Nominee Information

Name: Steven J. Rehse, PhD

Street Address: University of Windsor Department of Physics 401 Sunset Avenue Essex Hall, Room 277-3 Windsor, Ontario, Canada N9B 3P4

Telephone (519) 253-3000 ext. 2656

Current Occupation and Title: Assistant Professor - University of Windsor

Further Education:

- 1993 Bachelor of Science in Physics from Michigan Technological University
- 1997 Masters of Science in Physics from Colorado State University
- 2002 Doctoral (PhD) in Medical Physics from Colorado State University

1. I feel that Steven Rehse deserves the Tomahawk Distinguished Alumni Award for the following reasons.

Steven has pursued a life long career in Physics beginning with his undergraduate degree while working at the Los Alamos National Laboratory in New Mexico first as an undergraduate research assistant until 1993 then a Graduate research assistant beginning in 1994. From 1995 to 1997 Steven was a graduate teaching assistant at Colorado State University. In 1997 Steven shifted gears to becoming a Graduate Research Assistant until 2002 at which time he began his post doctoral fellowship at the University of Western Ontario in Physics and Astronomy. From 2005 until 2011 he was employed at Wayne State university as an assistant professor of physics and astronomy and is currently employed as an assistant professor of physics and astronomy at the University of Windsor in Ontario Canada.

He currently runs the Rehse Research Group (biomedical optics AMO, and Medical Physics) and is working with lasers to develop machines that will safely and quickly test for bacteria in the greenhouses in the major suppliers of the Canadian food industry.

2. Discuss how the nominee has made a difference in the lives of others.

Steven Rehse has assisted and supervised nine students through their masters degrees, seven students through their doctoral degrees and seven individuals through their post-doctoral work. In addition Steven has assisted twelve other individuals with the writing of their thesis's and other projects. Steven has appeared on the Daily Planet national TV

show to promote the national Science Rendezvous as well as demonstrate Medical Laser use. He has helped to inspire the Bellwood Public School robotics team to place in the top five in competition after using his ideas of zapping bacteria with lasers. Steven has also given a briefing to the U.S. House of Representatives Science and Technology Committee staffers on the modern applications of lasers for security and safety in Washington D.C.

- 3-5. Nominee's major community, personal, and professional accomplishments and recognitions.
- 1989 National Merit Scholarship
- 1995 Colorado Fellowship, Colorado State University dept of Physics
- 1998 Physical Society's Outstanding Student Presentation Award at the Four Corners Section Meeting, Provo Ut.
- 2000 Sigma Xi Award for Outstanding Natural Sciences Oral Presentation, Colorado State University Graduate Research and Creativity Symposium Fort Collins, Co.
- 2000 Physical Society's Outstanding Student Presentation Award at the Four Corners Section Meeting, Fort Collins, Co.
- 2001 Physical Society's Outstanding Student Presentation Award at the Four Corners Section Meeting, Las Cruces, NM
- 2008 Wayne State University College of Liberal Arts and Sciences Teaching Award
- 2012 University of Windsor Faculty of Science Faculty Performance Award
- 2012 University of Windsor Faculty of Science Certificate of Appreciation
- 6. Steven Rehse has been an invited presenter at 23 conferences on physics, medical physics, and laser technology to present on anything from Nanostructure Fabrication using Metastable Neon Atom Lithography and Chemically assisted Ion beam etching to Chemometric Data Analysis Strategies for Optimizing Pathogen Discrimination and Classification. The latter of which is his current thrust to come up with ways to make food safer for all Canadians.
 - In addition to his 23 appearances as a presenter he co-presented at an additional 34 conferences on similar subject.

Steven has 35 published articles in various journals of science and education.

In addition to his work at the various universities Steven Rehse has applied for and has been granted over \$937,000.00 in grants to assist his research team and to build state of the art physics labs and machinery.