



**1st International Conference on Toxicogenomics Integrated
with Environmental Sciences (TIES)**

**TIES-2007 - Bridging the toxicogenomics and environmental genomics communities
through bioinformatics**

**Thursday-Friday
October 25-26, 2007**

The McKimmon Center
North Carolina State University
1101 Gorman St
Raleigh, NC 27606

<http://www.ties-conference-2007.org>

Organized by NIEHS/NIH, NCTR/FDA and NCSU



NC STATE UNIVERSITY

Organizing committee:

Juliebeth Briseno, North Carolina State University
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About Toxicogenomics Integrated with Environmental Sciences (TIES)

The Toxicogenomics Integrated with Environmental Sciences (TIES) is an international conference with emphasis on application of bioinformatics in the fields of toxicogenomics and environmental genomics. TIES provides a venue where the diverse scientists can exchange the current advances in bioinformatics for elucidating perturbed biological mechanisms and pathways through omics and technologies.

TIES-2007 program overview:

TIES-2007 is a first of a series of TIES conferences that will be held in different countries.

- (1) The conference features keynote speakers, invited presentations and a poster session.
- (2) Cash awards are offered for the students who participate in the conference; three awards in two categories, oral and poster presentations.
- (3) Special session on the FDA-led MicroArray Quality Control (MAQC) project

Important Date:

- **Meeting date:** Oct. 25th and 26th, 2007
- **August 5th, 2007:** Last day to receive abstracts for student oral presentations (please indicate whether participating competition in the submission)
- **August 19th, 2007:** Notification of acceptance for oral presentations
- **August 19th, 2007:** Last day to receive titles for poster presentations
- **October 11th, 2007:** On-line registration closes
- **On-site** registration is available (Cash and Check only)

Registration

	On-line	On-site
Student	\$50	\$80
Government/University	\$125	\$200
Industry	\$225	\$300

Agenda

Day 1 (Thursday), October 25: (Theme: Genomics)

8:00 – 8:50 AM	Registration, snack and poster setup
8:50 – 9:00 AM	Opening remarks (Dr. William Slikker, Director of NCTR, FDA)
9:00 – 9:45 AM	Keynote speaker, <i>Unraveling Genetic Regulatory Networks of Mammalian Retroelements</i> , Kenneth S Ramos (Louisville University, USA)
9:45 – 10:15 AM	<i>Genetic and Environmental Impacts on Gene Expression Variation in Peripheral Blood</i> , Greg Gibson (North Carolina State University, NC, USA)
10:15 – 10:30 AM	Break
10:30 – 11:00 AM	<i>From genomics to pathways: toward understanding the role of EGFR/MAPK signaling in breast cancer</i> , Laura Heiser (Lawrence Berkeley National Laboratory)
11:00 – 11:30 AM	<i>Genetical Genomics and Liver Toxicology: Making New Friends</i> , Ivan Rusyn (University of North Carolina at Chapel Hill)
11:30 – 12:00 AM	<i>Surface plasmon resonance based antibody microarray--a new tool for systems biology</i> , Zhiyuan Hu (Institute for Systems Biology)
12:00 – 1:00 PM	Lunch (Sponsored by Rosetta Biosoftware)
1:00-1:45 PM	Keynote speaker, <i>The next innovation cycle: Linking toxicogenomics to environmental epigenetics</i> , Jürgen Borlak (Fraunhofer Institute of Toxicology and Experimental Medicine Toxicology, Germany)
1:45 – 2:05 PM	Presentation 1
2:05 – 2:25 PM	Presentation 2
2:25 – 2:40 PM	Break
2:40 – 3:00 PM	Presentation 3
3:00 – 3:20 PM	Presentation 4
3:20 – 3:40 PM	Presentation 5
3:40 – 4:00 PM	Presentation 6
4:00 – 5:30 PM	Poster exhibition (Sponsored by JMP Genomics)

5:30 – 7:30 PM Dinner with Keynote Speaker at the McKimmon Center - *Maintenance of Genomic Imprinting via Epigenetic Factors*, Randy Jirtle (Duke University, NC, USA)

Day 2 (Friday), October 26: (Theme: Bioinformatics)

8:00 – 8:30 AM Registration and snack

8:30 – 9:15 AM Keynote speaker, *Epigenetics: The Link Between Fetal Exposure and Adult Disease Susceptibility*, David Threadgill (University of North Carolina at Chapel Hill)

9:15 – 9:45 AM *Organization and Infrastructure of the Cancer Biomedical Informatics, Grid*, Peter Covitz (NCI/NIH)

9:45 – 10:15 AM *Combining prediction and explanation: using variable importance measures inspired from causal inference for biomarker discovery*, Allan Hubbard (University of California at Berkeley)

10:15 – 10:30 AM Break

10:30 – 11:00 AM *Protein damage and its consequences*, Daniel Liebler (Vanderbilt)

11:00 – 11:30 AM *Integrating gene expression and metabolic profiles to identify gene targets and pathways modulating liver toxicity*, Zheng Li (Michigan State University)

11:30 – 12:00 AM *Recent progress in toxicogenomics research in South Korea*, Yang Kim (Kyung Hee University, Korea)

12:00 – 1:00 PM Lunch (Sponsored by Rosetta Biosoftware)

1:00 – 1:30 Student awards and the announcement of the next TIES conference (TIES-2008)

MAQC Special Session (1:30-4:00PM):

- Leming Shi (NCTR/FDA): An overview of the MicroArray Quality Control (MAQC) project - from MAQC-I to MAQC-II
- Wendell Jones (Expression Analysis): MAQC-I - Findings and conclusions
- Russ Wolfinger (SAS): Reproducibility in microarray analysis - Put your 3D-glass on
- Anne Lucas (Agilent): Evaluation of external RNA controls for the assessment of microarray performance
- Tucker Patterson (NCTR/FDA): Performance comparison of one-color and two-color platforms
- Richard Shippy (Affymetrix): Using RNA sample titrations to assess microarray platform performance and normalization techniques
- Federico Goodsaid (CDER/FDA): Evaluation of DNA microarray results with quantitative gene expression platforms

- Ed Lobenhofer (Cogenics): Rat toxicogenomic study reveals analytical consistency across microarray platforms
4:00- 5:00 Presentation by the sponsor (JMP Genomics and Rosetta Software)

Program Committees:

1. Jürgen Borlak, Fraunhofer Institute of Toxicology and Experimental Medicine Toxicology, Germany
2. Pierre R. Bushel, National Institute of Environmental Health Sciences
3. Yiyu Cheng, Zhejiang University, China
4. Jonathan Freedman, National Institute of Environmental Health Sciences, US
5. Supriya Jayadev, Boehringer Ingelheim Inc., US
6. Yang Kim, Kyung Hee University, Korea
7. Leping Li, National Institute of Environmental Health Sciences, US
8. Carolyn J. Mattingly, Mount Desert Island Biological Laboratory, US
9. Dahlia Nielsen, North Carolina State University, US
10. Richard S. Paules, National Institute of Environmental Health Sciences, US
11. Kenneth Ramos, Louisville University, US
12. Tielu Shi, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, China
13. Marcy Speer, Duke University, US
14. Weida Tong, National Center for Toxicological Research, US
15. Russ Wolfinger, SAS, US

Student presentation and poster awards (in US dollars):

	Oral presentation	Poster presentation
1 st place	\$300	\$250
2 nd place	\$250	\$200
3 rd place	\$200	\$150

Sponsors:

JMP Genomics

Rosetta Biosoftware