

Saturday, January 28, 2006
Kresge Auditorium
9:00 a.m.



Meredith Center for Women in
Science and Mathematics

Winter Symposium at Meredith College



Dr. Rochelle Schwartz-Bloom
Department of Pharmacology, Duke University

"Pharmacology for High School (and earlier!): Integrating Biology and Chemistry"

Dr. Schwartz-Bloom has done extensive work with integrating pharmacology in the secondary science education curriculum.

The Schwartz-Bloom laboratory has completed 18 years of research investigating novel pharmacologic approaches to prevent neuronal death caused by cerebral ischemia associated with cardiac arrest and stroke. The group studied how GABA neurotransmission dysfunction contributes to the death of hippocampal neurons after ischemia in vivo or in vitro. Clinical trials based on her research findings are now in progress to prevent neuronal damage after acute stroke in humans.

Dr. Schwartz-Bloom's research program continues now exclusively in science education, which she started in 1996. As Director of RISE at Duke (Raising Interest in Science Education, www.rise.duke.edu), Dr. Schwartz-Bloom develops and provides novel science education curricular materials to the K-12 and college community. Dr. Schwartz-Bloom is the director of the Pharmacology Education Partnership (www.thepeproject.net), which developed a series of pharmacology- and drug abuse-related science education modules for high school biology and chemistry students.

Testing of over 15,000 high school students has revealed that student performance in biology and chemistry improves when they use the pharmacology curriculum developed by her team.

Dr. Schwartz-Bloom has also established the Pharmacology course for Duke University TIP, a summer program for gifted 9th and 10th grade students. Dr. Schwartz-Bloom provides several opportunities for Duke Pharmacology graduate students and post-doctoral fellows to obtain experience in teaching.

**Co-sponsored by: Center for Women in Science & Mathematics and
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