



Produced for PBS
by the WGBH
Science Unit



125 Western Avenue
Boston, MA 02134

617.300.2000

www.pbs.org/nova

Major Funding is provided by



Additional funding is provided
by the Corporation for Public
Broadcasting and public
television viewers. NOVA® is
a registered trademark of
WGBH Educational Foundation.

BIOGRAPHIES



Paula S. Apsell
Senior Executive Producer, NOVA and
Director of the WGBH Science Unit

Paula S. Apsell got her start in broadcasting at WGBH Boston, where she was hired fresh out of Brandeis University to type the public broadcaster's daily television program logs—a job that Apsell notes is now, mercifully, automated. Within a year, she found her way to WGBH Radio, where she developed the award-winning children's drama series *The Spider's Web*, and later became a radio news producer. But her real interest lay in television and science. In 1975, she joined a fledgling WGBH-produced national series that would set the standard for science programming on television: NOVA.

Apsell produced a number of critically acclaimed NOVA episodes before joining Dr. Timothy Johnson at WCVB, the ABC affiliate in Boston, as senior producer for medical programming. In 1983, she spent a year studying at the Massachusetts Institute of Technology as a Knight Fellow, then called the Vannevar Bush Fellowship in the Public Understanding of Science. She returned to WGBH in 1984 to become executive producer of NOVA, guiding the series into today's highly competitive, multi-media environment.

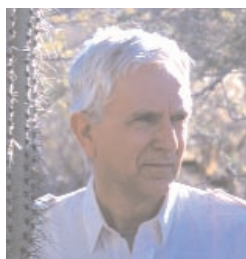
In addition to the programs in the regular NOVA television schedule, now in its thirty-first year on PBS, Apsell has overseen the production of many award-winning WGBH Science Unit specials including *Building Big* and the eight-part miniseries, *Evolution*. She's also directed NOVA's diversification into other media, most notably NOVA's award-winning Web site and the NOVA/PBS Online Adventures. As executive in charge of NOVA's large format film unit, Apsell has overseen the production of such award-winning films as Shackleton's Antarctic Adventure and Special Effects.

Today, NOVA is the most popular science series on American television and on the Web. In 1998 the National Science Board of the National Science Foundation awarded NOVA its first-ever Public Service Award. NOVA has won every major broadcasting award, including the Emmy (most recently two awards for Best 2002 Historical Documentary, *Shackleton's Voyage of Endurance* and *Galileo's Battle for the Heavens*, and the top award, Best 2002 Documentary for *Why the Towers Fell*), the Peabody (most recently for the 2003 NOVA miniseries, *The Elegant Universe*, hosted by Brian Greene), the AAAS Westinghouse Science Journalism Award, and the Alfred I. duPont-Columbia University Gold Baton.

Apsell lives in Newton, Massachusetts, with her husband and two daughters. She has served on the boards of several organizations, including The Earthwatch Institute, Hebrew College (Brookline, Massachusetts) and the Smithsonian's National Museum of Natural History. She is a trustee of the International Documentary Association.

more

ORIGINS BIOGRAPHIES



William K. Hartmann

Senior Scientist, Planetary Science Institute (Tucson, Arizona)

Dr. William K. Hartmann is known internationally for planetary research as well as his writing and painting. He served on NASA's Mars Global Surveyor imaging team (1997-present) as well as the Mariner 9 Mars mapping team (1971-1973).

With Dr. Donald R. Davis of PSI, he is credited with originating the modern theory of the origin of the moon (1975), and he has also worked on asteroid properties and the origin and evolution of planets. Asteroid number 3341 is named after him in recognition of his planetary research. His astronomical

paintings have been in many books, magazines, and exhibitions. He was the first winner of the Carl Sagan Medal of the American Astronomical Society for communicating planetary science to the public (1997), was elected a Fellow of the American Association for Advancement of Science (2001), and is a co-winner of the Rucorn-Florensky Medal of the European Geophysical Society for work on cratering (2002).

He has published numerous popular science books, including *A Traveler's Guide to Mars* (2003). He has also published two novels, one about Mars (*Mars Underground*, 1997) and the other about the southwest (*Cities of Gold*, 2002).



Thomas Levenson

Executive Producer, *Origins*

Levenson was educated at Harvard University and has received the Michael C. Rockefeller and Josiah Macy Fellowships. In addition to *Origins*, Levenson's most recent production was the Dome episode in the PBS series *Building Big*, hosted by David Macaulay, which was honored with a 2001 George Foster Peabody Award.

Other credits include producing and writing the two-hour NOVA special, *Einstein Revisited*, which premiered in 1996. Levenson's other films include the NOVA special *Eclipse*, which won the 1992 AAAS/Westinghouse Award for best science program, and the Emmy-Award-winning NET/DISCOVERY special *Cathedrals of the Sky*. Levenson also served as a writer/producer on the five-part PBS series *Mystery of the Senses* (1995), and he produced the NOVA mini-series *The Genius That Was China* (1990).

Levenson has written three books—*Einstein in Berlin*; *Measure for Measure: A Musical History of Science*; *Ice Time: Climate, Science, and Life on Earth*, along with numerous articles for publications ranging from *The Atlantic Monthly* to the *Times Higher Education Supplement*.



Anthony C.S. Readhead
Professor of Astronomy, Caltech

Dr. Anthony C.S. Readhead received his BS and BS (Hons) from the University of the Witwatersrand and his PhD from Cambridge University. Readhead began his career at the California Institute of Technology in 1974 and was appointed Professor of Astronomy in 1981, Director of the Owens Valley Radio Observatory (1981-1985), and Chair of the Astronomy Department (1990-1992). He is a member of the National Academy of Sciences and the American Academy of Arts and Sciences.

Readhead, a world authority on active galaxies, pioneered the technique of making images with very-long-baseline interferometry. He began work on the cosmic microwave background in 1979 and in 1989 published the definitive paper in the field showing that a large component of exotic "dark matter" is required to account for the existence of galaxies. He leads the group that, in January 2000, made the first observations of the seeds that gave rise to all structure in the universe - from clusters of galaxies down to galaxies, stars, and planets. Readhead made his observations using the Cosmic Background Imager (CBI), a radio interferometer at 17,000 feet in the Chilean Andes that has also made independent determinations of a number of fundamental cosmological parameters.



Neil deGrasse Tyson
***Origins* host and Frederick P. Rose Director of the Hayden Planetarium**

An astrophysicist, Neil deGrasse Tyson was appointed the Frederick P. Rose Director of the Hayden Planetarium in 1996. Dr. Tyson's professional research interests are primarily related to the structure of the Milky Way Galaxy and the formation of stars, supernovas, and dwarf galaxies. He directs the scientific research efforts of the Hayden Planetarium and guides its educational outreach, working closely with the Museum's Department of Education.

Born and raised in New York City, he has a personal connection to the Hayden Planetarium. Dr. Tyson graduated from the Bronx High School of Science, received his BA from Harvard, and earned his PhD in astrophysics from Columbia University in 1991.

In 2001 he was appointed by President Bush to serve on a twelve-member commission that studied the future of the U.S. Aerospace Industry. The final report was published in 2002 and contained recommendations that would promote a thriving future of transportation, space exploration, and national security. In 2004 Tyson was once again appointed by President Bush to serve on a nine-member commission on the implementation of the United States Space Exploration Policy, dubbed the "Moon, Mars, and Beyond" commission. This group will navigate a path by which the new space vision can become a successful part of the American agenda.

Dr. Tyson is the author of seven books; the most recent ones include a memoir, *The Sky Is Not the Limit: Adventures of an Urban Astrophysicist*, (second edition, Prometheus/October 2004), and *Origins: Fourteen Billion Years of Cosmic Evolution* (W.W. Norton/October 2004), the companion book to the NOVA/PBS series.