NOAA Fisheries
Northwest Fisheries Science Center
2725 Montlake Blvd. E.
Seattle, WA 98112

14 May 2008

Jennifer Nielsen,
USGS/ Alaska Science Center
1011 East Tudor Rd
Anchorage, AK 99503

Dear Jennifer,

I am writing to give my strongest support to the nomination of Dr. David Fournier for the William E. Ricker Resource Conservation Award. Over twenty-five years ago the growing power of desktop computers made new, numerically intensive approaches to fishery stock assessment modeling feasible. The statistical assessment approach developed by Dr. Fournier capitalized on this computing power and revolutionized the field (Fournier and Archibald, 1982). His approach served as a conceptual foundation for the Stock Synthesis assessment model I developed in the mid 1980s, and which has subsequently evolved into an assessment tool used for tens of important fish stocks on the US west coast and elsewhere. Dr. Fournier's contribution is vastly greater than his development of statistical assessment models like MULTIFAN-CL which has advanced the state of assessment modeling for many tuna stocks ins the Pacific. His signature accomplishment is the development of a computer software system, Auto Differentiation Model Builder (ADMB), which links the statistical models to the power of the computers. ADMB enables rapid and efficient coding of assessment models without the scientist needing to deal with the intricacies of coding auto-differentiation in C++. It is no exaggeration to state that Dr. Fournier's development of ADMB has empowered an entire generation of fishery stock assessment scientists. He participants in workshops to teach users the full power of this tool, and he has evolved ADMB in response to the needs of the fishery assessment community. Dr. Fournier has been instrumental in the advancement of the state of the science of quantitative population modeling. For this, he deserves the honor of the William E. Ricker Resource Conservation Award.

Sincerely,

Richard D. Methot Jr., Ph.D.
Senior Scientist for Assessments