UNIVERSITY OF
PENNSYLVANIA
MEDICAL CENTER

University of Pennsylvania School of Medicine
Hospital of the University of Pennsylvania

Alan D. Schreiber, M.D.

Assistant Dean
Research & Research Training

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

Dear Dr. de Ruyter van Steveninck,

This letter is in strong support of Dr. Randall Worth who has applied for a position in your new Institute for Biocomplexity. After receiving his Ph.D. in Biology studying the biophysics of receptor interactions on cell membranes, Rande came to my laboratory, in part to learn molecular biology and to extend his career in cell biology. Rande has quickly learned and applied several new techniques in order to make his projects come to fruition. He has been successful competing for prestigious fellowships from the Arthritis Foundation and from an NIH training grant through the Division of Rheumatology at Penn. Additionally, Rande has honed his grant writing skills to the point where he is now submitting grants for the American Heart Grant in Aid, Arthritis Foundation Investigator Award, and is also preparing an RO1.

As such, Rande has an abundant supply of new ideas and understanding of concepts that adds tremendously to our current view of many cell biological processes. Rande takes great pride in figuring out problems that we have had in the laboratory. He thinks about these problems in a new light and possesses the scientific knowledge to troubleshoot them.

As an example, Rande helped developed, in collaboration with Dr. Howard R. Petty, a new technique to image metabolic signaling in real time in living cells. This work was first published in *Phys. Rev. Letters* in 2000 and has been widely cited as an important contribution to the field of cell biology. Recently, Randall used these imaging techniques to observe a lesion in calcium signaling associated with a mutation he made in the cytoplasmic domain of FcγRIIA. The work was published in the *Proceedings of the National Academy of Sciences*. The paper was subsequently reviewed in the *J. of Cell Biology* in the Research Roundup section as among the most important work recently published.

Rande could not be a more pleasant individual. He likes to be a part of new discoveries in any way he can. He is willing to help anyone in the laboratory designing experiments or simply running flow cytometry. Rande has initiated new collaborations with various faculty members here at Penn. He is quick to listen and always has an

understanding manner about him. He takes great pride in training undergraduate and graduate students. Although I have not had much experience with Rande as a lecturer/teacher he seems to absolutely thrive in that environment. He speaks enthusiastically about his students and the joy he gets from class each week. Rande has taught two courses here at Penn and has received excellent evaluations from both students and the administration. Numerous students solicit positions from Rande to work in his laboratory. He has been successful in hiring two wonderful people that have both been very productive and have gone on to successful careers in medicine and research.

I have trained numerous postdocs over my career that have gone on to long careers at various research institutions both in the United States and abroad. Rande ranks among the best that I have trained. Rande has evolved from a hard-working and very talented graduate student when he came to my laboratory into an independent scientist ready to take on the challenges of junior faculty. I have no doubt that Rande will be successful in his career.

We would love to keep Rande at Penn. I enthusiastically recommend Dr. Randall Worth to you for a position in Biocomplexity at Indiana University.

Sincerely,

Alan D. Schreiber, M.D.
Professor of Medicine