

The University of Chicago  
Department of Molecular Genetics and Cell Biology  
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Yves Brun  
Systems Biology/Microbiology Faculty Search  
Department of Biology  
Indiana University  
Jordan Hall 142, 1001 E 3rd St  
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Dear Colleagues:

It is a pleasure to write this letter in support of Jeffrey Marcus' application for a faculty position in your department. I interacted extensively with Jeff over a period of approx. five years as a member of his dissertation committee and through his serving as a TA in the Cell and Developmental Biology course that I taught at Duke. Most importantly, although Jeff's official advisor at Duke was Fred Nijhout, much of his thesis research dealing with wing vein pattern formation in *Drosophila* was performed in my laboratory. Thus we had many opportunities for informal conversations, and despite the fact that Jeff's interests extend into areas of evolutionary biology that are outside of my expertise, I feel well qualified to judge his intellectual abilities, his commitment to research, and his prospects for a successful career. In short, Jeff is highly intelligent, deeply interested in biology, and thinks carefully about what he does. He was an excellent graduate student and has already demonstrated success as independent scientist.

Jeff entered Duke as one of the top choices of the Duke University Program in Genetics, and was awarded an HHMI graduate fellowship, one of the most competitive nationwide graduate fellowships in the biomedical sciences. For his dissertation research, Jeff took on a highly challenging but also very novel and important project to understand at a molecular level how the veins found in insect wings are formed, and then to use this information to understand how patterning mechanisms are regulated during evolution. Jeff's approach was of necessity highly interdisciplinary, requiring him to develop expertise in cellular and molecular biology and at the same time in evolutionary theory and methodology. From necessity also, Jeff had to live a dual existence as a graduate student, spending part of his time in Nijhout's laboratory and part in my own (these laboratories were not in the same building). Though this required Jeff to work harder, it had obvious rewards as well. As a result, Jeff has become one of a still small but growing number of scientists that have a command of modern molecular genetics, including the use of genomic technologies, and a superb training in evolutionary biology. It is clear that understanding the interplay between evolution and development will be an important area of biology in the coming years.

One other of Jeff's qualities worth mentioning is his deep commitment to teaching of all kinds, but in particular of undergraduates. I observed this both from his experience as a TA in a large undergraduate course, and from watching Jeff supervise undergraduates in the laboratory. Jeff was one of the best TA's I have ever had teach for me. His students clearly thought he was terrific, and his fellow TA's often looked to him for leadership and advice. In the laboratory Jeff is patient in teaching students new ideas and techniques, but also organized and demanding enough to ensure that they learn and succeed in their work. I expect that Jeff will become one of those that successfully combine excellence in research with commitment to fostering undergraduate education.

In short, not only is Jeff Marcus very bright, highly creative, and dedicated to a research and teaching career in the biological sciences, he is also one of the most sincere, mature, and selfless scientists I have ever known. He will be highly successful in the field of evolution and development, and one of a very few that have extensive training in both fields. His work will bring together diverse areas of biology, and he is therefore highly deserving of your careful consideration.

Please do not hesitate to contact me if there is any other information I can provide.

Sincerely

A handwritten signature in black ink, appearing to read "Richard G. Fehon". The signature is fluid and cursive, with a prominent initial "R" and a long, sweeping tail.

Richard G. Fehon, Professor  
Molecular Genetics and Cell Biology