December 17, 2003

Biocomplexity Faculty Search Committee c/o Prof. Rob de Ruyter van Steveninck Biocomplexity Institute Indiana University Swain Hall West 117 Bloomington, IN 47405-7105

Dear Dr. van Steveninck:

It is a real pleasure to provide a letter of reference for Patrick Burgon, who is applying for a position in your institution. I have known Patrick since 1997 when he first went to Harvard to begin postdoctoral work with the late Ernie Peralta. We had been collaborating with the Peralta lab to study a new class of G protein regulators termed RGS proteins, and it was on this project that Patrick elected to focus his attentions. As you know, Ernie became ill shortly before Patrick entered the laboratory, and thus I became much more directly involved in this project than I would have otherwise. Hence, I followed his work quite closely for two years as sort of a 'second mentor'.

First off, I would like to say that I consider Patrick an excellent scientist and colleague. His training prior to joining the Peralta lab was quite strong. Shortly after his arrival in the U.S., Patrick came down and spent a week in my laboratory learning basic aspects of working with G proteins. During these initial interactions, it became clear that he had received excellent training with at Monash University and he immediately came across as being highly motivated and a clear communicator. In addition, he quickly exhibited another quality required of top scientists, that being technical skill. His subsequent work has confirmed these initial impressions and, in spite of the tragedies of the loss of two mentors in less than two years, Patrick contributed greatly to our understanding of the cellular mechanisms through which RGS proteins themselves can be regulated.

Patrick's finding that RGS10 is regulated by protein kinase A through a phosphorylation-triggered translocation event was quite novel and exciting. His approach was a combination of biochemistry, cell biology, and electrophysiology, and he did it all very well. He presented this work at an ASBMB/ASPET symposium in Boston prior to its publication in a talk that received a great deal of attention. He aimed high on the publication of the study, spending a great deal of time trying to satisfy the editors at *Cell*, but didn't quite get there. However, the study was accepted quite rapidly and with glowing reviews by *The Journal of Biological Chemistry*, and has already become a quite highly-cited paper.

My contact with Patrick since he joined the Seidman's lab has been rather limited, but it is clear that he has approached this new area of research with the same enthusiasm and drive that he exhibited in the Peralta and Neer laboratories. There is no question that he has taken advantage of this opportunity to significantly broaden his base of expertise, as the work involves use of mouse models expression profiling, and some rather sophisticated genetics. The work is just now beginning to be published, but it appears that he has contributed significantly to a number of studies in their laboratory.

In summary, I regard Patrick Burgon as a very intelligent and highly-motivated young scientist who has developed into an excellent independent investigator. Even though I never witnessed his day-to-day habits (with the exception of the week spent in my lab), I would probably rank him in the top two of the ten postdocs that I have trained in terms of technical skills and scientific maturity. On a personal level, Patrick is a genuinely enthusiastic person even though his somewhat reserved nature sometimes masks this quality. However, he does 'warm up' rather quickly once he becomes familiar with people. Overall, I can recommend him with the highest enthusiasm.

Sincerely,

Patrick J. Casey, Ph.D.

James B. Duke Professor of Pharmacology and Cancer Biology

Director, Duke Center for Chemical Biology