Peter D. Ward

Professor of Biology,
Professor of Earth and Space Sciences, and
Adjunct Professor of Astronomy
The University of Washington

Peter Ward has been active in Paleontology, Biology, and more recently, Astrobiology for more than 40 years. Since his Ph.D. in 1976, Ward has published more than 140 scientific papers dealing with paleontological, zoological , and astronomical topics. He is an acknowledged world expert on mass extinctions and the role of extraterrestrial impacts on Earth. Ward was the Principal Investigator of the University of Washington node of the NASA Astrobiology Institute from 2001-2006, and in that capacity led a team of over 40 scientists and students. His career was profiled by the Pulitzer Prize winning reporter, William Dietrich:
http://seattletimes.nwsource.com/html/pacificnw12112005/coverstory.html

Ward has published sixteen books to date: *Beneath Puget Sound* (1974, PB Press, Seattle); *The Natural History of Nautilus* (1987, Unwin Hyman, London); *In Search of Nautilus* (1988; Simon and Schuster); *On Methuselah's Trail: living fossils and the great extinctions* (1991, W.H. Freeman), which won the Golden Trilobite Award by the Paleontological Society for best science book of 1991, and was nominated for a Los Angeles Times Book Award as well as being a Book of the Month Club selection, *The End of Evolution: on mass extinctions and the preservation of biodiversity* (1994, Bantam Books) was one of three finalists for the Los Angeles Times Book Award (science category) ; *The Call of Distant Mammoths: What killed the Ice Age mammals* (1997,Copernicus: Springer Verlag) ; *Time Machines*: *scientific explorations in deep time* (1998, Copernicus :Springer Verlag); *Rare Earth: why complex life is uncommon in the Universe(with Don Brownlee)* (2000, Copernicus :Springer Verlag) was an Amazon Best Seller, and was featured on the front page of the *New York Times* soon after its publication (it hit number 7 of all books) and was named by *Discover Magazine* as one of the ten most important science books of 2001, and it was featured by an entire episode of ABC *Nightline*. His other books include *Rivers in Time (2000, Columbia University Press); Future Evolution* (with Alexis Rockman) for W.H. Freeman (2001); *The Life and Death of Planet Earth)* Henry Holt, 2003 , *Gorgon: paleontology, obsession, and the greatest catastrophe in Earth History* (2004), Viking Penguin. *Gorgon* was awarded a Washington State Governor's Book Award in 2005, and was nominated for a Keck Science Writing award. *"Life as We Do Not Know It: the NASA search for and synthesis of alien life"* was published by Viking in November, 2005, and it was named one of *Library Journals* "Best Books of 2005:
(http://www.libraryjournal.com/article/CA6298434.html) . It was also nominated for a Keck Science Writing Award. His book, *"Out of Thin Air: Dinosaurs, Birds, and Earth's Ancient Atmosphere"* for The Joseph Henry Press, of the National Academy of Sciences, was a main selection of the Discover Book Club. His 2007 book, *Under a Green Sky: the global warming mass extinctions,* was in a *Scientific American* article (October, 2006),and was a subject of a recent TED conference

(http://www.wired.com/science/planetearth/news/2008/03/peter_ward_qa). His book, The Medea Hypothesis Princeton University Press, appeared in May, 2009, and was listed by the New York Times as one of the "100 most important ideas of 2009". His book, *Our Flooded Earth*, appeared in 2010.

In 2003 Ward was awarded the Jim Shea medal for popular science writing, by the National Association of Geoscience Teachers, its highest annual award. Previous recipients include Stephen Jay Gould, John McPhee, Robert Ballard, and Jack Horner. Ward was recently named to be the 2006 Stafford Little Lectureship in Public Affairs at Princeton University. In 2009 he was invited to give the 2010 University of Washington Annual Faculty Lecture (the 33rd), the most prestigious award that this University can give to one of its Faculty.

Ward has appeared in numerous television documentaries, including the three part *Dinosaur* series for WHYY, *The Crater* (Horizon), *The End of Evolution* (based on his book, for Discover Channel Canada), *The Shape of Life*, *The State of the World* (David Attenborough and the BBC), the WGBH *Evolution* Series through Nova, *The Shape of Life*, (National Geographic) as well as numerous Discover and Learning Channel documentaries. He appeared in the recent Nova series, *Origins*. He appeared in two 2004 National Geographic Explorer specials: *Alien encounters*, and *Urban Sharks* and the NHK series *Planet Earth* among many others.

His series, the eight hour *Animal Armageddon*, funded by Animal Planet Network, was televised in 2009. Ward was writer and main on screen presence. Ward also appeared as a major on screen talent in the David Suzuki, four hour Canadian Broadcasting Company about past oceans which aired in early 2010, as well as being the main onscreen scientist in the National Geographic special, *Future Gondwanaland* which appeared in 2010.

Ward has also been seen on a variety of television news programs. Following the publication of *Rare Earth*, Ward appeared on ABC News with Judy Muller, the O'Reilly Factor, CNN, MSNBC, and many local television programs. He is a regular on the Art Bell Coast to Coast radio program, as well as on the more mainstream *Science Friday* with Ira Flatow.

PETER DOUGLAS WARD

VITAE

Born: May 12, 1949, Seattle, Washington

Education:	B.S.,	1971	Interdisciplinary Studies (Paleoecology), University of Washington, Seattle
	M.S.,	1973	Geology, University of Washington, Seattle
	Ph.D.,	1976	Geology, McMaster University, Hamilton, Ontario, Canada

Employment:

1976-1978: Assistant Professor, Department of Geology, Ohio State University
1978-1981: Assistant Professor, Department of Geology, University of California, Davis
1981-1983: Associate Professor, Department of Geology and Division of Environmental Sciences, University of California, Davis
1982: Visiting Scientist, Laboratoire Arago (C.N.R.S.), Banyuls, France
1984: Professor, Department of Geology University of California, Davis
1985: Associate Professor, University of Washington
1986: Professor, Department of Geological Sciences, Adjunct Professor, Department of Zoology
1989: Curator of Invertebrate Paleontology, Thomas Burke Memorial Museum, University of Washington
1992: Chairman, Division of Geology and Paleontology, Thomas Burke Memorial Museum, University of Washington
2002: Adjunct Professor of Astronomy. University of Washington
2003: Department of Biology, University of Washington

Professional Service:

Councilor, Paleontological Society 1986-1988

Co-Editor in Chief, Cretaceous Research (Academic Press) 1984-1988

Associate Editor, Paleobiology, 1985-1989

Member, International Subcommission on Cretaceous Stratigraphy 1985-1992

Convener, Working Group 6, Cretaceous-Tertiary Boundary, Global Sedimentology Program, 1990-1992

Associate Editor, Geology, 1991-1993

Co-editor, Geological Society of America Special Paper 247, Global Catastrophes in Earth History, 631p., 1990.

Associate Editor, Geology, 1995-1996

Associate Editor, Lethaia

Councilor, Paleontological Society, 1994-1996

Principal Investigator and Lead, NASA Astrobiology Institute, University of Washington 2001-2007

Member, Executive Committee, NASA Astrobiology Institute, 2001-2007

Board of Directors, Seattle Aquarium, 2003-2006

Seattle Aquarium Research Planning Board, 2003-2006

Seattle Aquarium Education Planning Board, 2003-2006

Lunar Science Planning Committee, NASA, 2004-

Member, Solar System Exploration Subcommittee of the Space Sciences Advisory Committee for the Office of Space Sciences, 2004-2007

Honors or Awards:

Fellow (elected 1984) California Academy of Sciences

Gallagher Lecturer, University of Calgary (1996)

Affiliate Professor, California Institute of Technology, 1995-1997

Golden Trilobite Award, Paleontological Society, Best Science Book of 1993 (*On Methuselah's Trail*)

Nominee, Los Angeles Times Book Prize, 1992 (*On Methuselah's Trail*)

Finalist, Los Angeles Times Book Prize, 1994 (*The End of Evolution*)

Directors Lecturer, Los Alamos National Laboratory, 2001

Distinguished Lecturer, University of Hawaii, 2001

Distinguished Lecturer, Milan, Turin, and Bologne Cultural Ministries, 2001

Distinguished Lecturer, Rosenstiel School of Marine and Atmospheric Sciences, 2001,2004, 2008.

Keynote lecturer, Rimini Conference (Italy), 2002

Jim Shea Award, NAGT, 2003

Washington State Governors Book Award, 2005, for Gorgon

Stafford Little Lectureship in Public Affairs at Princeton University, 2007

TED main speaker, 2008.

Origins Speaker, 2009

Crossroads Conference Main Speaker, 2009.

33rd Annual Faculty Lecturer, The University of Washington

Rome Science Festival, 2011

Washington State Academy of Sciences, elected 2011

First South American Conference on Astrobiology, Keynote Speaker, Quito, 2011

Extramural Support since coming to University of Washington:

1984 National Science Foundation, EAR 83-18932. The Species of Nautilus. $137,240. (With W. Saunders and D. Woodruff)

1985 National Science Foundation. Biostratigraphy and magnetostratigraphy, Great Valley Sequence, California. $56,800.

1986 National Science Foundation - Renewal, The Species of Nautilus $131,000. (With W. Saunders and D. Woodruff)

1987 National Science Foundation, EAR-8843296. Molluscan Biostratigraphy at four Cretaceous-Tertiary boundary sections, Western Europe. $89,200

1989 National Science Foundation, EAR 8904797. Molluscan Biostratigraphy at four Cretaceous-Tertiary boundary sections, Western Europe, a renewal. $90,000

1992 National Science Foundation, EAR 9205555. The extinction of the Inoceramidae and Campanian-Maastrichtian paleoceanography. $99,894

1994 National Science Foundation, EAR 9432487. Pacific Coast Campanian-Maastrichtian Chronostratigraphy. $100,000 Paleontology and Stratigraphy panel

1995 National Science Foundation EAR 9567123 The roles of cameral liquid transport in shell strength in ammonoid suture complexity $18.000

1997. National Science Foundation. Phylogeny of the post- Triassic Nautilacea. $150,000

1998. National Science Foundation, Testing the Baja B.C hypothesis, Tectonics panel. $136, 000

1999. National Science Foundation, The Permo/Triassic extinction on land, South Africa. Paleontology and Stratigraphy panel $145,000

2001. NASA Astrobiology Institute. Habitable Planets and the Rise of Complexity, $5,500,000

2006. . National Science Foundation, Paleotemperature of mass extinction boundaries using clumped isotope systematic. Collaborative research with Prof. John Eiler, Cal Tech. $102,000

2007.NASA. Funding for a Variable Atmosphere Laboratory. $67,000

2007. Joint funding for biomarker research with Dr. Kliti Grice, Curtin University. A$35,000

2008 National Science Foundation. The Cretaceous – Tertiary mass extinction record in Antarctica. Polar Programs, starts June 1 2008, three years, $300,296.

2009 National Science Foundation. Paleontology and Stratigraphy panel. The Devonian of the Canning Basin, Australia. SGER, $18,000

2009 National Science Foundation, SGER, Role of H2S on Sea Grass germination. $76,000
A, equipment for the Variable Atmosphere Laboratory, 60k

2009 NASA. Variable Atmosphere Laboratory, 66K