To: Academic Programs Committee Members

From: Lesley Curtis, PhD, Chair, Department of Population Health Sciences
    Hayden Bosworth, PhD, Vice Chair for Education, Department of Population
    Health Sciences

Re: Proposal to create Master of Science (MS) and Doctoral Degree (PhD) in Population
    Health Sciences in the Duke University School of Medicine

Date: Wednesday, April 4, 2018

Dear Academic Programs Committee Members,

Thank you for meeting with us on March 7, and for your support for our proposal for a new Master of Science and Doctoral Degree in Population Health Sciences (PHS). We received the APC’s resolution and appreciate having the opportunity to respond to the issues you raise in section I.a.ii. including faculty preparation, administrative support and infrastructure, market demand, and the strategy for program roll-out.

**Strategy for Program Roll-out:**

We appreciate the recognition of the intellectual strength of our faculty and the confidence in our ability to start a PhD program. We fully agree. Respectfully, however, we request that the APC reconsider its recommendation that we begin with a PhD program and add a Master’s program at a later date. We believe that we have a strong plan to address the substantive concerns raised by APC related to faculty preparedness, market demand, and administrative support (and describe those plans below.) Additionally, after reflecting on our conversation with the APC, we propose to reduce the target number for our first Master’s cohort to 15, and increase our target number for the first PhD cohort to 5. A smaller Master’s program will reduce infrastructure and administrative demands on the new department, and the larger PhD cohort will provide a richer experience for our students. Finally, the sustainability of the PhD program is dependent, in part, on tuition revenues from the Master’s program. While other departmental and institutional resources will also support the PhD program, we would be remiss if we did not acknowledge the financial relationship between the two, and the importance of establishing a successful Master’s program.

**Faculty Preparedness**

Using the results from our recent teaching needs assessment, we are implementing teaching training for our faculty according to the timeline included with this letter. We will begin with a weekly seminar series that focuses on course development and design, innovative classroom management strategies, student learning topics including diversity and disabilities, and team teaching methods. We will train with the help of the experts at Duke Learning Innovations, and we will invite experts from offices and
schools around the University to give presentations and to work with our faculty. We are also committed to using co-teaching models, pairing an experienced faculty member with a less experienced faculty member for each course we develop and deliver. Note that the timeline also includes key dates for staff hiring, and marketing strategizing and implementation, as well as program milestones.

We acknowledge the need for significant faculty teaching resources and have requested financial support from the Dean of the School of Medicine to invest in training programs and support faculty time to refine teaching skills. In addition, we have sought guidance from colleagues in both the Department of Biostatistics and Bioinformatics and in Duke’s Global Health Master’s program about successful approaches for teacher preparation. We will approach faculty/student mentoring using a successful model implemented in both B&B and DGHI. This model is a matching system, wherein faculty can rank potential Master’s students, and students can rank the faculty. This will occur early on in the semester, and will be initiated by a program of “speed introduction,” where faculty will present their research to small groups of students and give them an opportunity to ask questions. The Director of the Master’s program will, with the Assistant Director of Education, evaluate the demands and quality of mentorship in an attempt to evenly distribute the mentoring demand among faculty. In addition, we will encourage mentoring teams to provide students with exposure to multiple mentoring styles.

Of our current faculty, 27 of 34 (80%) have doctoral mentoring experience, and many have chaired PhD committees and supervised students at other institutions and at Duke (e.g., Duke School of Nursing, Duke-NUS Health Services and Systems Research, School of Medicine, University of Bergen-Norway, UNC PhD programs). In addition, DPHS currently has 6 UNC PhD pre-doctoral students who are physically co-located with our faculty at Duke and are actively mentored by them. Multiple DPHS faculty members routinely teach courses in the CRTP Master’s program in the Department of Biostatistics and Bioinformatics.

Committees for doctoral students, whenever possible and appropriate, will have faculty from outside departments; we have reached out and asked others to share their advising experiences.

**Market Demand/Career Outlook**

We agree with the recommendation to focus and commit resources to the development of a robust marketing plan for the Master’s program, with the goal of highlighting the distinct strengths of Duke and our program. We have reached out to Bradley Fox, Director of the Pratt School’s Masters of Engineering Management Program, to learn about their experience engaging an external consultant to develop such a plan.

Since our initial meeting with the APC, we have learned that Duke has been selected as the newest site for the National Clinical Scholars Program (NCSP). Duke will join Yale, UPenn, UCLA/RAND, and Michigan. Briefly, the NCSP is an inter-professional fellowship program designed to prepare a select group of future clinician leaders to improve health and health care. The program supports two years of research training and funds scholars to pursue formal degrees, such as the MS in Population Health
Sciences. The application process is highly selective and the program attracts exceptional scholars. On Wednesday, March 21, we met with Ebony Boulware (co-director of Duke’s NCSP site and Professor of Medicine and Chief of the Division of General Internal Medicine) and Duke’s NCSP committee to discuss the educational needs of the NCSP. Dr. Boulware and the NCSP committee strongly believe the curriculum for the Master of Science in Population Health Sciences best suits the needs of these scholars. They further anticipate that 7-8 individuals would be ready to enroll in the two-year PHS MS beginning in 2019. Such a group would account for approximately half of our annual Master’s cohort and ensure a multidisciplinary student body, while the NCSP would serve as a reliable, ongoing recruitment tool for the PHS MS.

We fully appreciate the concern about the cost of the master’s degree relative to career opportunities for our graduates. As described in our proposal, we anticipate that graduates would be highly competitive for a variety of positions including research project leaders, program analysts, and project directors. Although we have not done a formal market survey, salaries for comparable positions at Duke start at $65K and exceed $80K for individuals with additional work experience. Different career paths across divergent fields (e.g., government, non-profit, academia, & industry) will yield various salaries, and we see preparing students for all potential career possibilities as a paramount goal of the program. We will encourage our students to consider the advantages and disadvantages of various career paths in the context of their goals, as well as career trajectories that cross different sectors. We will cultivate career development resources that facilitate such exploration.

**Administrative Support, Infrastructure & Space Resources:**

We are happy to provide our most recent administrative organizational chart for PHS, including the 4 full-time staff planned or already in place to manage and support the education programs.

Additionally, we include a diagram of our new office space in the Imperial building, highlighted to show the space we will make available for our Master’s students to use. More space – beyond what we have at the Imperial building – has become available, in the newly constructed DCRI building across Morris Street. We have already begun considering future plans for expansion, if needed.

Because both programs will sit within the Graduate School, Duke Career Services has a wide variety of resources available to graduate students. Meetings with Bill Wright-Swadel, Assistant Vice President of Student Affairs and Executive Director of Duke Career Center, and his team of career counselors devoted exclusively to graduate students, have begun. Options discussed at these meetings beyond standard career and internship counseling include the possibility of hiring a full-time career counselor, funded equally by PHS and the Career Center, who would be dedicated to internship management and career paths and placement for PHS Master’s students. We see advantages for this individual/position to sit within the Duke Career Center, where s/he can leverage synergies with related groups, as well as be supported by common practices, procedures and connections.
We believe the proposed infrastructure for student programs, administration, and career services is sufficient (if not more than sufficient) to support the proposed number of 15 Master’s students we expect to matriculate in the first 2-3 years of the Master’s program. Over this time period, our experience with this infrastructure will also help us understand what is necessary both to expand the Master’s program as well as support the PhD program.

In summary, we believe we have a plan for delivering a high-quality, competitive educational program that begins with a Master’s degree offering and adds a PhD program two years later (applications for the PhD would open fall 2020, for entry fall 2021). We look forward to revising our full degree programs proposal to reflect the changes discussed here and to next week’s discussion. Again, we thank you for the opportunity to respond, and appreciate the thoughtfulness the APC has shown toward our proposed degree programs.

Sincerely,

Lesley Curtis, PhD, Chair
Department of Population Health Sciences

Hayden Bosworth, PhD
Vice Chair for Education
Department of Population Health Sciences
Course Design
Syllabus Design
Course development process
Designing activities, assignments, and projects
Writing assignments
Assessment
Technology

Classroom Methods
Lecture strategies
Innovative methods (e.g., flipped classroom)

Students
Learning styles
Students in Crisis
Conflict Management
Disability Services
Diversity
International Students

Regulatory
FERPA

Other course lectures by Duke faculty (with instructors permission)
2018

- Hire Marketing Firm: 6/1/2018
- Marketing Strategy Completed: 9/1/2018
- Move to Imperial Building: 8/1/2018
- Hire Education Program Coordinator: 7/1/2018
- Begin Faculty Training Series: 6/15/2018
- Hire Education Administrative Assistant: 7/1/2018
- Hire Education Administrative Assistant: 7/1/2018

2019

- MS Applications Due: 3/1/2019
- Faculty Intensive Course: 4/1/2019
- Hire Library Liaison: 7/1/2019
- MS Program Begins: 8/15/2019
- Faculty Training Seminar Series: 6/15/2018 - 5/15/2019
- Program Advertising: 9/1/2018 - 1/31/2019
2019 2022
Aug 2020 Jun Nov Apr Feb

[Image: Timeline showing key dates and events]

- **Hire PhD Education Program Coordinator (if needed)**: 7/1/2020
- **PhD Program Begins**: 8/15/2021
- **2nd MS Cohort Begins**: 8/15/2020
- **PhD Applications Open**: 10/1/2020

**Timeline Events**:
- **MS Program Begins**: 8/15/2019
- **MS Cohort 1 (15 Students)**: 8/15/2019 - 5/15/2021
- **MS Cohort 2 (20 students)**: 8/15/2019 - 5/15/2022
- **Faculty Training Seminar Series**: 8/15/2019 - 8/2/2020
- **PhD Program Begins**: 8/15/2021
**Space Currently Available for MS Students**