UW–Madison: Enhancing Excellence, Overcoming Obstacles, Pursuing Partnerships

Chancellor Jennifer L. Mnookin
University of Wisconsin Board of Regents
Enhancing excellence in education, research, and outreach
Excellence in education

Convocation 2022

Winter Commencement 2022
Serving more students and improving outcomes

• #6 among U.S. public universities in six-year graduation rates

• Average time-to-degree down again: 3.85 calendar years

• More than 60% of undergrads graduate with NO student debt

• Recent study: Five U.S. universities produce one in eight of the nation’s tenure-track professors: UC Berkeley, Harvard, Michigan, Stanford, UW–Madison
New faculty recruitment

<table>
<thead>
<tr>
<th>Year</th>
<th>New Faculty</th>
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<tbody>
<tr>
<td>2012-13</td>
<td>107</td>
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<td>2013-14</td>
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<td>2015-16</td>
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<td>2016-17</td>
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<td>2019-20</td>
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<tr>
<td>2020-21</td>
<td>63</td>
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<td>2021-22</td>
<td>168</td>
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Professor Monica Kim

2022 MacArthur Fellow
Excellence in research
PANTHER
World-class centers and institutes (including, among many others):

- Carbone Cancer Center
- Institute for Research on Poverty
- Waisman Center
Excellence in outreach
TEACHER PLEDGE

FULL IN-STATE
- TUITION
- TESTING
- LICENSING

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учащиеся
Thank you, Chancellor Emerita Rebecca Blank!
Overcoming obstacles
Five challenges

1. Creating a physical infrastructure to support ongoing excellence
2. Helping our students thrive as learners, community members, and people
3. Bringing outstanding students into Wisconsin and keeping top students in the state
4. Growing the research enterprise
5. Making the case for increased state investment and flexibilities
Obstacle #1

Creating the physical infrastructure to support ongoing excellence
Movement into STEM

Trend in Juniors and Seniors with STEM Majors

Fall Semester
Reinvestments falling behind peer institutions

Average annual spend over 5 years to recurring and capital reinvestment target
(Academic and Research Space Only)

A-G represent a pool of universities: Cornell University, Duke University, Johns Hopkins University, MIT, University of Pennsylvania, University of Pittsburgh, and University of Washington
Meeting demand for engineering
Meeting demand for computer and data science
Growth in more than just STEM
Creating a new home for Music and Art
Irving & Dorothy Levy Hall
Obstacle #2:

Helping our students thrive as learners, community members, and people
Progress toward a more diverse campus

• Highest-ever number (907) and share (39.5%) of women faculty

• Highest-ever number (606) and share (26.4%) of faculty of color

• Highest-ever number (239) and share (10.4%) of faculty of color from historically underrepresented groups
Obstacle #3:

Bringing outstanding students into Wisconsin and keeping top students in the state
Projected percent change in number of high school graduates: 2013-2029

Percentage of Wisconsin students enrolling at UW–Madison following HS graduation
Share of our grads staying in Wisconsin to work

- 2016-17 grads employed in WI: 37%
- 2021-22 grads employed in WI: 48%
Obstacle #4:
Growing the research enterprise, creating more knowledge with impact on the world, and enhancing the ways we link to industry
Top 10 universities by research expenditures

1. Johns Hopkins University
2. University of California, San Francisco
3. University of Michigan
4. University of Pennsylvania
5. University of Washington, Seattle
6. University of California, Los Angeles
7. University of California, San Diego
8. University of Wisconsin–Madison
9. Stanford University
10. Harvard University
10-year growth in industry R&D expenditures at UW–Madison
Obstacle #5:

Making the case for increased state investment along with needed flexibilities to let us operate efficiently and effectively
UW–Madison is a great investment!

• We support one out of every 13 jobs in Wisconsin

• $31 billion annual economic impact

• Every state dollar invested returns $26.73

Source: NorthStar Analytics, LLC, 2021
Creating resources for the future
State support for higher ed: 10 Years

% change in state spending per student, 2011-2021
(adjusted for inflation)

Change in resident undergrad tuition at Midwest flagships, 2018 to 2022

Tuition & Fees (2022)
- Illinois $17,138
- Michigan $16,736
- Minnesota $15,859
- UW–Madison $10,796
Flexibilities to make us more nimble
Pursuing partnerships
Opportunities to improve education
Opportunities to improve research
Life sciences: An amazing success story

Top 25 U.S. markets with most life science workers

All of these markets are at least 3 times the size of Madison with metro populations over 2 million.
National leadership in the life sciences: Cryo-electron microscopy
UW - Morgridge Cryo-EM Breakthroughs in Viral RNA Replication Complex Imaging

Regular Electron Microscopy

Cryo-EM Tomography

Cryo-EM Single Particle Analysis

Atomic Resolution

Zhan et al. (2023) PNAS
Looking ahead: Building on our strengths

• Clean energy and energy storage
• Fusion research
• Climate change and sustainability
• Quantum science
• Semiconductors
• Application of artificial intelligence and machine learning
Opportunities to improve access
Bucky’s Tuition Promise: 2018 vs. 2022

937 new freshmen & transfer students covered under the program representing 66 of 72 WI counties.
Bucky's Pell Pathway
Thank you