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Dear Search Committee,

I am pleased to provide a letter of support for **Robert Shanks**, a former graduate student in my laboratory who is applying for a position in your Department. Rob was a student in my laboratory from 1995-2002. Based on his work in my laboratory I'm not at all surprised by his rapid progress and productivity as a post-doctoral fellow in the O'Toole laboratory.

In my laboratory Rob's project was to study the meiotic role of Kar3p, a minus-end directed kinesin-like motor protein in *Saccharomyces cerevisiae*. For a number of technical reasons, this is a difficult task; *kar3* null mutants are nearly inviable, do not mate (making strain construction a tricky process) and accumulate suppressor mutations readily. Despite these obstacles, Rob (as I now know is characteristic of him) pushed on relentlessly. His primary goals were to determine the molecular role of Kar3p, and to determine the basis of the meiotic arrest experienced by *kar3* mutants. He used a collection of methods to address these areas. Rob is especially talented as a geneticist, and coupled immunofluorescence microscopy with a variety of yeast genetics methods to explore the functional relationships of *KAR3* and other genes. His work led to one second author and two first author peer-reviewed research publications. In addition, he was the first author of a comprehensive review of meiotic checkpoints. His experiments illustrated the varied roles of Kar3p in mitosis and meiosis and yielded novel results about the way that the spindle checkpoint functions in meiosis.

Given the strengths he exhibited in doing thesis research, working with a remarkably difficult protein, it is no surprise that he has been so successful as a post-doctoral fellow. As a graduate student, Rob revealed himself to be highly committed to a career as a research scientist. He was focused and diligent in the laboratory and entirely self-motivated. He is very bright with an excellent ability to determine and remember the details of a biological system. In all of these areas I would place him in the top 10% of Tufts graduate students. Typically students of this level from Tufts have successful post-docs and move on to

scientist positions in industry or to tenure-track positions in academia. Some of our best former students hold faculty positions at major research universities such as U of Minnesota, Harvard, UCSF, UCLA, Yale, and U of Washington. Rob appears to me to be on this type of trajectory.

Rob's greatest attribute is the rigor he applies to his experimental work. His attention to detail and perseverance allow him to make and support observations that the majority of students would overlook. He writes and speaks well. Rob possesses a pleasant, patient and co-operative personality and will make an excellent colleague and fine mentor. I am confident he has the creativity, organizational skills and drive to build a successful research program.

Sincerely,

Dean Dawson
Director, Program in Genetics
Associate Professor
Department of Microbiology
Tufts University