



Wayne State University

Department of Pharmaceutical Sciences

November 21, 1995

Immigration and Naturalization Service  
Eastern Service Center  
75 Lower Welden St.  
St. Albans, VT 05479-0001

RE: Employment-Based Immigrant Visa Petition (EB-12) of the University of Alabama at Birmingham submitted on behalf of Dr. Nada H. Saab.

To Whom It May Concern:

I have been asked by Dr. Nada H. Saab, a former member of my research group, to write a letter supporting her application for an Employment-Based Immigrant Visa, and I am most pleased to do so. Nada completed her Ph.D. in my laboratory in January of 1994, and was then an NIH postdoctoral associate in the laboratory of Dr. Duane Miller at the University of Tennessee-Memphis. Recently, she has accepted a position as a postdoctoral associate in the laboratory of Dr. Elgarish at the University of Alabama-Birmingham. Nada is a very hard working and efficient scientist, and is able to work in the laboratory with complete independence. In many instances, she was able to seek out literature procedures that, following adaptation, increased the efficiency of her syntheses, and in this regard she had a very positive influence on the outcome of her project. We routinely use procedures in our laboratory which were originally worked out by Dr. Saab. In spite of some early synthetic efforts which did not produce biologically active compounds, Nada synthesized a number of analogues of the naturally occurring polyamines, some of which have significant antitumor activity. These compounds have also been instrumental in establishing the mechanism by which polyamine analogues exert their cytotoxic effects in human cancer cells. One of her analogues, CPENSpm, has been shown to induce programmed cell death in two cancer cell lines (H157 lung and MCF7 breast tumor lines). In addition, two of her analogues are involved in ongoing *in vivo* pre-clinical studies in athymic mice. A portion of this work has recently been published (*J. Med. Chem.*, **1993**, *36*, 2998-3004; *Cancer Chemother. Pharmacol.* **1995**, *36* 69-74), and a third paper has been submitted to *Bioorganic and Medicinal Chemistry*. I expect at least two more publications to result from her dissertation work. Nada was the first student in my laboratory to concentrate on this project, and was instrumental in establishing the associated chemistry, some of which was not trivial to work out. As a result of her efforts, we now have an established synthetic program in this area. The publications resulting from Nada's work are well accepted and frequently cited in other polyamine-oriented manuscripts. The preliminary data generated by Dr. Saab became the foundation for an RO1 proposal which was funded by the National Institutes of Health for a period of three years (1995-1997). I know that Nada has continued to excel in Duane Miller's laboratory, and has already accomplished a significant body of synthetic work.

Academically, Nada did well at Wayne State, and maintained a 3.5 GPA. This is a significant accomplishment, especially in light of our requirement that all Medicinal Chemistry students take the demanding advanced organic series in the Chemistry department, as well as graduate level offerings in Pharmacology and Pharmaceutics. As a result of her studies, Nada has a good understanding of biological issues relevant to medicinal chemistry. She is a frequent reader of the literature, and is able to identify areas where additional research is necessary. Her written and spoken English are very good, and she is also fluent in French and Arabic. At Wayne, Nada taught a number of techniques to the younger students, and acted as mentor to a number of undergraduate researchers. She also has considerable experience as a teacher of chemistry at the high school level. It is my impression that she would ultimately like to pursue an academic career. I suspect that she will ultimately become an independent investigator, and will be able to make a significant research and teaching contribution here in the United States.

Nada is a very personable young woman, and was a great pleasure to have as a graduate student. While at Wayne State, she lived with her mother and partially supported her financially, at times creating some degree of hardship in view of her modest graduate stipend. In spite of this obstacle, she managed to concentrate on her project and completed her degree within four years. This unique level of dedication has allowed her to excel as a graduate student and as a postdoctoral associate. I fully expect that Nada will continue to develop as an outstanding researcher. In light of these facts, I can recommend her highly for an Employment-Based Immigrant Visa. Should you require any additional information, please feel free to contact me at 313-577-1523, by FAX at 313-577-2033, or by E-Mail at [woster@wizard.pharm.wayne.edu](mailto:woster@wizard.pharm.wayne.edu).

Sincerely,

A handwritten signature in black ink, appearing to read "Patrick M. Woster", with a long horizontal flourish extending to the right.

Patrick M. Woster, Ph.D.  
Associate Professor of Medicinal Chemistry