joh and Eberhard O. Voit  
Collective Decision Making in Bacterial Viruses (<http://www.biophysj.org/cgi/content/full/95/6/2673>)
3. R. E. Lee DeVille and Eric Vanden-Eijnden  
Regular Gaits and Optimal Velocities for Motor Proteins (<http://www.biophysj.org/cgi/content/full/95/6/2681>)
4. Stefan Legewie, Dennis Dienst, Annegret Wilde, Hanspeter Herzel and Ilka M. Axmann  
Small RNAs Establish Delays and Temporal Thresholds in Gene Expression (<http://www.biophysj.org/cgi/content/full/95/7/3232>)
5. Ilka B. Bischofs, Franziska Klein, Dirk Lehnert, Martin Bastmeyer and Ulrich S. Schwarz  
Filamentous Network Mechanics and Active Contractility Determine Cell and Tissue Shape (<http://www.biophysj.org/cgi/content/full/95/7/3488>)
6. Agustí Emperador, Oliver Carrillo, Manuel Rueda, and Modesto Orozco  
Exploring the Suitability of Coarse-Grained Techniques for the Representation of Protein Dynamics (<http://www.biophysj.org/cgi/content/abstract/95/5/2127>)

## Cell

1. Arjun Raj and Alexander van Oudenaarden  
Nature, Nurture, or Chance: Stochastic Gene Expression and Its Consequences (<http://www.cell.com/content/article/abstract?uid=PIIS0092867408012439>)
2. Ahmet Yildiz, Michio Tomishige, Arne Gennerich, and Ronald D. Vale  
Intramolecular Strain Coordinates Kinesin Stepping Behavior along Microtubules (<http://www.cell.com/content/article/abstract?uid=PIIS0092867408009367>)
3. Liang Cai, Alexander M. Makhov, Dorothy A. Schafer, and James E. Bear  
Coronin 1B Antagonizes Cortactin and Remodels Arp2/3-Containing Actin Branches in Lamellipodia (<http://www.cell.com/content/article/abstract?uid=PIIS0092867408009392>)
4. Vitaly L. Zimyanin, Katsiaryna Belaya, Jacques Pecreaux, Michael J. Gilchrist, Alejandra Clark, Ilan Davis, and Daniel St Johnston  
In Vivo Imaging of oskar mRNA Transport Reveals the Mechanism of Posterior Localization (<http://www.cell.com/content/article/abstract?uid=PIIS0092867408008416>)
5. Kenneth G. Campellone, Neil J. Webb, Elizabeth A. Znameroski, and Matthew D. Welch  
WHAMM Is an Arp2/3 Complex Activator That Binds Microtubules and Functions in ER to Golgi Transport (<http://www.cell.com/content/article/abstract?uid=PIIS0092867408006934>)
6. Lee R. Swem, Danielle L. Swem, Ned S. Wingreen, and Bonnie L. Bassler  
Deducing Receptor Signaling Parameters from In Vivo Analysis: LuxN/AI-1 Quorum Sensing in *Vibrio harveyi* (<http://www.cell.com/content/article/abstract?uid=PIIS0092867408007757>)
7. Megan C. King, Theodore G. Drivas and Günter Blobel  
A Network of Nuclear Envelope Membrane Proteins Linking Centromeres to Microtubules (<http://www.cell.com/content/article/abstract?uid=PIIS0092867408007745>)

## Development

1. David Strutt and Samantha J. Warrington  
Planar polarity genes in the *Drosophila* wing regulate the localisation of the FH3-domain protein Multiple Wing Hairs to control the site of hair production (<http://dev.biologists.org/cgi/content/abstract/135/18/3103>)
2. Johannes Jaeger, David Irons, and Nick Monk  
Regulative feedback in pattern formation: towards a general relativistic theory of positional information (<http://dev.biologists.org/cgi/content/abstract/135/19/3175>)

## European Physical Journal E

1. M. Oettel, A. Dominguez, M. Tasinkevych and S. Dietrich  
Effective interactions of colloids on nematic films ([http://epje.edpsciences.org/index.php?option=article&access=standard&Itemid=129&url=/articles/epje/abs/first/10189\\_2008\\_Article\\_8071/10189\\_2008\\_Article\\_8071.html](http://epje.edpsciences.org/index.php?option=article&access=standard&Itemid=129&url=/articles/epje/abs/first/10189_2008_Article_8071/10189_2008_Article_8071.html))

2. A. Basu, J. F. Joanny, F. Jülicher and J. Prost  
Thermal and non-thermal fluctuations in active polar gels ([http://epje.edpsciences.org/index.php?option=article&access=standard&Itemid=129&url=/articles/epje/abs/first/10189\\_2008\\_Article\\_8046/10189\\_2008\\_Article\\_8046.html](http://epje.edpsciences.org/index.php?option=article&access=standard&Itemid=129&url=/articles/epje/abs/first/10189_2008_Article_8046/10189_2008_Article_8046.html))

## Europhysics Letters

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## Journal of Cell Biology

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## Journal of the Royal Society Interface

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## Journal of Theoretical Biology

1. **Author(s)**  
Title of highlighted article (<http://abstract.citation>)
2. Author(s)  
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## Nature

1. Long Cai, Chiraj K. Dalal & Michael B. Elowitz  
Frequency-modulated nuclear localization bursts coordinate gene regulation (<http://www.nature.com/nature/journal/v455/n7212/full/nature07292.html>)
2. Samuel P. Gubbels, David W. Woessner, John C. Mitchell, Anthony J. Ricci & John V. Brigande  
Functional auditory hair cells produced in the mammalian cochlea by in utero gene transfer (<http://www.nature.com/nature/journal/v455/n7212/full/nature07265.html>)
3. Franz-Josef Müller, Louise C. Laurent, Dennis Kostka, Igor Ulitsky, Roy Williams, Christina Lu, In-Hyun Park, Mahendra S. Rao, Ron Shamir, Philip H. Schwartz, Nils O. Schmidt & Jeanne F. Loring  
Regulatory networks define phenotypic classes of human stem cell lines (<http://www.nature.com/nature/journal/v455/n7211/full/nature07213.html>)
4. Tobias D. Wheeler & Abraham D. Stroock  
The transpiration of water at negative pressures in a synthetic tree (<http://www.nature.com/nature/journal/v455/n7210/full/nature07226.html>)
5. Samantha E. Forde, Robert E. Beardmore, Ivana Gudelj, Sinan S. Arkin, John N. Thompson & Laurence D. Hurst  
Understanding the limits to generalizability of experimental evolutionary models (<http://www.nature.com/nature/journal/v455/n7210/full/nature07152.html>)
6. Adam Kepecs, Naoshige Uchida, Hatim A. Zariwala & Zachary F. Mainen  
Neural correlates, computation and behavioural impact of decision confidence (<http://www.nature.com/nature/journal/v455/n7210/full/nature07200.html>)
7. Takeshi Sakamoto, Martin R. Webb, Eva Forgacs, Howard D. White & James R. Sellers

Direct observation of the mechanochemical coupling in myosin Va during processive movement (<http://www.nature.com/nature/journal/v455/n7209/full/nature07188.html>)

- Matthew R. Bennett, Wyming Lee Pang, Natalie A. Ostroff, Bridget L. Baumgartner, Sujata Nayak, Lev S. Tsimring & Jeff Hasty  
Metabolic gene regulation in a dynamically changing environment (<http://www.nature.com/nature/journal/v454/n7208/full/nature07211.html>)

## Nature Cell Biology

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## Nature Neuroscience

- Iori Ito, Rose Chik-ying Ong, Baranidharan Raman, and Mark Stopfer  
Sparse odor representation and olfactory learning (<http://www.nature.com/neuro/journal/v11/n10/abs/nn.2192.html>)
- Itaru Imayoshi, Masayuki Sakamoto, Toshiyuki Ohtsuka, Keizo Takao, Tsuyoshi Miyakawa, Masahiro Yamaguchi, Kensaku Mori, Toshio Ikeda, Shigeyoshi Itoharu, and Ryoichiro Kageyama  
Roles of continuous neurogenesis in the structural and functional integrity of the adult forebrain (<http://www.nature.com/neuro/journal/v11/n10/abs/nn.2185.html>)
- Javier F Medina and Stephen G Lisberger  
Links from complex spikes to local plasticity and motor learning in the cerebellum of awake-behaving monkeys (<http://www.nature.com/neuro/journal/v11/n10/abs/nn.2197.html>)
- Tara Keck, Thomas D Mrsic-Flogel, Miguel Vaz Afonso, Ulf T Eysel, Tobias Bonhoeffer and Mark Hübener  
Massive restructuring of neuronal circuits during functional reorganization of adult visual cortex (<http://www.nature.com/neuro/journal/v11/n10/full/nn.2181.html>)
- Patrick J Drew, Jeff H Duyn, Eugene Golanov and David Kleinfeld  
Finding coherence in spontaneous oscillations (<http://www.nature.com/neuro/journal/v11/n9/full/nn0908-991.html>)

## Nature Physics

- Allen P. Liu, David L. Richmond, Lutz Maibaum, Sander Pronk, Philip L. Geissler, Daniel A. Fletcher  
Membrane-induced bundling of actin filaments (<http://www.nature.com/nphys/journal/v4/n10/abs/nphys1071.html>)

## Neuron

- Mala Murthy, Ila Fiete, and Gilles Laurent  
Testing Odor Response Stereotypy in the Drosophila Mushroom Body (<http://www.neuron.org/content/article/abstract?uid=PIIS089662730800679X>)

## Physical Biology

- M. Shein, V. Volman, N. Raichman, Y. Hanein and E. Ben-Jacob  
Management of synchronized network activity by highly active neurons (<http://www.iop.org/EJ/toc/1478-3975/5/3>)
- F. Chamaroux, O. Ali, S. Keller, F. Bruckert and B. Fourcade  
Physical model for membrane protrusions during spreading (<http://www.iop.org/EJ/toc/1478-3975/5/3>)

## Physical Review E

1. **Author(s)**  
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## Physical Review Letters

1. O. Lieleg,<sup>1</sup> M. M. A. E. Claessens,<sup>1,2</sup> Y. Luan,<sup>1,3</sup> and A. R. Bausch  
Transient Binding and Dissipation in Cross-Linked Actin Networks (<http://link.aps.org/abstract/PRL/v101/e108101>)
2. Douwe Jan Bonthuis, Christine Meyer, Derek Stein, and Cees Dekker  
Conformation and Dynamics of DNA Confined in Slitlike Nanofluidic Channels (<http://link.aps.org/abstract/PRL/v101/e108303>)
3. Binquan Luan and Aleksei Aksimentiev  
Strain Softening in Stretched DNA (<http://link.aps.org/abstract/PRL/v101/e118101>)
4. K. M. Schmoller, O. Lieleg, and A. R. Bausch  
Cross-Linking Molecules Modify Composite Actin Networks Independently (<http://link.aps.org/abstract/PRL/v101/e118102>)
5. C. P. Broedersz,<sup>1</sup> C. Storm,<sup>1,2</sup> and F. C. MacKintosh<sup>1</sup>  
Nonlinear Elasticity of Composite Networks of Stiff Biopolymers with Flexible Linkers (<http://link.aps.org/abstract/PRL/v101/e118103>)
6. Paolo Visco, Rosalind J. Allen, and Martin R. Evans  
Exact Solution of a Model DNA-Inversion Genetic Switch with Orientational Control (<http://link.aps.org/abstract/PRL/v101/e118104>)
7. Igor V. Pivkin and George Em Karniadakis  
Accurate Coarse-Grained Modeling of Red Blood Cells (<http://link.aps.org/abstract/PRL/v101/e118105>)
8. M. G. L. van den Heuvel,<sup>1</sup> R. Bondesan,<sup>2</sup> M. Cosentino Lagomarsino,<sup>2</sup> and C. Dekker<sup>1</sup>  
Single-Molecule Observation of Anomalous Electrohydrodynamic Orientation of Microtubules (<http://link.aps.org/abstract/PRL/v101/e118301>)
9. Pavel Kraikivski, Boris M. Slepchenko, and Igor L. Novak  
Actin Bundling: Initiation Mechanisms and Kinetics (<http://link.aps.org/abstract/PRL/v101/e128102>)
10. Masatoshi Nishikawa,<sup>1,2</sup> Hiroaki Takagi,<sup>2,3</sup> Tatsuo Shibata,<sup>2,4,5</sup> Atsuko H. Iwane,<sup>1</sup> and Toshio Yanagida<sup>1</sup>  
Fluctuation Analysis of Mechanochemical Coupling Depending on the Type of Biomolecular Motors (<http://link.aps.org/abstract/PRL/v101/e128103>)
11. Tilo Beyer, Michael Meyer-Hermann  
Cell Transmembrane Receptors Determine Tissue Pattern Stability (<http://link.aps.org/abstract/PRL/v101/e148102>)
12. Guillaume Witz, Kristian Rechendorff, Jozef Adamcik, and Giovanni Dietler  
Conformation of Circular DNA in Two Dimensions (<http://link.aps.org/abstract/PRL/v101/e148103>)
13. M. Shane Hutson,<sup>1</sup> G. Wayne Brodland,<sup>2,3</sup> Justina Yang,<sup>2</sup> and Denis Viens<sup>2</sup>  
Cell Sorting in Three Dimensions: Topology, Fluctuations, and Fluidlike Instabilities (<http://link.aps.org/abstract/PRL/v101/e148105>)
14. Luis H. Cisneros and John O. Kessler, Ricardo Ortiz and Ricardo Cortez, Martin A. Bees  
Unexpected Bipolar Flagellar Arrangements and Long-Range Flows Driven by Bacteria near Solid Boundaries (<http://link.aps.org/abstract/PRL/v101/e168102>)
15. Davood Norouzi,<sup>1</sup> Farshid Mohammad-Rafiee,<sup>1</sup> and Ramin Golestanian  
Effect of Bending Anisotropy on the 3D Conformation of Short DNA Loops (<http://link.aps.org/abstract/PRL/v101/e168103>)

## PLoS Biology

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## PLoS Computational Biology

1. Francisco J. P. Lopes, Fernando M. C. Vieira, David M. Holloway, Paulo M. Bisch<sup>3</sup> Alexander V. Spirov  
Spatial Bistability Generates hunchback Expression Sharpness in the Drosophila Embryo  
(<http://www.ploscompbiol.org/article/info%3Adoi%2F10.1371%2Fjournal.pcbi.1000184#abstract1>)
2. Mark Müller-Linow<sup>1\*</sup>, Claus C. Hilgetag<sup>2</sup>, Marc-Thorsten Hütt<sup>2</sup>  
Organization of Excitable Dynamics in Hierarchical Biological Networks (<http://www.ploscompbiol.org/article/info%3Adoi%2F10.1371%2Fjournal.pcbi.1000190#abstract1>)
3. Wallace F. Marshall  
Modeling Recursive RNA Interference (<http://www.ploscompbiol.org/article/info%3Adoi%2F10.1371%2Fjournal.pcbi.1000183#abstract1>)
4. Neema Jamshidi, Bernhard Ø. Palsson  
Top-Down Analysis of Temporal Hierarchy in Biochemical Reaction Networks (<http://www.ploscompbiol.org/article/info%3Adoi%2F10.1371%2Fjournal.pcbi.1000177#abstract1>)

## PNAS

1. Dmitri Volfson, Scott Cookson, Jeff Hasty, and Lev S. Tsimring  
Biomechanical ordering of dense cell populations (<http://www.pnas.org/content/105/40/15346.full>)
2. R. Andrew Marshall, Magdalena Dorywalska, and Joseph D. Puglisi  
Irreversible chemical steps control intersubunit dynamics during translation (<http://www.pnas.org/content/105/40/15364.full>)
3. Floyd, D. L., Ragains, J. R., Skehel, J. J., Harrison, S. C., van Oijen, A. M.  
Single-particle kinetics of influenza virus membrane fusion (<http://www.pnas.org/content/105/40/15382.full>)
4. Tinkle, C. L., Pasolli, H. A., Stokes, N., Fuchs, E.  
New insights into cadherin function in epidermal sheet formation and maintenance of tissue integrity  
(<http://www.pnas.org/content/105/40/15405.full>)
5. Tu, Y., Shimizu, T. S., Berg, H. C.  
Modeling the chemotactic response of Escherichia coli to time-varying stimuli (<http://www.pnas.org/content/105/39/14855.full>)
6. Rabani, M., Kertesz, M., Segal, E.  
Computational prediction of RNA structural motifs involved in posttranscriptional regulatory processes  
(<http://www.pnas.org/content/105/39/14885.full>)
7. Nowak, M. A., Ohtsuki, H.  
Prevolutionary dynamics and the origin of evolution (<http://www.pnas.org/content/105/39/14924.full>)
8. Tamas, I., Wernegreen, J. J., Nystedt, B., Kauppinen, S. N., Darby, A. C., Gomez-Valero, L., Lundin, D., Poole, A. M., Andersson, S. G. E.  
Endosymbiont gene functions impaired and rescued by polymerase infidelity at poly(A) tracts  
(<http://www.pnas.org/content/105/39/14934.full>)
9. Ramanathan, V., Feng, Y.  
On avoiding dangerous anthropogenic interference with the climate system: Formidable challenges ahead  
(<http://www.pnas.org/content/105/38/14245.full>)
10. Ma, J., Ratan, A., Raney, B. J., Suh, B. B., Miller, W., Haussler, D.  
The infinite sites model of genome evolution (<http://www.pnas.org/content/105/38/14254.full>)
11. Grime, J. M. A., Edwards, M. A., Rudd, N. C., Unwin, P. R.  
Quantitative visualization of passive transport across bilayer lipid membranes (<http://www.pnas.org/content/105/38/14277.full>)
12. Henbest, K. B., Maeda, K., Hore, P. J., Joshi, M., Bacher, A., Bittl, R., Weber, S., Timmel, C. R., Schleicher, E.  
Magnetic-field effect on the photoactivation reaction of Escherichia coli DNA photolyase (<http://www.pnas.org/content/105/38/14395.full>)
13. Chia, N., Woese, C. R., Goldenfeld, N.  
A collective mechanism for phase variation in biofilms (<http://www.pnas.org/content/105/38/14597.full>)
14. Liu, J., Desai, A., Onuchic, J. N., Hwa, T.  
An integrated mechanobiochemical feedback mechanism describes chromosome motility from prometaphase to anaphase in mitosis (<http://www.pnas.org/content/105/37/13752.full>)
15. Rudnick, S. I., Swaminathan, J., Sumaroka, M., Liebhaber, S., Gewirtz, A. M.  
Effects of local mRNA structure on posttranscriptional gene silencing (<http://www.pnas.org/content/105/37/13787.full>)
16. Krivov, S. V., Karplus, M.  
Diffusive reaction dynamics on invariant free energy profiles (<http://www.pnas.org/content/105/37/13841.full>)

17. Hegreness, M., Shoresh, N., Damian, D., Hartl, D., Kishony, R.  
Accelerated evolution of resistance in multidrug environments (<http://www.pnas.org/content/105/37/13977.full>)
18. Sprouse, R. O., Karpova, T. S., Mueller, F., Dasgupta, A., McNally, J. G., Auble, D. T.  
Regulation of TATA-binding protein dynamics in living yeast cells (<http://www.pnas.org/content/105/36/13304.full>)
19. Mansy, S. S., Szostak, J. W.  
Thermostability of model protocell membranes (<http://www.pnas.org/content/105/36/13351.full>)
20. Begall, S., Cerveny, J., Neef, J., Vojtech, O., Burda, H.  
Magnetic alignment in grazing and resting cattle and deer (<http://www.pnas.org/content/105/36/13451.full>)

## Proceedings of the Royal Society B

1. Negyessy, L., Nepusz, T., Zalanyi, L., Bazso, F.  
Convergence and divergence are mostly reciprocated properties of the connections in the network of cortical areas (<http://www.ncbi.nlm.nih.gov/pubmed/18628120>)

## Science

1. Yusuke Toyama, Xomalin G. Peralta, Adrienne R. Wells, Daniel P. Kiehart, and Glenn S. Edwards  
Apoptotic Force and Tissue Dynamics During Drosophila Embryogenesis (<http://www.sciencemag.org/cgi/content/abstract/321/5896/1683>)
2. Liangti Qu, Liming Dai, Morley Stone, Zhenhai Xia, and Zhong Lin Wang  
Carbon Nanotube Arrays with Strong Shear Binding-On and Easy Normal Lifting-Off (<http://www.sciencemag.org/cgi/content/abstract/322/5899/238>)
3. Paul J. Choi, Long Cai, Kirsten Frieda, X. Sunney Xie  
A Stochastic Single-Molecule Event Triggers Phenotype Switching of a Bacterial Cell (<http://www.sciencemag.org/cgi/content/full/322/5900/442>)
4. Sreelaja Nair and Thomas F. Schilling  
Chemokine Signaling Controls Endodermal Migration During Zebrafish Gastrulation (<http://www.sciencemag.org/cgi/content/full/322/5898/89>)

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