



# Mission Fulfillment Committee

October 2017

October 12, 2017

1:30 p.m. - 4:30 p.m.

Boardroom, McNamara Alumni Center

## MIS - OCT 2017

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# BOARD OF REGENTS DOCKET ITEM SUMMARY

**Mission Fulfillment**

**October 12, 2017**

**AGENDA ITEM:** Diversity and Inclusion: Campus Climate, Faculty, and Graduate Education

**Review**

**Review + Action**

**Action**

**Discussion**

*This is a report required by Board policy.*

**PRESENTERS:** Karen Hanson, Executive Vice President and Provost  
Scott Lanyon, Vice Provost and Dean of Graduate Education  
Valery Forbes, Dean, College of Biological Sciences, Twin Cities campus  
Sean Garrick, Professor, Mechanical Engineering, Twin Cities campus  
Fernando Delgado, Executive Vice Chancellor for Academic Affairs, Duluth campus

## PURPOSE & KEY POINTS

The purpose of this item is to review the academic context and current efforts related to diversity and inclusion across the University system. Specifically, the discussion will address:

- Campus climate
- Faculty recruitment
- Graduate education, including postdoctoral education

Leaders from the Duluth and Twin Cities campuses will provide examples to illustrate the range of efforts and commitment across the University. The committee will consider how to best support continued progress toward the goals for a diverse environment that supports academic success and excellence for all.

The docket includes detail on a number of diversity and inclusion initiatives and projects across the institution.

## BACKGROUND INFORMATION

Equity is a core value for the public University of Minnesota, and diversity – of students, faculty, and staff – is critical for the achievement of our University goals for teaching and learning, research and discovery, and outreach and engagement. The University of Minnesota-Twin Cities Strategic Plan envisions a university that is “preeminent in meeting the grand challenges of a diverse and changing world.” The plan is unambiguous in noting the strategic need to diversify the faculty:

“We cannot expect to be preeminent in addressing the challenges of a diverse and changing world unless the University of Minnesota can draw on the full range of talents, expertise, perspectives, and interests of diverse researchers and teachers nationally and globally. A

diverse faculty is essential to providing our students with the knowledge and perspectives needed for life, work, and citizenship in the globalized 21<sup>st</sup> century and is crucial to innovative field-shaping research. Consistent with our mission, institutional values, and strategic vision, the University must be a place where all faculty feel welcome and encouraged to thrive. We must aggressively and deliberately promote diversity in faculty recruiting and in our ongoing practices of faculty development and support.”

The University has consistently defined diversity as not only a social goal but also a necessary condition for excellence. An academy of the highest stature, as measured against ideals of both academic excellence and public impact, is one in which excellence and diversity are inextricably intertwined – not either-or, but both-and. The University realizes that excellence is truly achievable only in an environment that fully supports engagement with diverse cultures and perspectives.

For some time, the University has understood itself to be an institution where equity and diversity must be woven into the work and the lives of every student, faculty, and staff member. As core institutional values, equity and diversity can, and will, infuse and inform thinking, policies, and practices throughout the University – from mission statements to strategic plans and from student admissions to faculty hiring, promotion, and tenure.

The responsibility for equity and diversity is shared across the University—it should help organize everyone's everyday work. Diversity goes well beyond numerical representation and access. It enriches campus life, the academic experience, and the processes of research and discovery. Equity and diversity are critical to campus culture and climate, and fundamental to the mission of the University.

As part of its commitment to creating a welcoming and affirming climate for everyone, the University understands it has a role in service and support to, among others:

- American Indians and other indigenous populations.
- People of color, including underrepresented groups and new immigrant populations.
- People with both apparent and non-apparent disabilities.
- People of various gender and sexual identities and expressions.
- First-generation students from economically disadvantaged backgrounds.

The University also addresses issues of access and climate for individuals who might encounter barriers based on their religious expression, age, national origin, ethnicity, or veteran status, and it recognizes that most people may claim more than one identity.

## Campus Climate

The University supports a welcoming campus climate in which all persons are treated with respect. Toward that end, the University facilitates, sustains, and advances a culture that supports equity, inclusion, and community by fostering dialogue, respect, and personal growth. These purposeful activities and an acknowledgement of shared responsibility provide an environment that allows everyone the opportunity to succeed.

Past and current grassroots efforts led by various campus groups concerned about the experiences of marginalized groups at the University have raised climate as a pressing issue, and it was an issue addressed as well by the Twin Cities campus strategic planning process. In 2014, President Kaler charged senior leaders on the Campus Climate Workgroup to study climate on the Twin Cities campus – what's working, what resources are in place, and what needs to change. A report detailing

those efforts and their short- and long-term recommendations was released on January 15, 2015. Campus climate work continues to focus on implementing those recommendations to improve the climate for faculty, staff, and students, working as well to foster continued campus community engagement and proactive communications on salient issues.

## **Faculty Diversity**

Building, developing and retaining a diverse faculty is crucial to the University's land-grant mission of advancing excellence in teaching, research, service, and community engagement. The institution's commitment to enhancing the diversity of its faculty is grounded on evidence that research and teaching are enriched by a variety of perspectives and multiple ways of knowing and being in the world. When diversity of thought and experience is a core principle undergirding all teaching and research, the university community benefits in the following ways:

- Academic excellence is advanced because students are better prepared to live in and contribute to our increasingly global, pluralistic, and multicultural society.
- Communities are strengthened because all members are judged by their character and contributions.
- Teamwork, respect, productivity, collaboration, and thus innovation are fostered.
- Our economic well-being is strengthened as we both support the success of and utilize the skills of those from different ethnic backgrounds, cultures and communities.
- The University is seen as a more attractive and engaging place of learning and teaching for excellent students and faculty of color.

## **Diversity in Graduate Education**

Increasing the quality of graduate education is the Graduate School's primary goal. Graduate School leaders have identified increasing the diversity of students receiving graduate degrees as the way in which the Graduate School can best achieve that goal. History shows that disciplinary advances are most likely to be made when new perspectives are added. One institutional goal is to produce change agents – alumni whose careers will help society address today's grand challenges. Those change agents will need to function in a diversity of communities, and it is appropriate they be drawn from those same diverse communities.

To achieve an increase in the diversity of students receiving graduate degrees, the University needs to make progress in both recruitment and retention. The Graduate School Diversity Office has for years supported colleges and individual graduate programs in their recruiting efforts through use of the DOVE Fellowship Program and has helped create a welcoming campus through the Summer Institute and Community of Scholars program. The Graduate School will continue those efforts but augment them with new initiatives focused on improving graduate advising, improving graduate program leadership, preparing students for a diversity of career paths, creating welcoming local communities, and establishing a graduate student alliance for diversity and inclusion.

**University of Minnesota Board of Regents  
Mission Fulfillment Committee  
October 12, 2017**

**Diversity and Inclusion: Campus Climate, Faculty, and Graduate Education –  
Select Initiatives and Projects**

Every campus and college at the University is engaged in significant diversity and inclusion efforts. Below is a small sample of the many initiatives and projects related to campus climate, faculty, and graduate education across the University. During the formal presentation, faculty administrators will highlight specific efforts at the Duluth campus and the College of Biological Sciences.

**Department Head and Chair Training**

The Office of the Executive Vice President and Provost offers department head and chair training. In partnership with the Office of Equity and Diversity, the vice provost for faculty and academic affairs works to enhance department executive officer leadership training to incorporate best practices for recruiting, retaining, rewarding, and ensuring a welcoming climate for all faculty.

**National Center for Faculty Development & Diversity (NCFDD)**

NCFDD is a nationally recognized center dedicated to helping faculty, post-docs, and graduate students make successful transitions throughout their academic careers by providing professional development, training, and mentoring. The University's membership is part of its ongoing commitment to recruit and support outstanding faculty and graduate students who advance academic excellence, facilitate reciprocal engagement, and develop scholarship that meets the grand challenges of our world. NCFDD resources are applicable across fields of inquiry and focus on a range of topics that include strategies for increasing productivity, writing grants, overcoming academic perfectionism, developing a daily writing plan, managing time more effectively, maintaining work-life balance, and resolving conflicts, among others. The benefits of NCFDD membership include greater success with publications and securing external funding for research, increased confidence as an independent scholar, healthier relationships with departmental colleagues, and more. With UMTC's institutional membership in the NCFDD, UMTC's graduate students, post-docs, and faculty can sign up to receive institutional resources at no cost. These resources are soon being extended to all campuses in the system.

**Advancing Diversity in Recruiting and Hiring**

A diverse workforce helps broaden perspectives, creates a more inclusive campus, increases student and employee retention, and enhances institutional quality. The Office of Human Resources employs diversity recruiters to develop pipelines of talent and strengthen the University's relationships with diverse communities, organizations, and campus groups. Under the theme "Together, We'll Change the World," the University participates in diversity and veteran career fairs, has held its own virtual career fair, supports applicants in their job search, and consults with departments across the institution to promote best practices in hiring, including in key student-facing positions.

**Employee Engagement**

The employee engagement survey measures aspects of the workplace environment and is a tool for leaders across the system to assess differences in engagement and seek improvements based on hard data and research-supported best practices. University leadership, along with collegiate deans, use the survey to facilitate discussion with campus communities such as the Campus Climate Work Group, the Faculty Consultative Committee, and the Diversity Community of Practice.

## **Academic Leadership Development**

The University uses external and internal academic leadership programs. Best practices are disseminated through a variety of programs, including new faculty orientation, comprehensive dean reviews, the Big Ten Academic Alliance's Academic Leadership program, the Big Ten Academic Alliance's Department Executive Officers program, and APLU leadership training opportunities. Additional peer networking activities include the Academy of Distinguished Teachers, distinguished faculty luncheons and lectures, department chairs and heads meetings, annual promotion and tenure recognition events, and various faculty awards ceremonies.

## **Implicit Bias Trainings for Faculty and Staff Involved in Hiring an Admissions Decisions**

The Implicit Bias Education Program is a collaborative effort supported by the Office for Equity and Diversity, the Provost's Office, the Graduate School, the Office of Human Resources, and the Office for Undergraduate Admission. Training topics include identifying and challenging implicit bias in faculty search committees and identifying and challenging implicit bias in graduate program decisions.

## **Certificate Workshops**

Equity and Diversity Certificate Workshops help participants develop tools necessary for advancing equity and diversity in all aspects of their personal and professional lives. The workshops are free and open to all students, faculty, staff, and alumni on all University campuses. Workshops count toward the Equity and Diversity Certificate and include topics such as being an ally, leadership, designs that increase access, facilitating challenging conversations, women, racism, and disabilities.

## **Diversity Community of Practice**

The Diversity Community of Practice is a grassroots community of faculty and staff from collegiate units across the Twin Cities campus. Its purpose is to develop and leverage personal, professional, and technical expertise, thereby effectively creating innovative strategies that ensure successful implementation of equity and diversity goals at the University. Specific goals include connecting college equity and diversity strategies to the strategic plan, changing the status quo, sharing resources, and using outcomes-based assessment to make decisions and measure success.

## **Institute for Diversity, Equity, and Advocacy (IDEA)**

IDEA is an interdisciplinary group of faculty and community scholars designed to enhance retention and faculty diversity by fostering stronger ties between and among faculty and the local community. The group's expertise in equity, diversity, and underrepresented populations leads to innovative scholarship that addresses urgent social issues. Resources include: faculty research grants; sponsorship of symposia and lectures; faculty workshops; and mentorship and professional development opportunities for junior faculty of color.

## **Diversity of Views and Experiences (DOVE)**

The DOVE Recruiting Fellowship is awarded competitively to outstanding students from underrepresented groups (U.S. citizens or permanent residents) who have been admitted to a graduate program and been nominated by the program faculty for this award. Prospective graduate students nominated for the (DOVE) fellowship are also candidates for participation for the DOVE Program Summer Institute. For 10 weeks prior to the initial fall enrollment, students in the Summer Institute conduct research with faculty and attend weekly seminars focusing on topics relevant to the graduate school experience.

### **National Name Exchange**

Through the National Name Exchange, participating institutions collect the names of their students of color who are interested in graduate study and are also sophomores, juniors, or seniors with a minimum 3.0 GPA. Institutions share this information with other institutions and extend application and financial information to the students.

### **Big Ten Academic Alliance FreeApp Program**

The FreeApp program is designed to increase access to graduate education for students who possess qualities and experiences that enhance the diversity of the intellectual, cultural, and social environments at Big Ten Academic Alliance universities. Through this program, prospective students can request a graduate application fee waiver for Ph.D. or Master of Fine Arts programs at participating BTAA universities:

### **Campus Community Connection Visitation Program**

During campus recruitment visits and orientations, the Graduate School assists graduate programs by connecting under-represented students to the selected communities on and off campus.

### **McNair Scholars**

Named in honor of Dr. Ronald E. McNair, one of the astronauts who perished in the Challenger mission, this national TRIO program assists eligible first-generation undergraduate students from low-income families to prepare for and to enter graduate programs leading to the Ph.D. Participants include academically talented low-income, first-generation students and students from groups that are traditionally underrepresented in graduate programs. During the summer, the Office for Diversity in Graduate Education, in collaboration with the Graduate School, invites McNair prospects to our Graduate School Visitation Program held once a month on the Twin Cities campus. The McNair Scholar Ambassadors Program provides prospective McNair Scholars with access to University of Minnesota McNair Scholars alumni.

### **Multicultural Summer Research Opportunities Program (MSROP)**

MSROP is a 10-week program held on the Twin Cities campus. The program provides students from various academic and cultural backgrounds an opportunity to develop research and inquiry skills with a faculty mentor, either on an individual basis or as part of research team. The experience provides participants groundwork for advanced study and prepares them for graduate and professional degrees at the University of Minnesota.

### **Gender Inclusive Restrooms**

In response to a request by the Trans Advisory & Action Team, President Kaler directed University Facilities Management to assess the current state of gender inclusive restroom facilities on campus and to develop a plan to increase the number and distribution of such facilities. There are presently approximately 110 gender inclusive restrooms, and University Facilities Management has identified more than 250 additional candidate restrooms for potential re-designation from gender specified to gender inclusive.

### **Lactation Advocacy Committee (LAC)**

The Lactation Advocacy Committee collaborates with University leaders to support parents and advocate for lactation resources on campus. In particular, the committee works to address the availability of sufficient and adequate lactation spaces.

### **Gender and Sexuality Center for Queer and Trans Life (GSC) Office Lounge**

The GSC lounge serves as a safer space for students, as well as faculty and staff, to build community, gain access to resources, study, or have small group meetings and student-focused programs. The lounge is staffed by student workers who answer questions and provide resources for visitors.

### **University of Minnesota Women in Technology**

Women in Technology (WIT) is a community of faculty, staff, students, and community members that provides a forum for women to share experiences and resources in a supportive network. Women who work with technology and students interested in working in technology are able to grow their professional networks, share knowledge with peers, and develop a support system to empower their future careers.

### **School of Public Health**

The Diversity and Equity Advisory Leadership Team serves as an advisory group to the School of Public Health dean and school leadership in order to better shape policies and practices that promote a more equitable, diverse, and inclusive environment within the School. The Equity Diversity Inclusion Team comprises students, faculty, and staff from across the school who proactively address issues of equity, diversity, and inclusion within the school community. The Equity Work Group advances health equities research within the school and nationally; develops collaborations with faculty and community partners; and ensures that students are well trained to work in a diverse society.

### **College of Design Diversity Committee**

The College of Design Diversity Committee completed an assessment of the college's diversity climate and then worked with collegiate units to help identify action steps to address opportunities identified in the assessment findings. In addition, the college sponsors its Diversity and Entrepreneurship Speaker Series.

### **Department of Family Social Science Graduate Student Diversity Survey**

The Family Social Science Department diversity committee created and administered a survey for all graduate students to assess the department climate. The project helps identify the extent to which graduate students feel safe and supported in the department and thus provides a foundation for efforts to enhance climate.

### **CFANS Working Across Difference Initiative**

Through the *Working Across Difference Initiative* in the College of Food, Agricultural and Natural Resource Sciences, undergraduate students take discipline-based courses and participate in activities each year that intentionally incorporate multiple cultural perspectives. These students develop intercultural competency and learn about cultural similarities and differences and how those differences may result in unequal impacts on people and communities.

### **Challenging Intercultural Intolerance (Our Own and Others') Workshops**

The College of Design and the College of Food, Agricultural and Natural Resource Sciences host workshops for faculty, staff, and students that offer specific strategies, and time to practice those strategies, on how to challenge intolerance.



# BOARD OF REGENTS

## DOCKET ITEM SUMMARY

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**Mission Fulfillment**

**October 12, 2017**

**AGENDA ITEM:** The University's Research Enterprise

Review

Review + Action

Action

Discussion

*This is a report required by Board policy.*

**PRESENTERS:** Allen S. Levine, Interim Vice President for Research  
Jessica J. Hellmann, Director, Institute on the Environment  
Jennifer Gunn, Director, Institute for Advanced Study  
Colleen Satyshur, Research Scientist, Department of Ecology, Evolution, and Behavior

### PURPOSE & KEY POINTS

In advance of the Vice President for Research's annual report to the Board in December, this discussion will examine the funding landscape of research and how internal resources are strategically allocated to supplement external resources to support and retain research faculty.

Nationally, the federal funding landscape has been in decline for several years. In FY 2017, for the first time in three years, the University showed a decline in total awards received.

From grand challenges research funding, to system-wide, state-funded programs like the Minnesota Futures grant, internal investments are targeted to advance the research priorities of the University and assure the University remains a competitive top ten public research university.

Faculty presenters will highlight areas of research that are not generally apparent as the University reviews the national research rankings and statistics, but are vitally important areas that cross disciplines and engage the scientific, humanities, and arts researchers who play a role toward research and discovery success stories. The presentation will include highlights from:

- The Institute for Advanced Study (IAS), a University-wide center for interdisciplinary and collaborative research. The IAS was established in 2005 with funding provided by the President's Interdisciplinary Initiative on Arts and Humanities. It continues to engage faculty across the University's colleges and campuses as an academic unit of the Executive Vice President and Provost. The IAS advances innovative research and creative work among scholars, scientists, and artists at the University and in the broader community; fosters critical engagement with issues and ideas; and builds relationships between the University and larger communities.
- The Institute on the Environment (IonE), which is supporting breakthrough research across disciplines, developing the next generation of global leaders and building transformative partnerships across the state, region and globe. IonE collaborates with external partners

while bringing different academic fields of expertise together within the University – with an eye towards being responsive, agile and entrepreneurial in the face of a changing world.

- Colleen Satyshur, a recent Minnesota Futures award winner who is studying “The Art and Science of Nesting Bees.” Her team will combine public art with novel science to understand more about wild bees’ nesting needs and how artificial nesting sites can help bees flourish. The artists involved in this project will tap the aesthetic qualities of nesting structures to convey scientific knowledge to the public in a visually compelling way. A large bee nest sculpture will capture viewers’ imaginations and help them experience the excitement of scientific discovery. The sculpture is intended for display at the Weisman Art Museum on the University’s Twin Cities campus.

## **BACKGROUND INFORMATION**

### **Office of the Vice President for Research**

The University’s research mission is to generate and preserve knowledge, understanding, and creativity by conducting high quality research, scholarship, and artistic activity that benefit students, scholars, and communities across the state, the nation, and the world. The Vice President for Research is responsible for maintaining a dynamic and competitive research environment, alongside system-wide and campus strategic plans and the educational and research priorities of the Executive Vice President and Provost, chancellors, and deans.

With this mission as a guide, the Vice President for Research presents each December the Annual Report on the Status of University Research and Commercialization of Intellectual Property to the Board of Regents, summarizing the University’s research metrics for the past fiscal year, documenting the trends in research productivity, scholarship and commercialization of intellectual property as well as benchmarking the University’s performance and ranking among its peer group. Past annual reports and statistics are available [online](#).

In addition to the research statistics, the Office of the Vice President for Research reports progress on a broad set of strategic system-wide priorities and principles that build upon the University’s historical research strengths and strategies to address barriers to research success. In 2013, the Vice President for Research facilitated the creation of a five-year research strategic plan, with partners across the University system. This plan, when aligned with the Twin Cities campus strategic plan *Driving Tomorrow*, and other campus plans, creates opportunities to bring researchers together through collective inspiration and discovery.

### *Follow-Up on Quarterly Report of Grants Activity*

The final quarterly report of grants and contracts activity for FY 2017, filed at the September 2017 Board meeting, showed a mostly-across-the-report drop in federal award funding. The information below responds to an inquiry from the Board about that decline.

Funding in FY 2017 reached \$744.5 million, a decrease of \$43.1M (5.5%) compared to FY 2016. This decrease followed three years of steady increases, from \$693.4 million in FY 2013 to \$787.7 million in FY 2016. The most recent decrease is due to decreases in both the average award amount per principle investigator (PI) and the total number of PIs who received awards.

Additionally, other factors contributed to making FY 2016 an unusually successful year and leading to a decrease in total award amounts in FY 2017:

1. The total award amounts of the top 30 percent of awards reached about \$180 million in FY 2016, but only \$100 million in FY 2017. This decrease is due to losses of center grants and the delay and cut of funding in the School of Public Health.
2. The time between submission of an ultimately successful application and the actual award varies significantly among grants and submission and awards are frequently not in the same fiscal year. FY 2016 saw an unusually high number of awards that were submitted in the same fiscal year, further contributing to the success in FY 2016 but, at the same time, depressing the award total in FY 2017.
3. FY 2017 also saw a much larger number of PIs who received awards in FY 2016 but not in FY 2017 as compared to PIs who received awards in FY 2015 but not in FY 2016, which amounted to a net loss of close to \$35 million.

### **The Driving Tomorrow Grand Challenges Research Initiative**

In early 2015, the Driving Tomorrow Grand Challenges Research initiative launched as one strategy to advance research goals that are a component of the Twin Cities campus strategic plan. The aim is to elevate the University's interdisciplinary research strengths for greater impact on the critical societal issues facing our state and the world, and, more broadly, to create a more integrated and deeply engaged campus.

Through a campus-wide effort, five interrelated Grand Challenges areas were identified for special focus: Assuring Clean Water and Sustainable Ecosystems, Fostering Just and Equitable Communities, Enhancing Individual and Community Capacity for a Changing World, Advancing Health through Tailored Solutions, and Feeding the World Sustainably.

The Grand Challenges initiative complements programs within the Office of the Vice President for Research, such as MnDRIVE and Minnesota Futures. Additional partners include the Global Programs and Strategy Alliance, the Institute for Advanced Study, the Institute on the Environment, the Interdisciplinary Center for the Study of Global Change, the Metropolitan Consortium, and the Office for Public Engagement.

The initiative provides funds (reallocations earmarked for strategic investments during planning with college deans) to jump-start new research collaborations, enabling faculty to collaborate more broadly and deeply and to compete successfully for additional resources. Areas of focus build on wide-ranging strengths that distinguish our University. The initiative intersects with work to strengthen reciprocal engagement, recruit and retain field-shaping faculty, and create a culture to broadly support transformational research, teaching, and collaboration.

### **College of Liberal Arts (CLA) Research and Creative Work**

CLA faculty are leaders in their disciplines and they tackle some of the most compelling issues we face. Their discoveries generate strategies and solutions for creating healthier and more vibrant communities. They embrace a culture of excellence to serve students, the college, the University, and the community.

Research conducted here solves problems that touch our lives every day. Why do we behave as we do? How do we apply discoveries in science and medicine to improve lives? What makes life worth living? Faculty research and creative projects address climate change, nerve damage, land use, voter behavior, the law, wealth acquisition, language preservation, and what we eat and why. [This video](#) highlights that research and creative work.

## **Minnesota Futures**

Modeled after the National Academies Keck Futures Initiative, the Minnesota Futures program supports extraordinary research by nurturing interdisciplinary ideas. The program helps develop projects to a point where they become competitive for external funding.

Since 2008, Minnesota Futures has supported research by faculty who later received substantial external funding and whose innovations have reached the market to potentially improve the lives of millions. The grants, supported by technology commercialization revenue, cover expenses of up to \$250,000 over two years.



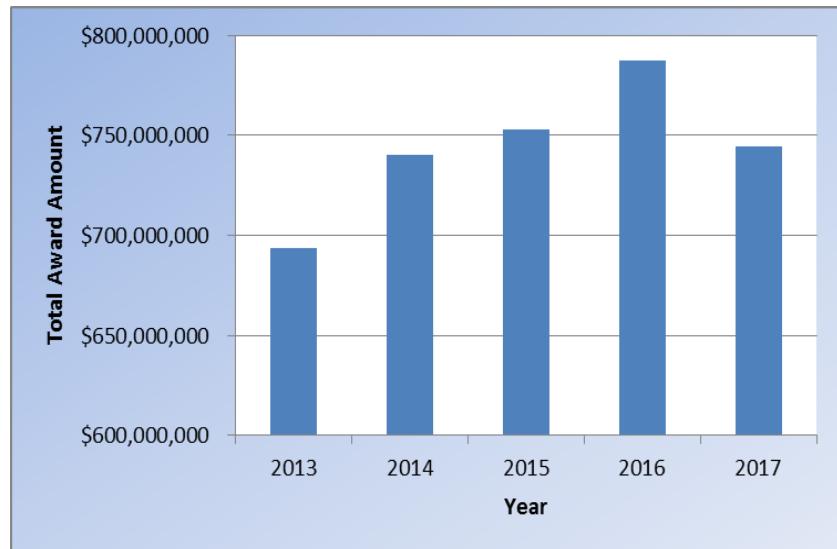
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# FY17 External Research Awards

Allen Levine  
Vice President for Research  
*Fulfilling the Mission*  
*October 12, 2017*

# The Facts: Decline in Total Award Amounts in FY17

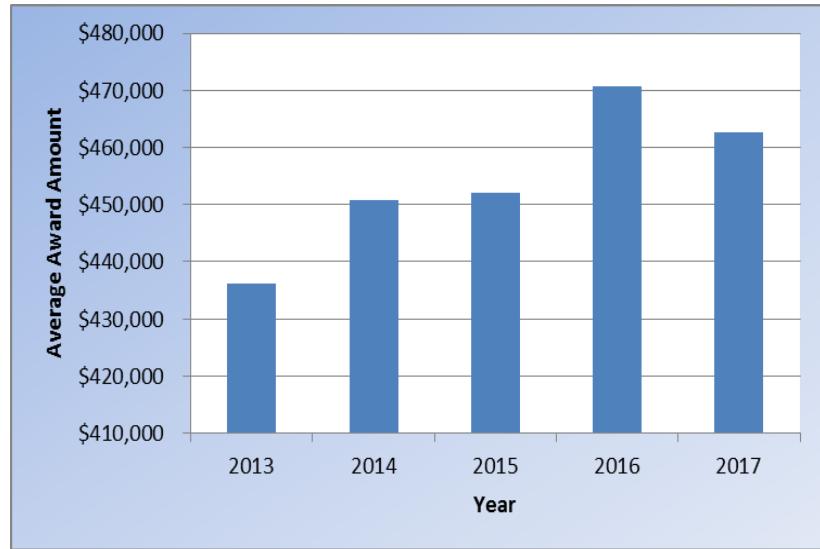
- Total award amounts **increased** every year between FY13 and FY16.
- The total award amount **declined** by \$43.2 million from \$787.5 million in FY16 to \$744.3 million in FY17.



Year	Total Award Amount	Change	%Change
2013	\$ 693,390,459		
2014	\$ 740,342,048	\$ 46,951,588	6.8%
2015	\$ 752,826,460	\$ 12,484,412	1.7%
2016	\$ 787,528,551	\$ 34,702,091	4.6%
2017	\$ 744,318,246	\$ (43,210,305)	-5.5%

# Factor I: Average Award Amounts

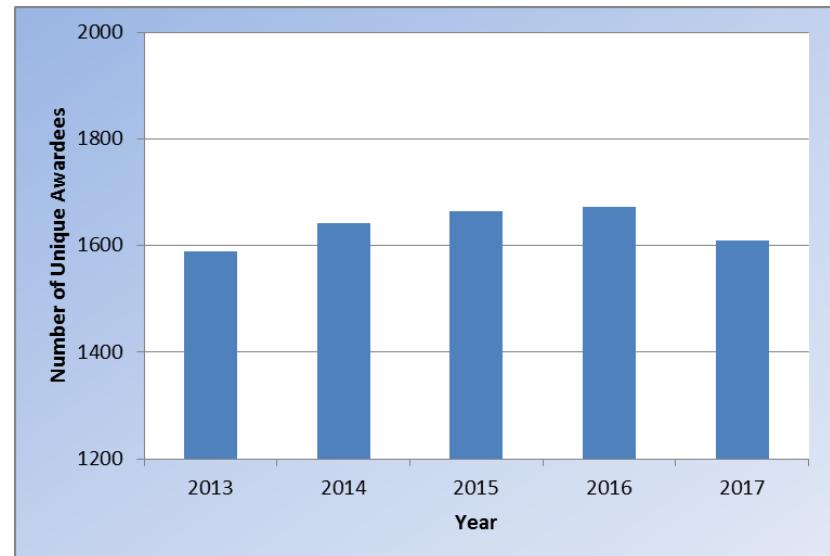
- The average award amount per **Principal Investigator (PI)**
  - increased every year** between FY13 and FY16
  - decreased in FY17**



Year	Average Award Amount	Change	%Change
2013	\$ 436,095		
2014	\$ 450,878	\$ 14,784	3.4%
2015	\$ 452,148	\$ 1,270	0.3%
2016	\$ 470,728	\$ 18,580	4.1%
2017	\$ 462,597	\$ (8,132)	-1.7%

## Factor 2: Number of PIs with Awards

- The number of **PIs**
  - **increased** every year between FY13 and FY16
  - **declined** by 64 from 1,673 in FY16 to 1,609 in FY17



Year	Number of Unique Awardees	Change	%Change
2013	1590		
2014	1642	52	3.3%
2015	1665	23	1.4%
2016	1673	8	0.5%
2017	1609	-64	-3.8%

# A Convergence of Events

In addition to FY17 **decreases** in

- average award amount per **PI**
- number of **PIs** getting awards

Additional factors are responsible for the decline in FY17, following a very successful FY16:

- ↓ **Fewer top awards** in FY17 compared to FY16
- ↓ **Fewer large one-time awards** in FY17 compared to FY16
- ↓ **Expedited awards** in FY16 and delays of awards in FY17



## Office of the Vice President for Research

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# BOARD OF REGENTS

## DOCKET ITEM SUMMARY

**Mission Fulfillment**

**October 12, 2017**

**AGENDA ITEM:** 21<sup>st</sup> Century Outreach Mission, Part I: Extension and Research Outreach Centers

**Review**

**Review + Action**

**Action**

**Discussion**

*This is a report required by Board policy.*

**PRESENTERS:** Karen Hanson, Executive Vice President and Provost  
Beverly Durgan, Dean, University of Minnesota Extension  
Brian Buhr, Dean, College of Food, Agriculture and Natural Resource Sciences and Director, Minnesota Agriculture Experimentation Station

### PURPOSE & KEY POINTS

The purpose of this item is to discuss the University's outreach mission, an integral part of the tripartite mission to advance and share knowledge through research and discovery, teaching and learning, and outreach and public service. This is the first conversation in a three-part series about the 21<sup>st</sup> century outreach mission.

This discussion will include an overview of the history, current context, and vision for Extension and Research and Outreach Centers (ROCs). The docket contains additional detail on Extension and ROCs.

### BACKGROUND INFORMATION

#### Outreach Rooted in Land-Grant Mission

The University of Minnesota has the distinction of being Minnesota's sole research university and its only public land-grant institution, with unique capacity – and responsibility – to improve the lives of Minnesotans and drive the state forward through advanced education, knowledge discovery, and collaborative problem-solving. The land-grant mission has been integral to the University's identity and development throughout its history. The institution was among the country's original land-grant institutions under the Morrill Act of 1862, and the roots of Extension and the ROCs go back to this watershed legislation along with related legislation passed over the years. Land-grant institutions in Minnesota and other states were envisioned as engines of economic and social development, charged with democratizing higher education and providing education, knowledge, and knowledge transfer directly relevant to people's lives and the needs of society.

Specifically, land-grant institutions were created to:

- Advance knowledge through research.
- Make that knowledge broadly accessible.
- Educate people of the region, from all walks of life, for the workforce, citizenship, and upward mobility—so as to contribute to the collective prosperity of the state and the nation.

Additional legislation at both the state and federal levels bolstered the University's land-grant commitment and helped to fund the Minnesota Agricultural Experiment Station (MAES, 1885), the foundation of today's ROCs, and the Minnesota Extension Service (1909), which continues today as University of Minnesota Extension. Over the years, Extension and the ROCs have successfully extended the reach of the University into every corner of the state, coupling community education with research and outreach to address major needs of Minnesotans ranging from farms and crops to environmental health, business innovation, and the well-being of families and youth.

### **Outreach to Address Changing Needs of Minnesota**

For much of the 20<sup>th</sup> century, outreach through Extension and the MAES/ROCS, along with campus-based outreach programs, focused primarily on the needs of a state with an economic and cultural center of gravity that was primarily rural and regional, and on knowledge transfer from limited disciplines within the University. Amid sweeping social changes and knowledge revolutions, as the University has continued its forward trajectory as a comprehensive research university of international renown, it has shifted its outreach mission to become more global and more urban and to reflect interconnections among disciplines. Outreach increasingly has focused on leveraging a range of University strengths in collaboration with diverse communities and partners to address complex issues and problems that are both locally relevant and global in scope.

Driving the 21<sup>st</sup> century outreach mission is a broadening vision of the critical role of place-based public research universities in an increasingly complex and global world. In recent decades, the University has worked to develop a broad-based, strategic agenda to optimize responsiveness to the needs of the state, to reflect new models of public engagement emphasizing partnership and reciprocity, and to more fully integrate community outreach and public service into the University's research and teaching initiatives. As a statewide system of five campuses of distinct strengths and specialties, the University recognizes its unparalleled opportunities to advance collaborations addressing the most urgent problems of our state and world; to foster innovation and economic growth; to engage students in community-based learning, workplace, and service experiences; and to enhance quality of life. This is emphasized in *Driving Tomorrow*, the strategic plan for the Twin Cities campus, as well as the system-wide strategic planning framework *Building Our Collective Future*.

Building on deep roots and relationships, Extension and ROCs continue to have major roles in outreach that carries the University's mission to every corner of the state. Their vitally important work helps to develop human capital, create innovation, and share knowledge that advances Minnesota business and industries, informs policymaking, and strengthens the well-being of families and communities.

**University of Minnesota Board of Regents  
Mission Fulfillment Committee  
October 12, 2017**

**21<sup>st</sup> Century Outreach Mission, Part I: Extension and Research and Outreach Centers -  
Detail on Extension and ROCs**

**University of Minnesota Extension**

**University of Minnesota Extension Overview**

University of Minnesota Extension (Extension) is the major outreach arm of the University and a significant contributor to the University's land-grant mission of research, education and outreach.

University Extension organizations across the nation were developed by authorization and funding of federal, state and county governments more than a century ago to "extend" scientific knowledge and expertise to the public in food and agriculture, communities, environment, and youth and families. The State of Minnesota established University of Minnesota Extension in 1909, five years ahead of the federal Smith-Lever Act that created Extension nationwide.

Extension's priorities have always reflected those of the state, county and nation. In its first decades, Extension programs focused largely on agricultural and domestic issues. Over time, as populations shift and society evolves, Extension also changes. Along with traditional agricultural programs, today's Extension helps urban youth succeed, sustains rural communities' vitality, and builds new Americans' leadership skills. Extension is closely integrated into local communities; 65 percent of its faculty and staff live and work in Greater Minnesota,

Extension's federal, state and county funding is distributed among four areas: 4-H and youth development (38 percent of all funding); agriculture, food and natural resources (37 percent); family development (15 percent); and community vitality (10 percent). Federal and state funding pays for state and regional programs, while counties choose how to allocate their Extension funds. Extension has memoranda of agreement with all 87 Minnesota counties, and 80 percent of all county funds go to 4-H and youth programs.

Extension programs are closely integrated with research in the College of Food, Agricultural and Natural Resource Sciences; College of Veterinary Medicine; College of Education and Human Development; College of Design; Hubert H. Humphrey School of Public Affairs; and the University of Minnesota Crookston. Extension is a leader in collaborating with other land-grant universities and has five tenure-track faculty who have joint appointments with North Dakota State University.

Global initiatives in Extension span the world. Initiatives under way in Morocco, Kenya, Guatemala, Brazil, and Mexico use the Extension model of learning to reciprocally share technical and leadership skills with citizens of those countries and U of M faculty, staff and students.

**Extension's Strategic Planning for Program Delivery**

In the early 2000s, Extension reorganized to respond to changing societal needs and funding challenges. The reorganization resulted in 15 regional Extension centers throughout the state that complement Extension's presence in Minnesota counties through increased organizational and cost-effectiveness. Four of these regional offices are co-located with University Research and Outreach Centers and two-thirds of ROC faculty have Extension appointments.

More recently, Extension's strategic planning has focused on changing demographics and technology as well as increased competition for funding and stakeholders' trust and attention, and on evolving funding models at the county, state, and federal level. The Extension strategic plan was last updated in 2011 and is currently being refreshed with leadership from Extension's Faculty Consultative Committee.

These efforts have resulted in greater efficiency and synergy between the Twin Cities campus and field faculty and among outreach, research and teaching efforts. In 2016, Extension:

- Engaged more than one million Minnesotans as participants in Extension programs, including nutrition education; train-the-trainer programs in agriculture; gardening; the environment; youth and families; leadership; and community involvement.
- Included more than 35,000 volunteers who contributed 1.2 million hours of their time as Master Gardeners, Aquatic Invasive Species detectors, or community advisory board members, and in other programs.
- Provided educational opportunities for more than 68,500 4-H members, including more than 7,000 new members in 2017. Attracting first-generation members and a more diverse population is a priority for 4-H in Minnesota and nationally.
- Led or supported more than 60 localized efforts to improve access to and learning about healthy foods and exercise, particularly in low-income, immigrant and tribal communities through the Supplemental Nutrition Assistance Program and other federal, state and non-profit efforts.
- Increased the diversity of participants in programs for urban youth, families, leadership and civic engagement, and natural resources. About 20 percent of these programs' participants are people of color, which reflects the current makeup of Minnesota's population.
- Delivered 165 applied research studies regarding business retention, tourism development, or economic impact—conducted in partnership with Minnesota communities.
- Increased the leadership skills of more than 2,000 participants in civic engagement programs over the last two decades. Leaders are needed to help Minnesota thrive; Extension research shows that one in 34 rural residents and one in 143 urban residents must serve in a leadership position in order to meet demand in government, civic, and nonprofit entities.

### **Extension's Alignment with the University Strategic Priorities**

Extension actively participates in all three strategic initiatives and four capacity-building strategies outlined in *Building Our Collective Future*, the system-wide strategic planning framework approved in June by the Board of Regents. In particular, Extension's presence across the state and its well-established relationships in communities is a catalyst for helping the statewide system reach its goals. Extension's programs engage diverse audiences and stakeholders that traditionally may not have had strong connections to the University, including nutrition education, youth programs and the Regional Sustainable Development Partnerships. Extension's highly productive research and outreach collaborations with partner colleges and centers across the University are key to advancing the aspirations of the Twin Cities campus strategic plan *Driving Tomorrow*, particularly component goals focused on leveraging location/reciprocal engagement and marshaling interdisciplinary strengths to address Grand Challenges.

## **Communication Strategies**

Extension actively communicates the value of University research and education throughout Minnesota. Every day, news articles and blog posts appear in Minnesota newspapers, on radio and television and across social media. Extension publishes *Source* magazine twice a year, featuring Extension's positive impact on Minnesota. Extension programs and experts are frequently cited in University publications and electronic media. Currently, Extension is revising its primary website, which has about 18 million page views annually, to improve user experience and accessibility. The new site will be unveiled in early 2018.

*Driven*, the University of Minnesota's fundraising campaign, includes Extension. Extension's goal is to raise \$16 million in the campaign to help fund improved experiences for youth and volunteers, build more robust community partnerships, and enhance Extension's contributions to building a 21st-century workforce.

## **Challenges, Opportunities and Policy Implications for Extension**

1. Extension must continue to address the unique challenge of funding non-credit, non-tuition generating educational programs. Currently, Extension is funded largely by appropriated funds (state, county and federal). In FY 2017, the State of Minnesota provided 38.5 percent of Extension's budget. Counties, in support of local positions and programs, provided 21 percent of the budget. The federal government, via federal formula funds, provides 14.6 percent of the budget. The remaining 26 percent of the budget is generated by Extension faculty and staff through grants, gifts, contracts, publication sales and fee-based programs. In total, 74 percent of Extension funding is from state, local and national government sources, down from 81 percent in FY 2010. This shift means Extension, like the rest of the University, is increasingly dependent on non-government sources of funding.
2. Extension must continue to serve all Minnesotans, meeting the needs of a growing urban population while maintaining its presence in rural parts of the state. This will require Extension to address demographic changes that create a more diverse and urban population. For example, as of 2015 about 1.2 million children younger than 18 lived in Minnesota, 55 percent of them in the seven-county Twin Cities metro area. That is a big shift from the primarily rural audience Extension was created to serve. In addition to programmatic changes to reflect new audiences, Extension will need to find funding and other support from Twin Cities partners while continuing to serve Greater Minnesota.

## **University of Minnesota Research and Outreach Centers**

### **Historical Perspective**

The University's St. Paul campus is the original location of the Minnesota Agricultural Experiment Station of the University of Minnesota, established in 1885. Edwin Porter, the first director of the agricultural research station in St. Paul, recognized that a farm on the St. Paul campus would not provide for the research needs of the entire state. He called the attention of the Board of Regents to the state's vastness, to the variations in soil and climate, and to the impossibility of finding a single location that featured all of the parts of the state's agriculture. The Hatch Act of 1887, which provided federal funds to support agricultural research, formally aligned national agricultural research and land grant universities. In 1895 the Minnesota Legislature passed a bill providing for the establishment of the Northwest Experiment Station in Crookston and the "Northeast Sub-Experiment Farm" in Grand Rapids. This period represents the early development of Minnesota as a world leader in agricultural production and industry, coincident with the development of the Great Northern Railroad and the opening of the "Great Northwest" to agriculture.

Although the University and state have evolved significantly since 1895, place still matters. In 1895 research and education were needed as crops were moved (on average 150 miles northwest since the late 1800s); now the climate and pests in any given location are changing, even more rapidly. How do we manage our regional resources and production systems when the land-to-climate interface is shifting? University Research and Outreach Centers (ROCs) will continue to innovate solutions to this and other Grand Challenges, as they have in the past.

## **Research and Outreach Center Programmatic Overview**

Currently, there are ten ROCs across the state. Together these centers include more than 10,000 acres of land dedicated to field and horticultural crop improvement, forestry, ecological preservation and restoration, wildlife management, livestock improvement, soil fertility and health, climate adaptation, and water quality and utilization research and outreach in each one of the four biomes across the state:

- *Northeast Region (Coniferous Biome)*: Located near the headwaters of the great lakes and the Mississippi River and characterized by northern boreal forests and a transitioning to prairies through lakes and grasslands (coniferous biome), three ROCs (North Central Research and Outreach Center at Grand Rapids ([ncroc.cfans.umn.edu](http://ncroc.cfans.umn.edu)), Cloquet Forestry Center ([cfc.cfans.umn.edu](http://cfc.cfans.umn.edu)), and the Hubachek Wilderness Research Center provide relevant research and educational programming to northeastern Minnesotans.

All three focus on forest or forest ecology research, including silviculture, adaptation to climate change, forest health and growth, and forest product research. Other research includes northernmost horticultural crop cold-hardiness research at Grand Rapids as well as beef cow/calf management and forage grazing research. All are highly engaged in both student and community education including partnerships with the Fond du Lac Tribal College as well as the University of Minnesota Duluth and the University's Natural Resources Research Institute.

- *Western Minnesota Region (Prairie and Tallgrass Aspen Biomes)*: The western length of Minnesota is endowed with fertile soils and a flat landscape ideal for cropping. Soil formation and climate differences result in a focus on interrelated, but distinctive, crop research with small grains, sugar beets, corn and soybeans. This research is conducted at the Northwest Research and Outreach Center, Crookston ([nwroc.cfans.umn.edu](http://nwroc.cfans.umn.edu)), West Central Research and Outreach Center, Morris ([ncroc.cfans.umn.edu](http://ncroc.cfans.umn.edu)), and Southwest Research and Outreach Center, Lamberton ([swroc.cfans.umn.edu](http://swroc.cfans.umn.edu)).

West Central's "The Greening of Ag" programs in energy efficiency are leading the way in sustainability for both livestock and crop systems. The swine and dairy operations represent a key linkage to Minnesota's significant animal agriculture sector and includes an innovative organic dairy system with rotational grazing. The Southwest ROC, situated in a more arid "high-plains" climate with unique soils, focuses on nutrient management, organic systems, and irrigated crops research. Northwest and West Central are co-located with UMN system campuses and have joint education and research programs. West Central has a partnership with the USDA Agricultural Research Service.

- *Southern and Central Region (Prairie Biome and Deciduous Biome)*: Located in a similar climatic zone, the relevance of these five centers—Southern Research and Outreach Center (SROC, [sroc.cfans.umn.edu](http://sroc.cfans.umn.edu)), Rosemount/UMORE Research and Outreach Center ([rroc.cfans.umn.edu](http://rroc.cfans.umn.edu)), Horticultural Research Center, and Sand Plain Research Farm ([sprf.cfans.umn.edu](http://sprf.cfans.umn.edu))—is enhanced by their proximity to the University's Twin Cities campus where the majority of faculty, graduate, and undergraduate students reside.

With the Rosemount, Horticultural Research Center (HRC), and Sand Plain sites at reasonable driving distances from the campus, students and researchers can commute regularly to manage their research trials as well as engage in experiential teaching. The HRC is co-located at the Minnesota Landscape Arboretum; the Department of Horticultural Science conducts major woody plant, floral, apple, and grape research there. The Becker Sand Plain is particularly valuable because of its “sugar sand” soils; horticultural and crop research (corn, potatoes, blueberries, soybeans, etc.) with irrigation is conducted there. The SROC conducts dairy heifer replacement, swine reproduction, and sow housing research, in addition to agronomic research in cover crops and the Forever Green initiatives; horticultural research focuses on phytonutrients and chemo preventive foods in partnership with the Hormel Institute in Austin.

## **ROC Operations and Management**

### *Leadership and Personnel*

ROC heads report to the associate dean for research and ultimately to the dean of CFANS. Heads have CFANS departmental homes linked to disciplinary expertise, but are physically located at their respective ROCs. In some cases, one ROC head manages two centers to reduce administrative costs.

<b>Research and Outreach Center</b>	<b>ROC Head and Departmental Affiliation</b>
Becker Sand Plain, Becker	Lee Johnston: Animal Science
CFC, Cloquet	Andrew David: Forest Resources
HRC, Chanhassen	Emily Hoover/Peter Moe: Horticulture Sciences/Director, MNLA
NCROC, Grand Rapids	Vincent Fritz: Horticultural Science
NWROC, Crookston	Albert Sims: Soil, Water Climate
RROC, Rosemount	Greg Cuomo: Agronomy and Plant Genetics
SROC, Waseca	Forrest Izuno: Bio-products and Biosystems Engineering
SWROC, Lamberton	Albert Sims: Soil, Water, Climate
WCROC, Morris	Lee Johnston: Animal Science

Regular tenure-track faculty (~31 as of Fall 2017) are located at the ROCs in relevant areas of expertise. Often, but not always, the faculty have dual research and Extension appointments and are Extension state specialists. Some Extension educators are co-located at ROCs to develop and implement Extension education programs.

ROCs operate ostensibly as working farms or forests in their mission fulfillment. Professional research staff are in charge of research design and implementation at each of the ROCs. Technicians and managers are operations experts working in field preparation and planting, equipment and facility maintenance, critical record keeping and management of research plots and uses, and day-to-day oversight. Integrating research with efficient, and ideally, profitable operations is critical to both research and financial success of the ROCs.

### Faculty and Staff Located at Research and Outreach Centers

<b>Job Class</b>	<b>Faculty*</b>	<b>Research Professional</b>	<b>Ext. Educ.</b>	<b>Technician</b>	<b>Support/Labor</b>
<b># Personnel</b>	31	41	10	24	66

\* Faculty include ROC heads

ROCs are an irreplaceable component of CFANS applied research programs. Faculty from nearly all departments in CFANS rely on the facilities and research results directly in their research programs. Several other Colleges (Science and Engineering, Biological Sciences, Academic Health Center, and Veterinary Medicine), system campuses, and USDA Agricultural Research Service personnel all also partner with ROCs for research and outreach.

### *Financial Overview*

The combined expenditures of the 10 ROCs were \$22.2 million in FY17. Of those, 59 percent (\$13 million) were labor expenditures and 41 percent (\$9.14 million) were non-labor expenses.

Income sources for these expenditures include \$8.6 million allocated from federal funds through Hatch (agricultural research), McIntire-Stennis (forestry research) or Smith-Lever (Extension) acts, as well as O&M allocations to CFANS and the Agricultural State Special. Operational income from crop, livestock, timer and internal sales are \$7.68 million. This income is dependent on commodity prices and all those funds are allocated to research or teaching expenses, so it is critical to the overall financial health and support of the ROCs.

The remainder of the income (\$5.92 million) is generated by sponsored and non-sponsored research projects directly attributable to the ROCs, including government, NGO, or private sector grants for research and teaching. Indirect cost recovery—increasingly difficult to obtain through grants—is critical for supporting the operational and infrastructure capacity inherent in ROCs.

### **Opportunities for 21<sup>st</sup> Century ROCs**

1. *Climate change research is growing.* Climate change affects the health and performance of our agricultural and forest systems and has ecological impacts on native plants and animals. Knowledge gained under historical values of rainfall, temperature, and other climate variables at ROCs across Minnesota biomes provides a platform from which to respond to future impacts on our agricultural and forest systems while preserving our natural resources (energy, water, soils, native flora and fauna).
2. *Advancements in precision agriculture.* Rapid scientific advances in molecular genetics, remote sensing, computational sciences, engineering, microbiology and the “-omics” (proteomics, metabolomics, genomics) lead to better understanding of highly complex agricultural and natural systems. Precision agriculture reveals complex evolutionary processes at work in antimicrobial or pesticide resistance and points to potential solutions using nature's inherent bio-defense mechanisms. Precise linking of genomics to field conditions to phenotyping is a rapidly growing frontier only possible in field conditions.
3. *Long-term agricultural research.* The average time from science breakthrough to full adoption of agricultural technologies is 30 years. Forests adapt over decades. ROCs have conducted research in site-specific locations for more than 100 years. Historical knowledge on treatments at specific sites helps speed research deployment and affect long term impacts on soils, water, and plants grown in those areas. For example, the Forever Green Initiative began more than 25 years ago and is now yielding commercializable grains from perennial cover crops that improve soil health, reduce carbon footprint, and enhance habitat. This long-range work plays an important role in our natural resources conservation, yet industry often under-invests in it.
4. *Public and private sector opportunities.* Detailed data captured in real time and on a large number of operating businesses creates the potential for crowd-sourcing production

variables in livestock, crop, forest, and natural systems. Controlled research experiments at the ROCs can test observed correlations and reintroduce research results into practice. This feedback loop of population observation, controlled research, to implementation leads to timely innovation and adoption by Minnesota businesses.

5. *Greater engagement with system campuses for experiential learning.* Interaction in the natural world through our managed agricultural/forestry locations leads to living-teaching experiences. We have implemented programs at both UM-M and Grand Rapids and online. Forest Resources and Fisheries, Wildlife and Conservation Biology both have extensive educational programs at Cloquet Forestry Center and HWRC. With more than 12,000 users, students learn in the settings where they are most likely to pursue their careers.
6. *Global relevance is increasing.* Issues addressed in Minnesota can be adapted to similar issues globally, and vice versa. Partnership on climate change impacts to boreal forests (Cloquet) with similar research the northern hemisphere avoids duplication. Similar opportunities exist in crops such as oats; the Oat Global project links partners across the world to address pathogens that have reduced dramatically global oat production. This is done through our Agro-Informatics Alliance and Stakman Borlaug Center for Sustainable Plant Health and includes crop trials done at the ROCs.

### **Challenges for 21st Century ROCs**

1. *Attractiveness of monetizing assets.* ROCs are operationally expensive and desires to "monetize" ROC land and assets results in income and mission challenges (campus proximity is valuable).
2. *Relevance as double edge sword.* Strong constituent interests and resource fixity make it difficult to make strategic financial and planning decisions. We are in need of a comprehensive strategic plan for ROCs and their role with the University; CFANS is embarking on that.
3. *Decline in capacity funds and rise in project funds.* Federal and state support of both capacity funds and competitive research funds are increasingly challenged. Capacity funds are critical for sustaining the infrastructure of long-run research, yet funding is shifting toward single-issue priorities and project funds.
4. *Complex systems science.* Public awareness of agricultural/forestry/environmental challenges is increasing. We need to increase this momentum by better conveying the value of our work for all Minnesotans. Because our research is long-range and system-oriented, there are no "silver-bullet" breakthroughs like a new cancer drug. There is interest, but we must also have urgency.
5. *Infrastructure investment.* HEAPR funds in ROCs are appreciated and vital for improving our laboratories and facilities. In securing state and federal appropriations, ROCs must compete for priority with assets that are located on system campuses—an ongoing challenge.

For more than 120 years, the University of Minnesota Research and Outreach Centers have provided a platform for place-based research tailored to the unique conditions of the four biomes in Minnesota. This network plays an important role in the University's research and outreach missions by bringing applied research techniques and best practices to life in communities and regions across Minnesota. Global challenges to agricultural, forestry, and ecological systems from climate change and the challenges of sustaining natural resources places increasing pressure to identify location-specific solutions that maximize agricultural and forest productivity while

minimizing impacts on, or even improving, the natural environment. Perhaps even more than in 1885, the ROCs are invaluable to the University, state, and local and global communities as a source of science-based responses and advances that dramatically improve productivity and use of resources in a complex and one-size-does-not-fit all world.

### **University of Minnesota 21<sup>st</sup> Century Outreach Mission: Future Discussions**

Spanning all five campuses and every part of Minnesota, Extension and ROC programs and partnerships continue to help ensure that the collective strengths of the University are accessible to, and meet the needs of, Minnesota communities and stakeholders.

The two further Board discussions of the 21<sup>st</sup> century outreach mission planned in the coming months will focus more broadly on the University's statewide engagement efforts and opportunities (December 2017) and the University's future vision for outreach (May 2018).

# **University of Minnesota**

## **21<sup>st</sup>-Century Outreach Mission**

### **Part I: Extension and Research and Outreach Centers**

**Karen Hanson**, Executive Vice President & Provost

**Beverly Durgan**, Dean, University of Minnesota Extension

**Brian Buhr**, Dean, College of Food, Agricultural and Natural Resource Sciences  
and Director, Minnesota Agricultural Experiment Station

Board of Regents Mission Fulfillment Committee | October 12, 2017



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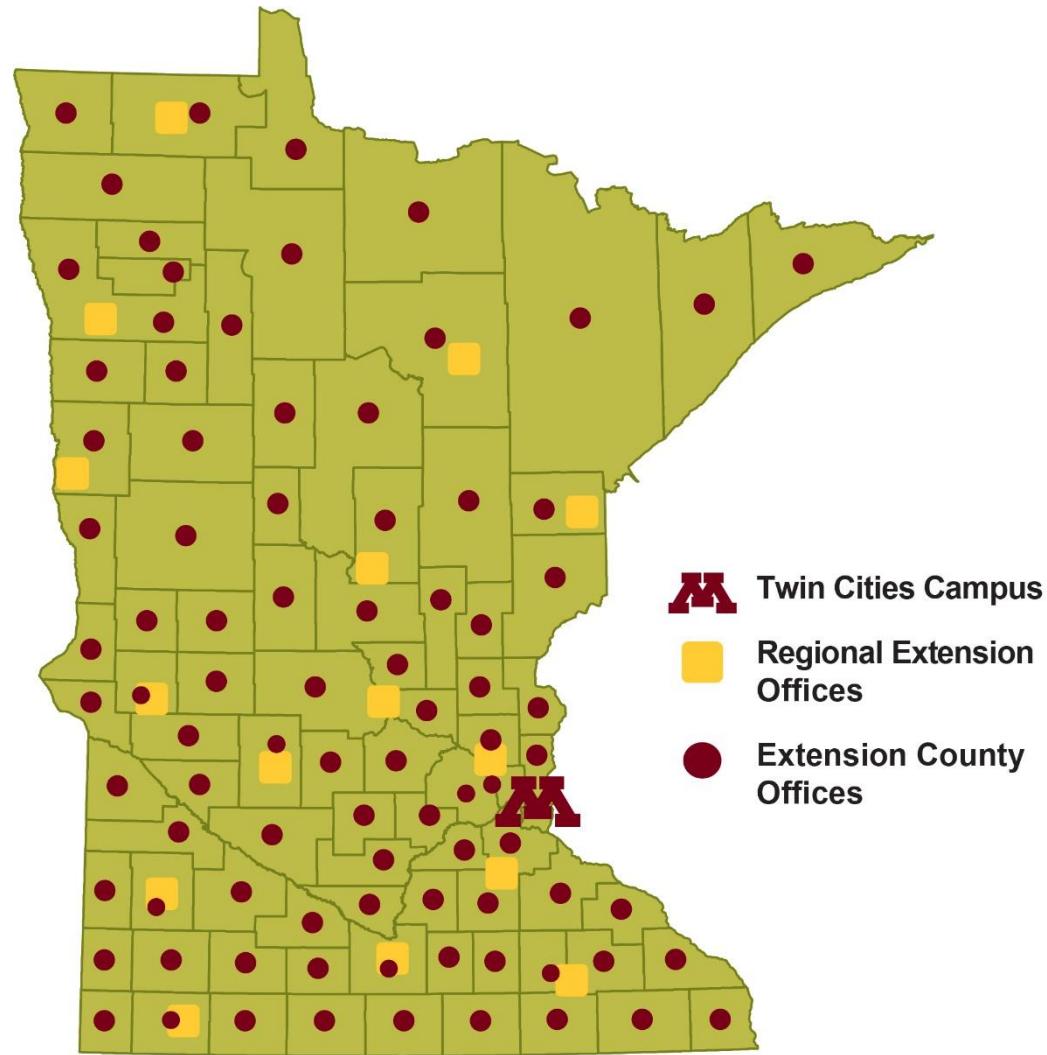
# Creating a Stronger Minnesota Through Extension & Research



# Connecting every county with the U of M

*Since 1909...*

**Extension  
Connects  
Minnesota to  
the University**



# Extension Addresses Issues Important to Minnesota

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Through research-based education, Extension makes Minnesota a better place to live, work and play

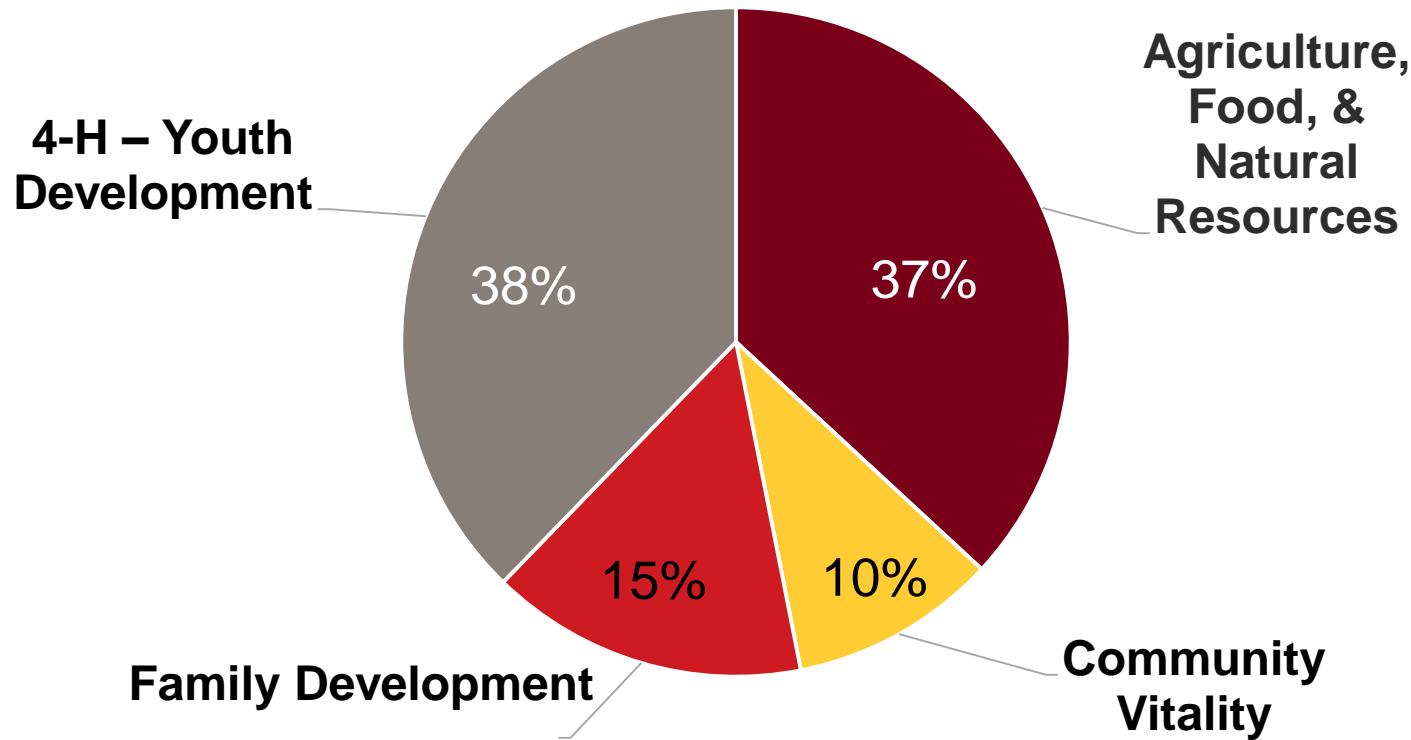
- ✓ Growing leaders
- ✓ Strengthening families
- ✓ Enhancing rural economies
- ✓ Bridging the opportunity gap
- ✓ Future workforce



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# Extension Funding Distribution

## Federal, State, and County



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# Extension Connects Minnesota to the University

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**800** faculty and staff

**65%** live outside the Twin Cities

**87** county offices

**15** regional offices

**6** colleges w/ Extension faculty



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# Extension Engages Minnesota

**>1M**

participants in  
Extension programs

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**>160,000**

youth participants

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**>34,000**

volunteers

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**>1,000**

advisory board  
members



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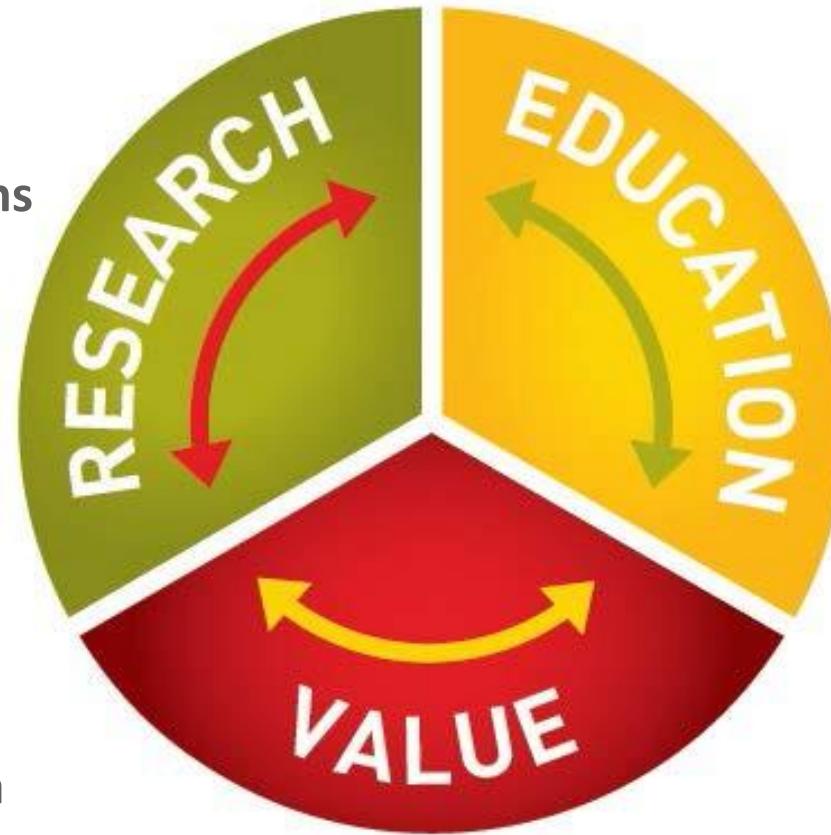
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# Extension's Educational Model

## RESEARCH

Discovering  
science-based solutions  
that work



## VALUE

Building  
a stronger Minnesota  
and a brighter future

## EDUCATION

Helping people  
develop knowledge  
and skills  
to solve problems



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# Extension Leadership Programs

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## Statewide

- 4-H
- MARL

## Regional Programs

- Emerging Leaders Programs

## County Programs



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# Improving Health & Nutrition

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**Federally funded nutrition education for low-income families**

## **Impact:**

- **Participants eat more fruits, vegetables and whole grains, healthier snacks**
- **Every \$1 spent on nutrition education saves up to \$10 in health care costs**



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# Meeting Agricultural Challenges

**Helping Minnesota farmers adapt to change:**

- Protecting water quality
- Managing pests and diseases
- Responding to pesticide resistance
- Exploring alternative crops
- Farmer-lender mediation



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# The Rural Economy

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Helping Minnesotans succeed:

- Rural grocery/local food partnerships
- ‘Brain Gain’ research
- Tourism Center
- Business Retention and Expansion



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# Partnerships

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## Extension faculty positions with NDSU

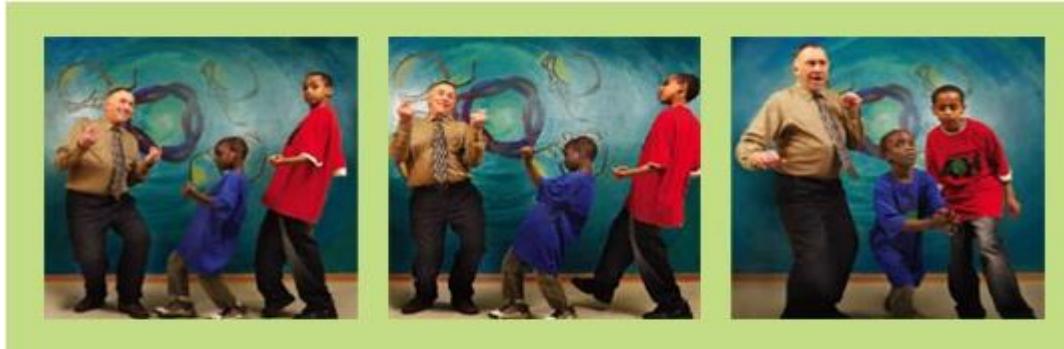
- Potatoes production
- Sugarbeet production
- Sugarbeet weed management
- Sheep Production
- Nutrition



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# 4-H: Growing True Leaders

*Today's  
youth  
are ...*



*...tomorrow's  
leaders*



**68,000 youth and 10,000 volunteers**

- Rural
- Urban
- White Earth and Fond du Lac programs



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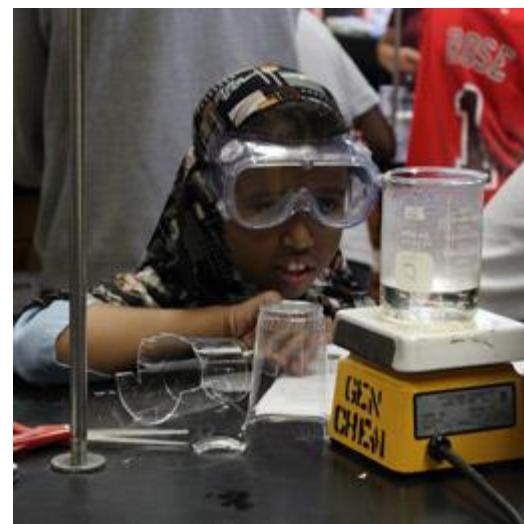
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# University of Minnesota 4-H Campus Immersion

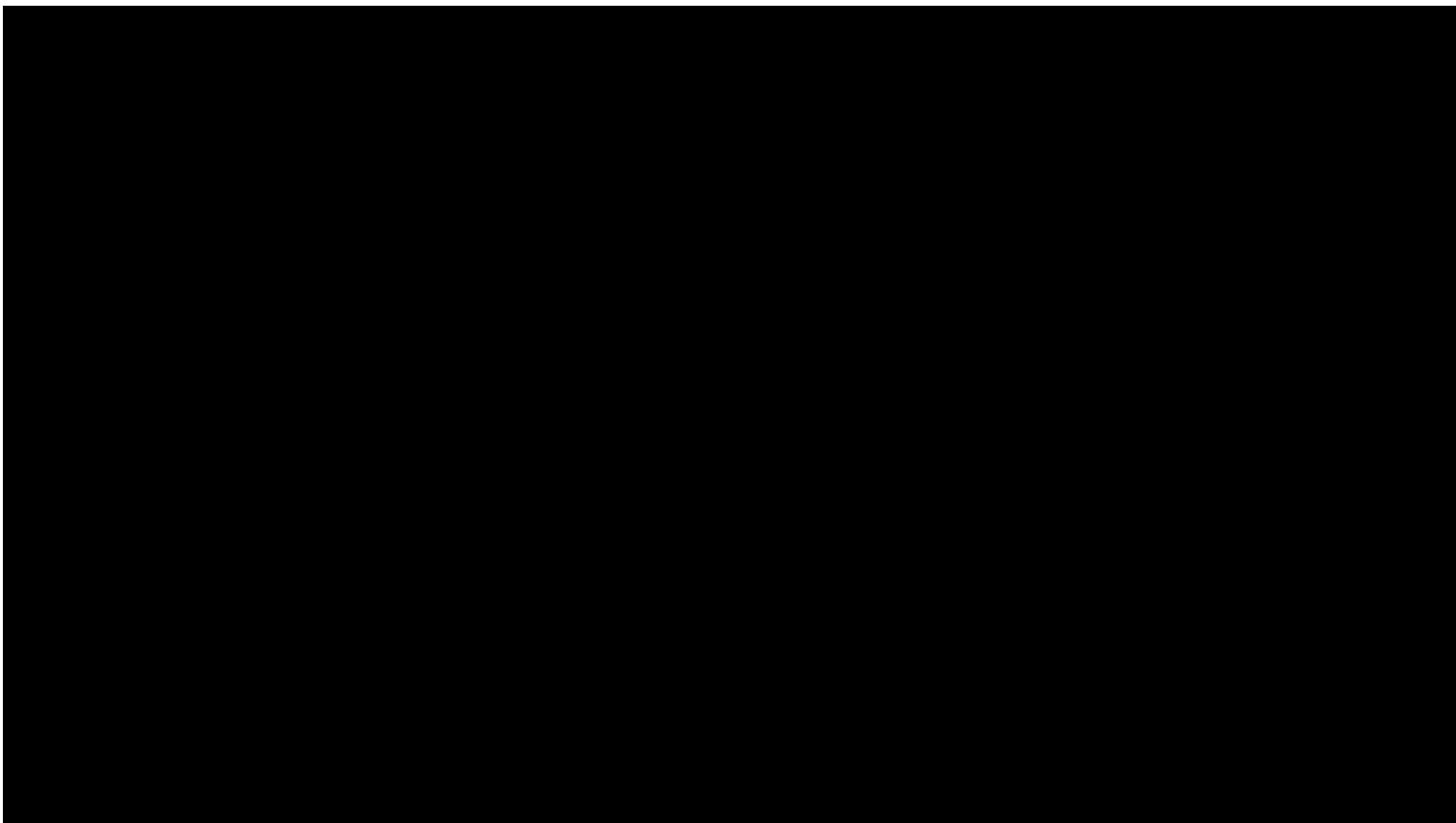
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- Middle-school youth interest in science, technology, engineering and math (STEM)
- Support from 3M
- 55% of MN youth live in 7-county metro area
  - Urban STEM Clubs
  - Fond du Lac and White Earth



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# Urban 4-H STEM Clubs



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# 21<sup>st</sup> Century Research and Outreach Centers

Board of Regents Mission Fulfillment Committee

October 12, 2017

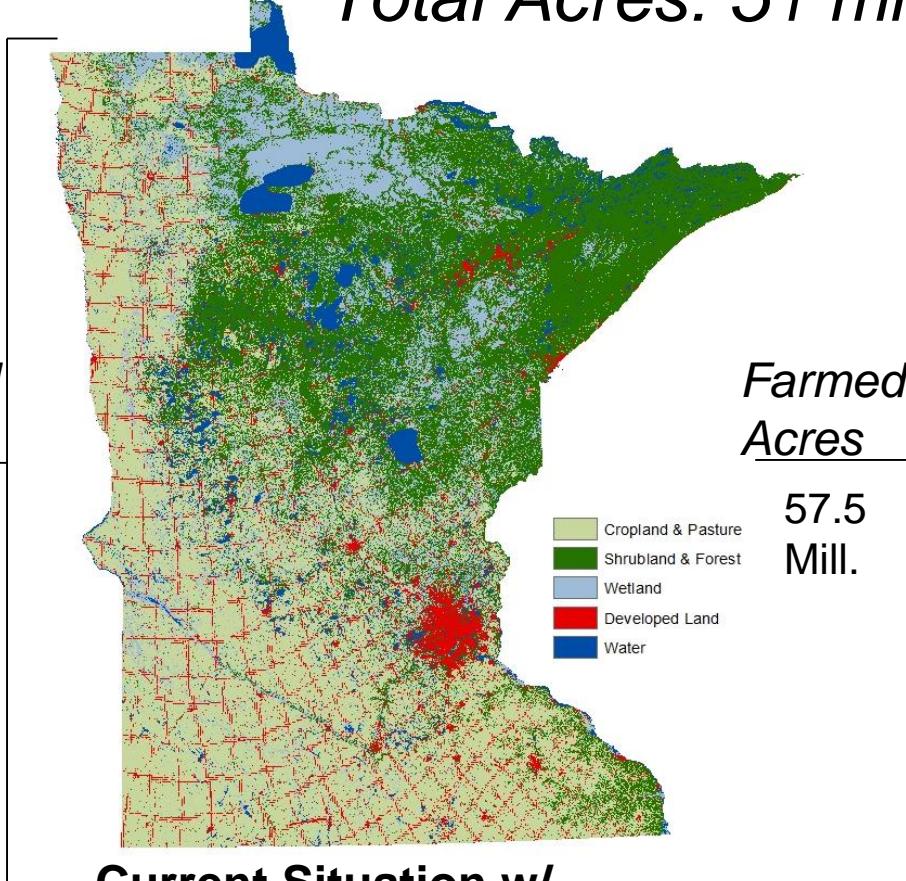


# Grand Challenge: Sustaining Agricultural Productivity and Preserving Natural Resources

*Total Acres: 51 million*

Farmed  
Acres

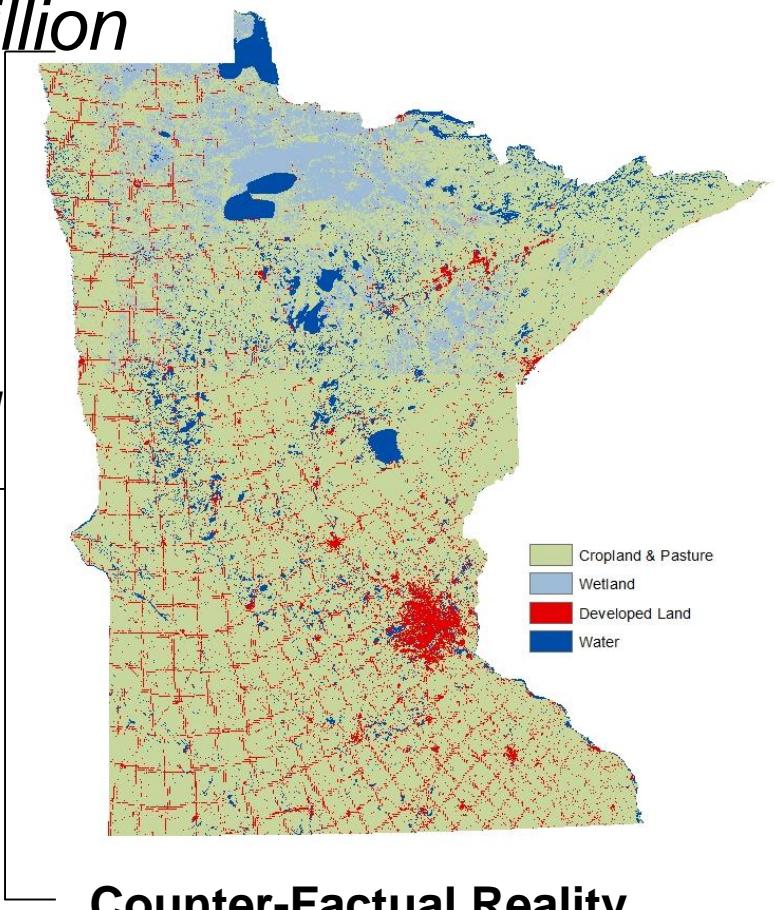
26.9  
Mill.



**Current Situation w/  
Agricultural Productivity Research**

Farmed  
Acres

57.5  
Mill.



**Counter-Factual Reality  
Without Agricultural Research**



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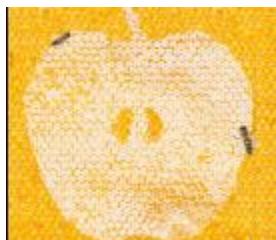
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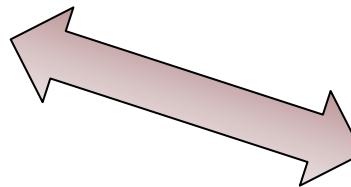
# ROCs Connect Foundational Science to Solve Real Minnesota Problems

## Foundational Science...

- Molecular Genetics and Gene Editing
- Computational Chemistry
- Informatics – Big Data – Computer Science
- Sensors and Robotics - Engineering
- Microbiology – Food Science
- Atmospheric, Climate, Water and Soil Chemistry and Physics
- Forest Biometrics



***Breakthroughs in foundational science are used to make advances in applied science that solve real problems for industry and the public.***

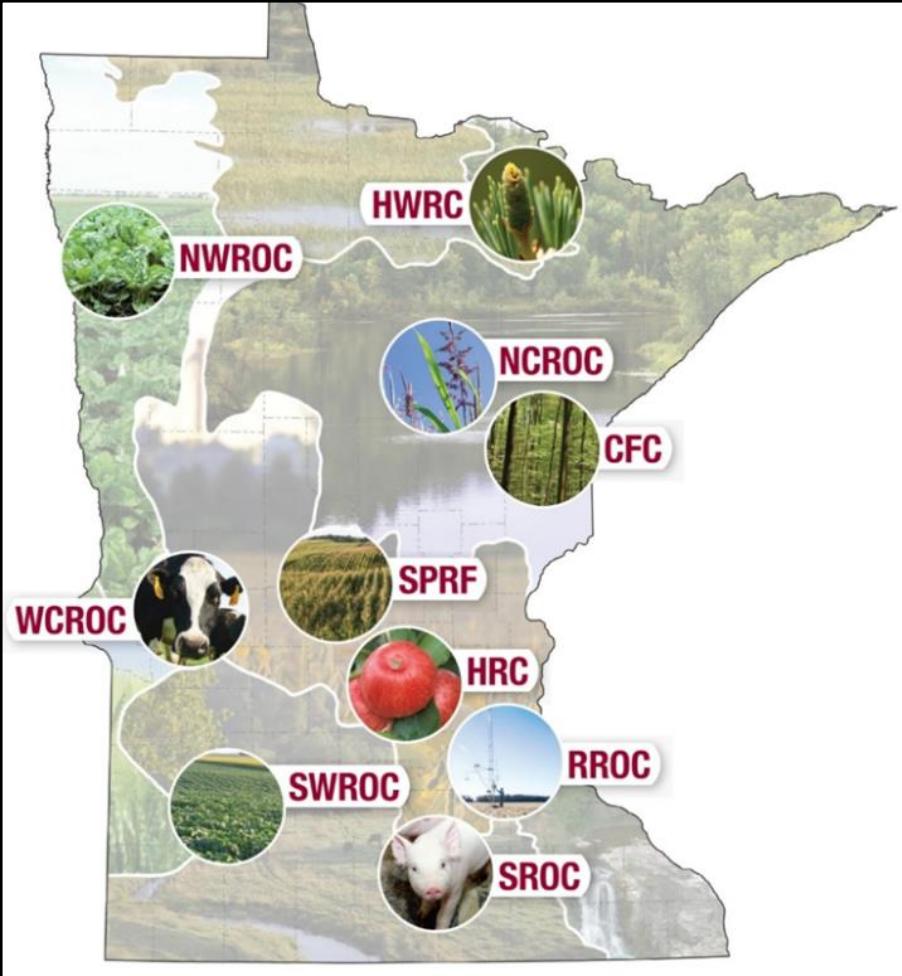


## ...Leads to Real Solutions

- Bio-control of invasive species
- Perennial crops improving soil health and water quality.
- Crops resistant to pests and drought.
- Animal health and efficiency.
- Hygienic bees that improve bee health
- Forest health and productivity adapting to effects of climate change.
- New markets and products for economic growth for all Minnesota.



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**RESEARCH AND OUTREACH CENTERS  
LEADING REAL-WORLD INNOVATION IN  
AGRICULTURE, FORESTRY, FOOD, ENERGY AND  
NATURAL RESOURCE SUSTAINABILITY**

# What's the Return for Minnesota? Competitive Economic Growth

- ***10.6% Return on Research Investment***

over 50-year period ending 2009 (*Pardey et al., 2010*)

- ***\$40.6 in total returns in Minnesota for every \$1 invested*** > \$21 to \$1 average in other states.

Attributed to Minnesota's natural resource suitability and climate.



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# What's the Return for Minnesota? New Markets and Business

- Honeycrisp Apples (global econ. impact)
- Rust-Resistant Soybeans
- Perennial Ryegrass Seed (2<sup>nd</sup> largest U.S.)
- Forever Green—Intermediate Wheatgrass, Camelina, etc.  
(TBD – Value of Ecosystem Services)
- Cold-Hardy Grapes (\$8.5 billion)
- “Greening of Ag”—Energy Efficiency
- Organic Dairy Innovation
- Chemo-Active Crops (life-saving)
- Algae to Energy and Soil Fertility
- Wood preservation for outdoor weathering



# ROC Opportunities

- Climate Adaptation
- Precision Agriculture
- Long-Term Agricultural Research
- Public/Private Partnerships
- System Campus Experiential Learning
- Global Relevance Increasing



# ROC Challenges

- Desire to Monetize Assets Not Considering Unique Asset Value
- Need for Capacity Funds in a Project World
- Complex System Science—No “Silver Bullet”
- Infrastructure Deferred Maintenance
- Relevance Conundrum

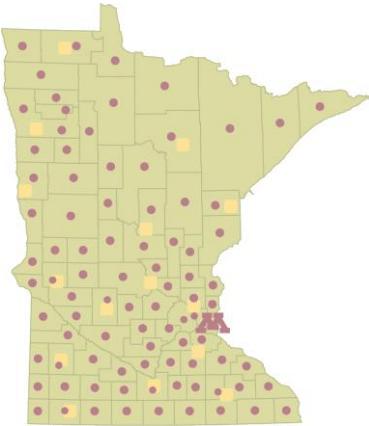


# CFANS

is science for life



**CFANS**  
COLLEGE OF FOOD, AGRICULTURAL  
AND NATURAL RESOURCE SCIENCES



# University of Minnesota 21<sup>st</sup>-Century Outreach Mission

Part I: Extension and Research and Outreach Centers



## Questions and Discussion



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# BOARD OF REGENTS

## DOCKET ITEM SUMMARY

**Mission Fulfillment**

**October 12, 2017**

**AGENDA ITEM:** Update on Online Learning Offerings

**Review**

**Review + Action**

**Action**

**Discussion**

*This is a report required by Board policy.*

**PRESENTERS:** Karen Hanson, Executive Vice President and Provost  
Mary Holz-Clause, Chancellor, University of Minnesota Crookston  
Christopher Cramer, Associate Dean, College of Science and Engineering  
Philip Miller, Assistant Dean, Carlson School of Management

### PURPOSE & KEY POINTS

The purpose of this item is to discuss the University's online learning offerings. The University defines online learning as the enhancement of educational offerings through a spectrum of delivery options serving both resident and distance students enrolled in undergraduate, graduate and professional, and continuing education.

The discussion will include a comprehensive overview of online learnings and examples from the Crookston campus and the College of Science and Engineering and the Carlson School of Management on the Twin Cities campus. The committee will discuss the University's online learning strategy.

Detailed background on online learning at the University is available in the docket.

**University of Minnesota Board of Regents  
Mission Fulfillment Committee**

**October 12, 2017**

**Update on Online Learning Offerings**

**Introduction**

For over 100 years, the University has used new technologies to improve learning outcomes and provide better access to education. Last year marked the 20th anniversary of the University's first offerings of online courses on the Crookston and Twin Cities campuses. Today, the University is delivering over 50 academic programs either completely online or with a short residency, and it is providing over 2,000 completely online course sections, serving both resident and distant students. The Crookston campus has 14 different fully online undergraduate programs, while the Twin Cities campus has focused much of its online efforts on graduate and professional programs.

Nationally, online education continues to grow. It is important for the University to consider its online education engagement and the strategies it can use to leverage and augment its strengths as a place-based, research institution. We can thus better serve both Minnesotans and geographically distant students across the whole student lifecycle, from undergraduate to graduate/professional to adults interested in continuing education. Robust and effective engagement in quality online education can also enhance the University's national and international reputation.

**Part I. Snapshot of Online Learning in the University of Minnesota System**

**Brief Profile of University Online Offerings**

- Number of completely online programs (Bachelors, Masters, Doctoral, Certificates) system-wide: **42**.
- Number of primarily online programs (online with a short campus residency) offered: **13 specialties** within the Doctor of Nursing Practice and **7 additional programs**, ranging from Public Health to Manufacturing Operations Management.
- **16 additional programs** have a significant online component (50-80%)
- Number of unique completely online student enrollments (that is, students taking at least one completely online class per academic year) system-wide during academic year 2016-17: **24,503\***
- Number of duplicated student enrollments (each online enrollment counted) system-wide during academic year 2016-17: **54,316**
- Number of courses offered online system-wide during academic year 2016-17: **2,014**
- Number of online-only students enrolled at U of M system-wide in Spring 2017: **2,048**
- Percent of total enrollments that are online at U of M Crookston: **over 50% of enrollments**

\* underestimated due to data coding methods used in 2016-17

*Sources: University of Minnesota Office of Institutional Research and Center for Educational Innovation*

### **National Online Learning Data**

Nationally, 6 million students are enrolled in at least one online course, accounting for 29.7% of all enrolled students. This is up from 25.9% in 2012. In 2002, less than 10% of students enrolled in at least one online course. Over 2.9 million students (14.3%) are taking courses exclusively online.

- Overall higher education enrollments are down.
- Enrollment in online learning at public and private non-profit institutions continues to grow, while enrollment at private, for-profit institutions continues to decline. Over two-thirds (68%) of all distance students are enrolled in public institutions.
- Distance education enrollments are concentrated among a small number of institutions, with 5% of the institutions offering online education capturing almost half the student enrollments.

*Source: Allen, I. Elaine and Seaman, Jeff, Digital Learning Compass: Distance Education Enrollment Report 2017, Babson Survey Research Group, e-Literate, and WCET, 2017.*

### **University of Minnesota System Completely Online, Primarily Online, and Partially Online Academic Programs**

	<b><u>Offering Unit</u></b>	<b><u>Online Level</u></b>
<b><u>Undergraduate certificate</u></b>		
Agricultural Business	Crookston	Completely Online
Finance	Crookston	Completely Online
Manufacturing Management Certificate	Crookston	Completely Online
Sport and Recreation Management	Crookston	Completely Online
Taxation Certificate	Crookston	Completely Online
Business Administration	Duluth	Completely Online
Undergraduate certificate in Election Administration	TC-HHH	Completely Online
Applied Business Certificate	TC-CCPS	Partially Online
Manufacturing Operations Management Certificate	TC-CCPS	Partially Online
<b><u>Graduate Certificate</u></b>		
Adult Literacy Certificate	TC-CEHD	Completely Online
Parent Education Certificate	TC-CEHD	Completely Online
Talent Development and Gifted Education Certificate	TC-CEHD	Completely Online
Online Distance Learning Certificate	TC-CEHD	Primarily Online
Technical Communication Certificate	TC-CLA	Completely Online
Data Science	TC-CSE	Completely Online
Veterinary Medical Education	TC-CVM	Completely Online
Election Administration Certificate	TC-HHH	Completely Online
Leadership in Health Information Technology for Health Professionals Certificate	TC-Nursing	Completely Online
Public Health Core Concepts Certificate	TC-SPH	Completely Online
Applied Biostatistics Certificate	TC-SPH	Primarily Online
Clinical Research Certificate	TC-SPH	Partially Online
	TC-Center for Spirituality & Healing	
Integrative Therapies and Healing Practices Certificate		Completely Online

<b>Undergraduate Degree Programs</b>		
Bachelor of Science in Agricultural Business	Crookston	Completely Online
Bachelor of Applied Health	Crookston	Completely Online
Bachelor of Manufacturing Management	Crookston	Completely Online
Bachelor of Manufacturing Management in Quality Management	Crookston	Completely Online
Bachelor of Science in Accounting	Crookston	Completely Online
Bachelor of Science in Applied Studies	Crookston	Completely Online
Bachelor of Science in Communication	Crookston	Completely Online
Bachelor of Science in Entrepreneurship	Crookston	Completely Online
Bachelor of Science in Finance	Crookston	Completely Online
Bachelor of Science in Health Management	Crookston	Completely Online
Bachelor of Science in Information Technology Management	Crookston	Completely Online
Bachelor of Science in International Business	Crookston	Completely Online
Bachelor of Science in Management	Crookston	Completely Online
Bachelor of Science in Marketing	Crookston	Completely Online
Bachelor of Science in Sport and Recreation Management	Crookston	Completely Online
Bachelor of Applied Science in Psychology	Duluth	Completely Online
Bachelor of Arts in Tribal Administration and Governance	Duluth	Completely Online
Bachelor of Social Work	Duluth	Partially Online
Bachelor of Applied Science in Manufacturing Operations Management	TC-CCPS	Partially Online
Bachelor of Multidisciplinary Studies	TC-CCPS	Partially Online
Bachelor of Science in Medical Laboratory Sciences	TC-Center for Allied Health	Partially Online
<b>Masters Degree Programs</b>		
Master of Education	Duluth	Partially Online
Master of Tribal Administration & Governance	Duluth	Partially Online
Master of Arts in Applied Child and Adolescent Development	TC-CEHD	Completely Online
Master of Arts in Applied Developmental Psychology	TC-CEHD	Completely Online
Master of Education in Family Education	TC-CEHD	Completely Online
Master of Education in Physical Activity and Health	TC-CEHD	Partially Online
Master of Science in Scientific & Technical Communication	TC-CLA	Partially Online
Master of Computer Science	TC-CSE	Completely Online
Master of Science in Computer Science	TC-CSE	Completely Online
Master of Science in Electrical Engineering	TC-CSE	Completely Online
Master of Business Taxation	TC-CSOM	Completely Online
Master of Business Administration	TC-CSOM	Primarily Online
Master of Science in Dental Hygiene	TC-Dentistry	Primarily Online
Master of Public Health in Maternal and Child Health	TC-SPH	Completely Online
Executive MPH in Public Health Administration and Policy	TC-SPH	Primarily Online
Executive Master of Healthcare Administration (MHA)	TC-SPH	Partially Online
Executive MPH in Public Health Practice	TC-SPH	Partially Online
Master of Public Health in Public Health Practice	TC-SPH	Partially Online
Master of Occupational Therapy	TC- Center for Allied Health	Partially Online
Master of Arts in Integrative Health and Well-Being Coaching	TC-Center for Spiritual Healing	Primarily Online

Master of Health Informatics	TC- Institute for Health Informatics	Primarily Online
<b><u>Doctoral Programs</u></b>		
Leadership for Intercultural and International Education Doctorate	TC- CEHD	Partially Online
Adult Health/Gerontological Clinical Nurse Specialist DNP	TC- Nursing	Primarily Online
Adult Health/Gerontological Nurse Practitioner DNP	TC- Nursing	Primarily Online
Health Innovation and Leadership DNP	TC- Nursing	Primarily Online
Integrative Health and Healing DNP	TC- Nursing	Primarily Online
Nurse Anesthesia DNP	TC- Nursing	Primarily Online
Nurse-Midwifery DNP	TC- Nursing	Primarily Online
Nursing Informatics DNP	TC- Nursing	Primarily Online
Pediatric Clinical Nurse Specialist DNP	TC- Nursing	Primarily Online
Pediatric Nurse Practitioner DNP	TC- Nursing	Primarily Online
Post-Master's Doctor of Nursing Practice	TC- Nursing	Primarily Online
Psychiatric Mental Health Nurse Practitioner DNP	TC- Nursing	Primarily Online
Public Health Nursing DNP	TC- Nursing	Primarily Online
Women's Health Nurse Practitioner DNP	TC- Nursing	Primarily Online
Family Nurse Practitioner DNP	TC- Nursing	Partially Online
<b>Explanation:</b> Completely online, primarily online (short residency), or partially online (50-80% delivered online)		

**University of Minnesota System Completely Online Courses**  
**Offered by Campus and Academic Unit**

Campus	Academic Unit	Completely Online Courses
<b>Crookston Campus</b>	<b>TOTAL</b>	<b>407</b>
Duluth Campus	Business and Economics	54
Duluth Campus	Education and Human Services	135
Duluth Campus	Fine Arts	10
Duluth Campus	Liberal Arts	78
Duluth Campus	Pharmacy	40
Duluth Campus	Science and Engineering	11
Duluth Campus	Academic Affairs	5
<b>Duluth Campus</b>	<b>TOTAL</b>	<b>333</b>
Morris Campus	Academic Affairs	2
Morris Campus	Division of Education	3
Morris Campus	Humanities	5
Morris Campus	Science and Math	9
Morris Campus	Social Science	15
<b>Morris Campus</b>	<b>TOTAL</b>	<b>34</b>
Twin Cities Campus	Academic Health Center	77
Twin Cities Campus	Biological Sciences	23
Twin Cities Campus	Continuing Education	99
Twin Cities Campus	Design	21
Twin Cities Campus	Food, Agriculture, and Natural Science	50
Twin Cities Campus	Liberal Arts	118
Twin Cities Campus	Science and Engineering	175
Twin Cities Campus	Carlson School of Management	77
Twin Cities Campus	Dentistry	9
Twin Cities Campus	Education and Human Development	211
Twin Cities Campus	Graduate School	2
Twin Cities Campus	Humphrey School of Public Affairs	23
Twin Cities Campus	Medicine	7
Twin Cities Campus	Nursing	133
Twin Cities Campus	Pharmacy	51
Twin Cities Campus	Public Health	151
Twin Cities Campus	Vet Med	3
<b>Twin Cities Campus</b>	<b>TOTAL</b>	<b>1,230</b>
<b>Rochester Campus</b>	<b>TOTAL</b>	<b>10</b>
<b>TOTAL</b>		<b>2,014</b>

Sources: University of Minnesota Office of Institutional Research and Center for Educational Innovation

**Summary of University of Minnesota System Online Courses**  
**Total Enrollments and Unique Enrollments**

<b>2016-17 Data</b>	<b>Courses</b>	<b>Total Enrollments</b>	<b>Unique Enrollments**</b>
<b>Crookston</b>			
Completely Online	407	7,252	1,626
Primarily Online	0	0	0
Partially Online	0	0	0
<b>Duluth</b>			
Completely Online	333	7,008	3,793
Primarily Online	44	649	335
Partially Online	148	3,860	2,325
<b>Morris</b>			
Completely Online	34	463	336
Primarily Online	0	0	0
Partially Online	3	20	20
<b>Twin Cities/Rochester</b>			
Completely Online	1,240	39,593	18,748
Primarily Online	223	4,661	2,571
Partially Online	297	8,584	5,976
<b>System</b>			
Completely Online	2,014	54,316	24,503
Primarily Online	267	5,310	2,906
Partially Online	448	12,464	8,321

\*\* Did not count UMTC CCPS ODL online classes due to data coding methods used. Unique completely online enrollments actually somewhat higher

**Delivery Mode Explanation**

- |                   |                                    |
|-------------------|------------------------------------|
| Completely Online | No in-person meetings.             |
| Primarily Online  | 1-3 face-to-face meetings.         |
| Partially Online  | More than 3 face-to-face meetings. |

**Data Explanation**

- |                   |  |
|-------------------|--|
| # of Courses      | Each course (i.e., HIST 1001) counted once per term per section. |
| Total Enrollment  | Individual student counted once per course section per term.     |
| Unique Enrollment | Individual student counted once per course type per year.        |

*Sources: University of Minnesota Office of Institutional Research and Center for Educational Innovation*

### **Big Ten and Peer Institutions: Completely Online Programs Offered by Systems\***

	<b>Bachelor's</b>	<b>Master's</b>	<b>Doctorate</b>	<b>Undergrad. Certificate</b>	<b>Graduate Certificate</b>
Indiana	17	28	6	26	31
Wisconsin	34	49	2	27	6
Iowa	9	10	1	0	11
Michigan	0	2	0	0	4
Ohio State	3	13	1	0	0
Illinois	15	46	2	68	9
Rutgers	2	7	2	0	0
Maryland	32	17	2	5	12
Pennsylvania	32	50	1	17	55
Purdue	0	20	0	0	4
Florida	20	87	9	11	70
Washington	2	18	0	48	0
<b>Minnesota</b>	<b>17</b>	<b>8</b>	<b>0</b>	<b>7</b>	<b>10</b>

\*These numbers represent completely online programs within institutional systems, both flagship and regional campuses.

## **Part II. Moving Forward with a Strategic and Operational Plan**

In 2014, the Provost's Office formed the U of M Online Steering Committee, consisting of representatives from academic units across the system that offered at least one fully online program. Last year, Vice Provost Ropers-Huilman charged two Steering Committee task groups to make recommendations concerning institutional and faculty support issues relevant to online learning. Provost Hanson consulted with senior academic leadership on the six major recommendations, and in July 2017, the provost issued a charge to the support units to begin implementing some of the teaching and learning related recommendations and to the U of M Online Steering Committee to complete work on a strategic and operational online plan. Here is an abbreviated summary of her charge:

- 1. Create a strategic positioning statement about the role and value of online learning at the University of Minnesota -** *The Online Steering Committee will consult with key academic stakeholders and draft a statement on the role of online learning programs within the U of M system. The statement would build on the Provost Office's existing online learning priorities, address the role of online programs in promoting the quality and availability of academic offerings, with a specific focus on graduate/professional programs, strategic undergraduate residential courses, adult degree completion, and continuing education.*
- 2. Consider how to provide operational support for the strategic growth of online programs -** *The Online Steering Committee will develop recommendations regarding: a) a sustainable funding support model that is based primarily on recovering increased revenue from new or expanded programs; and b) the U of M entity/entities that should be responsible for providing support for academic unit online program initiatives, especially in the areas of market research, marketing, project management and student services.*
- 3. Leverage and support Teaching Support @ UMN to build a collaborative approach to providing resources, faculty development, and best practices for online instruction -** *The Center for Educational Innovation (CEI), Office of Information Technology's Academic Technology Support Services (OIT*

*ATSS), Libraries, and the Disability Resource Center (DRC) will work with academic units to develop these support services and associated web-based self-service resources.*

**4. Ensure that colleges, academic units, and campuses have guidelines for online teaching and course development** - *CEI, OIT ATSS, Libraries, and DRC will work with academic units and the Vice Provost for Faculty and Academic Affairs, deans, chancellors, and other academic leaders to develop system-wide guidelines and provide support for unit-level guidelines for online teaching and course development.*

**5. Develop a process to evaluate the efficacy and value of current and emerging system-wide technologies supporting online teaching and learning and recommend those that enhance online learning** - *The Online Steering Committee will work with the Provost's Committee on Teaching, Learning, and Technology, University Learning Technology Advisors, CEI, and OIT to develop this process.*

**6. The Vice Provost for Faculty and Academic Affairs is charged with providing guidance and direction on the implementation of the recommendations in the [2016] online programs task group reports** - *Rebecca Ropers-Huilman will continue her work in this area by providing oversight for the implementation of those recommendations.*

**Key elements of this approach include:**

- **Recognizing that place-based and online education are complementary**, not competitive, methods of delivering high-quality academic programs.
- **Ensuring that there is broad buy-in across campuses, academic units and central academic leadership** on the strategic role and priority of online learning for the University, with assurances that relevant activities will be recognized and supported.
- **Embracing a U of M System approach** in accordance with the Strategic Plan that recognizes the unique missions and strengths of each campus and promotes collaboration in the design, development, and delivery of online courses and programs.
- **Encouraging and supporting academic units** to offer online courses and programs.
- **Establishing performance indicators** to map progress toward strategic, operational, and programmatic goals.

#### **Alignment with the President's U of M System Strategic Plan**

The Provost's online learning efforts are also in full alignment with the U of M System Strategic Plan's Teaching & Learning strategic area. Among the plan's recommendations in the online programs area:

**Develop a Coordinated Strategy for Online Learning for Undergraduate and Graduate Courses and Programs.** Working with the Dean of Continuing Education, a Crookston campus designee representing Crookston's distance learning program, the University of Minnesota Online Steering Committee, and leaders in the Center for Educational Innovation, the Executive Vice President and Provost and the Vice Chancellors for Academic Affairs will:

- Work closely with campus and collegiate units to coordinate needs assessments for and development of online offerings to increase accessibility and meet expressed needs. Market these offerings as a System.
- Create shared development and delivery methods, a shared curriculum or an agreed upon transfer policy when common or individual courses are delivered by different campuses that can be part of an undergraduate degree program, consider revenue sharing approaches, address multi-campus enrollment issues, and establish quality metrics and controls.

# Update on Online Learning Offerings

Presentation to the Board of Regents  
Mission Fulfillment Committee  
October 12, 2017

Karen Hanson, Executive Vice President and Provost



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# Online Programs by Campus

	All Programs	Completely Online	Primarily Online	Partially Online
UMTC/UMR	445	19	20	13
UMD	115	3	0	3
UMM	34	0	0	0
UMC	34	20	0	0
<b>TOTAL</b>	<b>628</b>	<b>42</b>	<b>20</b>	<b>16</b>

## Context

Completely Online	No in-person meetings.
Primarily Online	Short residency
Partially Online	50-80% delivered online

## Online Courses by Campus

	All Courses	Completely Online	Primarily Online	Partially Online
UMTC/UMR	<b>25,186</b>	<b>1,240</b>	<b>223</b>	<b>297</b>
UMD	<b>5,650</b>	<b>333</b>	<b>44</b>	<b>148</b>
UMM	<b>1,272</b>	<b>34</b>	<b>0</b>	<b>3</b>
UMC	<b>1,385</b>	<b>407</b>	<b>0</b>	<b>0</b>
TOTAL	<b>33,493</b>	<b>2,014</b>	<b>267</b>	<b>448</b>

### Context

Completely Online	No in-person meetings.
Primarily Online	1-3 face-to-face meetings.
Partially Online	More than 3 face-to-face meetings.

## Future Efforts

1. Strategic positioning for the role and value of online learning
2. Operational support for strategic growth
3. Leverage and support existing entities
4. System-wide guidelines for online teaching and course development
5. Evaluate the efficacy and value of technologies that support and enhance online learning

# **Online Students at the U of M Crookston**

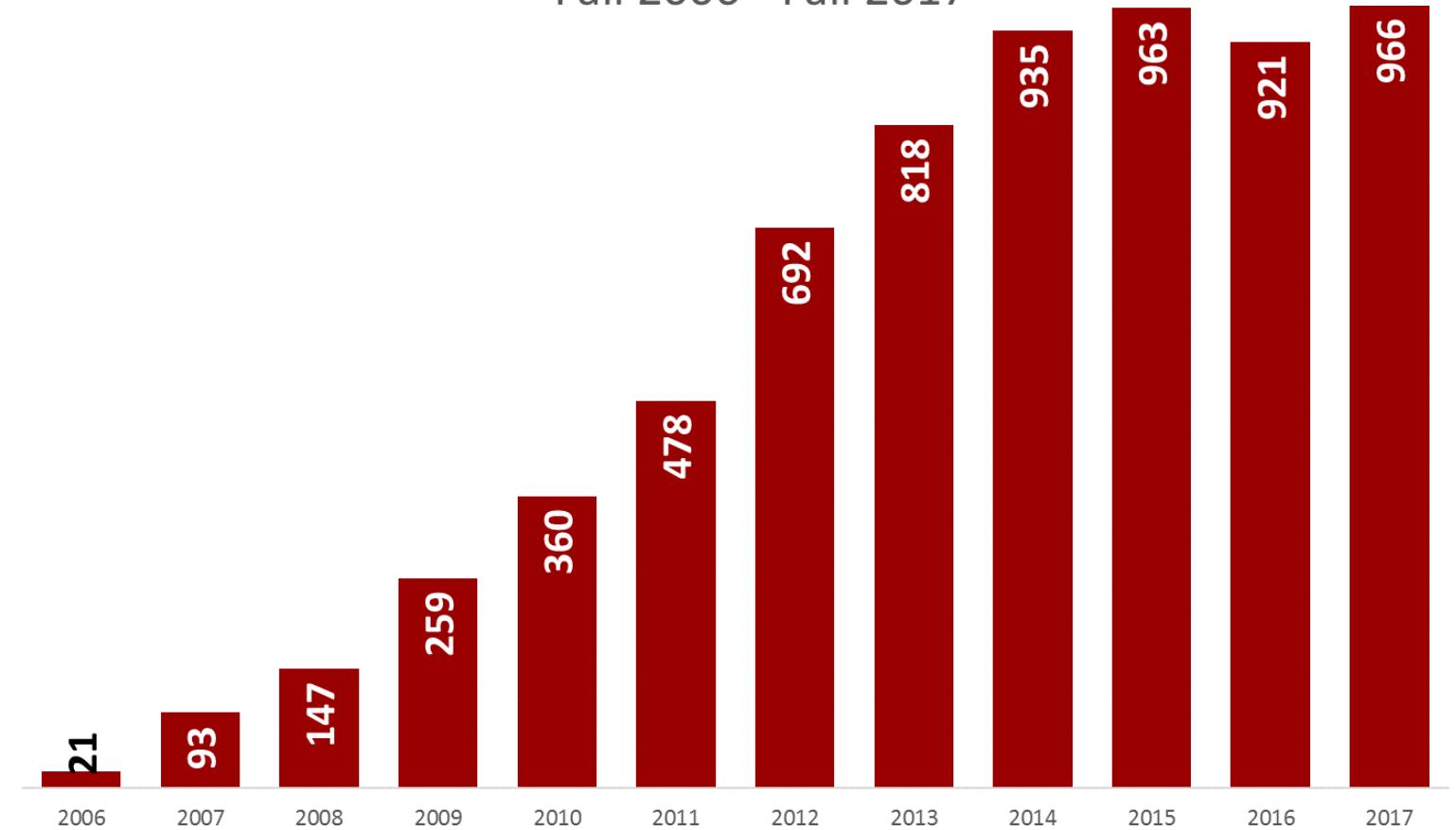
**presented by  
Chancellor Mary Holz-Clause  
October 12, 2017**



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# Online Enrollment at Crookston

Fall 2006 - Fall 2017



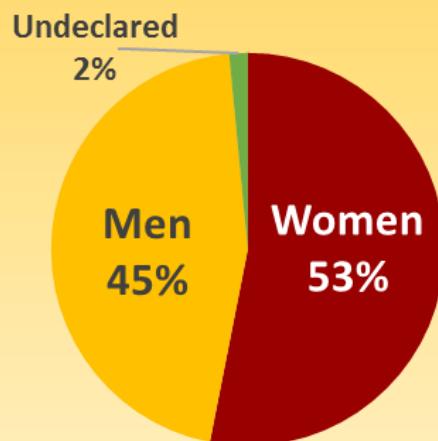
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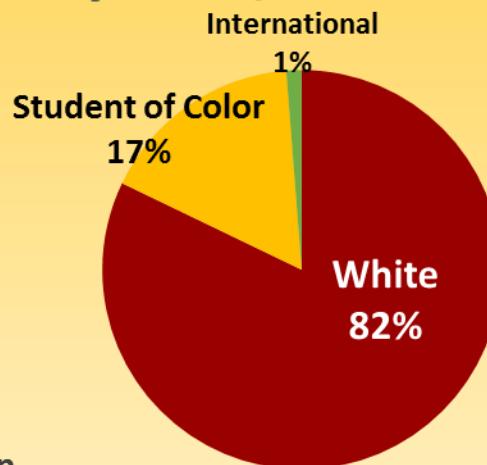
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# Online Enrollment at Crookston

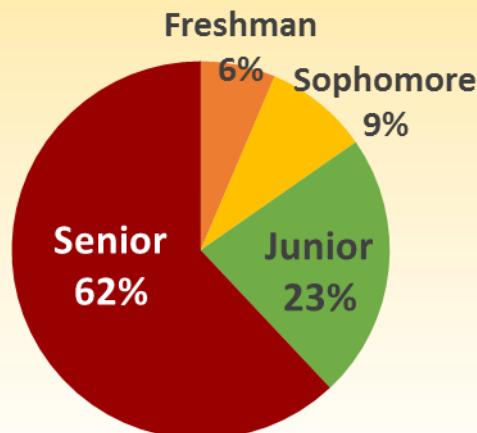
## By Gender



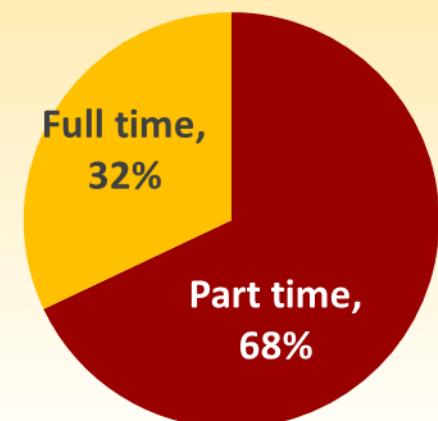
## By Race/Ethnicity



## By Class



## By FT PT Status

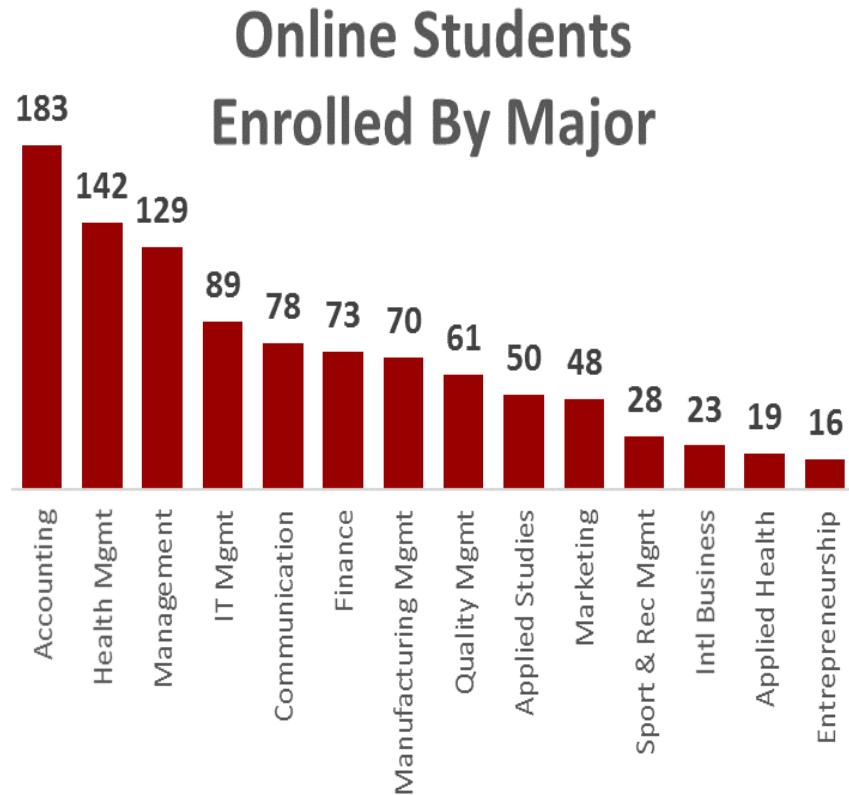


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# Online Enrollment at Crookston



## Retention & Graduation

- 80% return for a second semester
- 35% graduate within 3 years
- 45% graduate overall

## Additional Demographics

- Average age is 32.4
- 70% are Minnesota residents
- Nearly all enter as transfer students

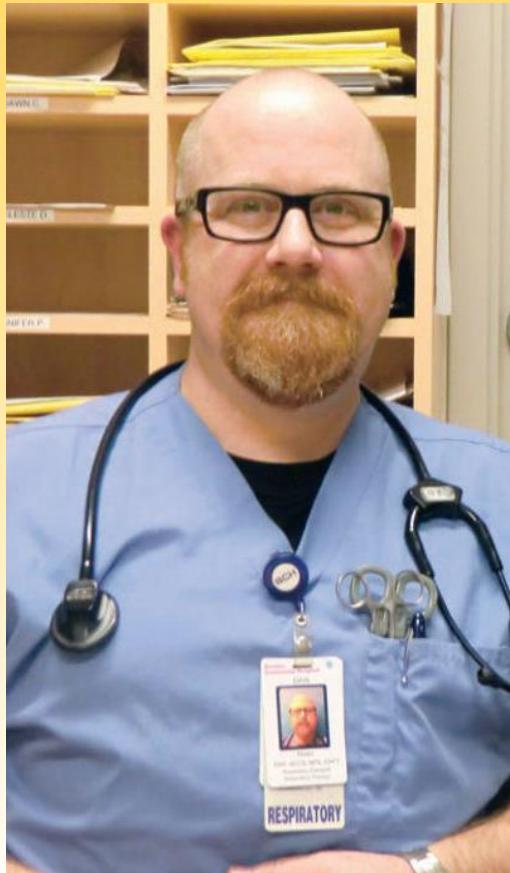


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# Dan Huso, Boulder, CO



- Held Associate's Degree in respiratory therapy
- Worked two jobs while earning his bachelor's online
- Completed B.S. in Health Management in 2015

**"For me, learning online was ideal for my busy life, and the quality was easily equal to, and even exceeded my previous traditional campus education in many ways."**



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# Bryan Boutain, Gilbert, AZ



- Earned Associate's Degree from Alexandria Tech
- Transferred to U of M Crookston through articulation agreement
- Completed B.S. in Marketing in 2012

**"Learning online was fantastic.  
Whenever I had the chance  
I recommended it to other students  
who wanted to complete a bachelor's  
degree but were tied to a location  
because of a job."**



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# Kristi Page, Crookston, MN



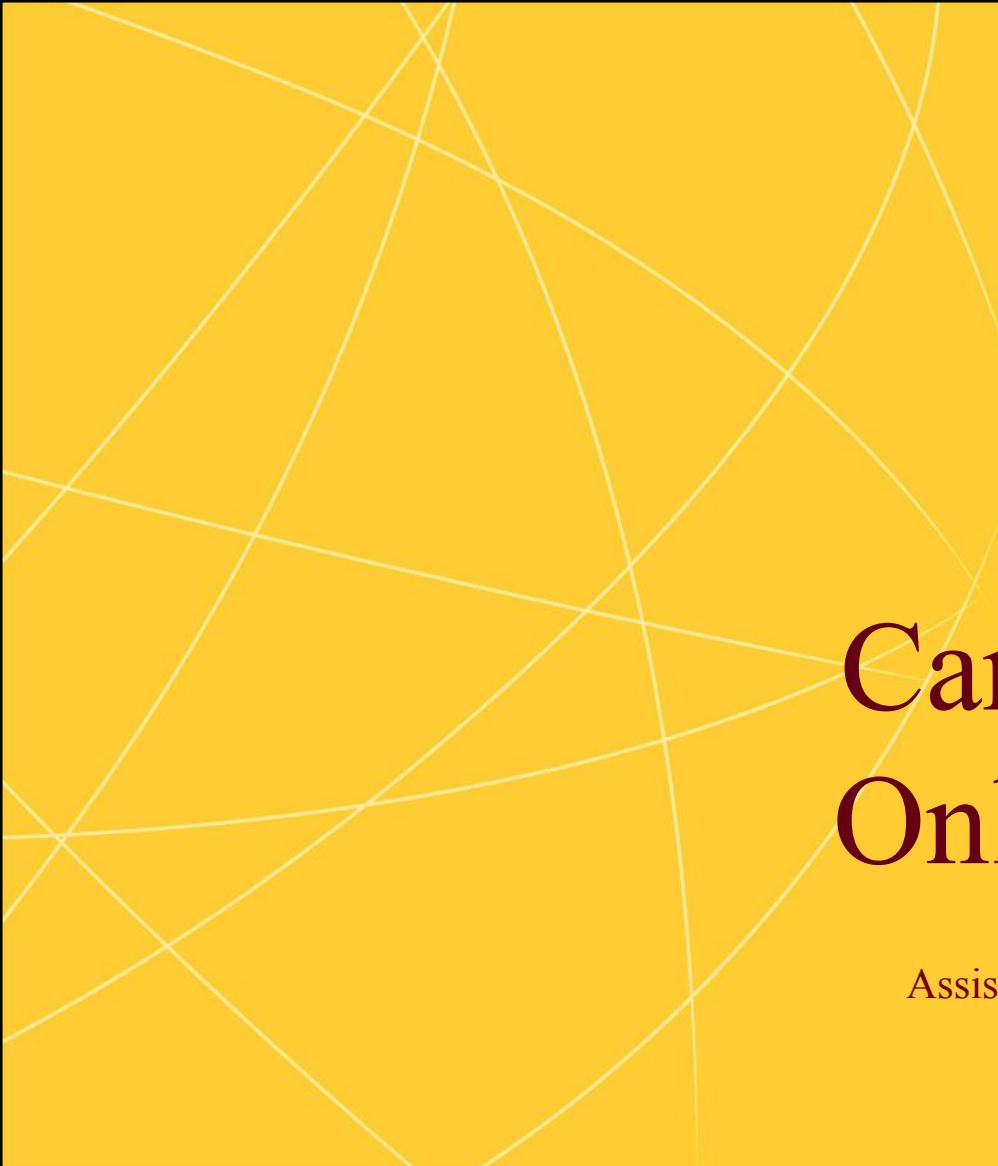
- Employed at Crookston Welding
- Worked full-time while earning her degree online
- Needed flexibility in course schedule
- Completed B.S. in Applied Studies in 2015

**“The entire experience changed me. It changed how I perceived myself as a professional—that self-esteem, that confidence. It’s one of the best things I ever did.”**



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# Carlson School's Online Evolution

presented by Philip Miller  
Assistant Dean of MBA & MS Programs

# The Carlson School's Online Journey

- Is ongoing...much progress in 5 years, but much more left to do...
- Dean focused on stakeholder needs
  - Students / Faculty / Staff / Employers
- 4 Phases
  - 2012: Confronting reality
  - 2013-15: Piloting change
  - 2015-17: Program level piloting
  - 2017 > : Scaling for growth

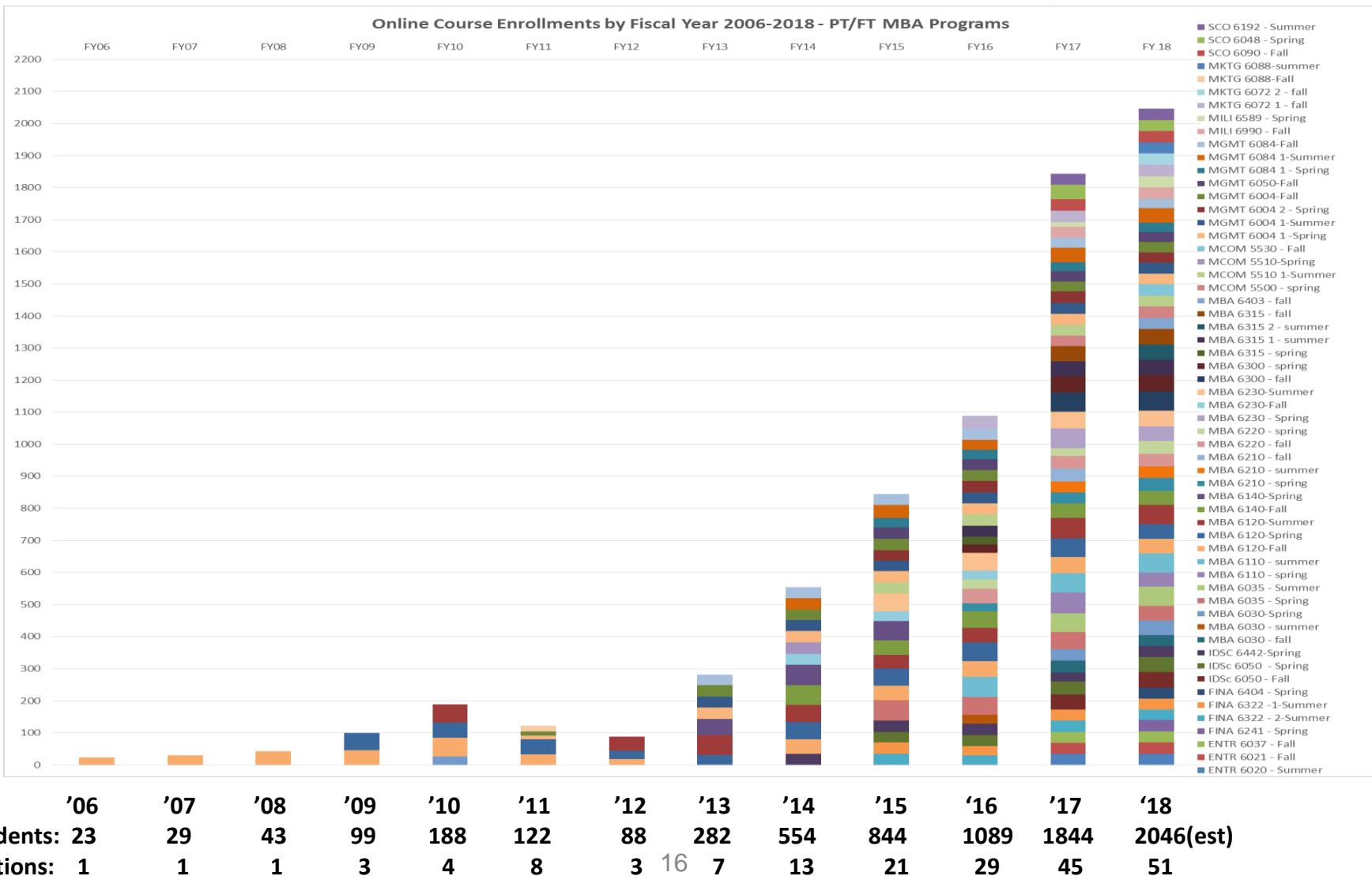
# Phase 1: Confronting Reality

- Market conditions and student needs changing dramatically for working professional students
- PT MBA program had both declining enrollments and low student satisfaction
  - Reduced corporate support for tuition and time
  - Student willingness to recommend was low (75% WTR/18% NOT WTR), driven in large part by dissatisfaction with course format flexibility
- Majority of faculty reluctant to engage new teaching formats/channels
  - Concerns with quality of instruction given school reputation and brand
  - Unfamiliarity: lack of knowledge created concerns about effort and support
- Results: Dean convened faculty committee to explore and propose a pilot set of course offerings as a strategic initiative

# Phase 2: Piloting Change

- Faculty committee of TT faculty leaders explored:
  - Online delivery models
  - faculty & staff requirements
  - student demand
- Developed proposal and approach for piloting 5 new online courses
  - Prioritized mix of course types (quantitative, discussion based etc.) and faculty (TT, P&A)
  - Supported with instructional design staff and incentive pay for course development
  - “Army of the willing”
- Rapid expansion of pilot to entire MBA “core” (see following slide for data)
- Results
  - Significant student demand (filled sections, long wait lists, expanded summer slate), resulting in WTR of 92% & NOT WTR of 4%.
  - Faculty successful in development & delivery
  - Hired additional instructional design staff
  - Adoption of course development process
  - Engaged >15 faculty in preliminary course build out

# CSOM PT MBA Online Seats Enrolled



# Phase 3: Program Level Piloting

- Needed to explore PROGRAM development and delivery, as distinct from COURSE level
  - “Building a program is different than building a bunch of courses”
- Industry MBA launch
  - Niche cohorted program in a new market (Washington DC)
  - Required new course content
  - Required program level curriculum coordination
  - Required distance support of student services
- Distance MBA soft launch
  - Modest scaling of existing PT MBA program in the region leveraging large library of online courses
  - Regional recruitment & marketing (~1/2 of distance enrollment is greater MN)
- Results:
  - Significant learning (coordination, recruitment, services etc.)
  - Incremental staff hiring for instructional design & online programming
  - Sufficient infrastructure and experience to explore scale launch

# Phase 4: Scaling for Growth & the Path Forward

- Dean has charged a senior faculty committee with developing a curriculum that will enable us to grow regionally and nationally online while enhancing the school's brand
- Currently developing a proposal for an online general management MBA that will make us competitive (likely in front of Regents in Spring '18 for a vote)
- Additional online instruction benefits & learning:
  - Allows CSOM to reach beyond metro, better serving the state
  - Instructors who develop online materials tend to improve their teaching in every format as they have to re-evaluate and re-engineer their content. Many of our best instructors have commented on this phenomenon.
  - Much of the “content” we teach is commoditized (Wharton offers core online for free through Coursera). We need to develop both good content, but meaningful ENGAGEMENT with learners.
  - Tools are important (Canvas, Voicethread, Yellowdig etc.), but the appropriate staffing and resourcing of instructional design and delivery of courses is more important than any specific technology implementation.



# BOARD OF REGENTS

# DOCKET ITEM SUMMARY

Mission Fulfillment

October 12, 2017

**AGENDA ITEM:** Consent Report

Review

Review + Action

Action

Discussion

This is a report required by Board policy.

**PRESENTERS:** Karen Hanson, Executive Vice President and Provost

## PURPOSE & KEY POINTS

To seek Board approval of new academic programs and program additions, program deletions and discontinuations, and/or program changes, and conferral of tenure for outside hires, as outlined below.

### I. Request for Approval of New Academic Programs

- Carlson School of Management (Twin Cities campus)—Create graduate minor in Business Management

### II. Request for Conferral of Tenure for Outside Hires

- Constantin Aliferis, Professor with tenure, Medicine, Medical School
- Catherine McCarty, Professor with tenure, Family Medicine and Biobehavioral Health, Medical School

## BACKGROUND INFORMATION

Board of Regents Policy: *Reservation and Delegation of Authority* calls for items, such as tenure and/or promotion recommendations, the establishment, naming, and changes of colleges, academic institutes, programs, and courses of study, to be brought before the Board of Regents for action.

## PRESIDENT'S RECOMMENDATION

The President recommends approval of the consent report.

**University of Minnesota Board of Regents  
Mission Fulfillment Committee  
October 12, 2017**

**Consent Report**

**I. Request for Approval of New Academic Programs**

- Carlson School of Management (Twin Cities campus)—Create graduate minor in Business Management**

The Carlson School of Management on the Twin Cities campus requests approval to create a graduate minor in Business Management, effective spring 2018. This proposed minor consists of foundation and elective courses that will provide graduate students with a solid understanding of key business disciplines. The minor is flexible and designed to suit the general needs and interests of potential students. The proposed program makes use of existing courses and resources.

## **Tenured Outside Hires**

The decision of the Board of Regents to confer tenure and rank for any individual faculty hire from outside the University of Minnesota becomes effective on the first day of that faculty member's academic appointment at the University.

### **Tenured Hires for the October 2017 Board of Regents meeting – Twin Cities campus Recommended by Executive Vice President and Provost Karen Hanson**

#### **Constantin Aliferis**

**Professor with tenure  
Medicine  
Medical School**

Professor Aliferis earned his M.D. from Athens University, Greece, in 1990. Previously, he served as an associate professor of pathology at the New York University. Dr. Aliferis is an internationally recognized researcher in high dimensional modeling and analysis designed to transform data into new actionable biomedical knowledge. He leads the Institute on Health Informatics as well as the Biomedical Informatics Program of the Clinical Translational Sciences Institute (CTSI).

#### **Catherine McCarty**

**Professor with tenure  
Family Medicine and Biobehavioral Health  
Medical School**

Professor McCarty is an internationally recognized epidemiologist with a particular interest in diseases of the eye. She received her Ph.D. in epidemiology in 1993 from the University of Pittsburgh, Graduate School of Public Health. Dr. McCarty joins the University of Minnesota from Essentia Institute of Rural Health in Duluth. She serves as Associate Dean for Research on the Duluth Campus.



# BOARD OF REGENTS

# DOCKET ITEM SUMMARY

**Mission Fulfillment**

**October 12, 2017**

**AGENDA ITEM:** Information Items

**Review**

**Review + Action**

**Action**

**Discussion**

*This is a report required by Board policy.*

**PRESENTERS:** Karen Hanson, Executive Vice President and Provost

## PURPOSE & KEY POINTS

### Information Report

This report highlights select activities at the local, regional, national, and global level in the areas of teaching, research, outreach, and other academic achievements at the University.

### Report on Academic Integrity Matters

This report provides an update on the Academic Integrity Matters (AIM) initiative on the Twin Cities campus.

## BACKGROUND INFORMATION

This report appears as a regular item on the committee agenda.

**UNIVERSITY OF MINNESOTA**

**BOARD OF REGENTS**

**October 12, 2017  
Mission Fulfillment Committee  
Information Report**

*This report highlights select activities at the local, regional, national, and global level in the areas of teaching, research, outreach, and other academic achievements at the University.*

**University Highlights**

The National Science Foundation recently awarded both the Center for Cognitive Sciences and the Center for Applied and Translational Sensory Sciences a \$3 million grant to employ Ph.D. students across the University to develop effective assistive technologies and therapies for people with sensory deficits.

The U.S. Food and Drug Administration has awarded the National Institute for Pharmaceutical Technology and Education, Inc. (NIPTE) with up to \$35M funding for a five-year period. The grant supports scientific projects in various areas of pharmaceutical science and technology, such as improving manufacturing practices, quality of pharmaceutical products and the knowledge base of the scientific community. The College of Pharmacy has been a member of NIPTE since its founding in 2005.

The University's Center for Urban and Regional Affairs (CURA) has received the National Neighborhood Indicators Partnership's inaugural G. Thomas Kingsley Impact Award. The award recognizes partners who use data-driven research to effect policy change and development in the communities they serve.

The College of Education and Human Development (CEHD) has been recognized as the top public school of education in the Academic Ranking of World Universities' 2017 college rankings. CEHD was ranked third overall, behind Harvard and Stanford. The ARWU college rankings are published by the Shanghai Ranking consultancy, an independent organization dedicated to objectively measuring the impact and quality of educational institutions around the world.

The University of Minnesota's Earl E. Bakken Center for Spirituality & Healing has been awarded the first phase of a cooperative \$11.2 million grant from the National Institutes of Health to study non-drug approaches to prevent chronic low back pain, which could lead to reduced opioid use.

The National Center on Educational Outcomes (NCEO) at CEHD's Institute on Community Integration (ICI) has been awarded a \$10 million grant from the U.S. Department of Education's Office of Special Education Programs to establish a National Technical Assistance Center on Inclusive Practices and Policies for Students with Significant Cognitive Disabilities.

The University of Minnesota Crookston tops the list in the latest rankings from U.S. News. In the category Midwest Top Public Regional Colleges for 2018, the U of M Crookston moves into first place.

The University of Minnesota Medical School, Duluth has received the school's largest donation of \$10 million by an anonymous donor, to establish a World Class Native American Research Center of Excellence. The gift will fund the center's mission of collaborating with American Indian and Alaska Native communities, by creating a positive impact on their health through research, leadership and education.

The University of Minnesota Morris was named one of the world's most environmentally responsible colleges by The Princeton Review in its 2017 Guide to 375 Green Colleges.

### **Faculty and Staff Activities and Awards**

James Cloyd, experimental and clinical pharmacology, has been selected to receive the American Epilepsy Society (AES) 2017 J. Kiffin Penry Award for Excellence in Epilepsy Care.

Established in 1997, this award recognizes individuals whose work has had a major impact on patient care and improved the quality of life for persons with epilepsy as well as recognizing excellence in the care of persons with epilepsy.

The Network of Schools of Public Policy, Affairs, and Administration (NASPAA) has presented Barbara Crosby, Humphrey School alumna, with the Leslie A. Whittington Excellence in Teaching Award, in recognition of her outstanding contributions to public service education through excellence in teaching over a sustained period of time.

Dean Connie Delaney, School of Nursing, was elected president-elect of the Women's Health Leadership Trust, a professional network of more than 320 executive women in health care, founded in the Twin Cities.

Aaron Engelhart, genetics, cell biology and development, received the International Society for the Study of the Origin of Life's Stanley L Miller Early-Career Research Award. The award is given for Ph.D. or postdoctoral research that makes a significant contribution to the field and is the highest honor for an early-career researcher doing work relating to the origins of life.

Niloufar Hadidi, School of Nursing, was awarded the 2017 Excellence in Neuroscience Nursing Education Award by the American Association of Neuroscience Nurses. Recipients of this award demonstrate excellence in neuroscience nursing through contributions that inspire, develop, and support nurses in the provision of care to neuroscience patients.

Karen Lundquist, Law School, has been honored as the 2017 Volunteer of the Year by LegalCORPS, a Minneapolis-based nonprofit.

The National Association of Criminal Defense Lawyers (NACDL) has presented JaneAnne Murray, Law School, with a presidential commendation for her “commitment to ensuring justice and due process for all” as a leader with two NACDL clemency efforts: Clemency Project 2014, an initiative spearheaded by the Obama administration, and the recently launched NACDL/FAMM (Families Against Mandatory Minimums) State Clemency Project.

Laura Palombi, College of Pharmacy, is the recipient of the Generation Rx Champions Award, by the Minnesota Pharmacists Association. The award honors a pharmacist who has demonstrated outstanding commitment to raising awareness of the dangers of prescription drug abuse among the general public and among the pharmacy community. It is also intended to encourage educational prevention efforts aimed at patients, youth, and other members of the community.

Cliff Poetz, College of Education and Human Development, will receive the Leadership in Advocacy Award from the Association of University Centers on Disabilities (AUCD) during the AUCD 2017 conference in Washington, DC on November 5-8. The award is presented to an outstanding individual or family member who has exhibited exceptional leadership and self-advocacy skills in the area of developmental disabilities.

Todd Sorensen, College of Pharmacy, is the recipient of the Harold R. Popp Award, by the Minnesota Pharmacists Association. The Popp Award was established in 1969 in honor of the late Senator Harold R. Popp to recognize one pharmacist annually for outstanding services to the profession of pharmacy. This is the highest honor bestowed by the association.

Siri Suh, gender, women & sexuality studies and global studies, has been awarded a Short-Term Research Publication Grant by the American Association of University Women (AAUW) for 2017-2018. These American Fellowships are highly competitive and will aid Professor Suh in finishing her book manuscript, titled “Obstetric Ambiguities: Reproductive Governance, Evidence, and Global Abortion Politics in Senegal.” The book explores how reproductive governance unfolds as selective epidemiological and demographic facts about abortion are produced through the mundane practices of clinical obstetric care, record-keeping, technology distribution and utilization, and monitoring and evaluation of maternal health programs.

Eric Watkins, College of Food, Agricultural, and Natural Resource Sciences, recently received a \$5.4 million grant from the USDA’s National Institute of Food and Agriculture to discover what is stopping homeowners from using fine fescues and how new varieties can be bred to overcome those barriers. This is a multi-institution effort that is working to increase low-input turfgrass use nationwide.

Mary Zellmer-Bruhn, work and organizations, won a best paper award from the Academy of Management (AOM). Her paper, “Evident and Hidden Language Barriers to Knowledge Processing in Multilingual Teams,” won the International Management (IM) Division Best Paper in OB/HRM/OT Award. The award is given to the best scholarly paper of AOM’s IM Division focusing on organizational behavior, human resource management, or organization theory.

Heather Zierhut, genetics, cell biology, and development, is the recipient of the Strategic Leader Award from the National Society of Genetic Counselors. The award recognizes members whose work advances genetics and genomics as a fundamental component of healthcare. Zierhut's research focuses on the education of genetic health professionals and the field's role in public health.

### **Student Activities and Awards**

Mitchell LeGrand, Carlson School of Management, and Kowsar Mohamed, College of Liberal Arts, are both recipients of the James A. Johnson Scholarship, which celebrates students who are engaged in the University community, and specifically in activities that demonstrate an interest in politics and public service. Mitchell was recognized for his outstanding work in organizations such as Acacia Fraternity, White Bear Lake Rotaract, and Minnesota Public Interest Research Group, and receipt of the President's Student Leadership and Service Award (PSLSA). Kowsar was recognized for his outstanding work in organizations such as the Student Unions & Activities Board of Governors, Students for the Horn of Africa, West Bank Community Coalition, City of St. Paul Department of Planning and Economic Development, and receipt of the PSLSA Award.

Kierra Mickelson is the recipient of the inaugural "Two Generations, One Future Scholarship" by the Student Parent HELP Center (SPHC). This scholarship will be awarded each year to an exceptional SPHC-involved student parent who is in the final two years of their undergraduate degree program. Kierra is the mother of daughter Sophia, achieved a cumulative GPA of 4.0 and will graduate in December 2017 with a degree in Business Marketing and Education with a minor in Retail Merchandising.

## **Information Item**

### **Academic Integrity at the University of Minnesota**

This Information Item is presented in response to the Board requesting further information about the new *Academic Integrity Matters* initiative on the Twin Cities campus and how it compares to peer institution efforts, including data relating to scope and Student Conduct Code implications.

#### **Student Conduct Code**

The Board of Regents Policy *Student Conduct Code* states as its first guiding principle: "The University seeks an environment that promotes academic achievement and integrity, that is protective of free inquiry, and that serves the educational mission of the University."

An act of student scholarly dishonesty is regarded as a serious offense. Imposed sanctions can vary depending on the nature and severity of the offence, the culpability of the student or student group, the impact on other students or members of the University community, and available opportunities for student development.

#### **Twin Cities campus**

New in the past two years on campus is the AIM (*Academic Integrity Matters*) initiative, an educational program designed to address first-time reports of scholastic dishonesty. If a student successfully participates in this program, the report of scholastic dishonesty will be removed from his or her university disciplinary record. This program was piloted in spring 2015, and remains an option endorsed by the Student Academic Integrity Committee of the Faculty Senate. This program is related to the university disciplinary records only; AIM does not affect the scheme of academic sanctions a faculty member may adopt within a course, nor does it involve removing or in any way modifying academic sanctions an instructor might have imposed for academic dishonesty.

The University Senate Student Academic Integrity Committee (SAIC), along with the Office for Community Standards (OCS), are the primary campus entities that address issues of academic integrity and scholastic dishonesty through enforcement, education, and outreach. The primary focus of OCS, as part of the Office for Student Affairs, is student development, which includes an ongoing imperative to educate students about academic integrity and to ensure faculty members have the tools they need to teach effectively and address scholastic dishonesty when it occurs.

OCS is the central repository for reports of scholastic dishonesty, which is essential to prevent recurring incidents. It is a requirement, under the [Administrative Policy: Teaching and Learning: Instructor and Unit Responsibilities](#), for faculty and instructional staff on the Twin Cities campus to report to the OCS. Faculty members determine the appropriate sanction for incidents of scholastic dishonesty and then report the incident to OCS. [Sanctioning guidelines](#) are available on the OCS website to assist faculty members where needed.

In the 2004 national Academic Integrity Survey, conducted by Dr. Donald McCabe of the Center for Academic Integrity at Duke University, the most common behaviors of scholastic dishonesty among students (undergraduate and graduate) reported by University of Minnesota faculty (N= 119), were:

- paraphrasing or copying a few sentences of material from a written source without footnoting or properly referencing its source (66 percent);

- paraphrasing without citing from an electronic source (52 percent);
- sharing an assignment with another as an example (42 percent); and
- turning in work done by someone else (40 percent).

As a result of this survey, more attention was given to notifying faculty of the importance of including a syllabus statement about academic integrity and reminding faculty how to report instances of scholastic dishonesty. These points were underscored in the New Faculty Orientation program.

In another "McCabe" survey conducted in 2012, the data were similar to the 2004 survey.

#### Current status and peer comparison

The number of cases reported to the OCS each year in the last five years has been fairly consistent. The increase in 2013-14 stems from a few cases that included multiple students, which raised the number significantly. About one-third of the cases are international students. The number of reports alone is not, however, a complete indication of whether students are engaging in dishonest practices. These numbers represent only the cases where faculty recognize scholastic dishonesty and report it centrally.

Reports of Scholastic Dishonesty	2012-13	2013-2014	2014-2015	2015-2016	2016-2017
	303	509	383	321	252

#### Educational Efforts

Office for Community Standards staff members meet regularly with students who were reported for scholastic dishonesty. Staff identified a need to provide more education to students who struggled not only with how to write (e.g., how not to plagiarize) but also with understanding why and how scholastic dishonesty violates the Student Conduct Code and community standards. OCS staff and members of the University Senate Student Academic Integrity Committee (SAIC) also know that some faculty members hesitate to report centrally some academic misconduct, out of concern for the damage such reports might do to the students' academic and future careers. These two factors were part of the impetus for creating the program *Academic Integrity Matters* (AIM), which is grounded on principles of restorative justice.

The practice of restorative justice has two main components: 1) identifying the harm, and 2) repairing the harm. It is important that students understand how scholastic dishonesty affects the community and other people. It is also important for them to learn how they can be "restored" back to the community, to consider how they might be given a chance to "repair the harm." The program provides an opportunity for effective conversations with students about what they did and the harm it caused.

OCS staff discussed this AIM program with the SAIC to obtain feedback and approval. They also met with an attorney in the Office for General Counsel to discuss logistics on all aspects of the program.

In order to participate in AIM, the student must 1) accept responsibility for violating the Student Conduct Code; 2) have no prior incidents of scholastic dishonesty; and 3) not be subject to additional sanctions such as probation, suspension, or expulsion (which would typically be

penalties for egregious incidents of academic dishonesty). This program provides both a greater understanding of academic integrity and an opportunity to ensure behavioral compliance.

During a two-hour community meeting, AIM participants share their incidents of misconduct with a small group of University community members (faculty, staff and students). The student participants and community members then discuss the impact of the scholastic dishonesty and together determine an educational activity which will give the student the opportunity to demonstrate understanding of the meaning and importance of academic integrity. Upon successful completion of the program, the student's record connected with the initial misconduct will become "non-disciplinary"-- though it will remain filed in the Office for Community Standards. Files are kept in case a second incident occurs.

Total AIM Participants:

- 2014-2015: 31
- 2015-2016: 70
- 2016-2017: 73 (number will go up as some cases are still in progress)

Total cases of recidivism (based on incident date of second incident)

- 2015-2016: 0
- 2015-2016: 1
- 2016-2017: 3

Other Big Ten Universities

The University of Maryland had 550 reports of academic misconduct in 2016-2017. Purdue University addresses around 500 cases per year. Last year, the University of Iowa had 340 reports. The University of Wisconsin Madison does not require their faculty to report cases centrally, but it still had 180 cases reported in 2016-2017. As at the University of Minnesota, as at most of our peers, education regarding academic integrity is taught primarily by instructors and professors in the classroom. Departments such as OCS are another layer of education, through both one-on-one discussions and AIM, and help address these issues when there have been violations.

AIM has also been attracting attention at national and international conferences on scholastic dishonesty. The International Center for Academic Integrity has invited the OCS to do a webinar to help other institutions adopt similar programs. The University of Wisconsin-Madison also started its own AIM program in January 2017, when a former U of M employee accepted a position in their conduct office.

Avoiding the Problem

Finally, the Office for Community Standards has a number of resources, from case studies that can help guide classroom discussions to recommended language for syllabi. OCS staff members are available to advise faculty on scholastic dishonesty (as well as on other behavior problems in their classes), including how to report instances of scholastic dishonesty in accordance with University policy and best practices.