

Department of Mathematical Sciences  
Clemson University  
Clemson, SC 29634-0975

April 25, 2018

Sean Sather-Wagstaff,

Dear Sean,

This letter serves as my request to be considered as the interim chair for the department. On Thursday, I am free except for two meetings. The tpr meeting at 1pm and one with with John Nicholson at noon. Friday, I teach at 9:05, 10:10 and 12:20. I also meet with John Chan at 2:30. Please find attached a copy of my vita. The vision statement follows.

### **Vision Statement**

I decided to apply for the position of interim chair in part because I like being of service in a Mathematical Sciences Department, but mostly because I like my colleagues. Whoever serves as the interim chair should promote an inclusive mathematical sciences philosophy. During my tenure at Clemson, I have had the opportunity to teach courses in operations research, statistics, analysis and computation; to served on the faculty senate and the college and university curriculum committees; to conduct an online course while visiting Texas A&M, and worked in an off campus program offered to Master's students at Virginia Tech and the University of Virginia while at Virginia Commonwealth University. I believe these experiences allow me to have a pretty good idea of who we are and what we do as a department.

There are three goals that I would like to accomplish while serving as the interim chair. The first is to lead the department toward being a more cohesive unit through judiciously chosen strategic hires. The second is to make sure we take care of our tenure track faculty by being personally involved in the mentoring process. The third is to successfully transition the department to the next stage by working to develop a clear path forward.

The Mathematical Sciences Department at Clemson University is unique in its construction and the vision. However, one thing I've seen happen over the years is that while the individual subfaculites have remained strong, the

bridges that connect them have not. Strategic hires offers an opportunity to strengthen these bridges. Perhaps, the best way for me to explain what I mean is through an example. Right now the actuarial program is the strength of the undergraduate program. However, there are no tenure track faculty doing research in this area. Insurance mathematics is one area which clearly overlaps the actuarial sciences. To support this effort, we could ask for three positions, one each in operations research, statistics and computation. There is a vast amount of stochastic modeling and control done in insurance related to the reserach of Sophie Liu. Extreme value theory plays an important role in insurance mathematics and here we could hire a statistician who can interface with Brooke Russell. Finally, many insurance models lead to complicated partial differential equations that must be solved numerically. This plays right to a strength of the computation group. The above is just one example and I am sure there are many better examples we can and should explore. That is, we repair the bridges not by asking faculty to expand their research interests but by finding research areas that bridge the subfaculties.

The department's greatest strength is its people. This includes regular faculty, special faculty, staff and students. According to the dean, the two most important tasks facing the interim chair will be in writing the tenure and promotion letters for those applying for promotion and tenure, and the mentoring of tenure track faculty. To accomplish this task, I would set up a meeting, say once or twice a semester, with each tenure track faculty member and their mentors to discuss the tenure track member's progress. Mentoring is important and good mentoring should be rewarded. These meeting should serve to give the chair an idea of how well the mentoring is being performed. Having served as the tenure, promotion and retention committee chair, I have an idea as to the importance and magnitude of the task.

When I first thought about applying for the position of interim chair, I compared the task to selling a house (a process my brothers and I just completed). Chris is leaving and we are trying to sell the school/department to a new person. One thing I learned in selling a house, that to get the price you want, you must do more than just get the house in order. The house must be appealing to potential buyers. Last year, our department did not look that appealing and it resulted in a failed search. If we are to make changes to the department structure, let us start them, if not complete them, prior to candidates interviewing. We will be able to give the candidates a

clear picture of who we are and where we are heading.

I have discussed three goals to pursue while being interim chair. There are many more which could be addressed, and I am not married to the three that I have chosen. I have been a member of this department for over twenty five years, and have seen the department evolve into a unit that we can all be proud. But even the best of department structures develop a couple of small blemishes over time, and our department is no different. Now is the perfect time to fix these minor imperfections, so that we can put our best foot forward when looking for the next director/chair.

Best regards

Peter C. Kiessler