

Memo: For undergraduate student research inquiries

Thank you for your interest in our work! In our research group, we develop novel approaches to medicine (mostly oncology) using mathematical/computational tools and evolutionary theory. Typical students working in our group have taken an undergraduate probability theory course and are familiar with numerical simulation of differential equations and/or stochastic processes, but I am open to considering students with other backgrounds and skills as well. To help me understand your particular goals, interests and skills, please send me an email introducing yourself, including your CV, list of relevant courses taken (with instructors if @UMN) and grades. In addition, please provide answers to the following questions:

1. Why do you want to work in our lab? (For example, you might be interested in simply finding out what research in mathematical biology or applied math is like, or perhaps you are interested in developing particular skills, or you are interested in gaining research experience for grad school applications.)
2. Describe your computational/programming background.
3. Describe your mathematical background, including any experiences with mathematical modeling.
4. Describe your biology background.
5. How many hours per week can you commit to research?
6. How long of a commitment do you intend to make to this work (e.g. 1 semester, full academic year, summer only)? When do you hope to start?
7. Are you looking for a paid/unpaid internship? Do you have your own funding?
8. Are you interested in participating in K-12 outreach efforts?
9. What kind of project(s) are you interested in? For example, you may be interested in primarily theoretical/primarily computational/primarily interdisciplinary modeling projects, or you may have no initial preference (which is just fine).

Statement on research experiences: Undergraduate students who join our lab (whether for a semester or for multiple years) are fully integrated into the research group. You will have a specific project assigned to you, and have regular meetings with either me or another senior lab member (graduate student or postdoc) or collaborator to discuss your project. You will also participate in our weekly research group meetings, where you will be able to learn about many research projects besides your own. We also regularly schedule career development sessions in our meetings (e.g. how to write a paper, how to write application essays, etc.) In addition to providing you with a research experience, I commit to providing you with a welcoming environment and community, as well as career advice and mentoring.