Alumni Concern on the Provost's Recommendation for Closure of the Ph.D. Program in Computational Mathematics

Quinn Morris <morrisqa@appstate.edu> Wed 1/24/2024 1:15 PM To:Stephen Tate <srtate@uncg.edu> Dr. Tate.

I am sending the letter below in the hopes that you can share it with the appropriate administrators, including Chancellor Gilliam.

Best wishes,
Quinn

Chancellor Gilliam,

I recently read with great surprise and alarm Provost Storrs's recommendation of the closure of the Ph.D. program in Computational Mathematics. As a faculty member in the UNC system, I am sympathetic to the difficult situation you and Provost Storrs are forced into due to budget cuts from the system level. However, as a program alumnus, I know that the role of the Ph.D. program in the Department of Mathematics & Statistics goes well beyond the awarding of the doctoral degree, and fear that the program's closure may only contribute to further declines in undergraduate enrollment at UNCG. I hope that in your final deliberation, which cannot be easy, you will see the value of the Ph.D. in Computational Mathematics to UNCG, both in terms of its value to the academic portfolio and to supporting undergraduate student success.

The Ph.D. program in Computational Mathematics is a valuable resource to the citizens of North Carolina. It fills an important void in the academic portfolio of the system, bridging the gap between theoretical, applied, and computational mathematics. Among the alumni with whom I am currently in contact, there are a number of faculty at public and private universities (including at least three in the UNC System) and North Carolina Community Colleges. There are alumni working in RTP developing computational statistical tools for data analysis that help make North Carolina a national leader in computation. Additionally, many of the program's alumni are themselves North Carolina residents at the time of their enrollment. I can't imagine a more worthwhile investment than in providing an education to the students of North Carolina that then provides dividends many times back to the state.

The Ph.D. program in Computational Mathematics is critical in supporting undergraduate mathematics and statistics instruction at UNCG. Many of the students in the program are funded through graduate teaching assistantships, and support undergraduate instruction by working in mathematics and statistics tutoring labs, teaching sections of introductory mathematics and statistics courses, and supporting full-time faculty in providing feedback and assessment of student learning. This support is critical to ensuring that undergraduate students are successful in early mathematics courses, which the data shows is critical to improving graduation rates, reducing time to completion, and supporting overall student success (all metrics which are critical to the new funding model). While these graduate teaching assistants are supported financially, the cost of the services will increase drastically if the University is forced to pay market wages for tutors and instructors with advanced degrees, putting the University in the position of either cutting student support services in early mathematics and statistics courses (thereby hurting important metrics and likely reducing overall funding) or paying a substantially increased rate to provide equivalent services.

Finally, the Ph.D. program in Computational Mathematics is critical to the long-term success of the institution. Tight budgets necessitate drastic measures. But in search of short-term solutions, we should not lose sight of the long-term goal. UNCG cannot live up to its mission to "redefine the public research university for the 21st century" while simultaneously cutting one of the most innovative and high-performing programs in its graduate portfolio. Indeed, creative thinking and sweeping changes may be needed to make such a venture possible, but I encourage you to embrace that challenge as opposed to taking the short-sighted, though easier, approach of program closure. The loss of students and high-quality faculty (who will no doubt look for other opportunities or consider early retirement) that would occur as the result of program closure would result in a loss for the university that could take decades to recover from.

While Provost Storrs's publicly shared recommendation is short, it appears to be based on the belief that cutting the Ph.D. program in Computational Mathematics will help the university to better achieve its mission and focus on improving undergraduate performance metrics which are critical to increasing funding. However, as I hope I have laid out, the reality is exactly the opposite. The Ph.D. program in Computational Mathematics supports the mission of the system and the University, and is critical to helping UNCG weather this storm.

With best regards,
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