

National Aeronautics and
Space Administration



SEEKING SIGNS OF LIFE:

A Symposium Celebrating the
50th Anniversary of NASA's
Exo/Astrobiology Program



Sponsored by NASA
and Lockheed Martin

NASA's Astrobiology Program addresses three fundamental questions:

How does life begin and evolve?

Is there life beyond Earth, and, if so, how can we detect it?

What is the future of life on Earth and in the universe?

Experts in a range of relevant disciplines will engage in an exciting day of discussions Are we alone?



8:45 a.m.

Welcome

James L. Green, Director, Planetary Science, NASA

R. Stephen Price, Director, Business Development for Sensing and Exploration Systems, Lockheed Martin Space Systems Company

9 a.m.

**Opening Keynote Address:
“Exobiology in the Beginning”**

James Lovelock, Honorary Visiting Fellow of Green Templeton College, University of Oxford;

Lynn Margulis, Distinguished University Professor in the Department of Geosciences at the University of Massachusetts-Amherst

10 a.m.

**Panel 1
“The Origins and Evolution of Exobiology and
Astrobiology at NASA”**

Steven Dick, NASA Historian (ret.); Baruch Blumberg, Fox Chase Cancer Center; Noel Hinners, Lockheed Martin (ret.)

Moderator: Roger Launius, National Air and Space Museum

11 a.m.

**Panel 2
“Understanding the Origin, Evolution, and
Distribution of Life in the Universe”**

Jack Corliss, Central European University; Martin Brasier, University of Oxford; Pamela Conrad, NASA Goddard Space Flight Center

Moderator: Lynn Rothschild, NASA Ames Research Center

Noon

Lunch

12:30 p.m.

**Keynote Address: “Astrobiology Institute:
Founding Vision and Reflections”**

The Honorable Daniel S. Goldin, NASA Administrator from 1992 to 2001 and Chairman, President, and CEO of the Intellis Corporation

1:30 p.m.

Awards Ceremony

2 p.m.

**Panel 3
“Who Are We? Where Are We Going? Are We
Alone? Astrobiology in Culture”**

Marc Kaufman, *Washington Post*; Connie Bertka, Carnegie Institution; David Grinspoon, Denver Museum of Nature and Science

Moderator: Linda Billings, George Washington University

3 p.m.

**Panel 4
“Homing in on Extraterrestrial Life: Where, and
How, To Look”**

Danny Glavin, NASA Goddard Space Flight Center; Victoria Meadows, University of Washington; Steve Benner, Foundation for Applied Molecular Evolution

Moderator: Michael Meyer, Mars Exploration Program, NASA

4 p.m.

**Closing Keynote Address:
“The Next 50 Years”**

Steve Squyres, Goldwin Smith Professor of Astronomy at Cornell University

