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RE: Code Club R25 application

Dear Pat,

I am happy to write in support of your R25 application to develop Code Clubs as a widely distributed teaching tool for scientists. Programming has become an essential skill for biomedical scientists, and "good coding practices" are fundamental to ensuring rigor and reproducibility in research.

During the time that we have both been at the University of Michigan, I have always enjoyed our discussions around implementing data science practices and developing approaches to help members of our labs to develop their skills. Your innovative teaching in microbial bioinformatics (e.g. your local Software Carpentry workshops and your online Riffomonas tutorials) has been a tremendous help to my trainees and provided them with the skills necessary to do their work.

I think the concept of a Code Club, which your group developed, is innovative and has proven itself an effective training tool. As you outline in your proposal, students often have difficulty retaining knowledge or maintaining their coding skills after completing a course or workshop. I have found this to be a frequent problem in my own work, and Code Club effectively addresses this issue. In fact, borrowing your idea of a Code Club, my group has used your original reproducible research modules to seed discussions and tutorials at our lab meetings. It is exciting that your proposal will develop materials to help individuals and labs to strengthen their data analysis skills through the Code Club format. These materials will have a significant impact on training the next generation of scientists.

As you know, my research group studies the biology, evolution, and epidemiology of influenza and polio. We would be thrilled to help you find interesting questions and datasets to as you develop the materials for your Code Club sessions. Good luck on your exciting proposal!

Sincerely,

Adam Lauring, M.D., Ph.D.

Associate Professor