From the Oat Newsletter, volume 50, 2006:

Dr. Stephen (Steve) James Molnar
Award for Distinguished Service to Oat Improvement

It is a privilege to honour Steve Molnar as a distinguished contributor to oat research. Steve will modestly confess that oat has only occupied the latest chapter of his career, that he has no rural roots, and that he has never occupied the hallowed rank of “oat breeder” or “agronomist”. But the diverse background, fresh ideas, and critical thinking that Steve brings to oat research are precisely why we wish to honour him.

Steve obtained his B.Sc. at the University of Toronto (his home town) in 1971. He specialized in geophysics and theoretical physics, but was enticed toward biology through courses in Medical Biophysics. His M.Sc. and Ph.D. (1978) were at the Ontario Cancer Institute at the University of Toronto, where he studied somatic cell genetics of Chinese hamster ovaries. Frustrated that whole organisms could not be regenerated from stabilized mutant cultures, Steve turned to plants. From 1978 to 1980 he worked on the isolation of amino acid metabolism mutants from plant suspension cultures, and on the development of regenerable corn tissue cultures. This work was conducted at Pfizer Pharmaceuticals in Connecticut, with a cross appointment in the Department of Crop and Soil Sciences, Michigan State University.

In 1980, Steve was recruited as a Research Scientist to join a new Biotechnology Group being established at Agriculture and Agri-Food Canada in Ottawa. He first focused on the isolation of amino acid analog resistant mutants in tissue cultures of corn, Brassica, and bromegrass. Then, in 1988, he changed research direction in response to emerging molecular marker technologies, and initiated work on “structural genomics” in barley. Soon afterward, he extended this work to oat, and then added soybean in 1995.

In 1989, Steve was invited by Dr. Fran Webster of The Quaker Oats Company to develop a proposal for recombination mapping and molecular marker development in oats. An exciting series of collaborations followed, involving groups from Minnesota, Cornell, Iowa State, Saskatoon, Winnipeg, and Lacombe.

Fostered by continued guidance and support from Quaker, these collaborations evolved toward marker applications in molecular breeding and genomic discovery. As a collective, these collaborations and other extended interactions are responsible for much of the “oat genomic tool box” that we now take for granted. Specifically, Steve has been instrumental in developing hexaploid oat maps, in the discovery of markers linked to agronomic traits, and in the development of simple PCR-based markers for application in breeding.

Throughout, Steve has been an eager and reliable collaborator. To the oat team at Ottawa, he has been a thoughtful and careful leader, as well as a wise and willing mentor. Steve’s research in oat is nicely complemented by his ongoing work in structural genomics of barley and soybean. He has held various roles as Study Leader and Research Team Leader at AAFC Ottawa. He has willingly carried out duties as Professional Advisor and Student Supervisor, as well as Editor, Director, and Secretary of societies and committees. Steve’s contributions are recognized in five book chapters (three on oat), 31 refereed articles (13 on oat), and numerous other scientific communications. For his solid and ongoing leadership and productivity in oat research, Dr Steve Molnar is a most deserving recipient of this award.