RON O'DOR: A LIFE OF JOY IN SCIENCE

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Dr. Ron O'Dor, a distinguished Department of Biology faculty member at Dalhousie University and member of the NSIS, passed away on May 11, 2020, a victim of the COVID pandemic that has shaken the world for three years.

Ron was born in Kansas City, Missouri, and his career spanned the fields of biochemistry, physiology and marine biology, with specialties in cephalopod biology and aquatic animal telemetry. He completed his undergraduate degree in biochemistry at the University of California Berkeley and his PhD in salmon calcitonin physiology at the University of British Columbia. After a postdoctoral fellowship split between Cambridge University in the UK and the Stazione Zoologica, Naples, Italy, Ron took up a faculty position in Biology at Dalhousie University in 1973. He was Director of Dalhousie's Aquatron Laboratory from 1986-1993, Chair of the Biology Department from 1997-2000, and held short-term positions of Visiting Researcher/Scientist at various universities in Canada, the USA, Australia, China, France, Japan, Papua New Guinea, Portugal, and South Africa, until he became Emeritus Professor at Dalhousie upon his retirement in 2015.

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Ron made immense contributions to cephalopod ecology and physiology, achieved by using a suite of interdisciplinary techniques including behaviour and ecology, physiology and innovative telemetry tracking techniques. He was an ecophysiologist long before the term became popular. His lab was always filled with repurposed scientific equipment tied together with wire and plumbing bits. In fact, for a time there was a "MacGyver Award" (named after the TV show hero who was always cobbling things together to save the day) in the Dalhousie Biology Department, but the award was eventually retired because Ron was in almost permanent possession of it. One of his quests was to understand movements and jet propulsion in squid and he famously published papers such as the "Choreography of the squid's nuptial dance" and "The incredible flying squid" (Fig 1).

When the Census of Marine Life (CoML) – a 10-year international effort undertaken to assess the diversity, distribution, and abundance of marine life – formally launched in 2000, the breadth and depth of Ron's interests and sense of humour made him the winning candidate for the post of Chief Scientist. He moved to Washington DC to take on this role from 2000-2010. In this role Ron did an outstanding job in recruiting, stimulating, and connecting scientists globally, and in communicating results from the CoML. Out of the CoML grew a dream of Ron's: the idea to build a global network of acoustic receivers and oceanographic sensors in all the ocean regions of the world to



Fig 1 Ron at sea, with one of his beloved squid.



Fig 2 The early days of acoustic telemetry of aquatic animals: Ron deploying a pole-mounted acoustic receiver listening for the animals he had tagged.

track keystone, acoustically tagged animals along migratory routes (Fig 2). This led to the birth of the Ocean Tracking Network (OTN), headquartered at Dalhousie University and launched as a Canada Foundation for Innovation International Joint Venture Project in 2008. Today the OTN is a global research, conservation and infrastructure platform and one of Canada's National Research Facilities, focused on understanding aquatic animal movements and survival in relation to changing environments in order to enable better stewardship of the world's aquatic resources. OTN has been foundational to the birth and growth of other major oceans initiatives and research at Dalhousie University. For his work with the CoML and the OTN Ron was named Canada's Environmental Scientist of the Year by Canadian Geographic in 2009.

Ron was a valued mentor to students, postdoctoral fellows and other trainees. He was known for encouraging students to visualize the puzzle as a whole before trying to put the pieces together, and to learn the importance of resourcefulness – the ability to take the tools you have at your disposal and adapt them to solve a problem at hand. One past student described how the defining moment of their research career came when, after much pondering and discussion of how they could study the relative roles of hydrodynamic drag and gravitational forces in the feeding and swimming dynamics of larval scallops, Ron saw a Request For Proposals from the Canadian Space Agency for work to be carried out on the NASA space shuttle. One successful proposal later, a group of scallop larvae were blasted



Fig 3 Always ready to talk, Ron was constantly sharing his insights in classrooms and with audiences worldwide.

into space where the impact of hydrodynamic drag could be studied in the absence of gravity. It was another Ron moment where a tool was adapted by a resourceful mind for an unconventional purpose: "Scallops in Space".

With students and colleagues alike Ron was extremely social, enthusiastically exchanging ideas and jokes with a smile and clap on the shoulder (Fig 3). Ron is remembered by his colleagues for his big ideas on big science, the use of cutting-edge technologies, for his ready smile and laugh, for his inventiveness worthy of MacGyver, and for his kindness and humanity. Former students fondly remember that Ron was kind, gentle, smiled all the time, could speak on an incredible breadth of topics, and always wore a suit jacket with his signature turtleneck. Everyone remembers that Ron did not have any hobbies and never took a vacation. As far as Ron was concerned his career of travel and visiting exotic places made them redundant.

Upon his passing, Ron left behind his loving companion Janet, who tolerated his idiosyncrasies and brought out the best in him for 52 years. He also left two children, and four grandchildren. For those of us in the science community who knew him as a colleague, teacher and friend, with his passing the world became a bit dimmer, and science a little less fun, than it was just before.

Dr. O'Dor is being recognized and honoured with a nomination for the NSIS Hall of Fame.