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A New Type of Review Journal

Cold Spring Harbor Laboratory Press announces the launch of a new monthly online publication, *Cold Spring Harbor Perspectives in Biology*. Spanning the complete spectrum of the molecular life sciences, the journal offers article collections that comprehensively survey topics in molecular, cell, and developmental biology; genetics, neuroscience, immunology, cancer biology, and molecular pathology. Written by leading researchers and commissioned by an eminent board of editors, subject collections grow with every issue of the journal. *Cold Spring Harbor Perspectives in Biology* is thus unmatched in its depth of coverage and represents an essential source for informed surveys and critical discussion of advances in emerging areas of biology.

**Scope:** Molecular Biology, Cell Biology, Developmental Biology, Genetics, Immunology, Neurobiology

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**Subject Coverage**

- Angiogenesis
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- The Biology of Cardiovascular Disease
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- The Cytoskeleton
- DNA Damage and Repair
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- Mitosis
- Molecular Motors
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- The NF-κB Family
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- The Origin of Life
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Call for Papers in Cancer Genomics

The editors of Genome Research are seeking submissions of manuscripts offering novel biological insights gained from genomic analyses of cancer, including, but not limited to, functional genomic analyses of cancer genes, large scale cancer epigenomics, advances in technology of significant utility in cancer genomics studies and in the computational biology of cancer. We expect to coordinate the publication of these research, methods and resource reports in a Special Issue to appear in Autumn 2011.

If you would like your work to be considered, please submit online on or before 1 May 2011 at Genome Research http://submit.genome.org/ and include keywords "Cancer Genomics”.

When considering submission to Genome Research, please note Genome Research now ranks third amongst primary research journals in Genetics & Heredity, and is one of the top ten Molecular Biology journals. In addition to its high impact, Genome Research has rapid manuscript turn-around -- on average less than 30 days -- and posts accepted preprints online within hours. Genome Research remains committed to the community it serves, setting standards in data quality and accessibility, and offering an Open Access option for authors.

Please visit Genome Research http://genome.org/ online for additional information about the journal. For more information about submitting your Cancer Genomics papers to Genome Research, please contact Executive Editor, Hillary Sussman: hsussman@cshl.edu.
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Postdoctoral Research Opportunities in Computational and Systems Biology in the Churchill Group at The Jackson Laboratory

The Churchill Group ([http://churchill.jax.org/](http://churchill.jax.org/)) is actively applying a systems approach to study the genetics of health and disease, incorporating new statistical methods for the investigation of complex disease-related traits in the mouse. We have interests in computation, mathematical modeling and statistics, with a shared focus on the genetics of complex traits within the group’s collaborative and cross-disciplinary environment.

The Jackson Laboratory ([http://www.jax.org/](http://www.jax.org/)) in Bar Harbor, Maine, USA, offers a unique research and training environment characterized by scientific collaboration, unparalleled mouse resources and outstanding core services within a spectacular setting adjacent to Acadia National Park. The Jackson Laboratory’s postdoctoral program ranks among the nation’s top, voted #2 in a poll of postdocs conducted by The Scientist (2009).

Applicants should have a PhD (or equivalent degree) in a quantitative field such as computer science, statistics, applied mathematics or in the biological sciences but with a strong quantitative background. Applicants must demonstrate a commitment to solving biological problems. Successful applicants must have good communication skills. Experience with scientific programming languages including java, c/c++, ruby, perl, or R is recommended. Work within the group is highly interdisciplinary, and applicants must demonstrate a desire to develop skills in new areas of science and in building strong collaborations.

To apply, please apply online at [www.jax.org/careers](http://www.jax.org/careers) (Job ID 2511) with a current CV, statement of research interests and the names of three referees.

The Jackson Laboratory is an EOE/AA employer.

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Systems Biology Ireland combines theory and experiment under one roof, offering a vibrant research atmosphere with strong national and international collaborations. Our team merges researchers from a broad spectrum of disciplines including biology, medicine, chemistry, bioengineering, physics, mathematics, statistics, bioinformatics, and computer science. For our work on the design principles of signalling networks, transcription factor regulation and stem cell differentiation we currently have positions available for:

- Lecturer in Probabilistic/Statistical Modelling
- Computational and experimental Post-doctoral fellows
- Cell biology research scientists (based at NUI Galway)
- PhD Students in systems biology

Informal enquiries to the SBI Directors & Pls – Professor Walter Kolch, Professor Boris Kolodenko and Prof Frank Barry - (systemsbiology@ucd.ie).

Please consult UCD’s website for application procedures for UCD based roles ([www.ucd.ie/vacancies](http://www.ucd.ie/vacancies) - PhD applicants need only consult the SBI website below) and the NUIG website for NUIG based roles ([www.nuigalway.ie/about-us/jobs/](http://www.nuigalway.ie/about-us/jobs/)).

For further information on SBI, the roles and how to apply please consult the SBI website ([www.systemsbiologyireland.eu](http://www.systemsbiologyireland.eu)).

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**Postdoctoral Training in Statistical Inference**

Reliable interpretation of genomic information makes unprecedented demands for innovations in statistical methodology and its application to biological systems. This unique opportunity drives research at the Statomics Lab of the Ottawa Institute of Systems Biology ([http://www.statomics.com](http://www.statomics.com)) to marshal strengths of the frequentist, empirical Bayes, and Bayesian frameworks. The lab seeks a postdoctoral fellow who will collaboratively develop and apply novel methods of statistical inference to overcome current challenges in learning from genome-wide association data, neurodegenerative lipidomics data, and other data related to genomics.

Experience in computationally intensive data analysis is essential, as is the ability to quickly code reliable software implementing the statistical algorithms developed. Strong initiative, excellent communication skills, and reception of a PhD or equivalent doctorate in statistical genetics, statistics, bioinformatics, computer science, mathematics, physics, any field of engineering, or an equally quantitative field within four years prior to the start date are also absolutely necessary. The following qualities are desirable but not required: working knowledge of statistical genetics; familiarity with R, S-PLUS, Mathematica, C, Fortran, and/or LaTeX; experience in a UNIX or Linux environment.

To apply, send a PDF CV that has contact information of three references to dbickel@uottawa.ca, with “Statistics Postdoctoral Fellowship” and the year of your graduation or anticipated graduation in the subject field of the message. In the message body, concisely present evidence that you meet each requirement for the position and describe your most significant papers and software packages with summaries of how you contributed to them. All applicants are thanked in advance; only those selected for further consideration will receive a response.
NCI-ICBP Sponsored
Annual Workshops on Cancer Systems Biology

Center of Cancer Systems Biology
St. Elizabeth’s Medical Center
Boston, Massachusetts, USA
www.cancer-systems-biology.org

Upcoming workshop:
Systems Biology of Tumor Dormancy
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2012 Systems Biology of Cancer Progression and Metastasis
2013 Systems Biology of Metronomic Treatment
2014 Systems Biology of Tumor-Host Interactions

The Center of Cancer Systems Biology is part of the National Cancer Institute’s Integrative Cancer Biology Program (ICBP) which is the NCI’s primary effort in cancer systems biology. Our Center brings together diverse researchers from biological, mathematical, physical and clinical backgrounds to better understand the molecular and tissue-level events underlying cancer initiation, evolution and progression.
**Postdoctoral Fellow in Bioinformatics**

Department of Biomedical Informatics
Vanderbilt University Medical Center

Two postdoctoral positions are available in Dr. Zhongming Zhao’s Bioinformatics and Systems Biology Laboratory (BSBL, http://bioinfo.mc.vanderbilt.edu/) at Vanderbilt University Medical Center. The successful candidates are expected to join an established bioinformatics team, which is currently comprised of 11 members, including postdocs in bioinformatics, a bioinformatics engineer, graduate students, and a program coordinator. The ongoing projects in our group use data generated from platforms such as next generation sequencing (Illumina, 454, SOLiD) and microarrays (gene expression, GWAS, microRNA, CNVs, and methylation) to study cancer, neuropsychiatric disorders, or other complex diseases using bioinformatics and systems biology approaches. Integrative genomics approaches are often applied. Funding is available to support this position for up to three years. The candidate will have the opportunity to access many high-throughput datasets and to interact with the investigators in Vanderbilt Medical Center.

Vanderbilt University was ranked the 17th best college by US News & World Report. Vanderbilt’s Department of Biomedical Informatics is the largest academic department of biomedical informatics in the country, with more than 65 faculty members, a graduate training program, and a portfolio of research and development projects that span from computational biology and bioinformatics applied to the understanding of biological molecules, through advanced clinical information systems that care for hundreds of thousands of patients at Vanderbilt, to regional health information projects that span many states.

More information about the department can be found at http://dbmi.mc.vanderbilt.edu/

The qualified candidates should be highly motivated in research and have a Ph.D. in bioinformatics, computational biology, molecular biology, or related field upon the job start date. The successful candidate should have some experience in analyzing high-throughput genomic data and proved skills in at least one programming language (Perl, Java, or C/C++). Good understanding of molecular biology and familiarity with biostatistics are desirable.

For more information, please visit our web site http://bioinfo.mc.vanderbilt.edu/

Applicants should send a CV, brief statement of research interests, and reference to: Zhongming Zhao zhongming.zhou@vanderbilt.edu

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**Postdoc Position in Computational Biology**

The collaborative project CyclIX (http://cyclix.org), supported by the Swiss initiative in systems biology SystemsX.ch (http://systemsx.ch), brings together nine research groups from the University of Lausanne (UNIL), the Ecole Polytechnique Fédérale de Lausanne (EPFL), and the Swiss Institute of Bioinformatics (SIB) in Lausanne together with the University of Geneva. It aims to study the mammalian transcription regulatory networks of three interacting cycles: cell division, circadian, and nutrient.

We seek an outstanding and motivated collaborator to join us and take advantage of ChIP-seq data generated from mouse liver in different phases of the cell-division cycle. These results will be contrasted and compared to those of the other two cycles to identify shared and differentiating features.

The successful candidate will hold a PhD in computational biology or equivalent experience. He or she will be familiar with the processing and statistical analysis of genome-wide datasets, fluent in at least one programming language, and familiar with the R statistical framework.

He or she will integrate and analyze a large number of dense genomic datasets and will have many opportunities for interaction and collaboration with the other experimentalists and computational biologists associated with the CyclIX project. This experience should put the successful candidate in a position to subsequently build a strong and independent research program.

A start date is envisioned in 2011.

For further questions please contact Jacques Rougemont: jacques.rougemont@epfl.ch, or Winship Herr: winship.herr@unil.ch

To apply, please send a full CV, a statement of interests and names of three references by e-mail to: ruthlie.elec@unil.ch

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**POSTDOCTORAL FELLOW AT IRB BARCELONA**

**POSTDOCTORAL POSITION IN CANCER RESEARCH**

Applications are invited for a postdoctoral position in the Structural Bioinformatics & Network Biology Group of the Institute for Research in Biomedicine (IRB-Barcelona). Our laboratory builds and analyzes the information contained in cell networks to study the molecular mechanisms underlying complex diseases (http://www.irbbarcelona.org/paloy).

We are now looking for a highly motivated and interactive scientist to investigate molecular mechanisms underlying breast and colorectal cancer, using a battery of molecular and cell biology techniques. These studies will involve extensive collaborations with other research groups.

**Requirements:**

- PhD degree in Biomedical Sciences with a good publications record.
- Strong background in molecular and cell biology, with experience in cancer research. Familiarity with RNAi assays and confocal microscopy will be highly valued.
- Enthusiasm for science and capacity to work independently and to drive a scientific project to conclusion.
- Good knowledge of English.

Applicants should send by e-mail a brief cover letter summarizing research interests and goals, full curriculum vitae and the names and addresses of two references to Dr. Patrick Aloy: patrick.aloy@irbbarcelona.org
Tenure-track Faculty Positions in Population, Quantitative, Computational, and/or Evolutionary Genetics, College of Agricultural and Life Sciences, University of Wisconsin-Madison

The College of Agricultural and Life Sciences at the University of Wisconsin (UW)-Madison has long been a world leader in experimental and theoretical population and quantitative genetics. To continue to build strength in these areas, we seek to hire two tenure-track assistant professors in the areas of population, quantitative, computational, and/or evolutionary genetics. Candidates for these positions will be considered in three broad research areas:

Integration of population genetics and genome-scale approaches to elucidate evolutionary mechanisms within and between populations

Quantitative genetics of economically important animals or crops

Integration of experimental, computational, and/or theoretical approaches to population and quantitative genetics

In addition, the successful candidates will help to promote a deeper and more profound understanding of population, quantitative and evolutionary genetics in UW undergraduate and graduate students. Faculty members hired through the initiative will be expected to spend part of their teaching efforts in courses that serve departmental needs and part of their efforts in courses that serve a broader college-wide and campus-wide community.

Areas of interest include experimental and theoretical research that draw fundamental insights into the connections between molecular function and genetic variation, experimental evolution, ecological genetics, and research that addresses emerging issues in human health, ecology, natural resources or food security; and quantitative and computational approaches that foster genetic improvement of agriculturally important animals or crops. Four departments have worked collaboratively to outline the vision and needs for the initiative: Agronomy, Animal Sciences, Entomology, and Genetics. Each faculty position will be located in one of these four departments.

The successful candidates will be capable of developing a strong, independent, extramurally-funded research program; developing an innovative undergraduate and graduate teaching program; building collaborative relationships in research and instructional programs; and contributing to service and outreach functions of the Department, College, University and professional societies.

Earned doctorate with expertise in population, quantitative, computational, and/or evolutionary genetics is required. Postdoctoral experience is highly desirable. Interested individuals are welcome and encouraged to contact Professor Irwin Goldman directly by phone at (608) 262-7781 or by email at ilgoldma@wisc.edu to discuss this position opportunity.

HOW TO APPLY: Send CV, a 1-2 page statement of research interests and plans, a statement of teaching philosophy, and arrange to have three letters of reference sent to Dr. Irwin Goldman, pvl6521, by mail to CALS/UW-Madison, 240 Agricultural Hall, 1450 Linden Drive, Madison, WI 53706 OR electronically to pvl6521@cals.wisc.edu.

Applicants can find further information on the Evolution Institute web site at www.evolution.wisc.edu or each of the four departmental websites:

**Agronomy:** [http://agronomy.wisc.edu/](http://agronomy.wisc.edu/)
**Animal Sciences:** [http://www.anosci.wisc.edu/](http://www.anosci.wisc.edu/)
**Entomology:** [http://www.entomology.wisc.edu/](http://www.entomology.wisc.edu/)
**Genetics:** [http://www.genetics.wisc.edu/](http://www.genetics.wisc.edu/)

Applicants furnishing all materials by March 31, 2011 will receive priority in consideration.

NOTE: Unless confidentiality is requested in writing, information regarding the names of applicants must be released upon request. Finalists cannot be guaranteed confidentiality.

*The College of Agricultural and Life Sciences views recruiting women and minority faculty members as central to its strategic goals. The University of Wisconsin is an Equal Opportunity and Affirmative Action Employer.*
The Luxembourg Centre of Systems Biomedicine (LCSB) is an interdisciplinary research centre at the University of Luxembourg. The LCSB is accelerating biomedical research by closing the link between systems biology and medical research. Collaboration between biologists, medical doctors, computer scientists, physicists and mathematicians is offering new insights in complex systems like cells, organs, organisms or human populations. The University of Luxembourg is a multilingual, international research University.

The University of Luxembourg seeks outstanding postdoctoral research associates for the newly established Luxembourg Centre of Systems Biomedicine (LCSB), to participate in a strategic cooperation with the Institute of Systems Biology (ISB) in Seattle.

**Research Associate in Computational/Systems Biology (m/f)**

Ref. I1R-DIR-PAU-08PBPR

5-year-fixed term contract

Employee status, full-time

**Fields of Research:** The candidates will join collaborative groups to carry out research in the area of systems and computational biology, bioinformatics with a special focus on the analysis of disease-related networks.

**Mission:** The LCSB will be highly interdisciplinary research centre, integrating experimental biological and computational biology approaches in order to develop the foundation of a future predictive, preventive and personalized medicine. The candidates will contribute to the development of the LCSB by participating in a 5 year training and knowledge transfer program with ISB. They will spend a total of two years in residence in Seattle and return to potential positions at the LCSB in Luxembourg.

**Profile:** Qualified applicants must have a minimum of a MS Degree in one of the above-mentioned disciplines (Ph.D, Postdoc strongly preferred) and at least two years research experience in one or more of the disciplines listed above. Candidates with a strong background in Mathematics, Physics or Informatics are particularly encouraged to apply.

**Offer:** The University offers highly competitive salaries based on the candidate's experience and is an equal opportunity employer. Applicants should send their detailed CV, publication list, and references in English preferably in electronic form to katrin.effenberger@uni.lu no later than May 6th, 2011. All applications will be handled in the strict confidence.

For further information, please contact:

Prof. Dr. Rudi Bailing, rudi.bailing@uni.lu
Director of the Luxembourg Centre of Systems Biomedicine

**Postal address:**

University of Luxembourg
Luxembourg Centre of Systems Biomedicine
162, avenue de la Faiencerie
L-1511 Luxembourg

www.lcsb.lu

The University of Luxembourg invites applications for the following vacancy in its Faculty of Science, Technology and Communication

**Professor or Associate Professor in Computational Biology (M/F) – focus on stochastics, probabilistics and biostatistics**

Ref. F1-100038

Employee status, full-time

Start date : 01/09/2011

**Mission**

- Teaching activities: Biostatistics, complex trait genetics, stochastics of biological systems in the Bachelor in Life Sciences as well as in the Master in Integrated Systems Biology
- Contribute actively to the development of research within the University’s strategic research priority in “Life Sciences” by contributing his/her expertise in computational biology specifically in areas such as stochastic and statistical analysis of complex biological systems, mathematical and computational methods for probabilistic and stochastic modeling of biological systems and network analysis.
- Collaborate with other research teams of the Research Unit and with the new Interdisciplinary Center CSBL “Center for Systems Biology Luxembourg”

**Profile**

- PhD in applied mathematics, physics, engineering, computer- or biosciences
- Master or equivalent in Chemistry or Biochemistry
- Post-doctoral experience of at least five years.
- Strong publication record in computational and systems biology, specifically in the area of stochastic and statistical analysis of complex biological systems, model building and network analysis

The University of Luxembourg is set in a multilingual context. It is desired that the successful candidates will have a working knowledge in addition to English in at least one of the following languages: French and German. However, it is also possible to obtain proficiency in a second language after being hired as the University provides access to language classes. A basic knowledge of French has to be acquired during the first two years. For more information please contact Prof. Dr. Rudi Bailing, rudi.bailing@uni.lu, Director of the Luxembourg Centre of Systems Biomedicine, www.lcsb.lu.
Environmental Genomics and Disease Susceptibility
Scientific Organizers: Randy L. Jirtle, Moshe Szyf and Frederick L. Tyson
March 27–April 1, 2011
Grove Park Inn Resort & Spa • Asheville, North Carolina • USA
Keynote Speaker: Eva Jablonka, Tel Aviv University, Israel
Session Topics: Fetal Origins of Adult Disease Susceptibility
Epigenetic Mechanisms of Gene Regulation
In vitro Fertilization, Cloning and Stem Cells
Postnatal Epigenetic Programming of the Brain
Epigenetics and Complex Diseases
Epigenetic Transgenerational Inheritance
Epigenetics and Neurological Disorders
Mammalian Evolution and Disease Susceptibility
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Changing Landscape of the Cancer Genome
Scientific Organizers: Lynda Chin, Christoph Lengauer and Michael Stratton
June 20–25, 2011
Boston Park Plaza Hotel & Towers • Boston, Massachusetts • USA
Keynote Speaker: Tom Hudson, Ontario Institute for Cancer Research, Canada
Session Topics: Integrative Cancer Genome Projects
Genome Technologies: Current State and 3rd Generation
Cancer Genome Analysis: Bioinformatics
Cancer Genome Analysis: Algorithm Development and Network Modeling
Genome Biology
Beyond the Genomes
Cancer Genomics and Drug Discovery
Workshop 1: Genome Technologies
Workshop 2: Genome Analysis Tools
Workshop 3: Late-Breaking Developments
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