



November 9, 2004

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Dear Search Committee,

This is a letter of reference for **Dr. Stephen Proulx**. Steve was a shared postdoctoral fellow at the University of Toronto from Jan. 2000 until September, 2001, working with Locke Rowe, Peter Abrams, Helen Rodd, and me. Because Steve came to us directly from his thesis defense, some of his time in Toronto was spent putting the finishing touches on manuscripts arising from thesis chapters. One of the main aspects of this research was Steve's exploration of the effects of mate choice and sexual selection on adaptive evolution. Some of his PhD work developed novel ideas about how mate choice strategies can affect the evolution of niche breadth, particularly when the nature of selection varies spatially. He has extended some of these results by exploring their implications for the maintenance of genetic variation, and he has published a manuscript that looks at their implications for rates of adaptation and speciation as well, with Locke Rowe, me, and another PDF (Pat Lorch). Steve was also working with a group of us who were developing theory that examines the interplay between sexual selection and life history evolution, and he has had a paper from this research come out in Proceedings of the Royal Society as well.

Another aspect of Steve's PhD research involves evolution under demographic and environmental stochasticity, and he developed some very interesting and novel results about how demographic stochasticity affects sex ratio evolution. He and I explored similar avenues while he was with us, looking at the use, and misuse, of the geometric-mean fitness concept in evolutionary biology. I have always been impressed with how quickly Steve is able to grasp some of these difficult issues, and he never fails to have interesting insight and a unique perspective in our discussions.

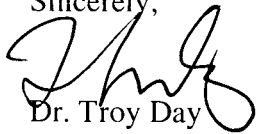
More recently, Steve and I have continued a collaborative project developing theory on the evolution of parasite virulence. Nearly all theory in this area is based on

game-theoretic models, whereas we have been exploring an approach that is more akin to quantitative genetics.

Finally, my recommendation would not be complete without commenting on Steve's personality. He is an extremely interactive, community-minded person who loves to talk about science with both theorists and non-theorists alike. What's more, he is equally comfortable discussing science with botanists and zoologists, making him a valuable resource with a very broad range of interests. This is particularly important in a theoretician since they are often involved in many collaborative projects. I encourage you to consider him in your search for a new colleague.

Please do not hesitate to contact me if you would like further information.

Sincerely,



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