



University of Connecticut
Department of Marine Sciences

College of Liberal
Arts and Sciences

Applicant: M. Maille Lyons
Recommender: J. Evan Ward
January 18, 2007

Dear Selection Committee:

It is a pleasure to recommend Ms. M. Maille Lyons for the Advanced Studies Institute on Mathematical Modeling of Infectious Diseases. Maille has been working in my laboratory on her doctoral studies for about five years. She is an enthusiastic, self-motivated individual who has a strong interest in ecological epidemiology of marine diseases. Academically, Maille is an outstanding graduate student who has an impressive GPA from both undergraduate and graduate studies (3.8/4.0 undergraduate; 3.9/4.0 graduate). She has a diverse teaching and research background, and an impressive publication record for such a young scientist (seven published papers, one in review). In addition, Maille was the recipient of a prestigious National Science Foundation (NSF), Graduate Research Fellowship.

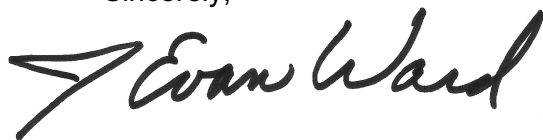
Maille's research project focuses on the role of marine aggregates (flocs, marine snow) in the transmission of diseases of commercially important bivalve molluscs. Specifically, she is examining the epidemiology of a devastating disease of a commercially important bivalve (QPX disease of clams) to determine if aggregates serve as reservoirs and vectors of the disease causing agents. A key component of this work is the mathematical modeling of the spread of QPX via aggregates, which she is developing under the guidance of Dr. J. Vallino of the Marine Biological Laboratory (MBL), Woods Hole. This is a novel and exciting concept that has implications for the way in which many marine diseases may be spread. Maille has made excellent progress: developing experimental techniques, finishing course work, organizing a research time table, and contacting and working with scientists at other institutions. Through her collaborative work with scientists at MBL, Maille has learned molecular techniques that she has applied to her work. She has generated many interesting results and has written several papers that describe her findings. Over the past several years she has presented her data at numerous meetings, including those of the National Shellfisheries Association (winning the Gordon Gunter Award for best student poster), the Benthic Ecology Meetings, the American Society of Limnology and Oceanography meetings and special international meetings on aquatic diseases (e.g., Global conference on Aquatic Animal Health, Norway). These presentation have generated plenty of interest because her findings not only have implications for diseases of marine organisms, but also for human health (e.g., consumption of shellfish).

In the fall of 2004, Maille and I obtained a grant from the NSF/NIH, special initiative on Ecology of Infectious Diseases. This research is a collaborative effort among members of my laboratory, and scientists at Woods Hole (Dr. R. Smolowitz and co-workers) and Stony Brook University (Dr. B. Allam). The successful proposal was based largely on Maille's dissertation material, and she was instrumental in writing the project description, including incorporating all of the changes and modifications that were made by me and the other co-PIs. Without a doubt, it was Maille's diligence that enabled us to submit a quality proposal to this special NSF initiative. Over the past twelve years I have advised numerous graduate students; Maille is certainly one student that stands out as a dynamic individual who displays the talent for scholarly pursuits. I would rank her in the top 5% of all of the students that I have advised.

On a more personal note, Maille is an amiable, good-natured person with a good sense of humor. She interacts well with other graduate students and the faculty in our Department. In addition to her graduate course work and research efforts, Maille has two young children and handles the myriad of responsibilities of parenthood. Frankly, I do not know how she accomplishes so much.

In closing, I highly recommend that you select Maille for the Advanced Studies Institute on Mathematical Modeling of Infectious Diseases. She is a superb graduate student whose potential to excel is evidenced by her positive personal attitude and strong scholarly record. Participating in the Institute and workshop will be an excellent opportunity for Maille to broaden her ideas and approaches with regard to the mathematical model of QPX transmission. I have no doubt that she will significantly contribute to the course and workshop. If you require any additional information, please contact me by telephone (860-405-9073) or e-mail (evan.ward@uconn.edu).

Sincerely,

A handwritten signature in black ink that reads "J. Evan Ward". The signature is stylized, with a large, sweeping initial "J" and a cursive "Ward".

J. Evan Ward
Associate Professor