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#### **Definition**



The Wisconsin Institutes for Discovery are twin institutes, one public and one private, to be constructed in the heart of the UW-Madison campus.

- Public: Wisconsin Institute for Discovery (WID)
- Private: Morgridge Institute for Research (MIR)

They will serve as a hub for interdisciplinary research spanning biotechnology, nanotechnology, and information technologies which will lead to the development of new biomedical treatments and technological applications aimed at enhancing human health and welfare.

# **The Location**



 encompasses 1300 block of University Avenue



 surrounded by the Engineering College, Computer Science, Chemistry, Biotechnology, and Biochemistry



Street level view from southwest

 will accommodate approximately 106,000 ASF in research space, including laboratory (wet and dry), research support, core facilities, and offices

#### Mission of WID

The mission of the Wisconsin Institute for Discovery (WID) is to enhance human health and welfare by facilitating interdisciplinary research spanning biotechnology, nanotechnology, and information technologies. This research will lead to discoveries of new biomedical treatments and technological applications. WID will engage faculty members from across the campus and all divisions of the university in creative collaborative research, education, and outreach.



#### **Context for the Institutes at UW-Madison**

- •UW-Madison has a long history of interdisciplinary research centers that bring together faculty from multiple departments in pursuit of a common goal. The campus currently has more than 200 interdisciplinary programs, departments, centers, and institutes, and hundreds of faculty actively involved in interdisciplinary teaching and research.
- The campus-wide Cluster Hiring Initiative has brought together 49 clusters of faculty who work across departmental lines on new frontiers of knowledge that cross traditional departmental and disciplinary boundaries.
- No entity on the UW-Madison campus currently integrates biotechnology, nanotechnology, and information technologies into a single program.

## **Mileposts**

**2004** Governor James Doyle proposed the formation of the Wisconsin Institutes for Discovery, a research enterprise that would strengthen the state's position in science and technology, and stimulate the economy.

April 2006 Announcement of gifts: \$50 million from John and Tashia Morgridge, with matching gifts from the state of Wisconsin and WARF.

<u>February 2007</u> Announcement of eight seed grant awards involving more than 60 faculty and staff researchers from 25 UW-Madison departments.

<u>April 2007</u> Graduate School APC approves proposal to established WID as a Graduate School Center.

October 2007 University APC approves proposal; WID is now established as a Graduate School Center.

### **Seed Grants**

- early detection of diseases such as Polycystic Ovary Syndrome
- understanding the neurobiology of hyperactivity
- repairing the heart using stem cells
- reducing inflammation associated with tumors, asthma, arthritis, inflammatory bowel disease
- restoring vision and developing new optical devices
- healing wounds
- new methods for drug discovery for neurological diseases
- reducing the gap in school performance of disadvantaged children



#### Planning for WID Began in 2006

Ad Hoc Steering Committee

Consultation with schools, colleges, and centers on the UW-Madison campus that have overlapping interests with WID began with the ad hoc Steering Committee that met monthly during 2006.

The Steering Committee included Provost Patrick Farrell as well as the deans and/or associate deans of the Graduate School, College of Engineering, School of Medicine and Public Health, and School of Education, and faculty from the College of Letters and Science, School of Medicine and Public Health, College of Engineering, and the College of Agricultural and Life Sciences.



# **Establishment of WID Program Committee**

In the fall semester of 2006, the Provost established the WID Program Committee and the WID Building Committee, which replaced the ad hoc Steering Committee.

# The WID Program Committee

- chaired by Marsha Mailick Seltzer
- charged with the task of developing the program of WID and establishing the Institute as a unit of the Graduate School

The WID Building Committee

- chaired by Carl Gulbrandsen
- charged with designing and building the WID/MIR building.



# **The WID Program Committee**

Marsha Mailick Seltzer, Chair
Rose Barroilhet Consultant WARF

Laurie Beth Clark Associate Vice Chancellor for Faculty & Staff, and Professor of Art Paul DeLuca Vice Dean for Research, SMPH, and Professor of Medical Physics

Walter Dickey Professor, Law School

Susan Ellis

Weismer Associate Dean for Research, L&S, and Professor Communicative Disorders

Michael Falk Chief of Staff, WARF

Adam Gamoran Director, Wisconsin Center for Educational Research and Professor of Sociology

Jo Handelsman Chair, Department of Bacteriology, CALS
Miron Livny Professor of Computer Science, L&S
Richard Moss Professor of Physiology, SMPH

Donna Paulnock Associate Dean for Biological Sciences, Graduate School, and Professor of

Medical Microbiology, SMPH

Paul Peercy Dean, College of Engineering and Professor of Materials Science and Engineering

Chris Thorn Assistant Scientist, Information Technology, WCER

Herb Wang Associate Dean for Natural Sciences, L&S, and Professor of Geology and

Geophysics



# **WID Faculty**

- Twenty faculty PIs will have labs at WID and have tenured or tenure-track appointments in academic departments.
- WID faculty will locate their labs fully in the WID building and will be committed to contributing to the scientific and intellectual climate of WID
- "Rolling horizons model": PIs who have their lab space in WID will be able to occupy that space as long as their work is relevant to the mission of WID, productive, and funded.
- Some space in WID will be reserved for temporary assignment to innovative short-term research projects, visiting scientists, and scholars/artists in residence.



#### How will the 20 Pls be Chosen?



# Research Theme Competition

WID lab floor rendering

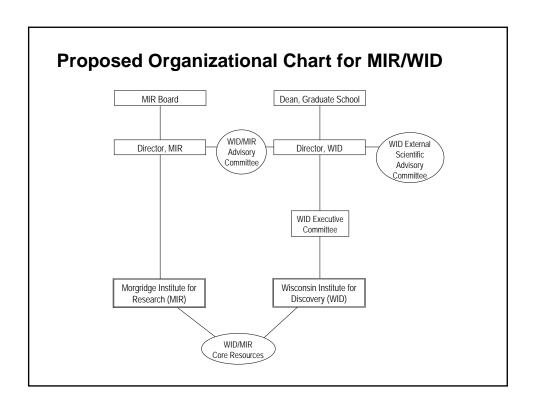
- Faculty will be invited to write proposals for research themes. Each theme will articulate an area of research that brings together two of the three "thrust" areas of WID biotechnology, nanotechnology, information technology.
- Each theme will ultimately involve a group of four faculty members: one will be a current member of the UW-Madison faculty who is the author of the theme proposal, and three will be newly-recruited to the UW-Madison.



# **Research Theme Competition**

- The Provost, Dean of the Graduate School, and WID Director will appoint a faculty committee to review proposals for research themes. Proposals will be due on November 1, 2008 and the competition winners will be selected by the end of the 2008-2009 academic year.
- Recruitment of the three additional members of each research theme will span a several-year period, with one new member recruited in 2009-2010, the second new member recruited in 2010-2011, and the third new member to be recruited in 2011-2012.
- The goal: to fully occupy WID 3 to 4 years after it opens.





#### WID Research Environment: A "Collaboratorium"

- Each research theme will conduct collaborative interdisciplinary research spanning two of the three basic areas of WID (biotechnology, nanotechnology, information technology).
- Research resources will be maintained as communallyaccessed space to the extent possible.
- WID will provide a context in which the interdisciplinary collaborative process can be studied.
- The Wisconsin Institutes for Discovery will require collaborative leadership and operation to unite WID and MIR.



#### **Additional Basic Principles**

- WID is open to faculty of all departments and divisions of UW-Madison
- WID will not compete with existing campus resources but rather will complement and support them in meeting the needs of WID PIs.
- WID's budget will not draw resources away from any current entity of UW-Madison.
- PIs will be expected to compete for extramural funding.
- WID is committed to creating a climate supportive of diversity.



#### **Core Facilities**

Three types of core facilities are envisioned:

- WID will be home to innovative cores not currently available on the UW-Madison campus that will facilitate the WID mission.
- 2. WID will leverage cores elsewhere on campus, thereby avoiding duplication and competition, maintaining flexibility for WID, and maximizing space for research.
- 3. Basic cores needed to operate WID labs will be located in the building, as will cores that are available elsewhere on campus but are currently at maximum capacity.



# **WID Budget and Funding**

- WID will have a university core budget to support WID administration and some portion of WID core facilities.
- No resources currently allocated to other units will be reallocated to the WID budget.
- Projects housed at WID will be administered by WID, with WID receiving the share of the capital exercise from these grants. Some capital exercise dollars will be returned to individual PIs, while other cap ex dollars will be used to upgrade WID scientific infrastructure.



#### **Evaluation**

- In the first five years of operation (2010 2015), WID will engage in intense self-study and outside evaluation.
- Faculty from the social sciences who have expertise in the interdisciplinary process and in collaborative research will be invited to use WID as a living laboratory for their own research.
- The Director will prepare a strategic plan and issue annual reports to assess the extent to which the objectives of the strategic plan are achieved.
- The WID External Scientific Advisory Committee will meet on an annual basis to assist the Director in establishing goals, assessing progress, and evaluating the achievements of WID.



