



# UW SYSTEM OUTLOOK

*Emerging ideas and issues in the UW System*

## **Access and Affordability**

The UW System Board of Regents is committed to improving access to a higher education for all students. Part of this commitment is the Board's interest in reducing financial barriers, especially for the most financially needy Wisconsin families, so students can attend a UW campus and pursue their dream of a college education.

The importance of college access and success has never been greater to young people as individuals and to the United States as a nation, and we must continue to support and preserve access to the resources provided by all forms of federal student aid.

### *Essential Financial Aid Programs*

The Pell Grant and other federal student financial aid programs are essential to keeping a college education accessible to all students in the UW System. UW System supports the highest possible funding level for the maximum Pell Grant award and the highest possible increase in the Pell Grant program.

UW System also supports two new, important Federal programs, the Academic Competitiveness and SMART Grants.

Further, UW System supports continued funding for the campus-based programs: Supplemental Education Opportunity Grants, Federal Work-Study, and Perkins Loans. The Fiscal Year 2008 budget proposed by the President cuts Federal Supplemental Educational Opportunity Grants and provides no funds for the Perkins Loan Federal Capital Contribution. If not funded, these cuts will create barriers for students to access higher education. In 2005-06, nearly 15,000 UW System students received \$10 million in SEOG funds for an average grant of \$676; and almost 17,000 Perkins Loan recipients in the UW System received an average award of \$1,493.

UW System strongly supports funding for TRIO and GEAR UP, programs that are critical to preparing and supporting students from disadvantaged backgrounds to succeed in higher education.

At a time when student loan aid comprises the largest component of financial aid to UW students, keeping student interest rates low also makes college more affordable.

### *UW System Financial Aid Highlights for 2005-06*

- A total of 105,523 students received some form of financial aid in 2005-06. This is 65% of all students enrolled in the UW System.
- In 2005-06, federal sources provided 77% of financial aid, down from 85% a decade earlier.
- The Pell Grant program provided \$62.3 million to 25,598 Wisconsin resident undergraduates in 2005-06.
- Pell Grants were awarded to 22% of resident undergraduates in 2005-06. The average grant was \$2,434.
- The average loan debt for a Wisconsin resident who had loan debt at graduation and received a bachelor's degree in 2005-06 was \$19,809.
- The student loan default rate for the UW System was 1.6% in fiscal year 2004, well below the national average of 5.1%.

## **Academic Research and Student Collaboration**

The UW System appreciates the investment that the Federal government makes in basic and applied research through the National Science Foundation and other key federal research agencies. The UW System also appreciates the investment that the Federal government makes through programs at the U.S. Department of Education and NSF that inspire students and support faculty in developing and testing new curricular models that build capacity for research and innovation.

We support strengthening federal programs that assist colleges and universities as they educate the next generation of science and technology leaders, conduct basic and applied research to meet the long-term challenges of the state and the nation, and spin-off new discoveries from university research for the benefit of all Americans.

### ***Foundations for research excellence***

The flagship campus of UW-Madison is internationally renowned for the quality, depth, and breadth of its academic research and development. The 25 UW campuses outside Madison are perhaps lesser known, but are largely untapped sources of innovation and economic dynamism.

According to the National Science Foundation Baccalaureate Origins Database, the UW-Eau Claire Chemistry Department, over a recent 10-year period, was the No. 1 producer of eventual Chemistry Ph.D.'s among 550 public and private comprehensive universities. UW institutions are major feeders for developing a pipeline of well-trained students interested in a career in the sciences.

Recognizing the importance of research opportunities for developing the careers of these young scientists and engineers, UW-Eau Claire created the Materials Science Center, a state of the art facility made possible, in part, by federal grants. The Materials Science Center enables students to engage in collaborative research with faculty and gives regional businesses access to instrumentation and expertise that greatly enhances their analytical, research and development capabilities. The Materials Science Center is a cornerstone of the partnership between UW-Eau Claire, UW-Stout and Chippewa Valley Technical College to develop cutting-edge nanoscience and nanotechnology programs and industries in the Northwest Wisconsin region.

U.S. News and World Report's "America's Best Colleges" ranks UW-Eau Claire in the category of excellence for undergraduate research and creative expression. This ranking is just one that demonstrates the general quality and success of the undergraduate and graduate student-faculty collaborative research embedded in the educational mission of all UW institutions.

### ***Innovation at work***

The WiSys Technology Foundation is a non-profit technology transfer organization designated to promote research and development in the UW System. WiSys assists UW campuses outside Madison in moving university discoveries to industry through intellectual property protection and marketing. Its July 2006 report demonstrates the diversity of academic research and development that is already “on the shelf” and available for licensing or entrepreneurial endeavors.

UW technologies are available in seven major areas: research tools, nanotechnology, medical devices, pharmaceuticals, automobile technologies and food and water technologies. They include:

- A genetic breakthrough that could greatly increase the expression of proteins in cultured insect cells, aiding researchers in their field.
- New methods for producing nanocrystalline zinc sulfide, which has many commercial uses, including computer monitors.
- Products for people with disabilities, such as a lightweight lifting device, a wheelchair- accessible refrigerator, and a height-adjustable cook-top for both commercial and residential use.
- New diagnostic tools for nerve and muscle functions, as well as body-fat composition.
- Broad spectrum antibiotics derived from the “Sweet Fern,” a woody shrub that grows in the Great Lakes region.
- Software for design and testing of lithium ion batteries, which provide one of the best energy-per-weight ratios for rechargeable batteries.

The National Academies report, “*Rising Above the Gathering Storm,*” identified several key actions to maintain the nation’s competitiveness. Here in Wisconsin, UW faculty are training students for math and science careers, conducting basic and applied research and outreach, and bringing discoveries to the market for the good of the nation.

UW System institutions are strongly positioned, through their missions of education, research and outreach, to respond to this important issue and help maintain our nation’s competitive edge.

## **Biofuels/Bioenergy**

The UW System stands to be a national leader in advancing bioenergy research and discovery. The UW System has hundreds of faculty, staff and students working on projects related to bioenergy in disciplines that encompass biology, agriculture, engineering, natural resources and the social sciences.

UW scientists across the state are generating new knowledge that will help expand our potential to harness microbial and plant systems for cost-effective renewable energy production.

### ***Wisconsin Bioenergy Initiative***

Recently, the University of Wisconsin System launched its Wisconsin Bioenergy Initiative (WBI), led by Dean Molly Jahn and researchers at the UW-Madison's College of Agricultural and Life Sciences. The initiative is an exciting and first-of-its-kind public-private partnership that showcases and builds on the UW System's considerable efforts in bioenergy research, outreach, and training.

The partnership includes the educational, industrial and public sectors, and serves as a point of coordination between colleges at all of the UW campuses. The WBI was created in response to the announcement that the U.S. Department of Energy will invest \$250 million in two new multidisciplinary bioenergy research and technology development centers.

### ***Going "green"***

In late 2006, UW System brought together faculty, state officials and private industry experts to discuss bioenergy and biofuels, present and future initiatives, research and development, and opportunities for collaboration. Several faculty members presented about research regarding plant and microbe-based isoprene production, super critical carbon dioxide breakdown of lignocelluloses, and the development of switchgrass.

The state is also working to become the nation's leader in energy independence and to create thousands of jobs for Wisconsin. Governor Doyle has proposed the next major step forward for energy independence by dedicating \$40 million for renewable energy like solar, wind, hydrogen, biodiesel and ethanol. Governor Doyle has set a goal for Wisconsin to generate 25 percent of its power and transportation fuels from renewable sources by 2025.

The Governor also recently announced that four University of Wisconsin System institutions will be part of a pilot program to become energy independent by 2012.

Information about the WBI initiative and other UW System initiatives can be accessed at <http://www.cals.wisc.edu/wbi/index.php> .