WRIGHT STATE UNIVERSITY



СН R O G R A M S 2 S R D D Ρ 0 R П П A A S 0 R П Community Service Through Research & Education

Greetings



right State University has always been connected to the community that supports it. A recent economic study stated that Wright State contributed more than \$350 million per year to the economy of the Dayton region. This Research and Sponsored Programs *Annual Report* highlights Wright State's commitment to the community through numerous service endeavors.

For example, the university has taken the lead in the development of the new STEM school that will prepare high school students for new and vibrant careers in science, technology, engineering, and mathematics. It is reaching out to the business community to foster entrepreneurship with a new Center in Innovation Management and with industry training at the Lake Campus. Collaborative research with our neighbor, Wright-Patterson Air Force Base, is also a priority, as evidenced by the establishment of the Center for Advanced Power and Energy Conversion. Wright State's College of Nursing and Health and the School of Professional Psychology contribute to the physical and mental health of our community. We are proud that every college at Wright State University has contributed significant service to the community.

This publication focuses on Wright State's strategic plan to expand community service. In the future, look for us to expand the amount of service rendered to the community and to increase our leadership responsibilities. America is undergoing a difficult transition from a manufacturing economy to a knowledge-based economy, and institutions of higher education can help with this transition. The University System of Ohio and Wright State University both agree that higher education is a critical piece of the infrastructure required in the new knowledge-based economy.

Dayton has always been a center of innovation, so we are confident that the region will thrive again. Although economic development is critical, we will not forget our efforts in the area of community service. Wherever we can contribute, we will be trying to help.

Jack Bantle Vice President for Research and Graduate Studies Wright State University

GEORGE HUANG

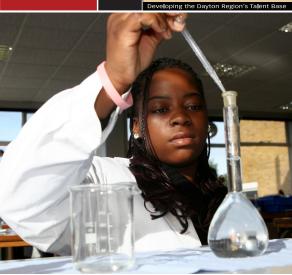
FOR GEORGE HUANG, chair of Wright State's Department of Mechanical and Materials Engineering, the world of plasma goes far beyond televisions in people's homes.

Innovative uses for plasma are just one of the topics for research in the Center for Advanced Power and Energy Conversion (CAPEC). CAPEC is the first joint research center for Wright State and the Air Force Research Laboratory (AFRL).

Working with AFRL and other Wright State faculty members and students, Huang studies plasma, an ionized or highly charged gas. While plasma has already proven to be an effective tool for sterilization in medical procedures, there are many possible uses yet to be discovered. "This is novel technology," said Huang.

Huang hopes to find partners in industry to create real-world applications for CAPEC's research. "Renewable energy is a big issue to come, such as more efficient fuel cells and batteries."





MICHELE WHEATLY & GREG BERNHARDT

WHEN IT OPENS IN AUGUST 2009, THE DAYTON REGIONAL STEM SCHOOL will be the first in the region and one of only eight STEM schools in Ohio. Two people sure to be present at the grand opening are Michele Wheatly, dean of the College of Science and Mathematics, and Greg Bernhardt, dean of the College of Education and Human Services.

Wheatly and Bernhardt, along with more than 30 education, business, industry, community, and government partners, were instrumental in bringing a STEM school to the Dayton region. "For us, it's almost an experimental situation where we can create something different and forward thinking," said Wheatly.

With fewer students interested in the STEM fields of science, technology, engineering, and math, a new and innovative approach was clearly needed. As Bernhardt explained, "We want to produce students who are well rounded, confident that they can get a job, and community involved. Together, we can elevate the chances of an economic recovery in the Dayton region."

SCOTT WILLIAMS

WHEN CORNERSTONE RESEARCH GROUP was thinking about introducing an alternative to duct tape to repair breaks, cracks, and tears in outdoor recreation equipment, they came to Wright State's Center for Innovation Management (CIM) for help.

CIM provides business research, analysis, and planning assistance to companies, inventors, and investors in the Dayton region who want to bring new products and technologies to the marketplace and create jobs.

"The most rewarding aspect of the job is achieving high levels of client satisfaction. Nothing makes me feel better than a client raving about the project we delivered or referring someone to us," said Scott Williams, executive director of CIM. "A close second would be the 'eureka' moments we get as a staff during our research when we find an answer that our client couldn't find."





DAVID JONES

DAVID JONES KNOWS what people are thinking. As a research associate in Wright State's Center for Urban and Public Affairs, Jones has conducted hundreds of surveys asking local citizens their opinions on topics ranging from street maintenance to public health.

Jones oversees the survey research laboratory where information is gathered for local governments and nonprofits. "This collaboration brings the community and university together to address issues in the region," said Jones.

For Jones, the most meaningful projects are ones where "we're involved with the next step." In an ongoing project with the Greene County Combined Health District, Jones is working with the county to form task forces to address concerns expressed by the community in a recent telephone survey.



DEBI SAMPSEL

STUDENTS AT WRIGHT STATE'S COLLEGE OF NURSING AND HEALTH ARE

experiencing a whole new approach to learning, thanks to a robot.

"We can beam nurses and faculty into the classroom from anywhere in the world," explained Debi Sampsel, executive director of the Nursing Institute of West Central Ohio. "A robot had never been used before in a nursing academic setting. We were the first."

One of Sampsel's most memorable experiences with the robot was during a virtual trip to an American military base in Germany. Using the robot, Sampsel brought nurses and administrators to the bedside of a wounded war veteran.

"We're creating an environment of learning that both younger and older students can relate to," said Sampsel. "We're empowering students to learn in a highly technological way."

JULIE MILLER

WORKERS IN ADVANCED MANUFACTURING can gain a competitive edge thanks to the SkillsTrac Training Consortium. This partnership links Wright State's Lake Campus, Edison Community College, Sinclair Community College, and Upper Valley JVS with industry partners to help workers acquire new skills.

"We had to engage both our educational partners and the community to make this happen," said Julie Miller, director of the Business Enterprise Center at Lake Campus. Funded by a grant from the Department of Labor, SkillsTrac trains workers in such areas as electrical safety, automation, and robotics. Twenty-nine companies have more than 200 workers enrolled in the program.

"We want to see more displaced workers get involved with this program," said Miller. "We're retraining for jobs that we know will be there when the economy turns around."





BETTY YUNG

BETTY YUNG FROM THE SCHOOL OF PROFESSIONAL PSYCHOLOGY'S ELLIS INSTITUTE

is one of the leading researchers of health disparities among minority groups living in the state of Ohio. She has been instrumental in developing initiatives to address these disparities, such as the Research and Evaluation Enhancement Program (REEP). Yung's work with REEP has included a series of conversations with local communities throughout Ohio.

"Small cities really appreciate the opportunity to discuss health issues," said Yung. "I saw leaders born through that process. It was empowering for them to express their needs."

In 2008, Yung and a team of researchers from the University of Akron, University of Cincinnati, and Case Western Reserve University received an Annual Ohio Health Policy Research Award from the Health Policy Institute of Ohio. This was the first Annual Ohio Health Policy Research Award for Wright State.

JO ANN FORD



ROBIN STEWART KNOWS WHAT IT MEANS TO BE HOMELESS. She lived in a homeless shelter for six months. She knows what it takes to battle and overcome an addiction. After going through rehab, she has been clean for eight months. Now Robin is sharing her experiences to help others as a volunteer at Mt. Olive One-Stop Center.

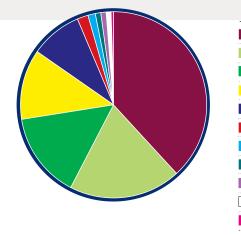
Mt. Olive One-Stop Center is operated by Substance Abuse Resources and Disability Issues (SARDI), a program of Wright State's Boonshoft School of Medicine. Jo Ann Ford is assistant director of SARDI. Ford and SARDI Director Dennis Moore secured grant money to open the center at Mt. Olive Baptist Church. The center provides HIV testing, education, and counseling.

"We reach out to people who are afraid to come in for testing or who don't want to go to the doctor," said Ford. Along with HIV and hepatitis C testing and awareness, Mt. Olive One-Stop Center offers a food and clothing pantry and a cyber café to assist people with job searching and resume writing.



Awards by Major Funding Source FY08

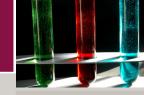
Awards by Campus Area FY08



Campus Area	Number of Awards	Amount Awarded
Boonshoft School of Medicine	148	\$26,397,357
Student Services-Uwide/Library	48	\$13,437,026
School of Graduate Studies	17	\$10,262,769
College of Engineering & Computer Science	129	\$8,451,476
College of Science & Mathematics	104	\$6,200,456
College of Education & Human Services	13	\$1,288,822
School of Professional Psychology	33	\$906,000
College of Nursing & Health	8	\$646,667
College of Liberal Arts	48	\$637,911
🗌 Lake Campus	15	\$608,260
Raj Soin College of Business	17	\$282,336
Total	580	\$69,119,080

Awards by Type and Campus Area FY08

College/School	Research	Instruction	Pub. Serv.	Other	Total
Medicine	\$16,973,757	\$816,958	\$8,237,590	\$369,053	\$26,397,358
University-Wide	\$0	\$5,680	\$430,421	\$13,000,924	\$13,437,025
Grad. Studies	\$1,159,645	\$0	\$22,705	\$9,080,419	\$10,262,769
Engineering	\$7,449,104	\$690,872	\$65,538	\$245,962	\$8,451,476
Sci. & Math.	\$4,767,878	\$1,162,385	\$5,413	\$264,780	\$6,200,456
Education	\$61,737	\$624,585	\$602,500	\$0	\$1,288,822
Prof. Psych.	\$136,002	\$344,600	\$314,619	\$110,779	\$906,000
Nursing	\$0	\$181,059	\$0	\$465,608	\$646,667
Liberal Arts	\$21,562	\$150,641	\$442,009	\$23,699	\$637,911
Lake Campus	\$0	\$0	\$0	\$608,260	\$608,260
Business	\$40,000	\$0	\$123,218	\$119,118	\$282,336
TOTAL	\$30,609,685	\$3,976,780	\$10,244,013	\$24,288,602	\$69,119,080

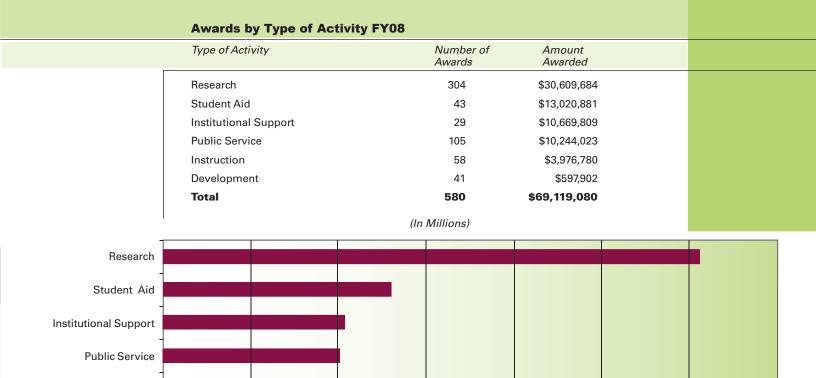


Awards by Federal Agency and Campus Area FY08

Instruction

Development

TOTAL	\$13,774,558	\$11,524,230	\$2,870,027	\$2,139,270	\$1,583,274	\$876,560	\$205,815	\$32,973,734
Grad. Studies								\$0
Lake Campus								\$0
Education								\$0
Business								\$0
Liberal Arts								\$0
Nursing		\$60,608						\$60,608
Prof. Psych.	\$89,123	\$84,990						\$174,113
Sci. & Math		\$403,074		\$456,561	\$560,566	\$336,423	\$163,815	\$1,920,439
Engineering		\$393,930		\$524,109	\$1,022,708		\$42,000	\$1,982,747
U-wide	\$12,985,451			\$126,475				\$13,111,926
Medicine	\$699,984	\$10,581,628	\$2,870,027	\$1,032,125		\$540,137		\$15,723,901
College/ School	EDUC	DHHS	VA	DoD	NSF	NASA	Other Fed	Federal Total



Note: Institutional support = academic support plus employer assistance plus institutional support plus student services Instruction = instruction plus non-credit instruction



Office of Research and Sponsored Programs 3640 Colonel Glenn Hwy. Dayton, OH 45435-0001

For more information, contact the Office of Research and Sponsored Programs at (937) 775-2425 or visit www.wright.edu/rsp



