

**Dr. Russ Schnell, Deputy Director, NOAA Global Monitoring Division,
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Russ was raised in a rural setting in eastern Alberta (Castor) and studied at Universities in Alberta; Newfoundland; Hawaii; Wales; Wyoming and Colorado. He holds degrees in Biology, Chemistry and Atmospheric Science (M.Sc. and Ph.D.). He received an honorary Dr. Science degree from the University of Alberta in 2015.

Dr. Schnell discovered biological ice nuclei now used in ski hill snowmaking and frost control in crops. Some of this research was conducted as an employee of Alberta Research Council (1960s). In the past 5 years ~200 papers have been published by others expanding on his pioneering work. Dr. Schnell discovered wintertime ozone production in gas and oil fields (2009) and springtime Arctic ozone destruction (1988, with co-author Nobel Laureate Paul Crutzen).

He has published ~160 scientific papers on biological ice nuclei, methane, ozone, CO₂, aerosols, long-range pollution transport, Arctic ice leads, power plant effluents and oil and gas field out-gassing with 9 in *Nature*, a premier scientific journal. He holds patents in plant science and biochemistry.

In 2007 Dr. Schnell was recognized as one of the NOAA co-recipients of the Nobel Peace Prize for his contributions to the IPCC. He regularly represents NOAA and the U.S. State Department in environment negotiations in Asia.

Russ has lived, traveled or conducted research in 91 countries and on every continent including the North and South Poles.

In his present position, Dr. Schnell shares responsibility for collecting atmospheric composition and climate forcing data at 130 NOAA sites around the globe, a staff of 110 scientists and engineers, and a budget of \$20 M/year.

Dr. Schnell reviews papers for various US and European journals and has authored papers with scientists from Russian, China, Japan, Canada, Australia, New Zealand, Norway and Taiwan. He has been (is) on many budget and scientific funding and program review committees including in the U.S., Canada (Alberta and NSERC), Japan, Sweden, China, Taiwan, U.K., Mexico, Australia, Russia, Switzerland, Norway and France.

Dr. Schnell's other interests include building wooden trains for children (>100 units to date), public speaking on environmental issues (~20 /year), constructing, donating and installing "Little Free Libraries" (26 units now in 4 countries) and real-estate investing.