Graduate Faculty Executive Committee
1:30 p.m. – 3:30 p.m., Room 52 Bascom Hall
March 8, 2019

AGENDA

1. (1:30) Automatic consent approval of minutes from February 8, 2019

Approvals

2. (1:35) Notice of Intent to establish an MS in Clinical and Health Informatics from the School of Medicine and Public Health

3. (1:45) Notice of Intent to establish an MS in Business Analytics from the School of Business

Program Reviews

4. (2:00) Program Review MS in Biotechnology (Lara Collier)

5. (2:30) Program Review MS/PhD in Freshwater and Marine Science (Mike Graham)

Post-Review Program Responses (Parmesh Ramanathan)

6. (3:00) Statistics Post-Review Response

7. (3:05) Public Affairs/International Public Affairs Post-Review Response

8. (3:10) Latin American, Caribbean and Iberian Studies Post-Review Response


10. (3:20) Life Sciences Communication Post-Review Response

11. (3:25) German, Nordic and Slavic Languages and Literature Post-Review Response
University of Wisconsin-Madison
Graduate Faculty Executive Committee Meeting
1:30 pm – 3:30 pm, Room 52 Bascom Hall
February 8, 2019

MINUTES


Members Absent: Tracy Schroepfer

Guests: James Keck, Melinda Leko, Nicole Wiessinger, Elaine Klein, Carolyn Kelley

Staff: Judy Bauman, Amy Bergholz, Amy Kuether, A.J. Meinig, Joshua Morrill, Emily Reynolds

Dean William Karpus called the meeting to order.

1. The minutes of January 11, 2019 were approved as a matter of automatic consent.

Approvals:

2. Dean Karpus introduced James Keck, Associate Dean for Basic Sciences, School of Medicine and Public Health, who presented a request to discontinue the Doctoral Minor in Medical Physics. The department will suspend admissions effective Spring 2019 and will complete a teach-out plan for two students enrolled in the program by Fall 2022.

Motion: Moved and seconded to approve the request to suspend admissions effective Spring 2019 and discontinue the Doctoral Minor in Medical Physics effective Fall 2022. The motion was passed unanimously.

3. Dean Karpus introduced James Keck, Associate Dean for Basic Sciences, School of Medicine and Public Health, who presented a request to discontinue the Doctoral Minor in Physiology, effective Spring 2019. There are no students enrolled.

Motion: Moved and seconded to approve a request to discontinue the Doctoral Minor in Physiology, effective Spring 2019. The motion was passed unanimously.

4. Dean Karpus introduced Melinda Leko, Chair, Rehabilitation Psychology and Special Education, School of Education, who presented a request to establish the named option Research and Theory associated with the M.S. Special Education, Department of Rehabilitation Psychology and Special Education, School of Education, effective Fall 2019. The proposal formalizes what the department currently offers to students through differentiated “tracks,” reflecting an emphasis on research and theory in the field of Special Education.
Motion: Moved and seconded to approve a request to establish the named option Research and Theory associated with the M.S. Special Education, Department of Rehabilitation Psychology and Special Education, School of Education effective Fall 2019. The motion was passed unanimously.

5. Dean Karpus introduced Melinda Leko, Chair, Rehabilitation Psychology and Special Education, School of Education who presented a request to establish the named option Teacher Certification associated with the M.S. Special Education, Department of Rehabilitation Psychology and Special Education, School of Education effective Fall 2019. The program proposal formalizes what the department currently offers to students through differentiated “tracks,” reflecting a path leading to a teaching certification in Special Education. The program has received several federal grants through the U.S. Department of Education to provide financial support for students to complete this new named option.

Motion: Moved and seconded to approve a request to establish the named option Teacher Certification associated with the M.S. Special Education, Department of Rehabilitation Psychology and Special Education, School of Education effective Fall 2019. The motion was passed unanimously.

Adjournment:

Meeting adjourned by Dean William Karpus
February 8, 2019

Sarah C. Mangelsdorf, Ph.D.  William Karpus, Ph.D.
Provost and Vice Chancellor for Academic Affairs  Dean of the Graduate School

Sent electronically

Re: Notice of Intent to Plan for MS in Clinical and Health Informatics

Dear Provost Mangelsdorf and Dean Karpus:

On behalf of the School of Medicine and Public Health, I endorse the notice of intent to plan for a new MS degree in Clinical and Health Informatics. After discussion at the February 6, 2019 meeting of the SMPH Academic Planning Council, APC members unanimously approved the request. The request is attached. Thank you for your consideration. If you require additional information, please do not hesitate to contact my office.

Sincerely,

Robert N. Golden, M.D.
Robert Turell Professor in Medical Leadership
Dean, School of Medicine and Public Health
Vice Chancellor for Medical Affairs, University of Wisconsin-Madison

Copies to:
Beth Burnside, ICTR
Laura Ladick, ICTR
Rob Lemanske, ICTR
Beth Meyerand, ICTR
James Keck, School of Medicine and Public Health
Andrea Poehling, School of Medicine and Public Health
Parmesh Ramanathan, Graduate School
Josh Morrill, Graduate School
Emily Reynolds, Graduate School
Jocelyn Milner, Academic Planning and Institutional Research
Nicole Wiessinger, Academic Planning and Institutional Research
Jeff Russell, Division of Continuing Studies
Marty Gustafson, Division of Continuing Studies
Mary Thompson, Division of Continuing Studies

Attachment: Notice of Intent and letters of support – MS in Clinical and Health Informatics
Notice of Intent

Master of Science in Clinical and Health Informatics

New Major Program

Degree/Plan: Master of Science in Clinical and Health Informatics

Primary Contact: Elizabeth Burnside, Deputy Executive Director of the Institute for Clinical and Translational Research (ICTR) and Associate Dean in the School of Medicine and Public Health

Academic Home: ICTR—UW Institute for Clinical and Translational Research, School of Medicine and Public Health

Delivery: Online Program

Executive Summary

The UW-Madison School of Medicine and Public Health is submitting a Notice of Intent (NOI) to create a new online graduate major entitled Clinical and Health Informatics (C&HI). The major will be housed in the University of Wisconsin Institute for Clinical and Translational Research (ICTR). The program will serve working professionals in the healthcare industry through a fully online curriculum, and seek to become Wisconsin’s first Master’s program accredited by the Commission on Accreditation for Health Informatics and Information Management (CAHIIM). The program collaborators include the School of Medicine and Public Health, College of Engineering, School of Nursing, School of Pharmacy and School of Business. This interdisciplinary approach is essential to providing the expertise from population health, biomedical informatics, industrial systems engineering, nursing, pharmacy, and healthcare operations management needed to provide clinicians, nurses, pharmacists, researchers, administrators and health information technologists the tools and methods to assess the effect of health innovations on policy, clinical practice, security, and biomedical and health information systems.

Importance of Offering

The 2017 Leadership and Workforce study conducted by the research arm of the Healthcare Information and Management Systems Society (HIMSS) found that 61% of healthcare organizations and vendors are expecting to increase hiring in the upcoming few years. Epic, a Wisconsin-based company, now works with over 50 IT vendors seeking healthcare informatics specialists in over 20 states. Additionally, informational technology and healthcare clinical informatics is a growing field with more than 900 job postings in Wisconsin alone looking for a person with 3 to 5 years of clinical experience and a masters in data analytics. Local employers include Deloitte, General Electric, Vital Tech solutions, UW Health and Epic. According to the Department of Labor and Bureau of Labor Statistics, healthcare will produce more new IT jobs through 2020 than any other industry, with a projected increase of 21%.

https://www.onetonline.org/link/summary/11-3021.00#WagesEmployment
https://laborinsight.burning-glass.com/jobs/us/#/snapshots/display2018
Because of these growing trends and opportunities in healthcare and informatics, many major universities are creating program offerings and certificates. The University of Illinois at Chicago has recently created a Master of Science in Health Informatics (MSHI) and a Post-Master’s Certificate in Health Informatics (PMC-HI). Other institutions with health informatics programming include University of Cincinnati, Northwestern University-Feinberg School of Medicine, John Hopkins, University of Texas, and the University of Wisconsin School of Nursing and School of Medicine.

Given the growing demand for master’s level training in clinical and health informatics, the University of Wisconsin-Madison will leverage our institution’s cutting-edge work in the School of Medicine and Public health where medical and population health research already have a strong record to inform best practices in the clinical setting. Moreover, ICTR, where this program will be housed, is interdisciplinary (and interdepartmental) by design. ICTR is housed within the School of Medicine and Public Health and partners closely with the Schools of Nursing, Veterinary Medicine, Pharmacy and the College of Engineering. The overarching mission of the clinical health informatics masters is to offer ICTR members and partners throughout the entire institution, as well as external professionals in the region, to translate best practices in applied clinical informatics to improve clinical care. This program is poised to be a leader in clinical and health informatics with a proven record of accelerating research into applied outcomes to improve health in the United States. This program will leverage the expertise of faculty across the university to build upon a growing need to leverage informatics expertise in the healthcare space where evidence-based decision making and data-informed care are essential. Students will leave this program with skills to enhance their professional practices in the clinical healthcare setting and as business and informatics leaders drawing from operational and healthcare management, health informatics, and information technology skills to solve complex problems of the social-behavioral aspects of health. They will contribute to the health of the individual and populations.

The program expects to enroll 100 students (clinicians and healthcare information technology professionals) per year by the fourth year after implementation. Scale is possible with cohorts starting in multiple terms. Students will be able to complete the program in 2-3 years depending upon if they attend full time (2 years) or part time (3 years).

Targeted career paths for graduates include:

- **Chief Medical Information Officer**: Focuses on developing and implementing IT strategies and educating users of clinical information systems. This C-suite administrator executes implementation of a data management and works with evolving array of administrative, financial and management professionals.
- **Chief Nursing Information Officer**: Focuses on the healthcare delivery and outcomes. This role combines clinical nursing skills with technical knowledge to create systems to improve the quality of patient care.
- **Director of Informatics**: Develops financing, implementation and life cycle strategies for integrating information systems while leveraging innovative IT and business models. This role also ensures that information systems protect the security, confidentiality, and integrity of medical records in compliance with regulatory requirements.
- **Director of Clinical Operations**: Focused on the implementation and optimization of information systems, to create needed infrastructure that connects and enables the flow of critical information to and from each of the stakeholders in a patients care planning team. It also creates opportunities with hospitals, public health organizations, research laboratories, medical software firms, insurance agencies, pharmaceutical companies and education institutions to use data to inform systems-based solutions.
• Clinical Data Analyst: Use clinical informatics strategies to capture and disseminate patient data to other members of the multidisciplinary healthcare team. This use of informatics has created significant efficiencies in documenting clinical data and outcomes to improve patient care strategies.

• Pharmacy Informatics Specialists: Through optimized healthcare training in clinical informatics, Pharmacy Informatics Specialists provides a unique set of skills to communicate, interpret and ensure safe implementation of medical prescriptions across setting and populations.

Recent job titles for careers in clinical healthcare informatics include:

- Medical Informatics Project Director
- Medical Informatics Researcher
- Medical Informatics Systems Analyst
- Director of Clinical Informatics
- Clinical Informatics Specialist
- Clinical Informatics Analyst
- Clinical Informatics Coordinator

Expertise in clinical and health informatics is required in the top tier of job openings that involve electronic health record analysis, database design and clinical operational management, health modeling and health care data security. The market demand according to the Educational Advisory Board Report on Health Professions saw a national demand of over 35,000 job posting in 2016 asking for the informatics skills listed. Moreover, healthcare has even greater data integration, system interoperability, and reporting needs than ever before and healthcare clinical informatics skills are required to demonstrate outcomes for Medicare reimbursement and reform. The need for these skills is driving new online programming across the country. UW-Madison is poised to become a leader in this space for the following reasons. Within the integrated School of Medicine and Public Health, ICTR is the home to the Clinical Health Informatics Institute (CHI), which is designed to foster applied clinical health informatics activities. ICTR provides links to the Schools of Nursing, Veterinary Medicine, and Pharmacy and the College of Engineering. Within SMPH, there is a strong biostatistics and medical informatics department. The timing is right as health care employers are actively seeking analytics in informaticists with a 37% increase in informatics jobs stipulating data analytics skills from 2013-2016. The overall projected growth in the healthcare analytics market from 2015-2020 is over 11 billion with 4 out of 5 hospital systems citing value-base care as a key analytical driver. The need for data skills are increasingly becoming a necessity in the healthcare industry.

Unique Place within the UW System Graduate Portfolio

UW System Programs

Currently there is just one graduate-level health science related degree and two certificates within the UW System in this domain. These UW System programs serve students interested in learning skills related to IT management within a healthcare setting. UW-Milwaukee offers a Masters in Health Care Informatics and a Certificate in Health Care Informatics. This UW-Milwaukee master’s degree focuses on

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the automation of medical data and information and closely aligns with IT network design than clinical healthcare decision-making. Courses are face-to-face and online for working IT professionals. The Certificate in Health Care Informatics is offered as a cooperative program among the College of Health Sciences, the Department of Health informatics Administration, and the School of Information Studies. The certificate allows students to explore the three disciples to build foundational knowledge across fields. According to the program website neither the degree nor the certificate is accredited.

Additionally, the University of Wisconsin-Oshkosh offers a Healthcare Informatics Certificate. The program serves healthcare nurses interested in integrating computer science and information science to improve patient outcomes. The program is online with a required clinical practicum. Because the program serves nurses, this certificate allows students to be eligible to take the ANCC Informatics nursing certification exam.

The proposed UW-Madison program will serve a different audience including healthcare professionals with clinical experience interested in managing large healthcare enterprise solutions and implementing system-based solutions to improve patient outcomes. Students will be required to have work experience in clinical healthcare or a degree in a clinical discipline (M.D., R.N., PharmD, etc.) and proficiency with basic statistics. Within the University of Wisconsin-Madison, the School of Medicine and Public Health offers an on-campus full-time M.S. Degree in Biomedical Data Science. The program is research and thesis-based. MS students study methodologies from computer sciences and statistics to contribute to the solutions central to computational problems in biomedicine through building algorithms and coding simulations for population health research, statistical genetics and biomedical informatics.

**UW-Madison Programs**

Within the University of Wisconsin-Madison, the School of Medicine and Public Health offers an on-campus full-time M.S. Degree in Biomedical Data Science. The program prepares graduates to understand key concepts and methodologies from computer sciences and statistics to contribute to the solutions central to computational problems in biomedicine. The program is research and thesis based and is designed for students interested in building algorithms and coding simulations for population health research, statistical genetics and biomedical informatics.

Additionally, the on-campus full-time MS in Statistics named option in biostatics at UW-Madison serves students who work in the theory, methodology, and application of statistics. The program focuses primarily on the statistics of biomedical sciences and differs from informatics in that is focused on the computation and mathematical application of how to design experiments and survey samples in the biomedical field. Informatics in contrast is focused on the interaction between humans and information.

The proposed C&HI degree also differs in that will be accredited and all courses will offered online for working healthcare professionals and will be focused primarily on the application and applied tools used in a clinical or healthcare setting. C&HI will not offer a thesis option. The C&HI degree will teach the applied skills needed to translate data science into workable processes at the healthcare system level for leaders and managers to use informatics to solve complex healthcare problems.

The Clinical Health Informatics Institute (CHI²), embedded in the Institute of Clinical Translational Research (ICTR) is working to create new online courses focused more on data-driven medicine and system-based decision making with an informatics focus to serve a new audience. This is part of the School of Medicine and Public Health’s strategic vision and planning mission to create vital connections between basic discovery and clinical/translational research, and provide programs that support the health and wellness of individuals and populations. The overarching goal for the C&HI masters is to
create strategic programing and research partnerships that improve public health by translating basic research discoveries into direct, practical improvements in clinical care and healthcare delivery systems. This program also supports the UW-Madison campus strategic framework goal to improve access (through online delivery) and “build innovative professional master’s-level degrees and other lifeline learning experiences.”

Curriculum and Learning Outcomes

The program learning outcomes are based on AMIA Health Informatics Core Competencies for CAHIIM Accreditation. This program will seek accreditation to support the mission and vision of next generation of informatics professionals. Accreditation is key differentiator for our program and leverages key expertise across disciplines and expertise across faculty departments to leverage all 10 competencies in one degree program that spans expertise in data management, interprofessional practice, and data design, systems and operational management across healthcare fields.

The program learning outcomes/competencies are:

1. **Health**: The background knowledge of the history, goals, methods and challenges of the major health sciences, including human biology, genomics, clinical and translational science, healthcare delivery, personal health and population health.

2. **Information Science and Technology**: The background knowledge of concepts, terminology, methods and tools of information science and technology for managing and analyzing data, information and knowledge.

3. **Social and Behavioral Science**: The background knowledge of the effects of social, behavioral, legal, psychological, management, cognitive, and economic theories, methods, and models applicable to health informatics from multiple levels including individual, social group, and society.

4. **Health Information Science and Technology**: The knowledge, skills, and attitudes to use concepts and tools for managing and analyzing biomedical and health data, information, and knowledge. Key foci include systems design and development, standards, integration, interoperability, and protection of biomedical and health information.

5. **Human Factors and Socio-technical Systems**: The knowledge, skills and attitudes to apply social behavioral theories and human factors engineering to better understand the interaction between users and information technologies within the organizational, social, and physical contexts of their lives, and apply this understanding in information system design.

6. **Social and Behavioral Aspects of Health**: The knowledge, skills, and attitudes to use social determinants of health and patient-generated data to analyze problems arising from health or disease, to recognize the implications of these problems on daily activities, and to recognize and/or develop practical solutions to managing these problems.

7. **Social, Behavioral, and Information Science and Technology Applied to Health**: The knowledge, skills and attitudes to apply the diverse foundation concepts and facets in order to develop
integrative approaches to the design, implementation, and evaluation of health informatics solutions.

8. **Professionalism**: The conduct that reflects the aims or qualities that characterize a professional person encompassing especially a defined body of knowledge and skills and their lifelong maintenance as well as adherence to an ethical code.

9. **Interprofessional Collaborative Practice**: Behavior that reflects the foundations of values/ethics, roles/responsibilities, interprofessional communication practices, and interprofessional teamwork for team-based practice.

10. **Leadership**: Behavior that demonstrates the following characteristics: credibility, honest, competence, ability to inspire, and ability to formulate and communicate a vision.

This 30-credit master’s degree is designed as a 2 year full-time or 3 year part-time online program for adults working in either clinical healthcare or who have a strong analytical background in science and statistics related to healthcare. The average student will complete the program in 18 months but may take up to three years to complete the program once started. The majority of the courses are currently available and will need to be converted to an online platform to serve this new body of students. There are also several new courses in development.

**Core and Elective Courses:**

- Health Informatics Systems: Knowledge of Healthcare
- Data Driven Medicine
- Health Communication in the Information Age
- Healthcare Quality Improvements
- Human Factors Engineering Design and Evaluation
- Core Principles of Population Health Sciences
- Healthcare Operations Management
- Organizational Communication for Healthcare Professionals
- Regulatory Practice and Compliance
- Translational and Outcomes Research in Health and Health Care
- Clinical and Health Informatics Capstone

The MS in Clinical and Health Informatics will leverage expertise across several schools and departments across the University of Wisconsin-Madison. The expertise and variety of interdisciplinary coursework will make our program competitive to solve challenging problems in the healthcare arena. The curriculum will center on real world challenges and team-based problem-solving skills to inform evidence-based decision making in a complex electronic health care environment.

**Faculty and Staff**

The core faculty and staff supporting development of this program include:

- Elizabeth Meyerand, Professor School of Medicine and Public Health and Professor of Medical Physics and Co-Director of the Women in Science and Engineering Leadership Institute
- Elizabeth Burnside, Deputy Executive Director of the Institute for Clinical and Translational Research (ICTR) and Associate Dean in the School of Medicine and Public Health
• Enno Seimsen, Associate Dean of the MBA and Master’s Programs, Executive Director of the Erdman Center for Operations and Technology Management
• Jack Temple, Clinical Associate Professor, School of Pharmacy
  Manager, Information Technology and Medication Use Systems, UW Health
• Richard Bruce, Assistant Professor of Neuroradiology, School of Medicine and Public Health
• Maureen Smith, Professor in the Departments of Population Health Sciences, and Family Medicine and Community Health, School of Medicine and Public Health
• Barbara Pinekenstein, Clinical Professor, School of Nursing

The master’s program will be housed within the UW Institute for Clinical and Translational Research (ICTR), administered by the School of Medicine and Public Health (SMPH), and supported by a Board of Governors that includes four additional academic units:

• School of Nursing
• School of Pharmacy
• School of Veterinary Medicine
• College of Engineering

ICTR is designated an administrative body for educational programs under the academic authority of the School of Medicine and Public Health. Program governance includes a faculty executive committee and a curriculum subcommittee. The executive committee, which is led by a faculty chair and includes the ICTR Training Director as a non-voting member, has oversight over the program. The curriculum subcommittee votes on recommendations, which are presented to the executive committee for approval.

A Faculty Director will be hired. Laura Ladick is the Assistant Program Director for Biomedical Informatics and will serve as the Administrative Lead for Student Services and support and coordinate student recruitment efforts. A program director will be hired to facilitate the incorporation and maintenance of existing curricular offerings across schools and colleges; work with Division of Continuing Studies to create a marketing, recruitment, and admission plan; grow academic and business relationships with corporate and government partners that can participate in curriculum design and delivery, participate in projects, and support career development for students; attend professional trade conferences and recruitment-related conferences; monitor program outcomes; and manage appropriate budgets.

Students will be academically advised by faculty and staff members from ICTR and its strong interdisciplinary team approach. Student services will be provided through ICTR. The SMPH is developing a plan so that students will have access to UW-Madison’s Handshake recruitment and career management tool, with additional career counseling services from the Division of Continuing Studies’ Adult Career and Special Student Services for revenue programs until the program revenue will support a focused career counselor.

Funding

This program is expected to be self-funded through tuition revenue within 3 years of implementation. Enrollment will begin with 25 students and increase with additional cohorts of 25 students per year until a goal of 100 students is reached in Year 4 after launch. The program will also request an online per credit tuition tier based on the competitive space for this discipline, which will be decided by the time of the development of the full proposal.
Table 1: Enrollment and Direct Revenue Projections

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<th>Development</th>
<th>Launch and Grow</th>
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<td>Enrollment</td>
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<td>Credits taught</td>
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Funding for program development is supported by ICTR, the Division of Continuing Studies, and central campus. Memorandums of Agreement for participating schools and colleges to share tuition revenue with participating departments and instructors will be signed as departments commit. Funding from the Division of Continuing Studies also includes market research and analysis, including a market demand study, competitive survey and plans to build out marketing strategy and execution plans for program launch in fall of 2020. The DCS Recruitment Team will create and implement program-specific recruiting plans, and support development of websites and other communication materials.
Letters of Support
Notice of Intent for MS in Clinical and Health Informatics

Letters of support from the following academic units are attached:

- A request from ICTR to its governing schools/colleges to consider the Notice of Intent. This document indicates the approval dates of various ICTR governance bodies.
- College of Engineering
- College of Letters and Science
- Department of Biostatistics and Medical Informatics (SMPH)
- Department of Computer Sciences (College of Letters and Science)
- Department of Industrial and Systems Engineering (College of Engineering)
- Department of Population Health Sciences (SMPH)
- Department of Statistics (College of Letters and Science)
- MS in Biotechnology Program (SMPH)
- School of Nursing
- School of Pharmacy
- School of Veterinary Medicine
- Wisconsin School of Business
MEMORANDUM

Date: Dec. 18, 2018

To: Dean Scott, School of Nursing
   Dean Swanson, School of Pharmacy
   Dean Richardson, College of Engineering
   Dean Markel, School of Veterinary Medicine
   Dean Golden, School of Medicine and Public Health

From: Graduate Program in Clinical Investigation (GPCI)
      Karen Hansen, MD, MS
      Chair, Executive Committee
      David Rabago, MD
      Chair, Curriculum Subcommittee

Re: Request for approval to advance Notice of Intent for Professional online MS in Clinical and Health Informatics

The Executive Committee governing the Graduate Program in Clinical Investigation requests that the proposed program revisions outlined below, in accordance with the approved process for making changes to these programs; be taken up by each of the APCs of ICTR’s partners as follows: *The APC Chair, with appropriate consultation with the full committee, provides written approval of the requested change within 2 weeks or notifies the Chair of the Executive Committee (formerly “Faculty Governance Committee”) that their respective School/College APC will need to vote on the change of their next closest meeting and provide their decision within a week of that meeting.*

As a reminder, the Executive Committee governing the Graduate Program in Clinical Investigation is comprised of active and engaged faculty representatives from the five academic partners of ICTR and the Marshfield Clinic.

PROPOSED PROGRAM

A copy of the Notice of Intent to propose an online master’s degree in Clinical and Health Informatics (attached) was approved by the faculty GPCI Executive Committee Dec. 14, 2018, and its Curriculum Subcommittee Nov. 16, 2018. Minutes of those meetings are attached.

Please contact GPCI Administrator Sally Wedde (sally.wedde@wisc.edu) or either of us (keh@medicine.wisc.edu or david.rabago@fammed.wisc.edu) if you have questions.

Thank you.
January 18, 2019

Allan Brasier, Executive Director  
UW Institute for Clinical and Translational Research  
School of Medicine and Public Health  
University of Wisconsin-Madison

Dear Dr. Brasier,

The College of Engineering supports the creation of a new online MS degree program in Clinical and Health Informatics. Our College offers educational and research opportunities for students with interests in health care and we feel that this program complements our offerings. We are pleased to be a part of this program and look forward to contributing to the curriculum.

Sincerely,

James P. Blanchard  
Executive Associate Dean  
blanchard@engr.wisc.edu
5 February 2019

TO: Andrea Poehling, Director, Academic Program Development and Evaluation, SMPH

FROM: John Karl Scholz, Dean

RE: Notice of Intent to Offer a New Program: MS-Clinical and Health Informatics

CC: Elaine Klein, Associate Dean for Academic Planning, L&S
Marty Gustafson, Assistant Dean for Academic Affairs, Continuing Studies
Jocelyn Milner, Vice Provost and Director, Academic Planning and Institutional Research
James Montgomery, Associate Dean for Fiscal Initiatives, L&S
Jennifer Noyes, Associate Dean for Operations and Staff
Parmesh Ramanathan, Associate Dean, Graduate School
Emily Reynolds, Academic Planning Specialist, Graduate School
Eric Wilcots, Deputy Dean, L&S

Thank you for affording the College of Letters & Science an opportunity to review the Notice of Intent to plan and to offer a new online academic program, the MS-Clinical and Health Informatics, at UW-Madison. The council unanimously recommended that L&S endorse this proposal, adding to the support already expressed by our colleagues in the departments of Computer Sciences and Statistics, who are very familiar with the demand for research, scholarship, and applied training in informatics. We agree with your evaluation that, as the program is designed, there should be little crossover with programs and courses offered in L&S. Though our colleagues noted that we are actively working to develop a new undergraduate major in Data Science, that program is envisioned to serve a traditional, residential undergraduate population, which will not compete with the program SMPH proposes to offer – though it might serve students who may someday seek it out.

We wish you all success in the work ahead.
January 18, 2019

Allan Brasier, MD
Executive Director
Institute for Clinical and Translational Research
School of Medicine and Public Health
University of Wisconsin-Madison

Dear Dr. Brasier,

Thank you for sharing the Notice of Intent to develop a new online, interdisciplinary degree program in Clinical and Health Informatics. This growing field is critically important for health care improvement, and we are pleased to provide support from the Department of Biostatistics and Medical Informatics (BMI) for this innovative program.

As you know, BMI has a strong and successful history of being a world-leader in applying statistical and informatics methods to solve difficult health-care problems. Our department looks forward to collaborating and contributing as needed for your program’s development. Specifically, we are interested in exploring course offerings to benefit the Clinical and Health Informatics degree program that draw upon the specific research and teaching expertise of BMI’s faculty. In fact, we already have classes that I believe could add significant value to your curriculum.

We understand that BMI faculty may receive funding and instructional design support through the Division of Continuing Studies to participate in this planning effort, and that BMI will receive compensation from program revenue for any teaching done by our faculty in support of the Clinical and Health Informatics degree program.

We look forward to supporting your efforts in this exciting new program area with you in the future.

Sincerely,

Michael A. Newton, PhD
Professor and Interim Chair
December 3, 2018

Allan Brasier, Executive Director  
UW Institute for Clinical and Translational Research  
School of Medicine and Public Health

Dear Dr. Brasier,

Thank you for sharing the Notice of Intent to develop a new online, interdisciplinary degree program in Clinical and Health Informatics. As Chair of the Computer Sciences (CS) Department, I write to express enthusiastic support for the proposed degree. As Professor Tachinardi explained to me, the intention of this degree includes providing a range of different personnel in a health care environment with exposure to and training in basic technological skills. As even a novice can see, technology is becoming pervasive in a health care environment, and its use in transforming the health care environment is only going to increase. It is great to see UW-Madison work towards creating such a degree.

Since there are currently no CS courses involved, there is no additional demand placed on the CS department at this time. That said, the CS department is planning to develop courses, especially as part of a proposed data science major, that may be of relevance as core (technology-related) courses in the proposed degree.

While at this time the CS department does not have the staffing for more closer interactions with SPMH for this, or other curricula that require technological training, I expect that will change in the future. At that time, closer interactions may not only be warranted but also prudent, especially given the rapid change in technology and its impact on organizational structures and operations. I ask that SPMH periodically evaluate this degree and assess potential pedagogical interactions with the computing entities on campus.

Sincerely,

Gurindar S. Sohi  
Department Chair  
Vilas Research Professor
January 14, 2019

Allan Brasier, Executive Director
UW Institute for Clinical and Translational Research
School of Medicine and Public Health
University of Wisconsin-Madison

Dear Dr. Brasier,

Thank you for sharing the Notice of Intent to develop a new online, interdisciplinary degree program in Clinical and Health Informatics. This growing field is critically important for health care improvement, and we are pleased to provide support from the Department of Industrial and Systems Engineering (ISyE) for this innovative program.

As you know, ISyE has a strong and successful history of being a world-leader in applying engineering principles to solve difficult health-care problems. Our department looks forward to collaborating and contributing as needed for your program’s development. Specifically, we would be interested in exploring course offerings to benefit the Clinical and Health Informatics degree program that draw upon our department’s specific research and teaching expertise. In fact, we already have classes that I believe could add significant value to your curriculum.

We understand that our faculty would receive funding and instructional design support through the Division of Continuing Studies to participate in this planning effort, and that any instruction in the future would be compensated through program revenue and a signed Memorandum of Agreement between the School of Medicine and Public Health and the College of Engineering.

We look forward to supporting your efforts in this exciting new program area with you in the future.

Sincerely,

Jeff Linderoth
Harvey D. Spangler Professor and Department Chair
linderoth@wisc.edu
608-890-1931
Monday, December 10, 2018

Allan Brasier, Executive Director  
UW Institute for Clinical and Translational Research  
School of Medicine and Public Health  
University of Wisconsin-Madison

Dear Dr. Brasier,

Thank you for sharing the Notice of Intent to develop a new online, interdisciplinary degree program in Clinical and Health Informatics. This growing field is critically important for health care improvement, and we are pleased to provide our support for this innovative program.

We look forward to contributing as needed to the program’s development over the next two years. With your support, we would be interested in exploring course offerings that would benefit the curriculum and call upon the expertise of the Department of Population Health Sciences. We understand that our faculty would receive funding and instructional design support through the Division of Continuing Studies to participate in this planning effort, and that any instruction in the future would be compensated through program revenue and a signed Memorandum of Agreement with the School of Medicine and Public Health.

We look forward to supporting your efforts in this exciting new program area with you in the future.

Sincerely,

Maureen Durkin, PhD, DrPH  
Evan and Marion Helfaer Professor of Public Health  
Chair, Department of Population Health Sciences  
University of Wisconsin School of Medicine and Public Health
January 15, 2019

Allan Brasier, Executive Director  
UW Institute for Clinical and Translational Research  
School of Medicine and Public Health  
University of Wisconsin-Madison

Dear Dr. Brasier,

Thank you for sharing the Notice of Intent to develop a new online, interdisciplinary degree program in Clinical and Health Informatics. This growing field is critically important for health care improvement, and we are pleased to provide our support for this innovative program.

We look forward to supporting your efforts in this exciting new program area with you in the future.

Sincerely,

Jun Zhu, Professor and Chair  
Department of Statistics  
University of Wisconsin-Madison
January 17, 2019

Allan Brasier, Executive Director
UW Institute for Clinical and Translational Research
School of Medicine and Public Health
University of Wisconsin-Madison

Dear Dr. Brasier,

Thank you for sharing the Notice of Intent to develop a new online, interdisciplinary degree program in Clinical and Health Informatics. This growing field is critically important for health care improvement, and we are pleased to provide our support for this innovative program.

The Master of Science in Biotechnology Program, also within the School of Medicine and Public Health, has been an extremely valuable resource for the biotechnology workforce of our state. It is evident that your proposed degree program in Clinical and Health Informatics would fill a similar role in the health care field.

We look forward to supporting your efforts in this exciting new program area, and would look forward to possible collaborations as they arise.

With best wishes for your success,

Kurt J. Zimmerman
Director
Master of Science in Biotechnology Program
School of Medicine and Public Health
University of Wisconsin-Madison
January 7, 2019

Allan Brasier, Executive Director  
UW Institute for Clinical and Translational Research  
School of Medicine and Public Health  
University of Wisconsin-Madison

Dear Dr. Brasier,

Thank you for sharing the Notice of Intent to develop a new online, interdisciplinary degree program in Clinical and Health Informatics. This growing field is critically important for health care improvement. In principle and philosophy, we are pleased to provide our support for this innovative program.

We look forward to contributing as needed to the program’s development over the next two years. With your support, we would be interested in exploring course offerings that would benefit the curriculum and call upon our faculty expertise in health and health care systems leadership and organizational decision-making. We understand that our faculty would receive funding and instructional design support through the Division of Continuing Studies to participate in this planning effort, and that any instruction in the future would be compensated through program revenue and a signed Memorandum of Agreement with the School of Medicine and Public Health.

We look forward to supporting your efforts in this exciting new program area with you in the future.

Sincerely,

Linda D. Scott, PhD, RN, NEA-BC, FAAN  
Dean and Professor  
University of Wisconsin-Madison School of Nursing

Danny G. Willis, DNS, RN, PMHCNS-BC, FAAN  
Associate Dean for Academic Affairs  
University of Wisconsin-Madison School of Nursing
Dear Dr. Brasier:

Thank you for sharing the Notice of Intent to develop a new online, interdisciplinary degree program in Clinical and Health Informatics. This growing field is critically important for health care improvement, and we are pleased to provide our support for this innovative program.

We look forward to contributing as needed to the program’s development over the next two years. With your support, we would be interested in exploring course offerings that would benefit the curriculum and call upon the expertise of our faculty in pharmacy’s expertise in health system pharmacy data analysis and informatics. We understand that our faculty would receive funding and instructional design support through the Division of Continuing Studies to participate in this planning effort, and that any instruction in the future would be compensated through program revenue and a signed Memorandum of Agreement with the School of Medicine and Public Health.

We look forward to supporting your efforts in this exciting new program area with you in the future.

Sincerely,

Steven M. Swanson, PhD
Dean and Professor
January 10, 2019

Allan Brasier, Executive Director
UW Institute for Clinical and Translational Research
School of Medicine and Public Health
University of Wisconsin-Madison

Dear Dr. Brasier,

Thank you for sharing the Notice of Intent to develop a new online, interdisciplinary degree program in Clinical and Health Informatics. This growing field is critically important for health care improvement, and the UW School of Veterinary Medicine is pleased to provide our support for this innovative program. We believe it would be of great value to some of our students.

We look forward to supporting your efforts in this exciting new program area with you in the future.

Sincerely,

Mark D. Markel, DVM, PhD
Dean
Vilas Distinguished Achievement Professor
MEMORANDUM

Date: December 14, 2018

To: Allan Brasier, Executive Director, UW Institute for Clinical and Translational Research, School of Medicine and Public Health, UW-Madison

From: Barry Gerhart, Interim Albert O. Nicholas Dean, Wisconsin School of Business

Re: Support for intent to create online degree program in Clinical and Health Informatics

Thank you for sharing the Notice of Intent to develop a new online, interdisciplinary degree program in Clinical and Health Informatics. This growing field is critically important for health care improvement, and we are pleased to provide our support for this innovative program.

We look forward to discussing how we might contribute to the program’s development over the next two years. With your support, we would be interested in exploring course offerings that would benefit the curriculum and call upon our expertise in health informatics, health operations, and related areas. We understand that our faculty would receive funding and instructional design support through the Division of Continuing Studies to participate in this planning effort, and that any instruction in the future would be compensated through program revenue and a signed Memorandum of Agreement with the School of Medicine and Public Health.

We look forward to supporting your efforts in this exciting new program area with you in the future.

Copies:

Enno Siemsen, Associate Dean of Masters Programs, WSB
Ella Mae Matsumura, Senior Associate Dean of Academic Programs, WSB
Mary Thompson, Division of Continuing Studies
Date: February 4, 2019

To: Sarah Mangelsdorf, Provost
   Office of the Provost
   University of Wisconsin - Madison
William Karpus, Dean
Graduate School
University of Wisconsin - Madison

From: Barry Gerhart, Interim Albert O. Nicholas Dean, Wisconsin School of Business

Re: Notice of Intent: New Master of Science in Business Analytics

The School of Business is submitting a Notice of Intent (NOI) to create a new MS in Business Analytics. Many of our peer universities, including several other Big Ten schools, have launched successful MS programs in Business Analytics in recent years. These programs are meeting a student demand for business school degrees that teach data-driven decision making in business. Graduates of these programs also meet a growing need in industry for business domain experts that are versed in analytical techniques. Thus far, the UW System does not offer a Business Analytics degree, so we are excited to close this gap in the UW offerings.

Letters of support from the iSchool, the Departments of Engineering Professional Development, Computer Science, Economics, and Statistics are attached. We anticipate that the College of Letter & Science APC will consider this at their February 5, 2019 meeting and are optimistic that they will provide comment shortly after that meeting.

This Notice of Intent was approved by the School of Business Academic Planning Council on November 15, 2018 and by the faculty of the School of Business on November 26, 2018.

We are now requesting approval from the Graduate Faculty Executive Committee and UAPC.

Thank you for considering this request.

cc: Jocelyn Milner, Associate Vice Provost, Academic Planning and Institutional Research
Nicoie Wiessinger, Academic Planner, Academic Planning and Institutional Research
Josh Morrill, Assistant Dean, Academic Analysis, Planning and Assessment, Graduate School
Parmesh Ramanathan, Associate Dean for Graduate Education, Graduate School
Ella Mae Matsumura, Senior Associate Dean of Academic Programs
Enno Siemsen, Associate Dean for the MBA and Master’s Programs
Sharon Kahn, Director of Academic Affairs
Notice of Intent for New Academic Degree  
Masters of Science: Business Analytics

**Name of Proposed Degree:** Master of Science in Business Analytics

**Home unit:** School of Business

**Mode of Delivery:** Primarily face-to-face, but will also include blended options

**Primary Faculty Contact:**
- Daniel Bauer, Associate Professor
- Kristin Branch, Faculty Associate
- Jordan Tong, Associate Professor

**Program Description**

The Wisconsin School of Business is proposing a new Master of Science in Business Analytics (MSBA) program for students who want to combine strong analytical and quantitative ability with managerial excellence and application knowledge to pursue a career in business analytics.

Our intended Learning Outcomes include:

- Apply business analytic tools and methods across various business functions (marketing, finance, supply chain, etc.) and industries (health care, finance, technology, etc.)
- Deliver insights and recommendations for organizations using cutting-edge descriptive, predictive, and prescriptive analytics techniques
- Manage analytics projects, communicate professionally, and influence data-based changes within an organization
- Use software & programming languages to go from data collection to solution implementation (SQL, R, Python, Tableau, Excel)

**Program Content**

The masters will start with one 3-credit summer term Statistics and Programming for Business Analytics Boot Camp (starting in summer 2020) and then include the full fall and spring semesters for a total of three terms of study. The program will feature a cohort format with all students starting and ending together. The boot camp and fall semester provide a methodological foundation educating students with a balanced skillset across descriptive, predictive, and prescriptive analytical techniques that they can use to deliver insights and solutions to a breadth of business problems. The spring semester focuses on business analytics applications through hands-on experience, real-world consulting projects, and by allowing students to select courses in specific business functions/industries.
More specifically, this Master program will help students learn to:

- Apply business analytics tools and methods across various business functions and industries:
  - Marketing Analytics
  - Risk Analytics and Behavioral Science
  - Supply Chain Analytics
  - People Analytics
  - Health Analytics

- Deliver insights and recommendations for organizations using cutting-edge descriptive, predictive, and prescriptive analytics techniques:
  - Data visualization
  - Experimentation and causal analysis
  - Machine learning
  - Prescriptive modeling and decision-making

- Manage analytics projects, communicate professionally, and influence data-based changes within an organization:
  - Project and change management
  - Business analytics consulting practicum
  - Applied learning courses

- Leverage expertise in software & statistical programming to go from data collection to solution implementation (SQL, R, Python, Tableau, Excel):
  - Summer boot camp
  - Data management
  - Applied learning courses

The Master of Science in Business Analytics program will be 30 credits, offered in-person, and will start in summer 2020, with the Statistics and Programming for Business Analytics Boot Camp into Summer Term (August offering).

Resources

The initial planning and startup phase for the Master of Science in Business Analytics is coordinated by the Leadership Team consisting of two Associate Professors and a Faculty Associate. This will be a 101 program where tuition dollars are generated and appropriated. The Wisconsin School of Business Dean’s office will allocate funds from tuition allocation to support the teaching, student support, and advising of the Master of Science in Business Analytics, and additional head count will be added when the student and credit count supports those additions.

Other Required Approvals

No specialized accreditation or HLC approval is required.

Alignment with broader UW-Madison, Direction, and Academic Programs

On 10/3/2018, the University of Wisconsin—Madison announced its intention to expand its computing efforts with a new synergetic project across Computer Sciences, Statistics, and the iSchool to “bring computing and key related disciplines closer together to encourage collaboration and expand teaching and research activities.” “It is crucial that UW-Madison stay at the forefront of research and education in computing, information and data
science,” said Chancellor Blank. With this Master of Science in Business Analytics, the Wisconsin School of Business can complement, contribute to, and leverage this broader UW-Madison initiative. For instance, we envision students from these other programs will take advantage of the business applications classes in various industries offered under the umbrella of the Master of Science in Business Analytics. And vice-versa our own students will have the possibility of deepening and broadening their modeling and computational skills by accessing classes in these programs.

The Master of Science in Business Analytics provides an option for UW-Madison undergraduate students to stay a 5th year Master’s program and obtain a master’s degree. Students studying business may want to expand their knowledge in business analytics and tap corresponding career opportunities. Students majoring in statistics, economics, computer science, and many other quantitative non-business fields may find this Master of Science in Business Analytics a way to link their undergraduate studies to business in order to expand their career possibilities. Additionally, students from other institutions across the state of Wisconsin, the US, and even the globe will be drawn to UW-Madison’s business application focused Master of Science in Business Analytics.

The Master of Science in Business Analytics is directly aligned with the Wisconsin School of Business Strategic Initiative goal of new and expanded Masters programs. It will also support the summer enrollment goal with our Statistics and Programming boot camp.

The University of Wisconsin—Madison states its goal of building innovative professional master-level degrees and other lifelong learning experiences in its Strategic Plan. We foresee extending the Wisconsin Idea as our curriculum emphasizes applied learning and includes live consulting projects with businesses in Wisconsin and beyond.

**Need for the new program**

Comparable business schools have recently launched master degrees in business analytics with sizeable cohorts. For example, Minnesota’s 2017-2018 student cohort was 97 students, Purdue’s was 82 students, Texas’ was 53, and USC’s was 90.

The Wisconsin School of Business recently conducted a survey taken by 2448 current UW-Madison students to review and indicate interest in the various MS offerings in development consideration. The MS in Business Analytics was the top-ranked interest of the Master programs offered with 73% of students expressing some level of interest. When asked about their interest level in enrolling in a Masters program immediately after undergraduate studies (our main target) 40 students in their senior stated extremely or very interested with 81 students in total expressing some level of interest in pursuing UW’s Master of Science in Business Analytics immediately upon undergraduate graduation. The interest numbers increase with the junior, sophomore or freshman students. In the survey, the most common majors expressing interest in this Master of Science in Business Analytics include Business BBA students (Finance, Accounting, Marketing, Actuarial Science, Information Systems, and Management – in that order). No Major BS and No Major BA students are the other two top major groups.

The Master of Science in Business Analytics overlaps with other programs offered on campus, particularly the Master of Science in Statistics Option in Data Science and related programs pushed forward under the school-wide initiative mentioned above. As also outlined above, we view these similarities as synergetic rather than providing competition. In particular, we are serving a different student population: The Master of Science in Statistics Option in Data Science requires background in linear algebra, advanced calculus, probability, and
programming, whereas we simply require one semester of calculus. Thus, the prototypical student will be less technically equipped, but possibly more veering towards managerial positions and liaison roles in analytics (and, indeed, our survey results indicated that the largest population of interested students are BBA graduates). And while most credits in the Master of Science in Statistics Option in Data Science are spent deepening students’ skills in statistical modeling, the Master of Science in Business Analytics curriculum takes a balanced approach between descriptive, predictive, and prescriptive analytics with an emphasis on business applications. Hence, the MSBA prepares students to tap the broad opportunities in business analytics rather than educating specialized data scientists.

Within the UW system, there is currently no MS-Business Analytics degree offered. There are a few UW schools offering concentrations/emphases in Analytics within their MBA degrees (UW-Milwaukee, UW-Parkside, UW-Whitewater), but the level of depth as well as the prospective student populations are different. Also, there is a system-wide UW Master of Science in Data Science offered by six UW campuses and extensions, but delivery is online only and the focus is on methods rather than business applications. Hence, currently UW students need to leave the state in order to obtain this in-demand degree. As the flagship university and the leading business school in the state, WSB is in a prime position to close this gap in the UW system offering.

Many universities currently offer the Master of Science in Business Analytics program as noted in this article, including some of our direct peers (e.g., University of Minnesota or Purdue). These programs have shown substantial growth over the past years. A Poet & Quants article notes that, “Business analytics programs have also become a popular offering, as schools respond to industry’s need to exploit big data, and the subsequent demand for skilled data analysts. Twenty-seven business analytics programs are available among the top 100 schools, and that number is likely to rise quickly.”

Starting median salaries for those with an Masters in Business Analytics is approximately $80,000/year based on this article from US News.

The positive evidence from our study as well as the emergence of similar master programs at other business schools make a strong case for student and industry demand. In less than 10 years, the number of business analytics master’s programs in the US has grown from 0 to over 80 (Institute of Advanced Analytics Report 2018).

Program Team

The team actively developing and leading the initiative (Leadership Team): Daniel Bauer, Associate Professor, Kristin Branch, Faculty Associate and Jordan Tong, Associate Professor. Other faculty members advising the degree include: Ella Mae Matsumura, Senior Associate Dean and Full Professor, Enno Siemsen, Associate Dean and Full Professor.
November 27, 2018

Ella Mae Matsumura  
Senior Associate Dean of Academic Programs  
Robert and Monica Beyer Professor in Accounting  
Wisconsin School of Business  
4345 Grainger Hall  
975 University Avenue  
Madison, WI 53706

Dear Professor Matsumura,

The Information School (iSchool) is pleased to support the Notice of Intent (NOI) for the new Master of Science in Business Analytics, currently under development by the Wisconsin School of Business (WSB). We believe that the new MS program will give WSB graduate students structured means to gain analytics expertise, and help them develop a credential to make them more competitive in job seeking. There is high demand for applied analytics professionals, and it is important that the UW-Madison campus offers multiple pathways for students to gain expertise in this area.

Sincerely,

Kyung-Sun Kim  
Interim Director and Professor
Memo To: Ella Mae Matsumura, Senior Associate Dean for Academic Programs

Regarding: Notice of Intent: New Master of Science in Business Analytics

Dear Ella Mae,

I have received your November 18, 2018 letter requesting EPD’s support as part of the process for the Wisconsin School of Business’ pursuit of a new Master of Science in Business Analytics. As you probably know EPD’s master’s degree programs, including our Master of Engineering: Engineering Data Analytics (MEDA), are all delivered online. The target audience for these graduate degrees is practicing professionals that intend to continue their employment while pursuing their advanced degree. I understand the proposed MSBA will be an on-campus residential program targeting students graduating with a BS as an option for a fifth-year masters. As such, these two programs are not competitive as they are focused on different disciplines and audiences. If you feel there are ways we could collaborate into the future to leverage resources or to achieve mutual strengthening of our respective programs, please do not hesitate to reach out to us.

On behalf of the Department of Engineering Professional Development, we support the development of this new Business Analytics MS program. I appreciate you reaching out with the advance notice of intent to develop this new MS program.

Regards,

Douglas T. Reindl

cc. Susan Ottmann – Director, EPD Online Degree Programs
Jake Blanchard – Executive Associate Dean, COE
December 3, 2018

Ella Mae Matsumura  
Senior Associate Dean of Academic Programs  
*Robert and Monica Beyer Professor of Accounting*

As Chair of the Computer Sciences (CS) Department, I write to express enthusiastic support for the proposed Master of Science: Business Analytics degree. The intention of this degree, as you explained in our meeting, is to provide managers with both the management training as well as exposure to basic technological skills so that they are better able to manage and make decisions in an environment where technology is increasingly pervasive. It is great to see UW-Madison work towards creating such a degree.

Since there are currently no CS courses involved, there is no additional demand placed on the CS department at this time. That said, the CS department is planning to develop courses, especially as part of a proposed data science major, that may be of relevance as core (technology-related) courses in the proposed Business Analytics degree.

While at this time the CS department does not have the staffing for more closer interactions with the Wisconsin School of Business for this, or other curricula that require technological training, I expect that will change in the future. At that time, closer interactions may not only be warranted but also prudent, especially given the rapid change in technology and its impact on organizational structures and operations. I ask that the Wisconsin School of Business periodically evaluate the Business Analytics degree and assess potential pedagogical interactions with the computing entities on campus.

Sincerely,

Gurindar S. Sohi  
Department Chair
Vilas Research Professor
Ella Mae Matsumura  
Senior Associate Dean of Academic Programs  
Robert and Monica Beyer Professor in Accounting  
Wisconsin School of Business  
4345 Grainger Hall  
975 University Avenue  
Madison, WI 53706  

Dear Professor Matsumura,

I received your email on December 7, 2018, regarding the proposal to create a new MS-Business Analytics in the Wisconsin School of Business. The faculty in the Department of Economics conducted a high level review of the proposal. The focus of the review was to generally assess for curricular overlap between the Masters of Science in Economics – Graduate Foundations (MS-GF) and the proposed MS- Business Analytics. There is some curricular overlap between the programs, however we recognize that the MS-Business Analytics curriculum is less technical than the Economics MS-GF curriculum.

The Economics MS-GF offers three courses that cover some of the same content that is part of the proposed MS-Business Analytics. The Economics courses are:

(a) Data Analytics for Economists  
(b) Economics of Machine Learning  
(c) Economics of Big Data.

The Economics of Machine Learning was taught fall 2018 semester. The Economics of Machine Learning content is close to the “Machine Learning for Business Analytics” and “Experiments and Causal Methods for Business Insight” courses that are part of the proposed MS-Business Analytics. One example used in the Economics of Machine Learning course is predicting sales/predicting the effect of promotions on a product's demand. Second, causal inference is a prominent topic in econometrics courses (which is a big focus of our MS-GF program) and we touch on the problem of causal inference and how machines learning tools can serve for causal inferences, possibly leveraging data generated by experiments.

The faculty consensus is that the overlap between the program coursework will be mitigated by the difference in technical training. We note that the first learning outcome is “Apply business analytic tools and methods across various business functions (marketing, finance, supply chain, etc.) and industries (health care, finance, technology, etc.).” In addition, the proposal explicitly states that the training will be at a very low tech level - more appropriate to training managers of data analytic industry divisions. These aspects of the training minimize the overlap with our data analytic programs. On behalf of the faculty in the Department of Economics, I offer our support for the proposed MS-Business Analytics degree program.

Sincerely,

Ananth Seshadri  
Chairman, Department of Economics  
Todd E. and Elizabeth H. Warnock Distinguished Chair
December 11, 2018

Dear Ella Mae,

On behalf of the Statistics Department, I am writing to indicate no objections to the new Master of Science in Business Analytics currently under development by the Wisconsin School of Business. The Statistics Department launched in 2015 a Data Science Option in our Master of Science - Statistics program, which has emerged as a leading Data Science graduate program on campus. While there is some overlap in the curriculum between your new Business Analytics program and our Data Science program (e.g. programming tools including R and Python, machine learning), your new program appears to be geared toward students interested in business requiring less math background, whereas our program provides a more comprehensive and rigorous training in Data Science requiring statistical data analysis, computing skills, and domain science knowledge.

We believe that your new program will serve graduate students in Business very well. In addition, we view your new program as a useful addition to the broader Data Science initiatives at UW-Madison and anticipate mutual benefits from coordination and collaboration between our programs.

The comments above also apply to your proposed named option Business Analytics within the Master of Science - Operational and Tech Management program.

We wish you the very best in developing the Business Analytics named option and the new Master of Science in Business Analytics program.

Yours sincerely,

Jun Zhu
Professor and Chair of Statistics
University of Wisconsin - Madison
5 February 2019

TO: Ella Mae Matsumura, Senior Associate Dean of Academic Programs, Wisconsin School of Business

FROM: John Karl Scholz, Dean

RE: Notice of Intent to Offer a New Program: MS-Business Analytics

CC: Elaine Klein, Associate Dean for Academic Planning, L&S
Marty Gustafson, Assistant Dean for Academic Affairs, Continuing Studies
Jocelyn Milner, Vice Provost and Director, Academic Planning and Institutional Research
James Montgomery, Associate Dean for Fiscal Initiatives, L&S
Joshua Morril, Assistant Dean, Graduate School
Jennifer Noyes, Associate Dean for Operations and Staff
Parmesh Ramanathan, Associate Dean, Graduate School
Eric Wilcots, Deputy Dean, L&S

Thank you for affording the College of Letters & Science an opportunity to review the Notice of Intent to plan and to offer a new academic program, the MS-Business Analytics, at UW-Madison. As you are already aware, a number of L&S units have already expressed their support for this new program and the related request, in the short term, to create a new “Business Analytics” named option under the MS-OTM – a program we understand to be slated for retirement if the new degree program is approved and implemented.

We have conferred with our colleagues (in particular, the Department of Economics, which has the strongest connections to your school) regarding any impact of your new program on their existing courses and programs. We appreciate the nuanced differences in the approaches to this topic that might be taken by Economics vs. the School of Business. At this time, I am satisfied that the program does not significantly overlap with L&S programs. In turn, I trust that the existence of this new program will not impinge upon the work in analytics that has long been part of the curricula in Economics, Statistics, and Computer Sciences.
As designed, the proposed degree program does not require students to take courses offered in the College of Letters & Science. However, the NOI envisions that L&S students will “take advantage of the business applications classes in various industries offered under the umbrella of the MSBA” and conversely that Business students “will have the possibility of deepening and broadening their modeling and computational skills by accessing classes” in L&S programs.

The NOI further indicates that the MS-Business Analytics will operate as a traditional pooled-tuition (fund 101) program. However, under the current budgetary arrangement between central campus and the School of Business, any incremental tuition revenue generated by this program will augment the 101 base budget for Business. Thus, while tuition for the new program is nominally pooled, Business will in fact capture tuition revenue for this new program in much the same manner as non-pooled (fund 131) programs in other schools and colleges.

Because non-pooled programs capture all tuition revenue for their students, there is a need for revenue-sharing agreements to defray any instructional costs incurred by other units. Within L&S, whenever students in 131 programs enroll outside the home department, we thus require the 131 program to pay the instructional department. L&S recently created a formal Memorandum of Understanding with the College of Engineering to extend this revenue-sharing agreement to cross-college enrollments. Under this MOU, Engineering pays L&S for any enrollments of Engineering 131 students in L&S courses, and conversely L&S pays Engineering for any enrollments of L&S 131 students in Engineering courses.

Recognizing that students in the new Business program are not required to take any L&S courses, we anticipate that the cross-college enrollments envisioned in the NOI will at least initially be small. Thus, L&S will not immediately request the creation of a revenue-sharing agreement with Business. However, L&S will monitor cross-college enrollments, and will contact Business to create an MOU should the need arise.

I discussed this matter with the L&S Academic Planning Council on February 5, 2019. The APC and I support the proposed MS-Business Analytics, with the understanding that L&S will monitor student enrollments and will contact Business about developing a revenue-sharing agreement should the need arise.
22 October, 2018

TO: Jeff Hardin, Professor and Chair, Department of Integrative Biology  
    Emily Stanley, Director of Graduate Studies, FMS

FROM: John Karl Scholz, Dean

RE: Completion of Academic Program Review: M.S./Ph.D. Freshwater and Marine Science

CC: Elaine M. Klein, Assistant Dean for Academic Planning  
    Gloria Mari-Beffa, Associate Dean for the Natural and Mathematical Sciences  
    Jocelyn Milner, Vice Provost and Director, Academic Planning and Institutional Research  
    Josh Morrill, Assistant Dean for Academic Analysis, Planning and Assessment, Graduate School  
    Jennifer Noyes, Associate Dean for Operations and Staff  
    Parmesh Ramanathan, Associate Dean for Graduate Education, Graduate School  
    Emily Reynolds, Academic Planning Specialist, Graduate School  
    Nicole Wiessinger, Academic Planning and Institutional Research  
    Eric Wilcots, Deputy Dean, L&S

On October 16, 2018, the L&S Academic Planning Council considered materials submitted with respect to the review of the graduate programs offered in Freshwater and Marine Science. In the course of the council’s deliberations, members were provided with the self-study prepared by the program faculty, and a brief report submitted by a committee of faculty who used that self-study as the foundation for discussions with faculty, staff and students. (We should note that iBio and FMS were also offered an opportunity to provide written comment on the report, too.) Associate Dean Gloria Mari-Beffa led the discussion with the Academic Planning Council.

We were pleased to learn that the relocation of this program to L&S has been successful, and the program has adapted to its new home with little disruption to students. In discussion, the committee noted the overall quality of the program, and the general impression that it is running well, students in it are satisfied and are completing the program at a reasonable rate and pace. Members noted that the conclusions drawn in the self study are reasonable, and in particular, that it makes sense to attend carefully to diversity, inclusivity, and climate. Members found the
review committee’s recommendations to be useful, too. They were particularly supportive of the recommendation that the program do what you can to “ground” students in some sort of common experience, whether that be via a common, interdisciplinary seminar or by providing opportunities for students across the program to gather, share information, and build community. The APC also agreed with the review committee’s observation that the program’s flexibility is a strength – and they agreed with the committee that flexibility works well until it becomes ambiguity. Council members discussed in some detail the costs of “too much” flexibility, which can create confusion and foster perceptions of inequity about rigor, standards of evaluation, and milestones. All of these issues can undermine an otherwise good climate for students. Members endorsed the suggestion that a handbook should identify common milestones, and convey that information to students. Furthermore, program faculty could agree on common standards for performance relative to those milestones, though within the context of the particular expertise students develop in their studies. A “standards without standardization” approach would support consistency for students, within the flexibility that seems to have worked so well for the program.

Though not discussed at length by the review committee, we note that learning outcomes have been defined for the program at both master’s and doctoral levels, as required for all UW-Madison programs. The outcomes are distinct, reflecting the difference in level and intensity of study expected in these programs. Efforts to assess student learning, as reported in the self-study, are still somewhat new to the program; however, the faculty seems to have embraced this work as a mechanism for understanding students’ perspectives on the programs, and as a basis for future improvement. Indeed, the results of the initial assessment informed the advice provided above with regard to students’ reports about not knowing program expectations, requirements or opportunities. The program faculty have also identified the need to improve student-advisor interactions. At this point, the assessment strategy used was an indirect measure (survey); given the relatively small number of students and their productive engagement in research, it seems feasible for the faculty to incorporate direct measures of student learning relative to the broadly stated learning outcomes in future assessment exercises. We anticipate that activity arising from the last assessment initiative, as well as plans under way for future projects, will be documented in the Provost’s annual process for reporting on assessment activity.

The council approved a motion to accept this review as complete. They encourage you to create a student handbook that will communicate common requirements and policies clearly and transparently to students, to help ensure a sense of fairness within the diversity of learning experiences students have in Freshwater and Marine Sciences. The council also supports your aspiration to improve the diversity of your student body, and in support of that effort, also recommends that you consider developing a seminar or common experience to foster a sense of community among all of your students.

The APC did not require any further follow up upon conclusion of the L&S portion of this review. The next stage of the process will involve discussion by the Graduate Faculty Executive Committee, and a final review of all of these materials by the Office of Academic Planning and Institutional Research.
10-Year Review
Freshwater and Marine Science Graduate Program

Review Committee: Simon Gilroy (Chair), Jean Bahr, Mike Graham (GFEC Representative)

1) Review Process
The committee was charged by L&S Associate Dean Gloria Mari Beffa to review the Freshwater and Marine Science graduate program (FMS). FMS provided a self-study and along with this document, the committee reviewed the FMS website and additional information prepared by the Graduate School. The review committee met with the program’s Chair, the Chair of the Department of Integrative Biology (the administrative home for the graduate program), faculty members in the program, the administrative staff person and seven of the program’s graduate students. The committee’s comments below come at the conclusion of this review process.

2) Executive Summary
Since moving from the College of Engineering to Letters and Science two years ago, the FMS graduate program has continued to be successful both for the participating faculty and students. The program’s hallmark is flexibility, with no set requirements for coursework and the only major milestones for progress for each student being their prelim exams and thesis defense. In general, this flexibility serves the faculty and students well, especially the students whose interests do not fit well into the confines of other programs. However, this structure encourages students to focus almost exclusively on their thesis research while potentially missing out on a broader education in the FMS area. The flexibility within the program tailored to each individual student also limits the shared experiences for the students that might otherwise help draw in students from outside of the Center for Limnology (CFL). All but one of the students are currently in the CFL, promoting tight cohesion between this group.

3) The FMS Program
   a) Overview
The PhD program in Freshwater and Marine Sciences originally resided within the College of Engineering but 2 years ago moved to the College of Letters and Science with an administrative home in the Department of Integrative Biology. This transition now seems complete. Letters and Science provides 25% time of a staff Student Services Coordinator for the program. Having this staff support has clearly been a very important factor in stabilizing the program and helping to develop plans for an up-to-date student handbook and student tracking (see below). The program has maintained a size of 10-12 students over the last several years and normally makes offers to about four applicants per year with an average acceptance rate of approximately 50%, an acceptance rate broadly comparable to other, similar programs at the university. Although the FMS program spans colleges and has participating faculty covering a broad range of water-related fields, at present all but one of the students in the program are in labs in the CFL, which can be partly attributed to the high profile of the CFL faculty in this field, a point that is expanded upon in the section below on Intellectual Structure of the Program.

   Time to degree over the last 10 years has been 6 years or less for >90% of the students and over the same period, ~83% of the enrolled students either completed a Masters or Ph.D.
degree or are still enrolled in the program. These statistics are consistent with a program delivering a successful graduate experience for the vast majority of the students.

Student support is through the home lab and consists of a mixture of mainly Fellowships, Traineeships and RAs and to a lesser extent TAships. This has been a successful model to date and the current students did not express concerns over their future funding. In addition, the mentoring environment within the program is very strong with individual faculty providing effective guidance, supporting students at levels from progress in research to future careers (see Graduate Student Experience below).

The students are able to compete for internal funding, providing important opportunities to make progress in their thesis projects. The program also encourages involving undergraduates in this research, helping foster mentoring skills for the graduate students running these projects.

On graduating, students pursue a range of careers, generally in academia and government agencies and the current students are generally pleased that the program is equipping them with skills that are suited to the job market.

b) Demographics
The 10 year average for graduate students in the program is ~75% male, and is in the single-digits for percentages of targeted minority populations. The program recognizes the need for diversity within the student body and has begun to address this issue, e.g., pursuing Advanced Opportunity Fellowship offers. Now that the program has made a stable home in L&S and has the support of a Student Services Coordinator, it is hoped that these efforts could be expanded, for example through more aggressive advertising to help build the program and also extend its visibility to prospective targeted minority students.

c) Intellectual Structure of the Program
As noted, FMS is at the extreme end of the flexibility scale in terms of both admissions requirements and course expectations. The faculty clearly value the option to recruit students whose backgrounds may be quite different from the majority of those in their home departments. They also value the flexibility to tailor the graduate program expectations to the backgrounds and goals of these students. This individually tailored approach is appreciated by the students and it also seems to be preparing them well for post-graduate careers. However, several of the students with whom we met indicated that their individual course plans focus almost exclusively on topics and skills they need to complete their individual research projects. There are no requirements (or even incentives) for them to build a broader base of expertise that would encompass physical, biologic, and chemical aspects of freshwater or marine ecosystems. Students who are based in the CFL do participate in some common seminars and special topics courses offered through the CFL, and in that way those students are developing common expertise related to freshwater ecology. It is not clear whether students who are admitted by, and working with, faculty whose research groups are not based at the CFL are likely to develop any common expertise with other graduates in the program. In this respect, as currently implemented, the program is more similar to a collection of individual majors than to one that is providing a coherent and integrated intellectual framework for future researchers and practitioners in the areas of freshwater and marine sciences.
While this flexible structure is working well for the faculty in the CFL and is appealing to faculty from other parts of campus who might occasionally recruit and supervise a FMS student, it may be missing the opportunity to develop a truly interdisciplinary cohort of students and faculty with common interests in freshwater and marine sciences. We recommend that the FMS faculty carefully consider what type of minimum structure to the curriculum might give students a broader view of the scope of freshwater and marine sciences along with opportunities and incentives to engage with the broad range of faculty who are members of the program. For example, a common course that integrates physical, biological and chemical processes could facilitate communication and collaborative interactions among graduate students from diverse backgrounds. As another option, a seminar that highlights research programs that span the full range of FMS faculty would provide students with a broader perspective on research challenges in freshwater and marine sciences. Some type of common core courses or seminars, either in the first year or throughout the graduate program, could serve to build coherence and a sense of program identity within the graduate cohort, particularly for those students who are not based in the CFL. A program that explicitly endeavors to build some interdisciplinary breadth in the freshwater and marine sciences might also enhance external visibility and student recruitment beyond that due to the strong reputation of the CFL. Increased opportunities to engage with students across the program might also offer enhanced motivation for engagement to UW-Madison faculty whose research programs relate to aquatic environments.

d) Graduate Student Experience
In the course of the review we talked with two groups of students, 7 total, 5 PhD and 2 MS. They ranged from 1st to 6th years, one was a woman. All the students we talked to were associated with the CFL, which has students from both the FMS and Zoology program (through the Department of Integrative Biology).

In the FMS program, students are admitted directly to work with a particular advisor. There are no specific required courses though many of the students take two 500-level statistics courses. The students have a week of written prelims with questions set by their committee members (but these do not seem to be mandatory). Students do have to give an oral defense of a thesis proposal. Students are involved in many seminar classes. There “tend to be annual committee meetings” – this is a program requirement but does not seem to be uniformly applied.

More generally, there is not a program handbook and the students do not seem to be very clear on the program requirements – they definitely would like to see more clarity about the requirements as well as more structure. For example, students would have liked more guidance on expectations coming in and community building at the start – there does not seem to be an initial get-together for students entering the program. They would like a nominal timeline for progress through the program and better communications about training requirements (TAing, sexual harassment…). At the same time, the students do not sense that there are students getting “lost” and taking too long to graduate. There seems to be very good communication between students and advisors. The graduate students in the program find its flexibility very appealing though one said that “flexibility is great until it turns into ambiguity”.

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There does not seem to be a formal mechanism for communication between students and other committee members between the prelim (thesis proposal) and defense. There is also no codified grievance process. A lot of the program structure seems to come through the CFL. For example, the students have even had input into CFL faculty hiring priorities. This serves the CFL students well but how students outside the CFL are drawn into programmatic governance is less clear.

These issues of communication and structure aside, the students seem very happy with the program overall. Several students (and faculty) mentioned the Sapelo Island field course as an important, enriching part of their graduate education. The Trout Lake facility is also a great resource made available for FMS student research. The students like their work and their advisors and feel that they have good opportunities when they graduate. They feel that they have networking opportunities with people outside CFL and iBio, especially through other students in FMS. One student expressed an interest in some sort of computing “bootcamp”. Students benefit from some of the financial resources of iBio (e.g. awards, grants), though they thought that there could be more support and encouragement to write external grants for graduate educations such as NSF and EPA graduate fellowships. Students thought that there was support for career paths other than academia, but a number expressed the opinion that they could use more career mentoring and the issue of “how am I going to get a job not doing exactly what I am doing now?” came up. A small thing that’s worth the program knowing about: while students did not complain about salary it was pointed out that there is not a uniform policy on whether students get computers provided by their research program to do their work.

4) Recommendations:
The graduate program is functioning well. We see the following recommendations as potential aids for continued success and for keeping up with the changing landscape of higher education in general.

- It is important that clear guidelines and timelines for proceeding through the program be developed and communicated with the students. These should be incorporated in a graduate student handbook that also contains information on a contact person and procedures for grievances or other issues. The department notes in its self-study the need for this document and are developing it and we commend the program on recognizing this as a high priority. Many departments have such guidelines and documents that the FMS program can use as a template.

- While flexibility is an important and appealing aspect of this program, the absence of structure, especially with regard to graduate coursework, may disadvantage students in their career opportunities, especially, but not solely, for students seeking academic positions. Attention should be paid both to courses and other preparation that advance the students’ progress in their thesis work and those that build a reasonably broad foundation in core areas of freshwater and marine sciences. As noted in the section on intellectual structure, this could be accomplished through one or more common, integrative courses or seminars.

- The program should establish clear guidelines for an annual student progress report. Possible models include a written report submitted to the Student Services Coordinator or an annual committee meeting where the committee signs off on progress and plans.
• The program has a 2 year rotation for the chair. We suggest the faculty discuss changing this to a 3 year term to help with programmatic continuity and capitalize on the expertise the program chair develops over the first year in this position.

• The program should request permission, when possible, to modify its RA rate structure to allow for students to be awarded stipends that are comparable to others in the labs in which they are based.

• The program should explore options to provide more formal orientation to new FMS students, including opportunities for them to meet continuing students and faculty from across the FMS program.
December 21, 2018

Sarah C. Mangelsdorf, Ph.D. William Karpus, Ph.D.
Provost and Vice Chancellor for Academic Affairs Dean of the Graduate School
Sent electronically

Re: Review of the Biotechnology MS degree program

Dear Provost Mangelsdorf and Dean Karpus:

On behalf of the School of Medicine and Public Health, I endorse the ten-year review of the Biotechnology MS degree program.

After discussion at the December 19, 2018 meeting of the SMPH Academic Planning Council, APC members unanimously approved the report of the review committee and the response of program leadership to the review committee’s report. Those reports are attached.

Strengths include the program’s mission and history; positive climate for students; commitment to fostering a sense of community among students and with alumni; record of diversity; emphasis on teaching skills that are immediately translatable to students’ workplaces; relationships with local and regional companies; focus on regulatory components; knowledgeable and dedicated staff; and commitment by leadership and staff to review the program annually and continuously improve it.

The review committee and the APC provide two recommendations to the program:

1. Address the decreasing applicant pool since 2014. In its response to the committee’s report, the program described additional recruiting efforts since the addition of new staff in 2017. The APC commends the program on these efforts and recommends that the program continue to monitor and, if necessary, adjust recruitment efforts.

2. Develop a leadership succession plan.

While the committee provided recommendations about the content of the program such as expanding beyond the regulatory component, adding additional tracks, diversifying the portfolio of hands-on experiences, and changing the laboratory requirement, the APC believes that decisions about program content are best left to the program’s leadership and constituents.

Both the SMPH Academic Planning Council and I concur with the review committee’s recommendation to continue the program. We recommend that the next review occur in ten years.

Thank you for your consideration. If you require additional information, please do not hesitate to contact my office.
Sincerely,

Robert N. Golden, M.D.
Robert Turell Professor in Medical Leadership
Dean, School of Medicine and Public Health
Vice Chancellor for Medical Affairs
University of Wisconsin-Madison

Copies to:
Natalie Betz, MS in Biotechnology Program
Bryan Husk, MS in Biotechnology Program
Richard Moss, MS in Biotechnology Program
Michele Smith, MS in Biotechnology Program
Kurt Zimmerman, MS in Biotechnology Program
James Keck, School of Medicine and Public Health
Andrea Poehling, School of Medicine and Public Health
Parmesh Ramanathan, Graduate School
Josh Morrill, Graduate School
Emily Reynolds, Graduate School
Jocelyn Miiner, Academic Planning and Institutional Research
Nicole Wiessinger, Academic Planning and Institutional Research

Attachments:
1) Program response
2) Review committee report
MS in Biotechnology Review Response  
Submitted by Rick Moss, Executive Director; and Kurt J. Zimmerman, Director, December 10, 2018

We thank Drs. Jeraj, Ge, and Collier for taking the time to meet with program leadership, faculty and students of the Master of Science (M.S.) in Biotechnology Program. We are grateful for the enthusiastic review, and will briefly respond to the Committee Report and some of its recommendations.

**Program Strengths:**

**Focus on regulatory component (the program should consider expanding even more into regulatory areas of emphasis).**

We appreciate this observation, as the program’s regulatory content has been a cornerstone of our curriculum since its inception. The program is currently undertaking two new initiatives that respond to the suggestion that additional regulatory content be developed:

- The program has recently taken on the responsibility for regulatory courses for the M.S. in Applied Biotechnology (MS-ABT). In the next year, the program will be working with faculty to create three new regulatory courses.
- Additionally, the M.S. in Biotechnology Program has started conversations with the Medical Physics Graduate Program with the idea to enhance both areas. It is believed that together we will be able to not only revise current courses, but also add to them in order to meet a more diversified student audience.

**Program Weaknesses and Review Committee recommendations**

*One of the concerns of the program is decreasing applicant pool since 2014, which steadily decreased from 102 applicants in 2014 to 70 applicants in 2017.*

Current 2019 and 2020 cohorts are at target levels. The low applicant pool in 2017 may be due to a loss in one of the program staff during this year. With the addition of new staff in July of 2017, the program has been able to modify and expand recruiting efforts that include the following:

- **Industry Recruitment:**
  - The program was able to reach out to more industry partners in the Madison area, and provide lunch and learn sessions. It is expected that the program will be able to expand to more industry partners as well.
  - The program has also held booth space at BioForward fall events as well as BTCI events.

- **Career Fair Recruitment:**
  - The program was able to attend a number of career fairs in 2018 and expect to expand again in 2019. These fairs included the Spring Career Fair at UW-Madison; hosting a panel of current biotechnology students prior to the start of the engineering career fair; attending the RISE career fair at UW-Madison; and attending a career fair at the University of Minnesota.

- **Marketing**
  - For 2018, the program explored social media for additional exposure. The knowledge gained led the program to hire a marketing strategist to better use social and digital media to market the program.
Students and alumni singled out regulatory aspects of the curriculum as some of the most valuable knowledge in their careers. It would be desirable to further expand and make this a trademark of the MS in Biotechnology program.

- The program is currently working with business, laboratory, and regulatory faculty to restructure courses based on student feedback. The changes include: moving the project management and leadership course into the first year; delivering regulatory courses for the MS-ABT program, which may be used in future face to face classes; working with the industry to expand opportunities for the capstone; discussing potential cross listing of regulatory courses with SMPH Medical Physics.

The program leadership should consider “diversifying” the portfolio of the hands-on experiences (e.g., some of the students are more interested in devices) and potentially link with other industries).

- The program has started to explore potential track options in our conversations with the SMPH Medical Physics Graduate Program. In addition, the program is working with UWEC to develop the MS-ABT program. Another potential track would include diagnostics/therapeutics.

Several students have expressed concerns of the usefulness of the lab component in its current form for the majority of the students, and suggested to make the lab component optional or reduced with several other options available to those who seek more in depth expertise in other components of the program.

- The program in the past has had a larger mix of incoming professional students. However, in recent years, we have seen an increase in the number of bench level scientists applying for, and matriculating into, the program. In this way, the program understands the concerns of the more recent students and graduates.
- The program does feel that the lab component is a great complement to other courses taught within the same semester. The goal of the program is to learn how new drugs or tests are developed and how to fully understand all development needs including business, regulatory, and laboratory aspects.

Reliance on a single partner to support a significant hands-on component of the program could be risky. Considering additional partnerships would be desirable.

- The program does utilize the current biofabrication space in Research Park. The space could be better utilized, and with appropriate funding would be a viable alternative.
- In addition, BTCI and Promega is one of the most stable biotechnology educational and industry spaces in the area. No working commercial laboratory would allow ongoing educational instruction to occur side by side. It is also not likely that they would have the space needed for teaching.

It would be benefit to both reduce the immense “burden” on the leadership, effort, as well as reduce potential negative impact in case the leadership changed. Creating an “extended leadership team”, composed of several of more active faculties could help transferring some of the roles from that current leadership. This might also help address a desire from the students to have a “mentor” from the first year on; a function largely provided by the Directors of the program at this time.
• Our unique structure of diverse adjunct faculty from both UW and industry makes it difficult for faculty to be available to students if they are not also currently teaching. For example, a mentor from the first-year may not be on contract as an instructor for the second year and vice versa. It is expected that all adjunct faculty provide mentorship to all students in the course they are teaching. The program anticipates increased involvement on the part of alumni and second-year students to support existing mentoring efforts.

Decrease in (financial) support for studies from employers (even though most of the students still get at least part of their tuition covered), partially linked to the recent economic downturn, has already negatively impacted student application numbers. It is recommended to continuously reach out to local companies to obtain feedback what they would like in future leaders and how to further create a program that is aligned with their expectations. Adding alternative “options”, such as devices, would make the program appealing to a much larger number of local companies. In addition, effort should be put into increasing the MS in Biotechnology program visibility and recognition in nearby larger cities. Similarly, the program should continue to explore targeted international recruitment.

• With the help of the new faculty assistant, the program plans to connect with the companies in the Madison area as well as the region (Milwaukee, Rockford, Chicago, Twin Cities) to understand their needs and expectations. The program also expects to continue and expand recruiting efforts with local and regional biotechnology companies to gain not only key talent as students, but also nurture industry relationships. The program continues to expand its visibility through professional networking relationships (BioForward, Women in BioHealth, and Women in IP) as well as being present at biotechnology industry events (BioForward, BTCI, career fairs).
November 8, 2018

To: Dr. James Keck
   Associate Dean for Basic Sciences
   University of Wisconsin School of Medicine and Public Health

From: Review Committee for the Masters of Science in Biotechnology (MS in Biotechnology) graduate program

The following report summarizes our review of the MS in Biotechnology graduate program.

**Summary of activities and materials reviewed:**
Our committee (Professors Lara Collier, School of Pharmacy, also a GFEC representative, Ying Ge, Department of Cell and Regenerative Biology, SMPH and Robert Jeraj, Department of Medical Physics, SMPH, also the Chair of the Review committee, with support from Andrea Poehling) met in October 2018 to review the MS in Biotechnology self-study and to produce a list of groups to meet with during our subsequent site visit. In this first meeting, our committee summarized our impressions of the MS in Biotechnology graduate program based on the self-study, listing strengths and weaknesses and selecting topics to be probed further during our visit. We also requested additional information, particularly on the application, enrollment and acceptance trends from MS in Biotechnology and more details regarding the newly established Collaborative Online Masters of Science Degree in Applied Biotechnology program. We received all the requested materials from MS in Biotechnology for our review.

Our site visit took place on October 29, 2018. We met with the graduate program Executive Director Rick Moss and Director Kurt Zimmerman, three program staff (Associate Director Natalie Betz, Assistant Director Bryan Husk and Program Manager Michele Smith), four faculty members (Natalie Betz, Ed Elder, David Lewis, Susan LaBelle), four alumni (Jared Finger, Michael Matter, Rachel Krause, Tanesha Norris) and five current trainees (Kenyon Koeper, Madison Porter, Jacqueline Rodriguez, Lavanya Saxena, Sabrina Valenci). The overall conclusion from our review and site visit is that MS in Biotechnology is an outstanding graduate program, with excellent leadership and faculties, outstanding support staff, and strong student body. In general, the students and program alumni are extremely happy with the program, and alumni said the program has strongly impacted their careers. The program faces some challenges, which the program directors are well aware of and which are largely being addressed appropriately. A full critique of the program is provided below including a number of recommendations from our review committee that we feel could improve an already strong program.

**Program strengths:**
Our committee was impressed with several aspects of the MS in Biotechnology graduate program. The trainees and trainers who participated in the site visit were very strong advocates and were clearly satisfied with most aspects of the program.

- **Strong and relevant mission of the MS in Biotechnology program:** The mission of the program is to provide an "integrated curriculum in science, policy, law, and business continues to lead the development and commercialization of new and promising technologies". The original, slightly updated mission appears still highly relevant, and is successfully accomplished by the program. There are several unique strengths of the program, such as integrated hands-on curriculum, which is fully recognized and appreciated by current students and alumni. The strength and relevance of the program is reflected, for example, by students from industry which tend to get
job promotions after completion of the program, as well as for the first time employments, where jobs largely match the targeted profile of the program.

• **Focus on regulatory component:** A specific strength of the program, and its unique feature, is a focus on regulatory components required for successful commercialization of technologies. This also makes it competitive against other (similar) programs at other universities, and appears one of the major distinctive features that attracts international students. The program should consider expanding even more into regulatory area of emphasis.

• **Translation of useful skills into the real world:** The MS in Biotechnology program takes full advantage of a strong partnership with the Biopharmaceutical Technology Center Institute (BTCI). The hands-on component of the program greatly enhances trainee experience, and while of limited interest to some of the students, provides real-life experience and skills. Strong affiliation between BTCI and Promega ensure that real-world expertise is shared with MS in Biotechnology program trainees.

• **Strong relationship with local/regional companies:** One of the important strengths of the program is strong, collaborative and collegial relationship with local companies (e.g., Covance, Illumina, Catalent). This strength, combined with the strong partnership with several of the University of Wisconsin schools (e.g., SMPH, Business School, Law School and School of Pharmacy), could serve as a role model for the University of Wisconsin interaction with the industry. The MS in Biotechnology program should probably better leverage this unique position and better promote its model.

• **Lack of on-line option:** Initially the program evaluation committee thought that the lack of on-line component might be a weakness, especially as the on-line option is commonly offered in competitive programs at other universities. However, after the site visit, the committee reversed the impression, and now considers lack of the on-line component a strength and an important feature of the program. There are clear benefits of in-person program for student to have sufficient facetime to build a network and cohort. Alumni of the program largely remain connected, which is an important outcome of the program, and which would not be possible with the on-line option. Furthermore, with the MS in Applied Biotechnology on-line program, opportunities exist to expand the pool of students for the MS in Biotechnology in-person program, together with the potential collaboration between the programs in on-line course materials that might be shared.

• **Strong support staff:** Associate Director Natalie Betz is a real asset to the program. Her commitment, enthusiasm, energy, history and experience with the program have a clear impact on the success of the program, as well as the program’s climate. She is complemented by the Assistant Director Bryan Husk, who oversees IT, student recruitment and admissions, and marketing and communication strategies. His commitment to personal engagement with students and continuous improvement has made MS of Biotechnology strong and visible. He employs innovative methods of recruitment (e.g., use of salesforce.com) and advertisement (e.g., social media) that help attracting students. Assistance of recently hired Michele Smith well complements Directors’ roles and her experience as a program alumnus adds additional important value to the program.

• **Excellent and stable leadership:** Faculty in leadership of the MS in Biotechnology are clearly dedicated to programmatic improvements and, in many cases, have been in their positions within MS in Biotechnology for many years. This stability is appreciated by students who identified key MS in Biotechnology personnel (particularly Associate and Assistant Directors) as people they always feel comfortable going to for assistance, advice or when problems arise.
• **Commitment to continuously improve the program:** For the program leadership, continuous improvement of the program is the top priority. The leadership and faculties meet twice a year to review what is good and what else could be improved. One of the significant improvements, a result of the self-assessment, and now uniformly praised by students and faculty is introduction of the final Capstone project. The program Associate Director Natalie Betz attends all program lectures to ensure minimal overlap between courses, maximum coordination between the guest lecturers and “real-time” evaluation of the program consistency. Regular review of the feedback from students and feedback to faculties further improves the quality of the program.

• **Strong trainee pool with significant international participation:** As highlighted by leadership, faculty and students, high quality (and diversity) of the students is critically important to the program. It appears that the quality of the student pool has been maintained through the years in spite of reduction of the application numbers. A significant increase in the international student pool, in spite of the fact that they need to largely self-fund, attests that the quality and uniqueness of the program is recognized internationally, and that the program remains competitive compared to other similar programs (e.g., Johns Hopkins University, Georgetown University). Lack of the on-line course component, which many of the competitive programs offer, has been by majority recognized as a strength, rather than a weakness.

• **Great sense of community among students and alumni:** The MS in Biotechnology program has created several opportunities for student community development and student leadership within the program. In terms of community development, students appreciate close interactions that they experience during course projects. Rotation among students for different projects ensures that they interact with everyone, building a strong sense of community. In addition, the program organizes several activities, which not only help developing community among students, but also with alumni (e.g., annual Holiday party, other parties). The program’s brand is very powerful, and has built a strong recognition and network within the local community.

• **Strong record of diversity in student recruitment:** The MS in Biotechnology program is cognizant of reaching out to underrepresented groups within the field. The ten-year average is demonstrating 50.9% women in the program (ranges are 22.7 to 76.5 percent). The program is also reaching its goal to have a 2/3 domestic: 1/3 international student ratio, which increased from a low of 4.6% international in 2008 to a high of 25% in 2015 and 2016 respectively. The international students include Canada, Chile, China, Columbia, Egypt, Germany, Kenya, India, Japan, Malaysia, Morocco, Taiwan, and Thailand. In terms of our domestic students, the MS in Biotechnology program averaged 75.4% Caucasian students and the underrepresented groups averaged: 4.2% Hispanic (all races), 3.8 African American, and 9.0% Asian, which is in line with the program objectives.

• **Positive program climate:** The program’s climate has been universally praised by students as very positive. An observation by one of the students in the self-evaluation on the “lack of diversity surrounding the various CEOs or ‘visionaries’” has been rectified during the site visit and is considered more of an outlier than a symptom of the program. The MS in Biotechnology is putting particular emphasis into positive climate, inclusiveness and balance, as also seen from other indicators, such as outlined in the diversity of student statistics. The program reports a 97% graduation success rate, and the vast majority of students complete the program in 2 years. The data supplied by the program and the graduate school indicate similar graduation rates for all student population groups.
Program weaknesses and review committee recommendations:
Through our committee’s review of the MS in Biotechnology self-study and our site visit, we have identified several weaknesses and areas that MS in Biotechnology might consider to improve its already strong program.

• **Depth of the applicant pool:** One of the concerns of the program is decreasing applicant pool since 2014, which steadily decreased from 102 applicants in 2014 to 70 applicants in 2017. In the same time the number of admitted students increased from 31 in 2014 (with the low of 26 in 2015) to 38 in 2017, while the number of new enrollments largely stayed stable (lower 20s). It seems however, that this trend has not significantly affected the quality of the applicant pool. While the overall decrease of the depth of the applicant pool is concerning, stability of the student quality is re-assuring. Regardless, the program should continue to increase efforts in increasing student recruitment, which should include directly targeting likely local/regional industries to send students into the program and targeted advertisement to key undergraduate programs. An important potential area that would increase application pool is to consider expansion into other areas of commercialization (e.g., devices). This would open and make the program attractive to companies in a different industry sector (e.g., GE, Accuray), which could significantly increase the applicant pool as well as the program as a whole.

• **Curriculum emphasis:** Students and alumni singled out regulatory aspects of the curriculum as some of the most valuable knowledge in their careers, and at the same time also one of the most distinctive features for the program. In the highly competitive space, it would be desirable to further expand and make this a trademark of the MS in Biotechnology program. Further increase of the regulatory component would also allow for better and more extensive coverage of this space, also recommended by some of the students (e.g., to include overview and comparison between US and international regulations, which is important for international business and commercialization).

• **Single-track option:** Some of the students expressed concern that highly specific training at BTCI might not serve the majority of the students’ diverse interests. The program leadership should consider “diversifying” the portfolio of the hands-on experiences (e.g., some of the students are more interested in devices) and potentially link with other industries. Also, implementation of “industrial internship option”, perhaps in place, or in addition to the current single-option, could provide opportunity to better serve different commercialization interests of students (it is also not uncommon for people to move from one to another industrial sector).

• **Lab component:** Several students have expressed concerns of the usefulness of the lab component in its current form for the majority of students, and suggested to make the lab component optional or reduced with several other options available to those who seek more in-depth expertise in other components of the program (e.g., regulatory expertise, biomedical devices). This is certainly a reflection of the diverse applicant pool, with several students already holding more senior positions in industry, and looking largely to move into more leadership positions within their companies. It should be noted, however, that students definitely support and appreciate the hands-on experience in a place such as BTCI. Given the relatively small size of the class, having multiple options might not be practically feasible, or easily achievable, but some thought should be put into creating potential innovative solutions to address these concerns, such as previously recommended expansion into other areas of commercialization.

• **Strong reliance on the Biopharmaceutical Technology Center Institute (BTCI):** While strong collaboration and involvement of the BTCI is definitely a strength of the program, reliance on a single partner to support a significant hands-on component of the program could become risky,
had the relationship or leadership or position of any of the parties change. Considering additional partnerships would be desirable. It should be noted, however, that the MS in Biotechnology program has made contingency plans (e.g., increased utilization of the current biofabrication space in the Research Park).

• *Program leadership succession planning:* While the current program leadership is a definite strength and makes the program what it is, it also raises concerns about the future of the program, had this leadership changed. It would be of benefit to both reduce the immense “burden” on the leadership, effort, as well as reduce potential negative impact in case the leadership changed. Creating an “extended leadership team”, composed of several of more active faculties could help transferring some of the roles from that current leadership. This might also address a desire from the students to have a “mentor” from the first year on; a function largely provided by the Directors of the program at this time.

• *Reliance on local companies:* The MS in Biotechnology program critically depends on the students from biotech industries. Decrease in (financial) support for studies from employers (even though most of the students still get at least part of their tuition covered), partially linked to the recent economic downturn, has already negatively impacted student application numbers. In order to secure continuing support from local companies, it is recommended to continuously reach out to local companies to obtain feedback what they would like in future leaders and how to further create a program that is aligned with their expectations. Furthermore, adding alternative “options”, such as devices, would make the program appealing to a much larger number of local companies. In addition, effort should be put into increasing the MS in Biotechnology program visibility and recognition in nearby larger cities (e.g., Milwaukee, Rockford, Chicago). Similarly, the program should continue to explore targeted international recruitment (e.g., global biotech industries, which might be interested in sending their employees as “international students”).

In summary, our committee recommends that the MS in Biotechnology graduate program continues and that the next program review occurs in ten years.

Sincerely,

Associate Professor Lara Collier, School of Pharmacy (also GFEC representative),
Associate Professor Ying Ge, Department of Cell and Regenerative Biology, SMPH
Professor Robert Jeraj, Department of Medical Physics, SMPH (also Chair of the review committee)
Response to GFEC Review of Academic Programs (Spring 2019)
Department of Statistics, University of Wisconsin - Madison

Thank you for your recognition of many strengths of our academic programs, which included progress toward improvement department climate and TA training, along with the implementation of assessment procedures to guide departmental decision. We also appreciate the challenges highlighted in the GFEC report including collective long-term vision and diversity, as well as your constructive and helpful advice.

We attach below our response to the review committee from spring 2018. Since then, we have been continuing to make progress. Below are a few additional highlights.

• Starting fall 2018, the climate committee has been renamed the climate & diversity committee comprising faculty, staff, and graduate students, charged to promote a welcoming and inclusive community for people from every background, organize social activities, and handle departmental climate and diversity issues. There has been a more concerted effort to host welcome, holiday, spring, and graduation gatherings to promote a stronger sense of community.

• The instruction/TA committee continues to improve the processes for TA recruitment, training, mentoring, evaluation, awards, and accountability. In fall 2018, the department discussed and voted in a written document about TA performance expectations, evaluations, and evaluation outcomes.

• For the MS-Statistics and PhD-Statistics programs, the director of graduate studies (DGS) role has been better defined and the new DGS has been leading the effort to build and improve processes for graduate admissions and mentoring. Some examples in 2018-19 are:
  o Since summer 2018, a new graduate advising committee has been formed to improve the process for mentoring and supporting new graduate students.
  o The graduate admissions process is now more transparent with initial screening by at least two people for all applications followed by comprehensive review by the full committee of the strongest applications.
  o The DGS and the graduate coordinator plan to visit with Assistant Dean LaRuth McAfee in the Graduate School in March 2019.

• For the MS-Statistics Data Science (MSDS) option, a new program manager has been successfully hired and is providing the much needed advising, coordination, and leadership for the program. The MSDS program has enrolled students beyond the visiting international student program (VISp), which is helping to promote diversity of students in MSDS.

• There has been an increasingly greater awareness and promotion for diversity and inclusivity in graduate admissions, faculty and staff hiring, and decision-making processes. Some examples in 2018-19 are:
  o A graduate representative has been selected whose role is to liaison between the faculty/staff and the graduate students.
  o We have resumed the practice of having the graduate representative participate in the monthly department meetings.
  o Faculty, staff, and graduate students are invited to participate in the search for an administrative department manager position.
  o The executive committee discussed and formalized a process that encourages the participation of assistant professors in faculty hiring decision-making. Efforts have also been made for open and timely communications among all faculty regarding hiring decisions.
  o Ad-hoc budget and space committees have been formed to build and improve the processes for making important fiscal and space decisions.
Response to Review of Academic Programs (Spring 2018)

The Department of Statistics greatly appreciates the committee’s thoughtful review, constructive report, and kind encouragement. The committee’s summary of program strengths, areas of concerns, and recommendations for improvement and continued success is extremely helpful and will play an essential role in the further development and expansion of our academic programs as the department continues to grow and excel.

Below are factual errors and possible misunderstandings that have been noted so far.

Section II Graduate Programs
- Page 1, section II, second paragraph under “Strengths”: The statistical consulting course is Stat 998, not Stat 698.
- Page 3, second paragraph: Graduate student representatives are expected to attend faculty meetings (which we call “statistics department meetings” to be more inclusive). Given that other students are not aware of graduate student representation at the department meetings, the role of representatives (or not) is duly noted. It is also our tradition to include graduate students in committees such as admissions and social, but there may have been lapses in oversight and communication in recent years due to turnover and shortage of staff.
- Page 4, recommendation #9 at top: Some recognition of student successes (e.g. ENAR student paper awards) is broadcast.

Section III Undergraduate Major
- Page 4, under overview: The department has engaged in assessment including the new campus initiative to assess learning goals of academic programs on an annual basis. The department also routinely conducts exit surveys of our majors (BS, MS, and PhD) in addition to the campus-level surveys. We note that assessment, while critical, is at a relatively early stage for this university. It is not always straightforward to design, implement, analyze, and interpret assessment and we welcome opportunities to collaborate with other units on campus (e.g. DoIT) to do this systematically and do it right.
- Page 5, recommendation #4 at top: Undergraduate class sizes have indeed increased, but this has to do with budget constraints, reduced number of faculty, and increased numbers of statistics majors. The attribution of larger undergraduate class sizes to VISP students seems to be a misunderstanding of some of our undergraduates. Quite the contrary, VISP has helped to ease budget constraints and allowed the department to offer more undergraduate electives each semester, addressing undergraduate majors’ past concerns that there was very limited choice of electives.

Section IV Gateway Courses
- Page 6, recommendation #4: The recent revision of the gateway courses was done with a great deal of stakeholder input via, for example, the campus adviser network and face-to-face interviews with key departments/programs requiring these courses. We recognize the need for continuing input, but note that the idea of gathering stakeholder input is something that has been in play for some time.

Section V Revenue Programs
- Page 7, concern #5: The annual mid-autumn festival party in the department is traditionally organized by the third-year graduate students for primarily graduate students, staff, and faculty and their family and friends. Therefore, in Fall 2017, the MSDS students were invited while the VISP students were not. We will communicate with the graduate student organizers in the future and explore the possibility of including VISP students (and undergraduate majors).

In addition, we have been making new progress that was not noted in our self-study and the review report. For example,
• **Page 4, recommendation #1 in Section III:** This is already done: several sections of “Intermediate R” and “Advanced R” courses have been offered every semester recently, and course pre-requisites require students to take the “Introduction to R” course early.

• **Page 4, recommendation #2 in Section III:** We are moving in that direction. In Fall 2017, we started to implement a new procedure for senior honors students to do their honors project as statistical consultants in a lab outside of statistics. We would like to extend this option further beyond honors in the major.

• **Page 9, recommendation #1 in Section VII:** The department has opened the process of faculty hiring to assistant professors in the faculty search that is currently underway.

Finally, many of the concerns and recommendations in the report have to do with budget and human resource constraints. In particular, our progress in hiring new faculty, teaching staff, academic advisers, and administrative staff has been outpaced by the growth in enrollment, majors, and new degree programs. The existing processes built over the last few decades were intended for a modestly sized department and need substantial revision to address the current, unprecedented growth. It will continue to take time, resources, and multiple iterations to experiment and learn in the development of sound policies, efficient processes, stewardship of resources, effective communications, and strong teams with diverse membership. We are grateful for the unwavering support by the L&S leadership to grow our academic programs, build an efficient infrastructure, and experiment with new ideas. We ask for their continued guidance and support, as well as patience as we move forward.
23 October 2018

Jun Zhu, PhD
Professor and Chair
Department of Statistics
College of Letters & Science
University of Wisconsin–Madison
Sent Electronically

Dear Professor Zhu,

When the College of Letters & Science assembled a review committee to conduct the ten-year program review of the Statistics MS/PhD/Doctoral Minor with Named Options in Biostatistics, Professor Monica Turner was asked to serve as the Graduate Faculty Executive Committee (GFEC) representative. Professor Turner led a discussion of the review at the GFEC meeting on October 5, 2018. In this letter, I summarize the committee’s discussion.

The GFEC learned of the strengths of this program, which include progress toward improving departmental climate and TA training, along with the implementation of assessment procedures to guide departmental decisions.

In addition to the many strengths, the GFEC discussed some of the challenges facing the program:

- **Collective long term vision:** The GFEC recommends continued examination of program strategies, including reducing prerequisites and elective course requirements, formalizing peer mentoring, and broadening use of professional development opportunities. The GFEC also recommends involving more faculty and graduate students in departmental planning and decision making.

- **Diversity:** The GFEC recommends diversity initiatives take a higher priority in the department and to that end, should consult with LaRuth McAfee, Graduate School Assistant Dean for Diversity, Inclusion and Funding.
The GFEC recommends the department engage in efforts to address the recommendations of the review committee and provide a written response by January 30, 2019, which will be discussed at a subsequent GFEC meeting. Thank you for your commitment to graduate education.

Sincerely,

William J. Karpus
Dean of the Graduate School
Professor of Pathology and Laboratory Medicine

Cc:  John Karl Scholz, College of Letters & Science
     Eric Wilcots, College of Letters & Science
     John Schuppel, Department of Statistics
     Bret Largent, Department of Statistics
     Jocelyn Milner, Office of the Provost
     Parmesh Ramanathan, Graduate School
     Joshua Morrill, Graduate School
     LaRuth McAfee, Graduate School
     Emily Reynolds, Graduate School
The La Follette School is pleased to provide this written response to the challenges facing our graduate programs. We are grateful that the report also identified a number of strengths across our programs, including our focus on student learning, leadership, and faculty research. More broadly, this report has been shared with our faculty and staff and discussed at a La Follette School meeting.

Below we have placed GFEC’s comments in italics and then follow these comments with the School’s responses. Of course, should you or your committee desire additional information or clarification, please do not hesitate to let me know.

**Leadership Turnover:** The GFEC noted the need to prioritize recruitment to fill recently vacated leadership positions with high quality leaders to carry the program forward.

We are pleased that GFEC recognized the importance of School leadership to our educational programs. The School has recently undergone two transitions that place it on a strong institutional leadership foundation going forward. I have taken on a leadership role as Director of the La Follette School—a position that I have also held in the past, and I bring strong experience to the position. I will likely stay in this role for a full three-year term. Additionally, we have a new Associate Director of the La Follette School. Steve Kulig, who is a graduate of our MPA program and recently served as our School’s Administrator, has taken on this role. Steve will provide important stability and leadership in this staff position. Moreover, he is an excellent administrator.

**Support for Graduate Students:** The GFEC recommends actively pursuing funding support through alumni for student support.

The School will continue to actively pursue funding support for graduate students from our alumni and friends over the next few years. That said, our support for graduate students from philanthropy has grown dramatically over the past five years. Some of this support has been provided in the form of direct student scholarships, while other support has flowed from philanthropy to support faculty research, which, in turn, has allowed the School to support an increasing share of our students through project assistantships. Despite these gains, support for our students via philanthropy will continue to be one of our goals in the future. I will note here that our alumni tend to work in the public and non-profit sectors and tend to have a lower capacity as a result, so our School’s development strategy does not exclusively focus on our alumni.

**Diversity:** The GFEC was concerned by the lack of diversity in the program. The GFEC recommends following up with identified outreach opportunities, including undergraduate students from other universities and alumni in varying regions. Additionally, the committee recommends use of the Diversity Inventory Program (DIP), as well as coordinating efforts with LaRuth McAfee, Assistant Dean for Diversity, Inclusion and Funding.
We agree with GFEC’s concern that, on some dimensions, the School lacks in diversity in our programs. Historically, we have not had a wide range of diversity in students coming from under-represented minority backgrounds. We have had, and continue to have, strong general diversity across our graduate student population, which includes non-traditional students, veterans, working-class students, students from varying political ideologies, students with disabilities, and students who identify on the GLBTQ spectrum. In reply to GFEC’s concern and due to our own internal prioritization, the School is now taking several steps.

Let me highlight three things here. First, we admitted our most diverse class for 2018-19. Thirty targeted minority and first-generation college students applied for admission, compared to 16 such applicants in 2017. Of these applicants, 25 were accepted, and 9 enrolled, making up 17% of the new class, compared to 4% last year, when 2 targeted minority students enrolled. We attribute that increase to a concerted effort by the students, faculty and staff as a whole, and while we see it as growth in the right direction, we are not satisfied and seek to continue increasing diversity of students and ideas. To that end, we are following GFEC’s recommendation to seek opportunities to recruit underrepresented students by strengthening relationships with campus partnerships with programs that support under-represented students. We presented at meetings for Chancellor’s and PK Scholars, majors in Chican@/Latin@ Studies, Badger Volunteers, and interns at Educational Analytics. This fall we recruited at institutions who partner with the UW-Madison Graduate School, including UIC and Howard University. Five of the seven fairs we attended were intended for under-represented students. We also recruited in Milwaukee at UW-M and Marquette. Second, last year, and aided by our La Follette School students, we were able to provide increased travel aid to underrepresented students to attend our graduate student visit day. This assisted the School to recruit its most diverse class to day. Third, we are planning a major student activity and keynote address on our 2019 visit day. The address will be provided by a prominent academic of color, who will speak about race and poverty issues in contemporary America.

We are also placing new emphasis on inclusion. In 2017-18, the La Follette School Student Association added a new Diversity & Inclusion board position. They have been involved in outreach and recruiting, as well as several of the following initiatives. Last year, we instituted our first climate survey in Spring 2018 and plan to renew these efforts in Spring 2019. Additionally, we have an active, student-led diversity and inclusion group this year, who are leading monthly student, staff, and faculty conversations around diversity and inclusion.

**Curriculum Overlap:** The GFEC recommends reviewing required course curriculum to evaluate and minimize existing course overlap.

We thank GFEC for its recommendation to review potential curriculum overlap in our existing classes. In reply, the Associate Director reached out to faculty teaching required courses where students expressed concern about overlap. Faculty were provided syllabi to review for each required course to help reduce content overlap. Additionally, four required courses this academic year have different instructors than the previous year, providing the School an opportunity to connect with these new faculty and discuss overlap issues as they prepped their courses.

The Associate Director has also scheduled a meeting with the La Follette School curriculum committee in January to discuss additional ways to minimize course overlap in required courses in future years. In preparation for this meeting, the Associate Director has shared results from La Follette’s annual student exit survey and excerpts from the 10-year review, which includes student comments regarding concerns with core course overlap. After meeting, the curriculum committee will provide the School recommendations to reduce course content overlap.
Inadequate Space: The GFEC noted the program lacks adequate facilities. The GFEC recommends prioritizing new space for the school in the forthcoming L&S master building plan.

Finally, we wholeheartedly agree with GFEC that our program lacks adequate facilities. As you may know, the School has been “prioritized” for new space across two master building plans, which now covers over 20 years of prioritization. Most of our peer competitors at policy/public affairs schools across the country have beautiful facilities that allow for teaching, research, fellowship, and (importantly for our mission) public engagement. To be viable going forward, a new facility is needed for the La Follette School.

CC: Greg Downey, Associate Dean, College of Letters & Science
23 October 2018

Susan Webb Yackee, PhD
Professor and Director
Robert M. LaFollette School of Public Affairs
University of Wisconsin–Madison
Sent Electronically

Dear Professor Yackee,

When the College of Letters & Science assembled a review committee to conduct the ten-year program review of the MPA/MIPS/Doctoral Minor in Public Affairs/International Public Affairs, Professor Steph Tai was asked to serve as the Graduate Faculty Executive Committee (GFEC) representative. Professor Tai led a discussion of the review at the GFEC meeting on October 5, 2018. In this letter, I summarize the committee’s discussion.

The GFEC learned of the strengths of this program, which include excellent completion and placement rates, the range of procedures used to evaluate the program and assess student learning, and strong leadership and faculty research.

In addition to these many strengths, the GFEC discussed some of the challenges facing the program:

- **Leadership Turnover:** The GFEC noted the need to prioritize recruitment to fill recently vacated leadership positions with high quality leaders to carry the program forward.

- **Support for Graduate Students:** The GFEC recommends actively pursuing funding support through alumni for student support.

- **Diversity:** The GFEC was concerned by the lack of diversity in the program. The GFEC recommends following up with identified outreach opportunities, including undergraduate students from other universities and alumni in varying regions. Additionally, the committee recommends use of the Diversity Inventory Program (DIP), as well as coordinating efforts with LaRuth McAfee, Assistant Dean for Diversity, Inclusion and Funding.

- **Curriculum Overlap:** The GFEC recommends reviewing required course curriculum to evaluate and minimize existing course overlap.

- **Inadequate Space:** The GFEC noted the program lacks adequate facilities. The GFEC recommends prioritizing new space for the school in the forthcoming L&S master building plan.
The GFEC recommends the department engage in efforts to address the recommendations of the review committee and provide a written response by **January 30, 2019**, which will be discussed at a subsequent GFEC meeting. Thank you for your commitment to graduate education.

Sincerely,

William J. Karpus  
Dean of the Graduate School  
Professor of Pathology and Laboratory Medicine

Cc:  
John Karl Scholz, College of Letters & Science  
Eric Wilcots, College of Letters & Science  
Steven Kulig, Robert M. LaFollette School of Public Affairs  
Jocelyn Milner, Office of the Provost  
Parmesh Ramanathan, Graduate School  
Joshua Morrill, Graduate School  
LaRuth McAfee, Graduate School  
Emily Reynolds, Graduate School
Dear Dean Karpus

I would like to thank professor Livanos for his participation in our ten year program review, as well as the Graduate Faculty Executive Committee (GFEC) for your recommendations. With respect to the challenges you have identified I would like to make some comments:

1. With respect to clarification of program requirements. We followed the L&S’ governance procedures in approving the changes made to our curriculum (attached approval letter). We will go over the description of those changes in the Graduate Guide, to ensure that these changes are accurately represented.

2. With respect to program growth. We completely agree with the need to monitor enrollment. We are also in the processes of implementing new marketing strategies to increase enrollment. With respect to recent faculty retirements we agree that these have impacted our program, yet we are happy to report that recent hires including Patrick Iber in History, Paul Dower in Agricultural and Applied Economics, Emilia Tjernstrom in the School of Public Affairs, and Diana Rodriguez in the School of Education, among many others, strengthen the program. This was recognized by our successful bid to renew LACIS’s appointment as one of the National Resource Centers that was funded by the Federal Government for the next 4 years.

3. With respect to affiliated appointments and pursuing cluster hires. We can’t agree more, this is why just in 2017 we affiliated: Paul Block, Civil and Environmental Engineering, Patrick Iber, History, Beatriz Botero, Comparative Literature, Aarli Mercado, Spanish & Portuguese, Catherine Vieira, English, Sara McKinnon, Communication Arts, and Carolina Sarmiento, Civil Society & Community Studies. We routinely meet with incoming faculty to discuss their research and how LACIS can support them. These meetings as well as their participation in LACIS activities usually results in these affiliated appointments. With respect to pursuing a cluster hire, we did that partnering with the School of Education and the School of Mass Communication for the University’s second round of proposals. Unfortunately our bid was not successful. We are currently making plans for the third round.

We look forward to your continued support in strengthening our program.

Sincerely,

Hernando

Hernando Rojas
Helen Firstbrook Franklin Professor of Journalism
School of Journalism and Mass Communication, UW - Madison
Director Latin American Caribbean and Iberian Studies Program, UW - Madison
Director - Center for Political Communication Research, Colombia
On Sep 24, 2018, at 11:24 AM, UW-Madison Graduate School Dean
<graduateschooldean@grad.wisc.edu> wrote:

Professor Rojas,

The Graduate Faculty Executive Committee completed its ten-year program review process for the MA/Doctoral Minor in Latin American, Caribbean, and Iberian Studies. The review summary is attached.

Have a great day,

Amy Bergholz
Executive Assistant to Dean Karpus
Graduate School, University of Wisconsin-Madison

<GFEC_ProgramReview_LACIS_9-17-18_emr_wjk092418.pdf>
24 September 2018

Hernando Rojas, Ph.D.
Professor and Director
Latin American, Caribbean and Iberian Studies Program
College of Letters & Science
University of Wisconsin–Madison
Sent Electronically

Dear Professor Rojas,

When the College of Letters & Science assembled a review committee to conduct the ten-year program review of the MA/Doctoral Minor in Latin American, Caribbean, and Iberian Studies, Professor Christopher Livanos was asked to serve as the Graduate Faculty Executive Committee (GFEC) representative. On behalf of Professor Livanos, Associate Dean Lisa Martin led a discussion of the review at the GFEC meeting on September 14, 2018. In this letter, I summarize the committee’s discussion.

The GFEC learned of the strengths of this program, which include interdisciplinarity, research focus, faculty and resource commitment, thoughtful design of five new curricular tracks and outreach to the social sciences and natural sciences.

In addition to these strengths, the GFEC discussed some of the challenges facing the program:

- Clarification of program requirements: It is recommended that the program work with L&S to make sure that new curricular requirements are approved through the college’s governance process and that they are accurately represented in the Guide.

- Program Growth: It is recommended that the program monitor the effect of the new curricular tracks on enrollment and also use marketing and recruitment strategies in tandem with these new tracks to increase enrollment numbers. The GFEC expressed some concern about the recent retirements of key faculty members in LACIS and would like to hear what the program is doing to bring in new affiliate faculty. The GFEC also wondered if there may be potential to pursue a cluster hire in this area.
The GFEC commends the program on its strengths and thanks you for your commitment to graduate education. We look forward to the program’s response by December 10, 2018.

Sincerely,

William J. Karpus
Dean of the Graduate School
Professor of Pathology and Laboratory Medicine

Cc: Karl Scholz, College of Letters & Science
    Eric Wilcots, College of Letters & Science
    Susan Zaeske, College of Letters & Science
    Elaine Klein, College of Letters & Science
    Alberto Vargas, Latin American, Caribbean and Iberian Studies
    Darcy Little, Latin American, Caribbean and Iberian Studies
    Jocelyn Milner, Office of the Provost
    Sarah Kuba, Office of the Provost
    Parmesh Ramanathan, Graduate School
    Joshua Morrill, Graduate School
    Emily Reynolds, Graduate School
December 7, 2018

TO: William J. Karpus, Dean of the Graduate School, Professor of Pathology and Laboratory Medicine

FROM: William Aylward, Chair, Classical and Ancient Near Eastern Studies

RE: Response to Summary of GFEC Program Review of CANES

CC: Karl Scholz, College of Letters & Science
    Susan Zaeske, College of Letters & Science
    Elaine Klein, College of Letters & Science
    Alex Dressler, Department of Classical and Ancient Near Eastern Studies
    Jeremy Hutton, Department of Classical and Ancient Near Eastern Studies
    Toni Landis, Department of Classical and Ancient Near Eastern Studies
    Jocelyn Milner, Office of the Provost
    Sarah Kuba, Office of the Provost
    Florence Hsia, Graduate School
    Parmesh Ramanathan, Graduate School
    Joshua Morrill, Graduate School
    Emily Reynolds, Graduate School

Thank you for commending our department on its strength and commitment to graduate education in your letter dated September 24, 2018. This memo fulfills your request for a response to your summary of discussion of the review of CANES graduate programs in AY2017-2018 at the GFEC meeting on September 14, 2018.

Graduate advising and time-to-degree

We are currently developing plans for yearly written feedback on student progress, which will include 1) yearly Qualtrics surveys of faculty regarding students, distributed to students with additional qualitative feedback prepared by the DGS, and 2) communication of written feedback developed in annual faculty discussion of student progress to students, along with the opportunity for student responses to that feedback. All of this will be assembled in a dossier and included in the student’s performance and career file. We anticipate at least some of these practices being established in the current academic year.

We aim to provide a formally written report pertaining to student performance in factors quantitative and qualitative at least once per year for every year of a student’s enrollment, a wider variety of
formally appointed advisers for students in their first two years, and a special advising seminar, led by a
one member of the faculty, based on rotation, every year, to support the DGS and provide students with
more specific and substantive, individualized feedback and assistance on specific projects, as well as
more general matters of professional development relevant to their specific year in the program. We
hope that this degree of dedicated individual advising will help all students, and especially
underrepresented students, whose primary obstacle to timely completion, to the extent that the very
limited numbers enable us to judge, has been insufficient preparation in the languages.

Other steps CANES has taken and will continue to take to address these issues:

CANES met with Associate Dean Florence Hsia on November 7, 2018, about our graduate program in
Classics, strategies for funding, advising students about alternative academic careers, and strategic
planning for growth and sustainability of our graduate programs. The meeting was attended by four
tenured faculty in CANES, including the department chair. We plan to meet again in Spring 2019 and
once every semester thereafter to check-in and re-tool practices and strategies for graduate education.

CANES also organized a listening session for graduate students on November 16, 2018. This two-hour
meeting was an informal way for graduate students to express concerns about their experience in the
department and the university. It was attended by three tenured faculty, including the department
chair, our Graduate Program Coordinator, and eight of our graduate students from all levels, from first-
year students to dissertators. CANES plans to repeat this event at least once per academic year.

Professional development and careers outside academia

Our weekly newsletters in CANES, emailed each Monday to all faculty, staff and graduate students,
routinely advertise alt-ac resources offered by the Graduate School and encouraging our graduate
students to take advantage of these opportunities. For example, a recent newsletter included links to
these recent perspectives:
"We Need to Systematize Alt-Ac Career Guidance"
"Toward a Trackless Future: Moving beyond 'Alt-Ac' and 'Post-Ac'"

Recognizing that we can supplement these activities, in 2017 CANES applied for and was awarded a
$1,000 professional development grant from the Graduate School. We used it to bring alumnus of Ph.D.
program in Classics, Prof. Kirk Ormand (Oberlin College), to campus to deliver a presentation called
"Find Your Best Fit: Could Teaching at a Liberal Arts College Be Right for You?" This wide-ranging talk on
alt-ac careers featured robust Q&A that involved the speaker’s candid advice about limited prospects for
employment in academic jobs at colleges and universities.

Additionally, we have added a Professional Development tab to our website, by which we link to
Graduate School resources and which we update with relevant and timely information about PD. Our
Web site will also soon feature the “Legion Project”, which is a product of The Paideia Institute, a non-
profit organization dedicated to promoting the study and appreciation of classical humanities. The
“Legion Project” fosters a community of Classists who seek employment outside of academia:
https://www.paideiainstitute.org/legion

Within the initiative is a bridge program, “a career placement initiative that advises and supports
Classicists as they seek to transition to fulfilling careers beyond the professoriate.”
https://www.paideiainstitute.org/bridge_program

Each week, our newsletter to faculty, staff and graduate students contains a link to these resources. On October 18, 2018, CANES organized an alternative careers workshop called “Classics and Careers” that featured three alumni of our undergraduate and graduate programs who now have successful careers outside academia. The alumni attended by video conference and the event was attended by thirty of our undergraduate majors and graduate students:
https://canes.wisc.edu/events/classics-careers

In Spring 2019 CANES is planning a second event specifically targeting our graduate students. We intend to host two alumni of our Classics graduate program currently on alt-ac career paths, one in library special collections and the other in museum studies.

The Classics Grad Forum, an RSO populated primarily by graduate students in the Classics graduate program, was recently awarded a $1,000 Graduate School professional development grant. They plan to use it for networking with alumni successful in academia and alt-ac careers and bringing a speaker to campus to address these concerns in conversation.
24 September 2018

William Aylward, Ph.D.
Professor and Chair
Department of Classical and Ancient Near Eastern Studies
College of Letters & Science
University of Wisconsin–Madison

Sent Electronically

Dear Professor Aylward,

When the College of Letters & Science assembled a review committee to conduct the ten-year program review of the MA/PhD in Classical and Ancient Near Eastern Studies with Named Options “Classics” and “Hebrew Bible” and Doctoral Minors Classics, Greek, Hebrew Bible and Latin, Associate Professor Christa Olson was asked to serve as the Graduate Faculty Executive Committee (GFEC) representative. Professor Olson led a discussion of the review at the GFEC meeting on September 14, 2018. In this letter, I summarize the committee’s discussion.

The GFEC learned of the strengths of this program, which include faculty commitment to plans for integration and coordination in the new department and its graduate programs along with robust scholarly training for students in their respective fields.

In addition to these strengths, the GFEC discussed some of the challenges facing the program:

- Advising: The review committee noted a need for more consistent early mentorship and clearer information about program requirements when students first arrive in the program. The GFEC recommends the department assess its advising strategy to ensure students feel confident asking questions of the right people.

- Professional Development: As the job market, particularly in Classics, continues to contract, the department will need to take concrete steps to support students across a range of career goals. The GFEC recommends the department engage in efforts to make information about alternative career options outside of academia available to students.

- Degree Completion: The data indicate that 35% of enrolled Ph.D. students do not complete the degree. Additionally, for those that do finish the Ph.D. the time to degree is prolonged beyond that of our AAU peers. While this may be a phenomenon of the past,
the department should outline its continuing strategy to mitigate both of these weaknesses.

The GFEC commends the program on its strengths and thanks you for your commitment to graduate education. We look forward to the program’s response by December 10, 2018.

Sincerely,

William J. Karpus  
Dean of the Graduate School  
Professor of Pathology and Laboratory Medicine

Cc: Karl Scholz, College of Letters & Science  
   Susan Zaeske, College of Letters & Science  
   Elaine Klein, College of Letters & Science  
   Alex Dressler, Department of Classical and Ancient Near Eastern Studies  
   Jeremy Hutton, Department of Classical and Ancient Near Eastern Studies  
   Toni Landis, Department of Classical and Ancient Near Eastern Studies  
   Jocelyn Milner, Office of the Provost  
   Sarah Kuba, Office of the Provost  
   Parmesh Ramanathan, Graduate School  
   Joshua Morrill, Graduate School  
   Emily Reynolds, Graduate School
May 31, 2018

TO: Parmesh Ramanathan
   Associate Dean, Graduate School

FR: Dominique Brossard, Chair, Department of Life Sciences Communication

RE: LSC Program Review Response

We thank GFEC for reviewing the LSC Program Review report, and are writing in response to GFEC’s concerns related to the LSC M.S. and doctoral minor review.

First, we would like to address the concerns over the percentage of underrepresented students in the M.S. program. Based on the data provided by the Graduate School, our program has been 70% female over the past eight years which is significantly higher than many Master of Science programs. 11% of all graduates were underrepresented minority students. In other words, our M.S. program is outperforming or performing as well as many other communication programs or social science units in STEM fields. As far as absolute numbers are concerned, we would like to reiterate that we have intentionally shrunk the size of our M.S. program, as stated in the report, to ensure that we can provide funding for virtually all of our students.

In spite of these very positive performance indicators, we are always striving to increase the diversity of our program and are actively working toward that goal. Specifically, we plan to expand and improve on our current strategies to recruit and retain more students from underrepresented backgrounds. Our Director of Graduate Studies will meet with Assistant Dean for Diversity, Inclusion and Funding, LaRuth McAfee, in early June, as requested by GFEC, to discuss our current efforts and a plan to optimize our recruitment and retention of underrepresented students in our graduate student population. Finally, we will also review the Diversity Inventory Program website to identify additional campus resources that can be used in our recruitment and retention efforts.

GFEC also expressed concerns that we were unable to attract top candidates to our program. We appreciate those concerns, but what is referenced in the memo are statements from the report related to recruitment to our Ph.D. program which is administered jointly with the School of Journalism & Mass Communication and was not part of this program review. Our concerns in this context relate to relative competitiveness with our private school peers. In the most recent National
Research Council doctoral rankings, we competed with the University of Pennsylvania, and Stanford University for the #1 ranking in the field of communication. Both are private universities and able to offer much more competitive funding packages than UW-Madison. We are therefore particularly happy to report that we have strategically used our last two recruitment fellowships provided by the Graduate School to attract outstanding females to Madison such as Nicky Krause and Laura Witzling. As a result, a majority of our Assistant Professor placements have been females and now hold faculty positions at R-1 schools, including Iowa State University, The University of Iowa, the University of Colorado, and the University of Utah.
April 23, 2018

Dominique Brossard, Ph.D.
Professor and Chair
Life Sciences Communication
College of Agricultural and Life Sciences
University of Wisconsin–Madison

Sent Electronically

Dear Professor Brossard,

An important part of the University’s continuing commitment to academic excellence is the evaluation of graduate programs by the Graduate Faculty Executive Committee (GFEC) during program review. When the College of Agriculture and Life Sciences assembled a committee to conduct the ten-year review of the MS/Doctoral Minor in Life Sciences Communication, Associate Professor Christa Olson was asked to serve as the GFEC representative. She led the discussion of the review at the GFEC meeting on April 13, 2018, which is summarized in this letter.

The GFEC learned of the many strengths of this program, which include significant faculty investment, engaged and well-supported students with a strong sense of community, good career outcome, including placements into PhD programs, loyal and involved alumni, and nationally-renowned faculty. GFEC also learned that the program has a model process for selection of teaching assistants. In addition to these many strengths, the GFEC discussed challenges facing the program, specifically:

1. The GFEC was concerned by low numbers of underrepresented minority students in the program and requests that the Director of Graduate Studies meet with Assistant Dean for Diversity, Inclusion and Funding LaRuth McAfee to develop a plan to increase and retain a diverse graduate student population. The GFEC also recommends that the program use the new campus Diversity Inventory Program to learn more about practices at UW-Madison related to diversity, inclusion and climate that may directly benefit its recruiting and retention efforts. GFEC also recommends that the program take advantage of the more diverse population of undergraduate students to recruit a more diverse group of graduate students.

2. Given its nationally-renowned faculty, GFEC was surprised to learn that the program has difficulty competing with peer institutions in recruiting the top to the program.
The GFEC requests the department engage in efforts to address the recommendations. Please send a response addressing the above-mentioned issues with specific actionable plans to Graduate School Associate Dean Parmesh Ramanathan (parmesh.ramanathan@wisc.edu) by September 28, 2018. Thank you for your commitment to graduate education.

Sincerely,

William J. Karpus  
Dean of the Graduate School  
Professor of Pathology and Laboratory Medicine

Cc: Kate VandenBosch, College of Agricultural and Life Sciences  
Richard Straub, College of Agricultural and Life Sciences  
Nikki Bollig, College of Agricultural and Life Sciences  
Bret Shaw, Life Sciences Communication  
Tera Holtz, Life Sciences Communication  
Jocelyn Milner, Office of the Provost  
Sarah Kuba, Office of the Provost  
Parmesh Ramanathan, Graduate School  
Emily Reynolds, Graduate School
In its “Report of the Committee to Review the Departments of German, Scandinavian Studies, and Slavic Languages & Literature” dated January 6, 2016, the College of Letters & Science-appointed committee of Stefania Buccini (French and Italian), Barbara “Suzy” Buenger (Art History, affiliate of German), Suzanne Desan (History), Adam L. Kern (East Asian Languages & Literature) and Fernando Tejedo (Spanish & Portuguese) made a number of specific recommendations regarding each of our three then-independent departments. In a memo dated July 27, 2016, Dean Karl Scholz asked the as-yet-unmerged departments to submit a follow-up report by September 30, 2018. This report responds to that request. In it, we refer to the recommendations made in the January 6, 2016 report (referred to below as the “outside committee report”) and outline briefly the steps we have taken to address identified issues and make progress as part of the merger process. We hope you agree that GNS has made excellent progress thus far, although lots of work remains to be done in order to ensure the ongoing health—and further enhancement—of our undergraduate and graduate programs, as well as our emerging identity as a dynamic and forward-looking hybrid department.

Recommendations as Listed in the Report (pp. 3 ff.)

1. **Recommendation to Merge.** While summarizing some of the concerns of each of the departments, the outside committee report strongly endorsed our merger, and the faculty and staff of the three former departments have worked diligently and with great collective goodwill to build a workable and effective merged department. Change is never easy, and all three departments went into the merger with concerns to ensure the quality of their programs in the future. Many of the negative effects some of us feared or anticipated have failed to materialize and on the whole, GNS possesses a growing spirit of robustness and confidence in its new configuration. Each of the formerly independent units has been able to maintain or even enhance its leadership role within its discipline while also beginning to explore the kinds of “new intellectual frissons ... best practices ... and courses of mutual benefit” called for by the committee, some of which are discussed below. Our success in this merger is in part due to the proactive and helpful advice, encouragement and assistance GNS has received from Associate Dean Sue Zaeske. Without her level of eager and encouraging assistance, our project might not have proved so successful thus far.

2. **Relocate German.** The review committee noted the challenges of creating a common identity when separated on different floors. We are still spread out over three floors in Van Hise Hall (8, 13, 14), which has impeded inter-unit communication and integration, and especially communication among administrative staff. In order to ensure that people on floors 13 and 14 feel served by staff, while the administrative hub and chair’s office of the new department is located on floor 8, we have chosen to locate at least one administrative staff member on each of the three floors. Of course, this situation is not ideal, but the department staff and faculty are working with the situation. A plan for relocation is a responsibility that of course rests with L&S administration and we would urge you to explore ways of addressing this
situation in the near future. We would love to achieve a configuration that affords easy communication among all our staff, faculty, and students. In the meantime, some of us are keeping fit by using the stairs between our floors when going to meetings.

3. **Address Concerns of Academic and Classified Staff.** During the review process, staff members expressed concerns regarding evenness of workload and treatment in the coming merged department, division of work responsibilities, questions of mechanisms for staff review, size of staff, and responsibilities in crisis moments (“pinch hitting”). The leaders of the merger process were careful to address each of these issues in planning the merger, and the resulting staffing configuration is both functional and effective. Each floor has an academic staff member, the chair has weekly meetings with the academic staff, work responsibilities are transparent and well-articulated, and staff reviews are clear and consistent. A measure of the quality of the leadership of the faculty who formed the transition team is the evident high quality of our resulting staff. So far, we have had to mount a retention offer to retain our talented chief of staff Nicole Senter, and we have lost one talented staff member, Katja Mohaupt-Hedden, to a competitive offer from another unit. Katja has been replaced by another very talented professional, Rebecca Forbes Wank. Ensuring a good work environment for all of our department staff is a recognized priority in the department, one which the department executive committee approaches with seriousness and resolve.

4. **Launch New Large Enrollment Service Courses to Benefit the Department.** The review took place during a time in which humanities enrollments were in steep decline throughout the country and in which an ever-stronger emphasis on STEM disciplines threatened to push the humanities out of existence entirely. Since the merger, GNS has worked to address issues of declining enrollment in creative and effective ways. An Eastern European fiction course has been created and was taught first in spring 2017. The popular Vampire and Vikings courses have been turned into online courses that can (also) be taught during the summer. Plans are to create a GNS large enrollment folklore course that will focus on the cultures of Central, Northern, and Eastern Europe. Newly hired faculty have been encouraged and guided to create new popular courses that will appeal to new audiences, such as planned Slavic course in Putin’s Russia and a planned GNS course in sustainability.

We also note in this connection that the synergies afforded by the merger have begun to result in new jointly offered courses. The recommended GNS pedagogy course for graduate students in all three units has been implemented since the fall 2016. In spring 2019, the professional development course for graduate students (once a course exclusively taught in Scandinavian) will be first taught under the newly created GNS subject heading. A GNS Banned Books course is being discussed, as is a common graduate course on literary theory. The faculty continue to explore ways that the new department may make use of the Cluster Hire program to develop pan-GNS expertise and courses. The aim of our development of all such courses is to diversify our popular course offerings so that we no longer rely on just a handful of
very popular courses (e.g., Hans Christian Andersen, Vampires). This strategy ensures against issues created by faculty departures or retirements and also aims to create more evenness in the numbers of students taught by various faculty and staff members.

5. **Level Up Enrollments & Credits-Per-Instructor and Even Out Course Releases.** The outside committee report pointed out imbalances in the credits-per-instructor rates of the three merging units and questions of enrollment caps and course releases. As a department, we are working deliberately and intentionally on enrollments and credits per instructor. Since fall 2016, we have 6 new faculty members, each of whom is charged with developing and teaching a large enrollment course. GNS offers coursework related to 17 languages, many of which are “less commonly taught” and have by necessity low enrollments. On the flip side, several of those (including Turkish and Kazakh) are funded through Title VI funds, and the Russian Flagship program makes it possible to offer multiple sections of Russian language. German unit-specific course releases have either been eliminated or covered by units outside of GNS (e.g., the *Monatshefte* course release is now self-funded; course releases due to directing and international center are now partially bought out by the International Division). The GNS Chair gets two course releases per year, the Associate Chairs each one. As signaled in the outside committee report, we regard it as crucial to make all such changes in ways that ensure the continued quality and leadership status of our units in their respective disciplines and not to impose changes that end up weakening our status in any area. This involves careful deliberation and listening in which the department leadership team works to monitor and respect the concerns of all three units.

6. **Level Up Cost Per Credit.** The outside committee noted disparities between the cost-per-credit statistics for the three departments and urged policies that would bring about a more balanced situation in the new department. As with Recommendation 5 above, this is an area that the department is working on. As the report noted, part of the issue with the cost-per-credit statistics of the various units in previous years had to do with a reliance on a few highly popular courses as breadwinners. When, for instance, Slavic offered Vampire in a given year, its annual cost-per-credit statistics were excellent. If, however, it did not offer the course in a given year, its statistics suffered. By diversifying our range of popular courses, as described above, and ensuring that a good selection of popular courses be offered by each of our units each year, we believe we will be able to better achieve a more balanced and more viable cost-per-credit system for the overall department. Our newly hired faculty are rising to this challenge, and senior faculty and staff are working hard to contribute to the solution and offer guidance for the future.

7. **Level Up and Even Out TA Salaries.** As the outside report clearly and accurately noted, “unevenness of TA salaries across the three units poses a serious challenge.” The sense of precarioussness of our graduate students and the low-percentage appointment levels particularly in German and Scandinavian made recruitment of quality graduate students difficult, while the prospect of students in a single
department doing similar work for different amounts of pay due to the differing percentages of their appointments threatened to create serious issues of morale and equity among our talented graduate students. The GNS leadership team addressed these challenges by developing a consistent and universal policy of 50% TA appointments with five-year guarantees. We achieved this goal in the spring of 2018 through a unanimous vote of our executive committee and are implementing the new system in the current semester (fall 2018). Our graduate students are now equitably and transparently compensated, and our department has proven that adjusting to the Graduate School’s recommended 50% appointment system can work for humanities departments. We are immensely proud of this achievement. At the same time, we point out that we reached this goal while continuing to respect the differences in TA mentoring and employment that were central to each of the three graduate programs. Such achievements can only happen through careful and open processes of deliberation, as we were able to ensure last spring, again with valuable input from South Hall during the process.

8. **Level Out Time to Degree**. The outside committee pointed out disparities in time-to-degree statistics, with a Slavic average of 10.5, as compared with German and Scandinavian, which each has an average of 8.3. In the short time since the merger, the Slavic graduate program has reduced its time-to-degree average to 7-8 years. The only exceptions to this healthy and effective rate for all GNS units have to do with returning graduate students. All GNS graduate students now receive formal notification in their seventh year that they will no longer be funded after that year. They are off guarantee by year 5. One also has to consider, however, that Slavic languages and Finnish are Category IV languages according to the Foreign Service Institute Languages Difficulty Rankings as opposed to Danish, German, Norwegian, and Swedish, which are Category II and I languages. (Source: [https://www.atlasandboots.com/foreign-service-institute-language-difficulty](https://www.atlasandboots.com/foreign-service-institute-language-difficulty).) The development of real proficiency in a Category IV language takes much longer than the same development in a Category II or I language, particularly if the learner has no natal or childhood familiarity with the language. As a department, we seek to take these points into consideration as we appraise the progress of each of our graduate students.

9. **Clarify and Disseminate Grievance Policies, Graduate Policies, Assessment Plan, and Student Learning Outcomes**. The outside committee report exhorted the new department to “adopt the best assessment practices of each of the three departments.” This is an area in which the merger has definitely been of great value, as we have indeed generalized specific best practices and come up with a greater degree of consistency and transparency with regard to grievances, graduate policies, assessment and student learning outcomes. Our new department has benefitted from greater clarity and guidance from campus and the College regarding assessment procedures and student learning outcomes, for which we are very grateful. The GNS leadership team has charged the Curriculum Committee with beginning the work of harmonizing at least some of these assessment procedures to some degree, so that we can generate consistent data and take advantage of
effective strategies that have been developed in each of the three formerly independent units. This is an area of ongoing work, as indeed, it should be: assessment and learning outcomes should not be things done once and then left untouched, but should be constantly revisited and retooled as part of quality control and development.

With the launch of the “Guide” the policies and requirements, assessment, and student learning outcomes are online. They are also available on the GNS website that was created in the fall of 2016 and is managed by our Department administrator. The department’s grievance procedures and reporting misconduct and crime can also be found on the GNS website with the Graduate Program information. The three programs are working on a supplementary handbook with more program specific details that will be posted on the Guide and the website before the end of the year.

10. **Consider New Faculty Lines Wish List.** As the outside committee report noted, each of the three departments had different understandings and needs regarding future faculty hires in their units. These existed because the disciplines in which GNS faculty operate are very diverse and differ in many respects. Our GNS policy has been to seek to maintain and enhance the quality of each of our units, ensuring that we remain leaders in our respective fields. We have been able to do so through careful listening to each other, but also by maintaining three “shadow BSR” reports instead of a single merged BSR that could potentially disguise processes of unintentional siphoning of funds from one unit to another that would create or worsen imbalances. We are grateful to the guidance of Sue Zaeske here, and also Mary Beth Roberts, that have helped us use the BSR in the ways it was intended, i.e., to maximize transparency and facilitate strategic decision making over time. Currently, each of the three units has new hires of staff and professors that ensure good growth and development of the units. We are very appreciative of South Hall’s generosity regarding faculty hire authorizations for our department, that have allowed us to develop some very promising and exciting new areas of expertise in each of our units.

11. **Hold a Faculty and Staff Retreat.** The outside committee recommended that the three units organize a faculty and staff retreat, possibly facilitated by members of the Office of Quality Improvement. We are planning this for spring 2019, on the occasion of the third anniversary of our merged department. In the meantime, regularly held meetings of our various committees and regularly scheduled occasions for socializing, such as our fall potluck picnic, have helped the various department members get to know each other and develop relations of camaraderie and trust. The positive effects of these events are evident particularly among our junior faculty, who appreciate having colleagues in a similar cohort and enjoy the novelty and dynamism of the new hybrid department. As we move forward with plans for retreats, etc., the leadership team will seek to learn about best practices in other large units in the College, e.g., English and History. Many of our units’ tried-
and-true practices before were effective in very small units, such as German, Scandinavian, and Slavic were before the merger. As we envision work in the future, we need to learn how effective decision-making happens in larger units, where, for instance, the consensus-building long conversations that were part of the governance systems in each of the prior units might not prove as effective once the number of participants in the conversation exceeds ten.

12. **Shape Departmental Governance Based on Parity.** The outside committee provided valuable suggestions for how the new department might be configured in terms of leadership. Particularly important was the committee’s emphasis on a joint governance system that would allow for the leadership contributions of all three formerly independent units while also creating a system that would be workable and not overly burdensome to the smallest of the three units. An overall chair, joined by two associate chairs, allows for balanced input. The current chair, Manon van de Water, has worked hard to consult carefully and proactively with her associate chairs, forming a leadership team that has gathered and respected the concerns of all department members. The regular rotation of the overall chair between each of the three units will ensure attention to issues of balance and equity. The GNS executive committee has developed bylaws that have clear rules and voting principles that have been tested so that the largest unit cannot override the votes of the smaller units. A GNS Graduate Admissions and Funding Committee has been created, as the outside committee report recommended, but the individual needs of graduate programs and funding resources differ considerably across the three units, and our executive committee is unanimous that that is why we need to maintain separate Directors of Graduate Studies and conduct separate processes of graduate recruitment when dealing with our potential student clientele as well as the College and the Graduate School. In our estimation, a single admissions process is not possible or prudent for a department committed to maintaining real excellence and leadership in three such diverse disciplines. At the same time, our joint committees allow for frequent consultation among our graduate programs and have served as a source for best practices. Over time, we foresee our graduate programs harmonizing to a greater degree, but only insofar as such would not weaken what are internationally recognized as stellar and strikingly successful graduate programs.

13. **Other: Diversity Efforts**

From the start, GNS has made concerted efforts to increase diversity and inclusion in the department. At the start of fall 2016 the Chair invited the LGBTQ Campus Center to give two workshops on preferred pronouns, one to all GNS TAs and one at the first department meeting to faculty and staff. Over the past three years GNS has invited other guests to our department meetings, including Brian Bubenzer and Luis Piñero. Recommendations on inclusive excellence in job searches have been carefully monitored and followed. We have a GNS diversity liaison in place (Moedersheim) and representatives attended university-wide teaching workshops addressing diversity and inclusivity and reported back to the department (Gross). Regarding classroom climate, a formal Statement on Equity, Diversity, and Inclusion was developed by a GNS ad hoc committee and adopted as joint GNS policy.
statement to be included on department syllabi and featured prominently on our department website. Department representative Jeanne Schueller attended a session on inclusive language learning at a national conference and worked to implement changes in GNS language courses, including through TA training, and in the pedagogy course she teaches in fall semesters for TAs. Graduate students in the department led a three-day workshop/roundtable on Addressing White Nationalism in GNS courses, which focused on post-Charlottesville concerns. Graduate students also took concrete steps to make their classrooms more welcoming and to include reflection on diversity issues as part of class assignments and discussions, in everything from questions of pronoun choice to homework assignments and in-class activities. Regarding our curriculum, several faculty and staff (Eldridge, Krouk, Moedersheim, Mani, and others) have updated courses to include more diverse array of authors and subjects. They also developed new courses that compare GNS situations with counterparts in the USA (e.g., Mani, DuBois, Cederström). Service on broader committees and initiatives increased. GNS was represented on the L&S Climate Committee (Schueller) and the university-wide Committee on Hostile and Intimidating Behavior (Louden); two colleagues are campus liaisons for Hostile and Intimidating Behavior (Louden, Mellor), another is a campus Diversity Liaison (Eldridge), and still others participated in the Annual Diversity Forum (Gross) and the LGBT Campus Center (Wilson [graduate student]). Diversity efforts were also expressed in public outreach: to Indigenous communities at Lac du Flambeau reservation and Menominee reservation (DuBois, Cederström); to the Wisconsin Sikh community (Mani); and to the state’s Amish community (Louden). These efforts are tied to specific topics or situations that intersect with our department’s curriculum and areas of research interest. For the fall 2018 semester we received permission to use our summer revenue to hire a PA to aid us in enhancing diversity in our undergraduate and graduate programs by serving as a liaison between graduate students, faculty, and staff. The department has also identified a Target of Opportunity hire to pursue and is currently at work on a proposal for the college to pursue this hire.

Respectfully submitted,

Manon van de Water, Chair
Mark Louden, Associate Chair for Advancement and Outreach
Tom Dubois, Associate Chair for Academic Programs
May 24, 2017

Manon van de Water, Ph.D.
Professor and Chair, Department of German, Nordic and Slavic
University of Wisconsin-Madison

Sent Electronically

Dear Professor van de Water,

An important part of the University’s continuing commitment to academic excellence is review of graduate programs by the Graduate Faculty Executive Committee (GFEC). When the College of Letters and Science assembled a review committee to conduct a decadal assessment of the graduate programs in the German, Nordic, and Slavic Department (which include the German M.A./Ph.D./Doctoral Minor, the Scandinavian Studies M.A./Ph.D./Doctoral Minor, and the Slavic Languages and Literature M.A./Ph.D./Doctoral Minor and Doctoral Minor in Russian), Professor Fernando Tejedo-Herrero served as the GFEC representative. Professor Tejedo-Herrero led a discussion of the review at the GFEC meeting on May 12, 2017, and in this letter, I summarize the committee’s discussion.

The GFEC learned of the many strengths of the three graduate programs, including connected faculty with exceptional reputations in their fields, editorial roles in leading journals in German, the successful Russian Flagship program, good assessment practices in Slavic and a positive climate with strong support for graduate students that produces award-winning teaching assistants.

The many strengths of the programs notwithstanding, the review revealed areas for further consideration:

- The GFEC expressed concern that the median time to degree and 10-year doctoral completion rates were generally lower than peers, most notably in Slavic Languages & Literature. The committee strongly recommends that the programs look critically at their practices for assessing progress to degree to understand what may be impacting student completion percentages, using that information to develop a plan to reduce time to degree and increase Ph.D. completion.

- The GFEC learned that the programs do not have an online graduate student handbook. Handbooks are required by our accrediting body and the Graduate School to ensure that students have access to all requirements and policies needed to make satisfactory progress toward their degree. Handbooks also connect students with university resources and processes and help answer questions should a grievance arise. A template is available to ensure all necessary sections are included. The committee requests that this handbook be completed before December 15, 2017, in time for the upcoming campus accreditation by the Higher Learning Commission.
• The recent movement of these programs to a new department provides a number of opportunities to share and adopt successful practices. The GFEC recommends strengthening assessment practices and learning outcomes in German and Scandinavian to standardize them across all three programs, along with leveling teaching assistant workload and salaries across the department.

• The GFEC agreed with the review committee’s suggestions to find ways to build connections for graduate students between programs, including developing a shared language pedagogy course in the graduate curriculum in Scandinavian Studies, and to consider a department pro-seminar on professional development.

• Finally, improving diversity in the graduate student body should be a goal for all three programs.

The committee acknowledges the review report was prepared almost a year ago, and the department may have addressed some of these issues. The GFEC would, therefore, appreciate a copy of the follow-up report due to the College of Letters and Science by September 30, 2018, in which the above concerns are addressed by substantive changes and planning. The GFEC commends the programs on their strengths and thanks you for your commitment to graduate education.

Sincerely,

William J. Karpus
Dean of the Graduate School
Professor of Pathology and Laboratory Medicine

Cc: John Karl Scholz, College of Letters and Science
    Susan Zaeske, College of Letters and Science
    Elaine Klein, College of Letters and Science
    Susan Brantly, Department of German, Nordic and Slavic
    Monika Chavez, Department of German, Nordic and Slavic
    Irina Shevelenko, Department of German, Nordic and Slavic
    Mark Mears, Department of German, Nordic and Slavic
    Jocelyn Milner, Office of the Provost
    Sarah Kuba, Office of the Provost
    Parmesh Ramanathan, Graduate School
    Marty Gustafson, Graduate School
    Emily Reynolds, Graduate School