

## PURDUE UNIVERSITY DEPARTMENT OF BIOLOGY

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SCHOOL OF SCIENCE

Professor of Biology

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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

Prof. Rob de Ruyter van Steveninck:

Michael Brzustowicz has asked that I write a letter in support of his application as a faculty member in the Department of Physics at Indiana University. I am pleased to do so.

Mike came to IUPUI in, I believe, 1997 as a graduate student in the Department of Physics. He chose to work on a membrane biophysics project with Dr. Stephen Wassall. Since Steve and I have had a close collaboration for about 20 years, I got to work with Mike from the beginning. Mike's project involved monitoring properties of cholesterol in model lipid bilayer membranes using primarily NMR. Even a quick glance at Mike's publication record clearly demonstrates the success he achieved as a graduate student. I am proud to be a coauthor on 8 of Mike's IUPUI papers including seminal papers in major journals on cholesterol organization. His 1999 paper in FEBS Letters and his 2002 papers in Biochemistry and the Biophysical Journal, in particular, are always referenced by investigators examining the interaction of cholesterol with polyunsaturated phospholipid acyl chains. His work demonstrated an aversion of cholesterol for docosahexaenoic acid and used these observations to predict important structural properties of membranes. Even today Steve and I are asked to write review articles on membrane structure that include Mike's work.

What impressed me most about Mike was how far he came as a graduate student. When he arrived in Indianapolis Mike knew nothing about basic organic or biochemistry and even less about membranes. Most physics students here prefer theoretical projects and completely avoid wet lab work. But not Mike! Mike worked hard to fill in his many deficiencies in chemistry. I went to several Biophysical Society meetings with Mike and saw him strongly defend his work. He clearly understood the structures and functions of the many membrane lipids. Early in his graduate career Mike was a student in my graduate Biological Membranes course. Despite the fact that Mike was at a tremendous disadvantage compared with the other graduate students with strong backgrounds in biochemistry, cell biology, physiology etc., Mike more than held his own. I discussed membranes countless times with Mike and found his knowledge in the field expanded rapidly. Although I know virtually nothing of his work at Stanford, I am sure he has continued his development and knowledge in biological physics.

Mike was very popular with the other students here. He is very outgoing and interacts well with everyone. If the qualities you are looking for include a solid background in physics, a broad understanding of biological science and a friendly outgoing personality, Mike is your man.

Sincerely,
William Stillwell

Professor of Biology