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K-BRIN

Winter 2003

Kansas Biomedical Research Infrastructure Network
Training and Mentoring Newsletter

1st annual symposium held in KC

Staff Report

The first annual K-BRIN student symposium was held in the Hixson Atrium at the University of Kansas Medical Center in Kansas City (KUMC), Kansas on January 11 and 12.

Thirty students presented posters or oral presentations on their research activities over the past year.

The event started with a greeting by the K-BRIN director, Dr. Joan Hunt. Dr. Hunt summarized the great progress the program was making, including the acquisition of an additional NIH supplemental grant to support two new programs, and congratulated trainees and



Dr. Peter Smith answers questions after his presentation on Sunday, Jan. 12. Smith was just one of several speakers at the K-BRIN symposium.

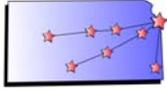


Student Clinton Seifert presents his project on Saturday. See Student Presentation story on Page 4.

mentors on their work.

The research symposium was highlighted by talks by Drs. William Brooks, the Director of the Hoglund Brain Imaging Center, KUMC; Mary Michaelis, Professor of Pharmacology and Toxicology at Kansas University and Linheng Li, from the Stowers Institute for Medical Research, on Saturday. Dr. Peter Smith, Directory of the Bioinformatics Satellite Core at KUMC gave a presentation on Sunday.

On Saturday, Dr. Brooks illustrated the use of magnetic resonance spectroscopy and magnetocephalography in studying brain
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function. While doing so, he settled any arguments about whether Homer Simpson has a brain or not!

Dr. Michaelis discussed her group's efforts in trying to discover drugs to treat Alzheimer's disease, an affliction that she estimates strikes over 50% of individuals over the age of 85.

On Sunday, Dr. Smith talked about using the Affymetrix gene chip technology to do microarray analyses and to determine gene expression. He also described the techniques that will be needed to assess and analyze the large amounts of data that are gathered during such experiments.



Dr. Mary Michaelis

Dr. Donald Hagen, Executive Vice Chancellor at KUMC also welcomed the audience and reminded everyone about the important role K-BRIN has in enhancing the infrastructure of the State of Kansas.

Over 80 participants, from eight K-BRIN institutions, gathered to view posters and discuss science before a banquet in the



Dr. William Brooks

Hixon Atrium ended the first day's festivities.

Dr. Paul Kelly, Director of the K-BRIN Bioinformatics core, discussed the K-BRIN sponsored course on bioinformatics on the second day of the symposium. He also reviewed the activities of the bioinformatics core and discussed the significant progress that has been made in obtaining software,



Dr. Linheng Li

computers and hiring personnel at KUMC, Kansas University and Kansas State University.

Dr. Keith Chapes, Director of the K-BRIN Training and Mentoring core, updated symposium participants on training and

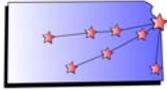
mentoring activities and rallied the crowd to keep the program rolling by preparing for the project's renewal.

It was announced that the second annual K-BRIN symposium will be sponsored by Kansas State University and will be held in Manhattan in January 2004.



Dr. Donald Hagen

Dr. Hunt pronounced the event a success and adjourned the meeting until next year.



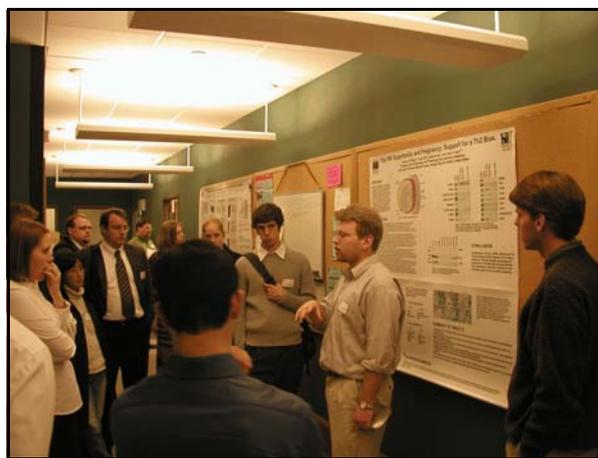
2003 K-BRIN Symposium



Guests enjoy dinner on Saturday night in Hixson Atrium.



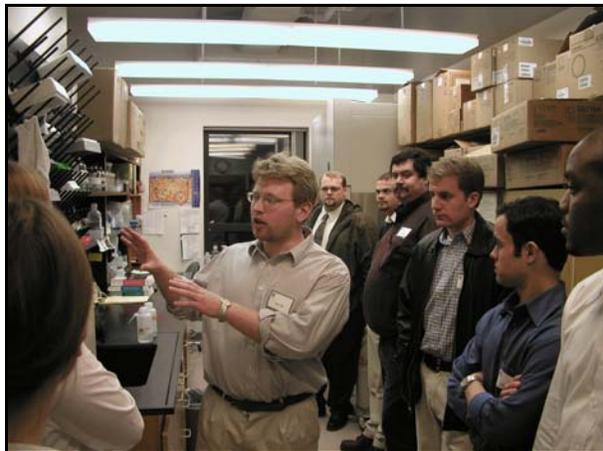
Student presentation posters were available for viewing during Saturday's programs.



A tour was given of several of KUMC's labs and facilities on Saturday after dinner.



Dr. Stephen Chapes sends a message during his presentation on Sunday.



Breakfast was offered in Hixson Atrium before starting Sunday's programs



Students present projects at symposium

Joseph Chapes
Editor

During the first annual symposium, 30 K-BRIN sponsored students presented their projects, in either lecture or poster form.

The four students who presented their projects in lecture form were Ryan Ausborn from Fort Hays State University, Crystal Cox and Carmelita Fryar from Wichita State University, and Clinton Seifert from Pittsburg State University.

Ausborn, who presented his project entitled “Regulation of Cardiac differentiation by Cell Adhesion Molecules,” was thrilled to be part of the symposium.

“A symposium constructed like this, where we could interact with other schools and talk with everybody, it’s phenomenal. It helps everybody keep on track, it gives everybody ideas and [makes them] inspired in science,” Ausborn said.

Ausborn appreciates the opportunities that K-BRIN has given him.

“Without the K-BRIN grants, there would be no way for me to do the research without taking extraordinary amounts of bank loans,” Ausborn said.

Cox, who presented her project called “Response of Gonadal Development and Reproductive



Ryan Ausborn (right) and his mentor, Duane Hinton.

Fitness in *Xenopus laevis* to Environmentally Relevant Exposures of the Herbicide Atrazine,” was also happy to be a part of K-BRIN.

“This wasn’t initially the study I was going to do, but I changed my study when I applied for the K-BRIN project. I’m really glad I did because I really like what I do, and I like what I am going to do in the future,” Cox said. “I really think it [K-BRIN] is a really good program because it helps people get interested in research, and a lot of people who initially get the grant continue to do it, whether or not they are being supported.”

Cox is glad to have had the chance to present her project in front of people.

“It is a good opportunity, especially if I do go into research, because I’m sure I’ll have to do it again in the future,” Cox said.

Fryar has found that K-BRIN has given her a chance to expand her interest in science.

“I have always been interested, but through my various classes, it seems to get



Crystal Cox

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Carmelita Fryar and her mentor, William Hendry

more interesting as you go up in levels and as you get more in-depth in classes. One of our mentors actually announced there was a possibility to do research and I jumped at the opportunity,” Fryar said.

Fryar presented her project titled “Immunobot Detection of Disrupted Protein Expression (STAT5A and Connexin-43) in the Neonatally DES-Exposed Hamster Uterus.”

K-BRIN has helped Fryar think about her future.

“There are now a lot of interesting things going on in science, with technological advances and everything. With my experience in K-BRIN, I have thought about going on to possibly grad school to do research. It has triggered my interest in research,” Fryar said.

K-BRIN has given Seifert a chance to expand on his interest in medical science.

“I have always been interested in the medical aspect of science, and I became interested in biomedical research so it could give me a broader understanding of what went on behind the scenes to make medicine possible,” Seifert said.

Seifert also enjoyed the chance to present his project in front of the people at the symposium.

“It was nice to be able to present in

front of these people. It was a friendly audience and it was nice to be able to talk to people who are interested in the same thing as I am,” Seifert said.

The other students who presented their projects in poster form from Pittsburg State included Brett Dunbar and Janae Jarred.

Students who presented projects from the University of Kansas, Lawrence, included Susan Banks, Andrew Giessel and Katie Mitchell. Participants from the University of Kansas Medical Center were Mila Ju and Josh Korosac.

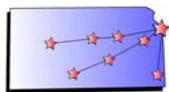
Amber Bledsoe, Ken Eilert, Carolina Leon, Jessica Morton, Carrie Norris, Judd Patterson, and Taryn Penabaz represented Kansas State University with poster presentations.

The other delegates from Fort Hays State University who presented posters were Jeff Berry and Andrea Keil. Washburn University had posters from Rachel Halpin, Dan Hulse, Jay Reed, and Joy Spicer.

The posters from Wichita State University were those of Jennifer Hanna, Paige Hatcher, Jennifer McCoy, Mauris Nnamani, and Benjamin Weaver. Christy Terry, from Emporia State University, also presented a poster.



Clinton Seifert and his mentor, Virginia Rider



Pilot, Bridging grants awarded

Information provided by Heiata Chapman
Administrative Officer

The K-BRIN administrative Core awarded ten Pilot & Bridging grants for year two of the K-BRIN program. \$249,555 was awarded to help investigators initiate new projects or acquire additional data to renew an expired NIH grant. The following is a list of investigators, in alphabetical order, who were awarded the grants and their project titles.

Awardee: Katsura Asano
University: KSU
Project: Control of translation initiation in fission yeast

Awardee: Susan J. Brown
University: KSU
Project: Structural Genomics of the Tribolium HOMC

Awardee: Dennis H. Burns
University: WSU
Project: Selective Bacterial Membrane Receptor for Antibiotic Use

Awardee: Scott S. Crupper
University: ESU
Project: Inhibitors of Staphylococcus aureus MurA1 and MurA2

Awardee: Elizabeth A. Friis
University: KU
Project: Development of Analog Soft Tissues for Mechanical Models

Awardee: Stevin H. Gehrke
University: KSU
Project: Elastin-Mimetic Triblock Gels for

Diverse Biomedical Use

Awardee: Steven M. Levine
University: KUMC
Project: Human ApoE 4 in CNS Demyelinating Diseases

Awardee: Gerry Lushington
University: KU
Project: Quantum/Classical Prediction of Nerve Agent Toxicology, Prophylaxis and Medical Therapeutics

Awardee: Tim Rozell
University: KSU
Project: FSH Receptor Variants in Bovine Follicles

Awardee: Sara E. Wilson
University: KU
Project: Vibration, Proprioception, and Low Back Disorders

K-BRIN Administration

Dr. Joan Hunt, Director
Dr. Paul Terranova, Associate Director
Dr. Stephen K. Chapes, Training & Mentoring Core Coordinator
Dr. Paul Kelly, Bioinformatics Core Director
Ms. Heiata Chapman, Administrative Officer
Mr. Joseph Chapes, Training & Mentoring Newsletter Editor

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Dr. Michael Madden, FHSU
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Dr. Virginia Rider, PSU
Dr. Michael Sarras, KUMC
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