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Search Committee
Dept of Mathematics, Gettysburg College
300 North Washington St
Gettysburg, PA 17325

Dear Search Committee Members,

I am applying for the tenure-track faculty position in the Gettysburg College Department of Mathematics. I completed a PhD in mathematics at the University of Pittsburgh under the supervision of G. Bard Ermentrout, and I am now a postdoc at the University of Pennsylvania under the supervision of Maria N. Geffen.

I am an ambitious applied mathematician who positions himself at the forefront of discoveries in both mathematics and the physical sciences. At Pittsburgh, I developed my mathematical repertoire by applying dynamical systems theory to reduce the dimensionality of famous neural models, aiding in novel insights into these systems. At the University of Pennsylvania, I introduce ground-breaking insights and models for data produced by one of the world's leading auditory labs.

Gettysburg College offers an excellent academic environment in which I can continue teaching to the highest standards and continue pursuing my independent research at the interface of dynamical systems and physical systems. My teaching portfolio boasts four years of teaching at different capacities (lectures, recitations, grading), at different levels (calculus sequence, differential equations, linear algebra, and discrete math), for three terms per year (Spring, Summer, and Fall). My teaching evaluations are consistently strong. As a result of my teaching I was shortlisted for the Elizabeth Baranger teaching award, the most prestigious teaching award at the University of Pittsburgh.

I have had the pleasure of teaching hundreds of students, where classrooms often consisted of a large variety of socio-economic and educational backgrounds. My goal, first and foremost, is to maintain that *I will give equal and unconditional attention to all students*. To this end, I work hard to keep my speech patterns and mannerisms consistent between all students. This conscious effort is of great personal importance, to avoid the demeaning effect of differing or preferential treatment.

I often assisted students with additional needs. One student required larger font (13 points at least) due to problems with his vision, so for each exam, I created an additional version with an augmented font size. He, as well as many other students, brought notes from a staff psychiatrist confirming their need for additional testing time, and that their tests be administered outside the classroom at a special testing facility on campus. For each student and for each exam, I emailed this external testing facility the exam with additional details such as the additional time required, and allowed materials such as calculators and notes. In all cases, I allowed myself to be available by phone so that they could ask questions during the exam.

Good teaching requires a deep commitment that extends beyond the classroom. Thus, I never constrain my teaching to office hours, and often answer questions through email and make additional appointments as needed. I make it a point that this feature is available to all of my students. For all students who seek additional help, I help them to the best of my abilities regardless of race, gender, background, and disability. *Gettysburg's commitment to diversity and inclusion aligns perfectly with my teaching philosophy*.

Regarding my research, I have written three papers spanning diverse topics from single neurons (coupled oscillators) to the population-level (neural field models) under the supervision of my doctoral advisor. We also published a pedagogical book chapter in computational neuroscience. I maintained collaborations from my masters institution, and published a fourth journal paper in dynamical systems theory. My research resulted in winning the prestigious Andrew Mellon Predoctoral Fellowship at the University of Pittsburgh, which is awarded to doctoral students of exceptional promise and ability. I was the first math-bio student at Pitt to receive this award.

As part of my application I include a curriculum vitae, research statement, and teaching statement. Please request additional details as needed, and I look forward to our correspondence.

Sincerely, Youngmin Park, PhD