



# Bio Trends

Biostatistics and Computational Biology

Volume 3, Issue 3

Summer 2009

## Upcoming Events

July 3rd  
University Holiday

July 24th  
Department Picnic  
Wegman Lodge in  
Seneca Park

July 30th  
Haiyan Su  
Thesis Defense  
Room K-207  
2:00 p.m.

August 10th  
Qin Yu  
Thesis Defense  
Room K-207  
2:00 p.m.

September 7th  
University Holiday

**Did you know...**  
Old ID Badges should have been turned into the University ID office before June 30th. If you have not turned yours in yet, please do so as soon as possible.

## Statistical Modeling for Biological Systems: A Conference in Memory of Andrei Yakovlev

On June 8th and 9th, our department hosted a conference organized in memory of **Andrei Yakovlev**. The conference featured many of Andrei's collaborators and friends, and reflected the breadth of interests for which he was well known and the international scope of his collaborations. Speaker affiliations included Chalmers University of Technology (Sweden), the University of Würzburg (Germany), the Institut Curie (France), the German Cancer Research Center, the Bulgarian Academy of Sciences, as well as many leading American universities. A number of our department members who collaborated with Andrei also gave talks and a poster session was held. The proceedings of the conference will be



Guest Speakers of the Conference in Memory of Andrei Yakovlev

Front Row (left to Right) - Suresh Moolgavkar, Linlin Chen, Aniko Szabo, Leonid Hanin, David Oakes, Ollivier Hyrien, Nick Yanev.

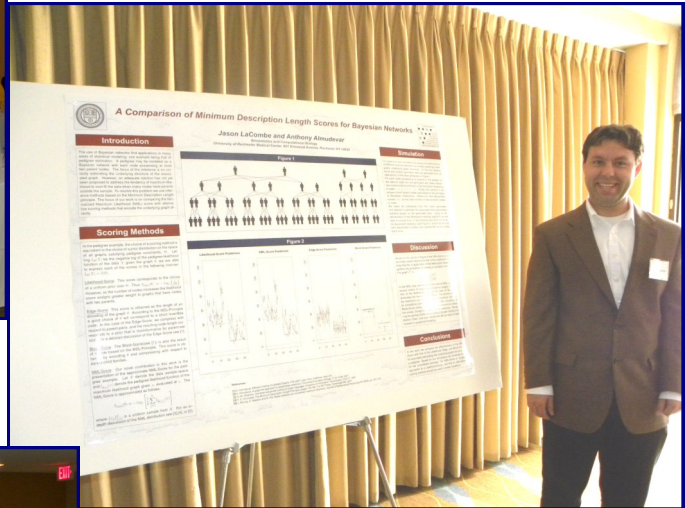
Back Row (left to right) - Nick Jewell, Anthony Almudevar, Alexander Tsodikov, Marvin Zelen, Bernard Asselain, Mark Noble, John Storey.

Missing from photo: Marianthi Markatou, Hucky Land, Peter Jagers, Xing Qiu, Lutz Elder, Alexander Gordon, Yuriy Gusev, Elart von Collani.



with the flawless administration due to **Cheryl Bliss-Clark** and **Cheryl Cicero**.

published as part of the Institute of Mathematical Statistics (IMS) collections series. The conference was organized by **David Oakes**, **Jack Hall** and **Anthony Almudevar**,



We are grateful to **Mark Noble** and **Hartmut Land**, from the Department of Biomedical Genetics, who formed close collaborations with Andrei, for their addresses, to **Nina Yakovlev** for hosting a reception, and to **Mike McDermott**, **Hulin Wu**, **Hua Liang**, **Sally Thurston**, **Li-Shan Huang** and **Derick Peterson** for serving as session chairs. The program and other conference details can be found at [www.urmc.rochester.edu/biostat/ayconference](http://www.urmc.rochester.edu/biostat/ayconference).

**Chris Brower** and **Susan DiVincenzo**, with help from **Nina Yakovlev**, **Nick Yanev** and **Olivier Hyrien**, compiled a “memory book” of photographs, letters and documents describing Andrei’s life and career.



Guest speaker - Marianthi Markatou



Guest speaker - Hucky Land



Guest speaker - Yuriy Gusev

## AY Conference - continued



Guest speaker - Alexander Gordon



Guest speaker - Elart von Collani



Guest speaker - Lutz Edler

We are very pleased to announce that our training grant in Environmental Health Sciences Biostatistics, PI David Oakes, has been renewed for a further five years, starting July 1, 2009.

This program is a collaborative effort between the DBCB, the Environmental Health Sciences Center and the Department of Community and Preventive Medicine. The program was funded at the full requested level of two predoctoral and

two postdoctoral trainees in each year. Trainees must be US citizens or permanent residents of the US.



Pictured above from left to right: Setta Odoroff, Terry Therneau, and David Oakes

On April 2, 2009, **Terry Therneau, Ph.D.** Professor of Biostatistics at Mayo Clinic, Rochester, MN was the guest speaker of the **2009 Charles L. Odoroff Lecture**. This was the 21st lecture in the series. Dr. Therneau was also an Assistant Professor with the department from 1983-1985. The lecture topic was "*Random Effects Models and Survival Data*".

**This is the 40th anniversary of the initiation of the Graduate Program in Statistics!**

**Y**es, it all began in 1969, with the enrollment of 7 graduate students. Professors Jack Hall, Govind Mudholkar and Sam Rao-Poduri were members of the founding faculty, along with several others no longer at the University. Since then, a total of 74 PhD's have been awarded, the first being to Hubert Chen in 1974. A BA program was organized a bit earlier, with Susan Miskura receiving the first BA in 1969.

**And here are some highlights from the 2009 Commencement...**



From left to right:  
Doctoral degree recipient,  
Yan Ma, with Professors  
Mike McDermott and Xin Tu.

**Congratulations!!!**



Doctoral degree recipient,  
Linlin Chen, with mentor Professor  
Anthony Almudevar.



Congratulations to **Ha Youn Lee, Hulin Wu** and the **CBIM team** - their latest paper will be a spotlight of the July "Journal of Virology", as well as being noted in the following - well done!



Here are some of the news websites:

NIAID/NIH Latest News

[http://www3.niaid.nih.gov/news/newsreleases/2009/flu\\_model.htm](http://www3.niaid.nih.gov/news/newsreleases/2009/flu_model.htm)

University of Rochester news:

<http://www.urmc.rochester.edu/pr/news/story.cfm?id=2493>

Science Daily:

<http://www.sciencedaily.com/releases/2009/05/090513121057.htm>

Science News

<http://esciencenews.com/articles/2009/05/18/>

[computer\\_simulation\\_captures](http://esciencenews.com/articles/2009/05/18/computer_simulation_captures)

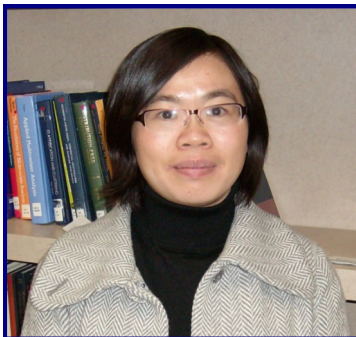
Top news

<http://silverscorpio.com/computer-based-model-sheds-new-light-on-bodys-i>



Paper: **Lee, H.Y.**, Topham, D.J., **Park, S.Y.**, Hollenbaugh, J., Treanor, J., Mosmann, T.R., Jin, X., Ward, B., **Miao, H.**, **Holden-Wiltse, J.**, Perelson, A.S., Zand, M., **Wu, H.** (2009), Simulation and Prediction of the Adaptive Immune Response to Influenza A Virus Infection, Journal of Virology, July 2009, Vol. 83: No. 14, pp. 7151- 7165

Front top to bottom: Ha Youn Lee, Sung Yong Park, Hongyu Miao, Jeanne Holden-Wiltse, and Hulin Wu.



Congratulations go out to **Hua He**, Ph.D. on her promotion to Assistant Professor effective July 2009.



**Hui Zhang** received a travel scholarship from the University of Washington to attend the 14th Annual Summer Institute in Statistical Genetics in Seattle on 06/14/09-06/21/09

(<http://sisg.biostat.washington.edu/>).

The scholarship included tuition support for 2 modules (usually \$650/module) and \$300 for travel expense.



**Xiang Liu** is participating in a 12-week internship at BARDS, Merck Research Laboratories, in Rahway, NJ. Xiang reports that everything is going well .



**David Oakes** has been appointed a permanent member of the “EPIC” (Epidemiology of Cancer) NIH Study Section, serving from 2009 through 2013.

research (under the supervision of **Hongyu Miao**). She is also the first student to participate in the education program of CBIM designed for undergraduate students. We anticipate additional internship opportunities via this program.



**Ha Youn Lee** is the recipient of a \$1,530,340 grant awarded by the **National Institute of Health, the National Institute of Allergy and Infectious Diseases**. The grant funds Dr. Lee's research on modeling the primary stage of HIV replication and sequence evolution, and on defining vaccine-inducible host immune functions that can be expected to lead to containment of infection and long-term protection from disease.

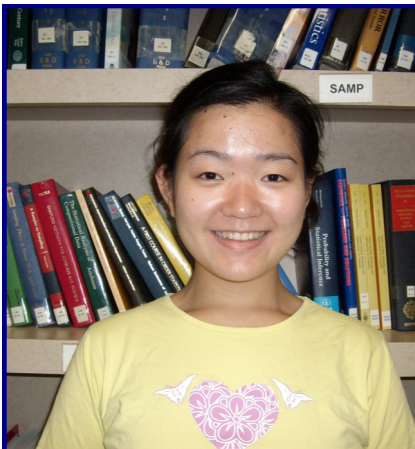
The research will be performed in collaboration with **Drs. Sally Thurston, Hua Liang, Stephen Dewhurst (Microbiology and Immunology), and Michael Keefer (Medicine)**.



**Anthony Almudevar** was the recipient of a \$50,000 grant awarded by the Wilmot Cancer Center, with funding provided by the **Sally Edelman and Harry Gardner Cancer Research Foundation**. The grant will fund Dr. Almudevar's research on gene regulatory network modeling that is being carried out in collaboration with the laboratory of Dr. Hartmut Land.

The Edelman-Gardner Foundation is located in Hilton, New York, and has since 1984 entered into a partnership with the University of Rochester to fund numerous projects in cancer research.

For more information visit [www.edelmancrf.org](http://www.edelmancrf.org).



**Wuwei Chen** is an undergraduate student from the UR College of Arts and Sciences who is in a joint program of mathematics and economics. She will be supported by CBIM for a two-month summer internship conducting a pilot study on the application of mathematical theory in viral dynamics



**Van Tran** will work on her summer internship project with **Dr. Xin Tu** and others in Biostatistics between May 26 and July 31, 2009. She is an awardee of the **Ronald E. McNair Post-Baccalaureate Achievement Program**. This program is funded through a grant from the US Dept of Education TRIO Program with the goal to prepare low-income, first-generation and underrepresented minority college students for entry into and success in doctoral programs. Its long-range mission is to increase the diversity of our nation's college and university faculties.

The Program is named in honor of **Dr. Ronald E. McNair**, the laser physi-

cist and Challenge space shuttle astronaut who died in the space shuttle accident in 1986. **Dr. McNair** graduated *magna cum laude* from North Carolina Agricultural and Technical State University in 1971 and received his Ph.D. from Massachusetts Institute of Technology in 1976. He was selected by NASA for the space shuttle program in 1978 and was Mission Specialist on the successful 1984 Challenge flight before his death in 1986.

The McNair Program at UR was established in 1992. Since then, over 400 students have received this award. Thirty-five percent of McNair Program participants have entered graduate study, compared to only 10% of national average. Rochester McNair Scholars have won prestigious awards such as Fulbright Scholarships and National Science Foundation Fellowships, and have joined the Peace Corps and AmeriCorps, and are completing graduate degrees in fields from English to aerospace, engineering at universities across the country.

Each January, up to ten UR sophomores are selected to participate in the academic year program, and remain in

the program until they graduate. The program provides a seminar series to help students identify and gain admission to graduate programs, prepare for the GRE, complete personal statements, and gain opportunities to network with faculty and graduate students. During at least one semester, they complete a mentored research project, which they present at a university-sponsored conference.



Please welcome **Shenghua Li, PhD** in Genetics, Bioinformatics and Computational Biology/Mathematics from Virginia Tech. He will be working with Hulin Wu as a postdoc in Bioinformatics.

## UNIVERSITY OF ROCHESTER MEDICAL CENTER

# Post-Doctoral Association

### **About Us**



The URM Post Doctoral Association was established in 2006 to provide career development and networking opportunities, as well as professional recognition specifically for post-doctoral fellows. Through these efforts we hope to contribute to the professional advancement of post-doctoral fellows and highlight our contributions to scientific research at the University of Rochester.

For more information visit our website:

<http://www.urmc.rochester.edu/smd/p-da/p-daindex.html>.



### **Programs**

#### ***Career Development***

- Academic Career
  - Grant Writing
  - Interview Preparation
- Teaching Career
  - Course Planning
  - Alternative Teaching Strategies
- Industrial Careers
- Alternative Careers



#### ***Networking Opportunities***

- Annual social gatherings
- Meetings with URM faculty and guest speakers



#### ***Professional Recognition***

- Poster awards
- Research highlights on the Web



#### ***Information***

- Postdoctoral positions
- Grant opportunities for U.S. and International students
- Links to National Post-Doctoral Association.

### **To Get Involved**

To help with the Post-Doctoral Association please contact:

Barbara Burton (Office of Graduate Education at the URM)

Email: [Barbara\\_Burton@urmc.rochester.edu](mailto:Barbara_Burton@urmc.rochester.edu)

Phone: 275-2933

University of Rochester  
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Suite G-9550  
601 Elmwood Ave



FROM: Human Resources Representative  
Benefits Office

SUBJECT: **Through December 2009** Schedule of Health Insurance Orientation/Enrollment Sessions for Postdoctoral Research Associates and Postdoctoral Teaching Fellows **with Position Codes 93 or 94**

To assist the Postdoctoral Research Associates and Postdoctoral Teaching Fellows in learning more about their University benefit plans and options, we are encouraging them to attend an orientation/enrollment session. The following orientation/enrollment sessions have been scheduled for:

Tuesday,	7/14/09	Natapow Conference Room	(1-9545)	1:00 pm – 2:00 pm
Tuesday,	8/11/09	Natapow Conference Room	(1-9545)	1:00 pm – 2:00 pm
Tuesday,	9/15/09	Louise Slaughter Conference Room	(1-9555)	1:00 pm – 2:00 pm
Tuesday,	10/13/09	Louise Slaughter Conference Room	(1-9555)	1:00 pm – 2:00 pm
Tuesday,	11/17/09	Natapow Conference Room	(1-9545)	1:00 pm – 2:00 pm
Tuesday,	12/15/09	Natapow Conference Room	(1-9545)	1:00 pm – 2:00 pm

**We need your assistance in ensuring that the current Postdoctoral Research Associates and Postdoctoral Teaching Fellows, as well as those appointed in the future in your department attend one of the sessions.** If you have any questions or if we can be of further assistance, please do not hesitate to contact the Benefits Office at x54636 or x33600.



Please welcome **Amit Chowdhry**, our Department's second ever MD/PhD student, who will be working with Dr. Peterson this June and July, before starting his first year of Medical School at URM on 8/10/09. Amit expects to be back with us again

next summer 2010; and he plans to devote himself full-time to his Statistics PhD from 2011-2015, following his second year of Medical School.



Please welcome postdoc **Nikolay Balov, Ph.D.** from Florida State. He will work with Peter Salzman on his Gene Regulatory Networks grant.

## BIostatISTICS AND COMPUTATIONAL BIOLOGY

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Email us with any  
suggestions at:

newsletter@bst.rochester.edu

### Did you know...

in case of an emergency, dial #13 from any University phone, or #413 from a Verizon or AT&T cell phone.

### Just to let you know...

Department personnel now have ssh access to simthree, a new 3.2GHz quad-core Intel Core-i7 Nehalem architecture computer system with 12GB RAM and a 32GB Solid State Drive, running Red Hat Linux. **Dr. Peterson** would welcome any benchmark comparisons with other systems.

### Keith's Computer Corner

Make sure your Windows machine is patched!

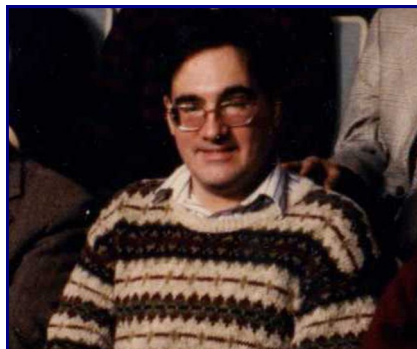
Of all the virus infected Windows computers I encounter here in Bio-stats I'd say 90% of those computers do not have the latest critical updates installed. This is by far the main reason computers get compromised. There are various reasons for machines to go unpatched. Some people turn off their Automatic Updates when they are running CPU intensive simulations and simply forget to turn it back on. Some people have Automatic Updates set to automatically download but not automatically install. And some do not have their Automatic Updates turned on at all. To make sure your computer stays running healthy make sure your Automatic Updates are on! As always, if you need assistance give me a call!

### Recycling Efforts being made in the MRBX

In helping with the effort to Go Green, there is a box in the front office to recycle your batteries. Don't throw away your expired batteries in the land fill when you can recycle them here.

Also, in the ground floor lobby there is a Green recycling bin for clean glass bottles, #1 and #2 plastic containers, aluminum and tin cans, juice and milk cartons.

McCavity (printer) is now known as Recycle, and is located in the Cube Area copy center. Recycle will use the back of separator pages for 1-sided copying. If you need to print, and it's just for your use, print to Recycle. (Directions will be posted by McCavity)



**John E. Kolassa**, who was a member of our faculty from 1992-1999, has been elected Fellow of the Institute of Mathematical Statistics. John is now Professor and Director of Graduate Studies, Department of Statistics and Biostatistics, Rutgers University