



Ohio's STEM Ability Alliance

STEM Degrees and Careers for Ohioans with Disabilities



OSAA E-NEWS

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Ohio's STEM Ability Alliance



OSAA has been established to increase the number of students with disabilities that earn degrees in the Science, Technology, Engineering, and Mathematics (STEM) fields. Funded by a National Science Foundation grant awarded to an alliance of Ohio institutions led by Wright State University, OSAA is

made up of cooperating regional "QUADS", each including a major 4 year university, a 2 year community college, regional public schools and STEM industry and government partners who work together to address OSAA goals.

OSAADAYTON (Wright State and Sinclair Community College) and the **Columbus QUAD** (Ohio State and Columbus State Community College) are implementing progressive programming to support the success of STEM students with disabilities at the 11th grade through college levels.

The OSAA founding academic institutions in the

Students with Disabilities visit Wright State and learn about STEM

Wright State University hosted a Campus Visit Day on Saturday August 8, 2009 for students with disabilities in grades 6-10. This all day event offered students and their parents an opportunity to learn more about college educational choices, especially in the Science, Technology, Engineering and Math (STEM) career fields. There were over 50 participants, including 18 students from across Ohio including Cleveland, Cincinnati and Columbus.



August 8 - Wright State University Campus Visit Day

State faculty and staff from the Office of Disability Services, the Learning with Disability (LwD) initiative and student volunteers from a local high school. A presentation by Dr. Shingledecker and

Mr. Vernooy outlined the opportunities available on campus for students with disabilities and gave an overview of the LwD initiative at Wright State, including the Starting Wright webcast program

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The day began with introductions of the Wright

The Ohio State University sets OSAA programs in motion

OSAA Beginner Student Learning Community (SLC). During Spring quarter 10 high school students completed our first student learning community. Students from Ohio State School for the Blind, Metro High School, Linden McKinley and the ACT program at Columbus State Community College (CSCC) participated. Thanks to the following staff and partners who participated in the SLC: Bianca McArrell, Jen Earley, Beth Middy, Chris Gerbetz, Caity McCandless, Steve Rissing, John Merrill, Nolan Crabb, Chris Andersen, Brenda Bruegge-



Mentoring Opportunities at OSU

mann, Jonathan Baker, Ken Petri, Diana Wolterman, Kathy Sullivan and Steve Jacobs.

Mentoring. On June 23, 19 people participated in mentor training using the iMentor electronic mentoring site. The mentor attendees included professionals from all OSU STEM fields. Approximately 35 mentors and 12 students have been recruited to date.

Faculty and Advisor Learning Community (FALC). On June 23, the FALC had its kick-off workshop with 29 faculty, advisors and project staff participating. Teresa Johnson at Johnson.134@osu.edu is the point of contact.

Students with Disabilities visit Wright State and learn about STEM (con't)

and Ohio's STEM Ability Alliance (OSAA). Students and parents learned about careers and opportunities in the STEM fields. They were also provided information about the physical assistance, academic help and accommodations available to students with disabilities at college.



IGERT Fellow Demonstrating Brainfingers

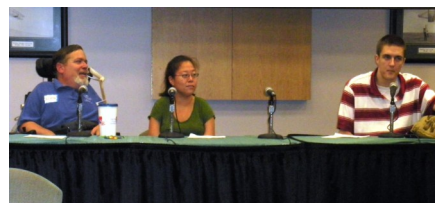
Dr. Michele Wheatly, Dean of the College of Science and Mathematics welcomed everyone to the university and began a campus tour to demonstrate examples of research being conducted in the STEM fields. The tour also included a dormitory visit to Hamilton Hall lead by



Computer Science and Engineering Lab

Joshua Foster. Between stops, the visitors explored the underground tunnel system which allows easy access to all campus areas without weathering the elements. Demonstrations and hands on presentations were provided at the Genomic Research Center by Dr. Michael P. Markey. IGERT fellows: Jennifer Border, James Leonard and Jeh Cooper from the Psychology Department demonstrated The Brain-Computer Interface lab. Dr. John Gallagher presented to the students the Computational Autonomy (Robotics) lab in the Computer Science and Engineering Department. The Wright State Office of Disabil-

ity's video *Striving & Thriving* was shown during lunch. This video is a guide for college-bound students with disabilities, filmed and produced on the WSU campus. The day concluded with an open group discussion led by a panel of current students with disabilities studying in STEM fields at Wright State. This gave participants the opportunity to



Panel Discussion lead by WSU students

ask questions about college and hear the panel's perception of campus life for students with disabilities. The campus visit day was supported by grant funding provided by the National Science Foundation for OSAA. Funding for Starting Wright was provided by the Johnson Scholarship Foundation.

OSAA opportunities at The Ohio State University

OSAA's Columbus QUAD is currently accepting applications from college students at OSU and CSCC to participate in an **Advanced Student Learning Community (ASLC)** for fall quarter. An informational meeting to notify students about Scholarship Opportunities, Mentoring, Ability Advising, Math Explorer and the ASLC will take place on September 30th on The Ohio State University campus.

OSU is currently recruiting high school and college students to take part in our **Math Explorer program**. The Math Explorer program is designed to prepare students who are taking college level math courses to meet successful completion of their courses. Interested individuals should contact us at osaa@osu.edu or 614-292-9920 for more information.

Faculty and Advisor Learning Community (FALC). Teresa Johnson, John Merrill and Steve Rissing will be starting a FALC in the Fall. If you know of any STEM advisors interested in participating, please contact Teresa Johnson at Johnson.134@osu.edu

Wright State University's Office of Disability Services received the 2009 Advocacy Award from the Governor's Council on People with Disabilities

Wright State OSAA Scholars participate in Health Research Internships

STREAMS is a competitive research training program open to college students from across the United States. It is funded by the National Institutes of Health to encourage members of underrepresented minority groups and students with disabilities to pursue careers in biomedical research. Three Wright State OSAA scholars were accepted and participated in this summer program. Jason Brewer, Kelly Leach and Lisa Daxer.

Lisa Daxer loves Broadway musicals, fantasy novels, and crochet, and she volunteers at Animals 4 Life, a local cat shelter. Her STREAMS research project was a study of the long-term cardiac effects of exposure to low doses of sarin, a nerve agent that may have caused the ill health of veterans with Gulf War syndrome. She learned how to do immunohistochemistry, interpret echocardiograms and EKGs, and analyze data from mice with implanted telemetry equipment.

Kelly Leach lives in Houston, Texas and a psychology major with a concentration in behavioral neuroscience. Her STREAMS research



Lisa Daxer working at her internship

project compared the efficiency of speech recognition software alone to using both speech recognition and a brain-computer interface as a means to make computer inputs.

Jacob Brewer currently lives in Pickerington, Ohio. He has a strong fascination for science and enjoys leadership responsibilities and activities within his community and on campus.

Jacob's research also addressed Brain-Computer Interfaces which permit control of a computer with

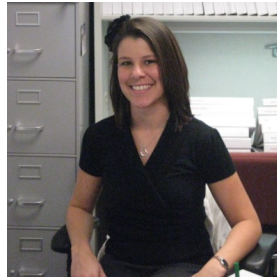


Jacob Brewer enjoys the lab environment

brain waves and other signals the body produces, such as electromyographic (EMG) signals generated by muscle tension primarily in the face and jaw.

Brittany Boyne named Wright State's new Ability Advisor

Brittany Boyne started July 1, as Wright State University's new Dayton Projects Coordinator for Ohio's STEM Ability Alliance. Brittany graduated in August 2006, with a Bachelor of Arts in Psychology from the University of Rhode Island. She earned her Masters of Education in Student Affairs in Higher Education Admini-



Brittany Boyne

stration from Wright State University, June 2009. Brittany serves as the Ability Advisor to OSAA Scholars at Wright State. She monitors these STEM students' academic and personal progress and provides them access to OSAA supports and degree enhancement opportunities.



WSU Learning Community for First Year OSAA Scholars

Wright State University is offering a new First Year Experience Learning Community course for freshman OSAA Scholars. OSAA staff members are teaching this course using interactive presentation methods and will cover many subjects of interest

for new college students with disabilities who are electing STEM majors. Topics will range from college life to various adjustment issues, study strategies, academic requirements and information, organization of the university, and STEM career exploration.

Welcome WSU OSAA Scholars!!!!

Fall quarter at Wright State saw the arrival of the first cohort of OSAA Scholars comprised of over 65 new and returning students. An informal welcome meeting was held on September 16th during the second week of classes. Scholars met the OSAA faculty and staff and discussed upcoming events and plans for an exciting new school year.



OSAA Scholars Meeting

