

David Welch is the president of Kintama Research Services Ltd., and chief architect of the Pacific Ocean Shelf Tracking project (POST), which has formed the basis for the global Ocean Tracking Network, based at Dalhousie University, in Halifax, Nova Scotia. Welch has a B.Sc. in Biology and Economics (University of Toronto) and a Ph.D. in Oceanography (Dalhousie University). Welch joined the Canadian Department of Fisheries and Oceans in 1985 and was appointed head of the High Seas Salmon Program in 1990. During the next decade he was responsible for studying the ocean biology of Pacific salmon, and provided some of the first compelling evidence for a potentially profound impact of global warming on Pacific salmon in the ocean. He was the Chief Scientist for the Census of Marine Life's project POST from 2000-2005.



David's company is currently prime contractor to the west coast POST array consortium. David is responsible for developing the original concept of building large scale marine acoustic tracking arrays to resolve long-standing problems in marine fish population management, particularly as applied to Pacific salmon. He founded Kintama in 2000 to begin evaluating sensor technology for this purpose and to develop the required technology for building large-scale arrays. Through the construction of POST many of the technical and scientific concepts underlying continental-scale marine telemetry arrays have been proven feasible and important. The POST array can now allow the direct and nearly flawless measurement of movements and survival of individual fish greater than about 12 cm in length over vast stretches of the continental shelves. As a result, the marine science community is now on the brink of being able to conduct direct quantitative experimental studies on fish in the ocean of the kind that transformed chemistry and physics one and two centuries ago and should radically change the way scientific research in coastal seas is conducted.

Dr Welch is the author of over 250 primary scientific papers and technical reports. Amongst his awards, he received from Fisheries & Oceans Canada (DFO) the *Prix de Distinction* (2007) for “*Outstanding scientific contributions related to national and international climate change research*” relating to his work on the potential impacts of global warming on salmon in the ocean, and the *Prix d'Excellence* (2008) in “*Recognition of Exceptional Scientific Contributions to the Government of Canada*”. In 2012 he received the *J.P. Tully Medal in Oceanography* from the Canadian Meteorological & Oceanographic Society, one of Canada's highest awards in oceanographic science, in recognition of his development of marine acoustic telemetry arrays. In 2012 he also received the *Award of Excellence in Fisheries Management* from the American Fisheries Society, the oldest and largest professional society for fisheries scientists in the world.

Dr Welch speaks fluent Japanese and lives on Vancouver Island in Nanaimo, British Columbia, Canada.