



Meet an MPRINT Scientist



Suzanne Nielsen

Suzanne obtained a B.S. degree (1976) in Food Science from the University of Nebraska - Lincoln, and M.S. (1979) and Ph.D. (1982) degrees in Food Science from the University of Minnesota - Minneapolis, St. Paul. Her studies included work in dietetics, nutrition, and biochemistry.

She came to Purdue University in 1982, first as a post-doctoral research associate in the Department of Biochemistry, then in 1983 began a faculty position in the Department of Food Science. Her research interests include the nutritional quality, functions, and interactions of proteins.

One major research project includes the nutritive value of plant proteins, their digestion by insect digestive enzymes, and the potential for protease inhibitors to create insect resistance in plants. A second major research project involves the proteases, protease inhibitors, and protease activators of the plasmin enzyme system in milk, which affects the quality of dairy products. Much of the work on both projects has been supported by USDA-NRI and industry. Suzanne's collaborators at Purdue include MPRINT's Ray Bressan, Mike Hasegawa, Larry Murdock, and Dick Shade.

Some MPRINT Science

Osuala, C. I., R. L. Donner, and S. S. Nielsen. (1994) Partial purification and characterization of an aminopeptidase from the bean weevil larvae

Acanthoscelides obtectus Say (Coleoptera, Bruchidae). *Comp. Biochem. Physiol.* 107B:241-248.

Hines, M. E., C. I. Osuala, and S. S. Nielsen. (1991) Isolation and partial characterization of a soybean

cystatin cysteine proteinase inhibitor of Coleopteran digestive proteolytic activity. *J. Agric. Food Chem.* 39:1515-1520.

Wieman, K. F. and S. S. Nielsen. (1988) Isolation and partial characterization of a major gut proteinase from larval *Acanthoscelides obtectus* Say (Coleoptera: Bruchidea). *Comp. Biochem. Physiol.* 89B:419-426.



Suzanne's student, Karen Wieman, dissects cowpea weevil midguts.

Personal MPRINT

Suzanne has two children in grade school who keep her busy with their activities. One of her annual pastimes is making Christmas ornaments for her many nieces and nephews.