Agenda

All events, unless specified otherwise, are scheduled at:

The Grumman Auditorium
The William and Ida Friday Center for Continuing Education
University of North Carolina at Chapel Hill
Chapel Hill, North Carolina

December 5, 2004 (Sunday)
8:00 – 9:00 p.m.  Welcoming reception (Carolina Inn)

December 6, 2004 (Monday):
7:00 -  Registration begins at the Friday Center
7:30 – 8:00 a.m.  Continental Breakfast (provided with registration)
8:00 – 8:25 a.m.  Welcoming Remarks:
William Kaufmann, PI UNC Program in Toxicogenomics
Kenneth Olden, Director, NIEHS
8:30 – 9:15 a.m.  Keynote address: Toxicogenomics and Mechanisms of Toxicity
Roger Ulrich
Senior Scientific Director
Rosetta Inpharmatics
9:15 – 10:45 a.m.  Presentations by the University of North Carolina-Chapel Hill
  9:15 – 9:25 a.m.  Introduction: William Kaufmann, PI UNC Program in
                  Toxicogenomics
  9:25 – 9:45 a.m.  Charles Perou
                  Gene Expression Signatures of Toxicant-Exposed
                  Human Mammary Epithelial Cells
  9:50 – 10:10 a.m. William Kaufmann
                 Profiles of Genetic Susceptibility to Oxidative Stress
  10:15 – 10:35 a.m. David Threadgill
                  Mouse Strain-Specific Molecular Profiles in Response to
                  Toxicants
10:45 – 11:00 a.m.  Coffee Break
11:00 – 12:00 p.m.  Presentations by the NIEHS/NCT
  11:00 – 11:10 a.m. Introduction: Richard Paules, PI NIEHS Microarray Group, TRC
                     Toxicogenomics Program
11:10 – 11:30 a.m. Richard Paules  
*The Use of Gene Expression Analyses to Investigate ATM Function and Signaling Responses to DNA Damage*

11:35 – 11:55 a.m. Raymond Tennant  
*Analysis of Tumor-Specific Differentially Expressed Genes in Skin Papilloma Development*

12:00 – 1:30 p.m.  
Lunch (provided with registration)

1:30 – 2:15 p.m.  
**Keynote address: Disease Mechanisms and Susceptibility**  
David Botstein  
Director, Lewis-Sigler Institute for Integrative Genomics  
Princeton University

2:15 – 3:15 p.m.  
**Oral Presentations from outside the TRC**  
(4 presentations selected from submitted abstracts)

3:15 – 3:30 p.m.  
Coffee Break

3:30 – 5:30 p.m.  
**Presentations by Fred Hutchinson Cancer Research Center and the University of Washington**

3:30 – 3:40 p.m.  
Introduction: Helmut Zarbl, PI FHCRC/UW Program in Toxicogenomics

3:40 – 4:00 p.m.  
Elaine Faustman  
*Toxicogenomic Pathway Analysis of Sensitive and Resistant Mammalian Models for Neurodevelopmental Toxicology*

4:05 – 4:25 p.m.  
Clement Furlong  
*Effect of the Human Paraoxonase (PON1) Polymorphisms on the Consequences of Developmental Exposure to the Organophosphorus Insecticide Chlorpyrifos Oxon*

4:30 – 4:55 p.m.  
Curtis Omiecinski (Pennsylvania State University)  
*Species and Zone-Specific Hepatic Gene Expression*

5:00 – 5:20 p.m.  
Helmut Zarbl  
*Response of Mammary Cells from Sensitive and Resistant Rat Strains to Carcinogens*

5:30 – 7:30 p.m.  
**Poster Session and Reception**

6:30 – 7:30 p.m.  
**Break-Away Session (Sunflower Room, Friday Center): Bioinformatics and Computational Biology Tools**

6:30 – 6:50 p.m.  
Michael Waters (NIEHS)  
*Chemical Effects in Biological Systems (CEBS) Knowledge Base*

6:50 – 7:10 p.m.  
Russell Wolfinger (SAS Institute)  
*SAS Scientific Discovery Solutions*
7:10 – 7:30 p.m. Robert Williams (University of Tennessee – Memphis)
WebQTL: An Open Internet Resource to Explore Complex
Interactions of Toxins and Drugs with Normal Genetic Variation

8:00 – 9:30 p.m. Toxicogenomics Research Consortium Steering Committee meeting
(closed session at the Carolina Inn)

December 7, 2004 (Tuesday):  
7:30 – 8:00 a.m. Continental Breakfast (provided with registration)

8:00 – 8:30 a.m. Special Presentation:
Rebecca Fry (Massachusetts Institute of Technology)
Standardization of Microarray Analysis Across Platforms and
Laboratories – Efforts by the Toxicogenomics Research Consortium

8:30 – 10:00 a.m. Presentations by Oregon Health & Science University

8:30 – 8:40 a.m. Introduction: Peter Spencer, PI OHSU Program in
Toxicogenomics

8:40 – 9:00 a.m. Charles Roberts
Growth factor action in neurodegenerative disease

9:05 – 9:25 a.m. Sri Nagalla
Role of Gene Expression in Brain Injury

9:30 – 9:50 a.m. Jeffrey Miller (Boston Biomedical Research Institute)
Evaluating the significance of apoptosis in neuromuscular
pathology

10:00 – 10:15 a.m. Coffee Break

10:15 – 11:15 a.m. Presentations by Duke University

10:15 – 10:25 a.m. Introduction: David Schwartz, PI Duke Program in
Toxicogenomics

10:25 – 10:45 a.m. David Schwartz
The Genetics of Innate Immunity

10:50 – 11:10 a.m. Elwood Linney
The Genetics of Neural Tube Development

11:15 – 12:15 p.m. Presentations by Commercial Vendors

11:15 – 11:30 a.m. Agilent Technologies

11:30 – 11:45 a.m. Affymetrix

11:45 – 12:00 p.m. Applied Biosystems

12:00 – 12:15 p.m. GE Healthcare
12:15 – 1:45 p.m. Lunch (provided with registration)

1:45 – 3:15 p.m. **Presentations by Massachusetts Institute of Technology**

1:45 – 1:55 p.m. Introduction: Rebecca Fry, MIT Program in Toxicogenomics

1:55 – 2:15 p.m. John Essigmann
*Differential Expression of Genes Following Exposure of Mice to Aflatoxin B₁*

2:20 – 2:40 p.m. Lisiane Meira
*Transcriptional Responses of Mice to Alkylating Agents*

2:45 – 3:05 p.m. Linda Griffith
*Liver MicroBioreactors: A New Tool for Toxicology*

3:15 – 3:30 p.m. Coffee Break

3:30 – 6:10 p.m. **Presentations of “STAR” Collaborative Research Projects**

3:30 – 3:40 p.m. Introduction: Brenda K. Weis, NIEHS

3:40 – 4:00 p.m. Ivan Rusyn (UNC – NIEHS - MIT)
*Genomic profiling in nuclear receptor-mediated toxicity*

4:05 – 4:25 p.m. Helmut Zarbl (FHCRC – UW - Duke)
*Mechanisms of selenium-induced chemoprevention*

4:30 – 4:50 p.m. Terry Kavanagh (UW – Duke – NIEHS - UNC)
*Analytic cytology enhancements to toxicogenomic analyses*

4:55 – 5:15 p.m. Jon Freedman (Duke – MIT - UW)
*Comparative genomic responses to environmental toxicants*

5:20 – 5:40 p.m. Peter Spencer (OHSU – MIT – FHCRC)
*DNA alkylation in neurodegenerative disease and cancer*

5:45 – 6:05 p.m. Peter Spencer (OHSU – FHCRC - UW)
*Genetic modulation in hydrocarbon solvent neurotoxicity*

7:30 – 9:30 p.m. **Banquet** (open to attendees with a reservation)
Spice Street, 201 S. Estes Drive, Chapel Hill, NC

**December 8, 2004 (Wednesday):**

7:30 – 8:00 a.m. Continental Breakfast

8:00 – 10:00 a.m. **Special Session:**
*Emerging Issues and Technology Development in Toxicogenomics*
Chair: Ivan Rusyn, UNC
8:00 – 8:25 a.m.  William Greenlee (CIIT, RTP, NC)
   *Application of Functional Genomics to Toxicology Research*

8:30 – 8:55 a.m.  Stephen Naylor (MIT and BU, Boston MA)
   *Systems Biology*

9:00 – 9:25 a.m.  David Walt (Tufts University, Boston, MA)
   *Nanotechnology*

9:30 – 9:55 a.m.  Kenneth Paigen (Jackson Labs, Bar Harbor, ME)
   *Inbred Mice as a Resource in Toxicology*

10:00 – 10:30 a.m.  Coffee Break

10:30 – 11:45 p.m.  **Panel Discussion**
   *Emerging Issues and Technology Development in Toxicogenomics*
   Chair: William A. Suk, NIEHS

11:45 – 12:00 p.m.  Concluding Remarks: William Suk, NIEHS

12:00 – 1:30 p.m.  Lunch (@ the Friday Center, provided with registration)

2:00 p.m. -  Participants depart