



PROFILE

New President of AAAS Renowned Physician-Scientist

Mary Ellen Avery—a neonatologist and the new president of the American Association for the Advancement of Science (AAAS)—is best known for her discovery in the 1950s that a lack of surface active agents in the lungs of newborn babies led to respiratory distress and caused many of them to die.

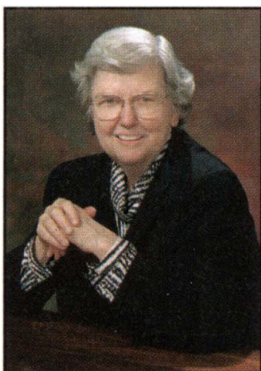
Avery, who went on to develop life-saving treatments for newborns at risk for respiratory disease, “represents the best of what we want in a clinical investigator,” according to Julius Richmond, U.S. Surgeon General under President Jimmy Carter and Avery’s colleague at Harvard Medical School.

“She has two important attributes,” said Richmond, Professor of Health Policy Emeritus in Harvard’s Department of Social Medicine.

“She showed remarkable creativity in identifying the best scientific approach for dealing with the question of why so many premature babies were dying of lung disease, and she persevered until there was a solution in sight. It was a great leap forward.”

One of four women in the class of 1952

at Johns Hopkins University Medical School, Avery was inspired to become a pediatrician while an undergraduate at Wheaton College in Norton, MA. She says that her research as a faculty member at Johns Hopkins, and later at McGill University and at Harvard, showed her the importance of a multidisciplinary approach to science and science policy, an awareness that makes her value AAAS and the professional diversity of its members.



2003 AAAS President Mary Ellen Avery

“I drew on the work of basic scientists—molecular biologists and others—and we went into it in depth,” said Avery, who was physician-in-chief at Children’s Hospital from 1974 to 1985, as well as Thomas Morgan Rotch Distinguished Professor of Pediatrics at Harvard. “I jumped disciplines very readily and we created an

unlikely merger of interests. I did have a goal, and not just to gain new knowledge. I wanted to see what could be applied in the treatment of newborns.”

As she begins her presidency of the Association in 2003, Avery hopes to encourage the organization’s role in bringing scientific

and technological solutions to bear on the world’s most intractable problems.

In an interview posted on “Children’s Online,” a publication of Children’s Hospital in Boston, Avery noted that her background as a leader in child and maternal health will affect her leadership style at AAAS. “I certainly have beliefs and prejudices, and they will show,” she said. “Women, children and newborns will not be ignored.”

She noted that her agenda goes beyond pediatrics. “My priorities are to support studies of global issues such as the increase in pollutants, efforts to have multilateral reduction in nuclear and microbial weapons, and the ever increasing socio-economic disparities in the world.”

Avery, who will take office at the close of the AAAS Annual Meeting on 19 February 2003, has been a council member of both the Institute of Medicine and the National Academy of Sciences. In 1991, President George Bush awarded her the National Medal of Science for her work on respiratory distress in newborns.

AAAS

Shirley Ann Jackson AAAS President in 2004

The membership of AAAS has elected physicist Shirley Ann Jackson to become president of AAAS in February 2004, following the term of Mary Ellen Avery, who will serve as president in 2003.

President of the Rensselaer Polytechnic Institute in Troy, NY, Jackson has served in positions of leadership in both the public and private sectors. She was Chairman of the U.S. Nuclear Regulatory Commission from 1995 to 1999, and a professor of physics at Rutgers University from 1991 to 1995. From 1976 to 1991, Jackson worked as a theoretical physicist at the former AT&T Bell Laboratories. She has conducted research in optical physics and in theoretical, quantum, and solid-state physics.

Jackson graduated from the Massachusetts Institute of Technology, becoming the first African-American woman to receive a doctorate from that institution, and one of the first two African-American women awarded Ph.D.s in physics in the United States. The recipient of numerous awards, Jackson was recently named one of the Top 50 Women in Science by *Discover* magazine.

AAAS

Public Welfare Medal for AAAS Official

Shirley M. Malcom, director of the AAAS Directorate for Education and Human Resources, will receive the National Academy of Sciences’ prestigious Public Welfare Medal, according to a recent announcement by NAS officials.

“Dr. Malcom has been a tireless advocate for the empowerment of the general public through science and technology, viewing such an education as a necessary ingredient for social progress,” said NAS President Bruce Alberts. “She has also been at the forefront in making science available to those normally underrepresented in science careers, dedicating her life to making sure that everyone has a chance to succeed.”

Malcom, who has worked at AAAS almost 23 years, has authored and co-authored a number of landmark publications, including the 1998 report, “Losing Ground: Science and Engineering Graduate Education of Black and Hispanic Americans,” which pointed to an “unwelcoming environment” for underrepresented minority graduate students as a result of policy changes affecting minority education. Malcom will receive the NAS award during a ceremony in April.

Results of the 2002 Election of AAAS Officers

Following are the results of the 2002 election. Terms begin on 19 February 2003.

General Offices

President-Elect: Shirley Ann Jackson. *Board of Directors:* Rosina M. Bierbaum, Peter J. Stang. *Committee on Nominations:* Wendy Baldwin, David A. Hamburg, Stanley B. Prusiner, Judith P. Swazey.

Section on Agriculture, Food, and Renewable Resources

Chair-Elect: Per Pinstrup-Andersen. *Member-at-Large:* Elizabeth W. Sulzman. *Electorate Nominating Committee:* Sue DeNise, Ronald Sederoff. *Council Delegate:* Sue A. Tolin.

Section on Anthropology

Chair-Elect: Emilio F. Moran. *Member-at-Large:* David G. Anderson. *Electorate Nominating Committee:* Anabel Ford, R. Brook Thomas.

Section on Astronomy

Chair-Elect: Stephen P. Maran. *Member-at-Large:* S. Alan Stern. *Electorate Nominating Committee:* Bruce Balick, C. Robert O'Dell.

Section on Atmospheric and Hydrospheric Sciences

Chair-Elect: Jim Coakley. *Member-at-Large:* Anne M. Thompson. *Electorate Nominating Committee:* Mary Anne Carroll, Amanda H. Lynch.

Section on Biological Sciences

Chair-Elect: Barbara A. Schaal. *Member-at-Large:* Nancy A. Moran. *Electorate Nominating Committee:* Karen L. Bennett, Marlene Zuk.

Section on Chemistry

Chair-Elect: K. N. Houk. *Member-at-Large:* F. Fleming Crim. *Electorate Nominating Committee:* Carolyn R. Bertozzi, William L. Jorgensen.

Section on Dentistry and Oral Health Sciences

Chair-Elect: Barbara D. Boyan. *Member-at-Large:* Margarita Zeichner-David. *Electorate Nominating Committee:* Floyd E. Dewhirst, Paul H. Krebsbach.

Section on Education

Chair-Elect: Julia V. Clark. *Member-at-Large:* Ann C. Howe. *Electorate Nominating Committee:* Jerry A. Bell, Joseph S. Krajcik.

Section on Engineering

Chair-Elect: Jose B. Cruz, Jr. *Member-at-Large:* James L. Merz. *Electorate Nominating Committee:* Sandra C. Greer, Paul C. Jennings. *Council Delegates:* James G. Harris, C. D. Mote Jr.

Section on General Interest in Science and Engineering

Chair-Elect: Susan E. Cozzens. *Member-at-Large:* Gloria J. Takahashi. *Electorate Nominating Committee:* M. Lee Allison, Fred J. Brenner.

Section on Geology and Geography

Chair-Elect: Lucy E. Edwards. *Member-at-Large:* Emi Ito. *Electorate Nominating Committee:* John T. Andrews, Thomas T. Veblen.

Section on History and Philosophy of Science

Chair-Elect: Phillip R. Sloan. *Member-at-Large:* Philip J. Pauly. *Electorate Nominating Committee:* Cathryn Carson, James R. Fleming. *Council Delegate:* Sally Gregory Kohlstedt.

Section on Industrial Science and Technology

Chair-Elect: Cary Gravatt. *Member-at-Large:* Laura A. Philips. *Electorate Nominating Committee:* Ray H. Baughman, Helena L. Chum. *Council Delegate:* Tina Kaarsberg.

Section on Information, Computing, and Communication

Chair-Elect: Christine L. Borgman. *Member-at-Large:* Paul B. Kantor. *Electorate Nominating Committee:* Lewis M. Branscomb, Robert F. Sproull.

Section on Linguistics and Language Science

Chair-Elect: Mark Aronoff. *Member-at-Large:* Judy Anne Kegl. *Electorate Nominating Committee:* Stephen R. Anderson, Annie E. Zaenen.

Section on Mathematics

Chair-Elect: Jean E. Taylor. *Member-at-Large:* Tamar Schlick. *Electorate Nominating Committee:* Willard Miller, Cora Sadosky.

Section on Medical Sciences

Chair-Elect: Elaine S. Jaffe. *Member-at-Large:* Patricia G. Spear. *Electorate Nominating Committee:* Harriet L. Robinson, Judith L. Swain. *Council Delegates:* Arleen D. Auerbach, Lynn W. Enquist, Gary J. Nabel, David H. Perlmutter, Noel R. Rose, Jack A. Roth.

Section on Neuroscience

Chair-Elect: John G. Hildebrand. *Member-at-Large:* Robert C. Malenka. *Electorate Nominating Committee:* Hollis T. Cline, Mary E. Harrington.

Section on Pharmaceutical Sciences

Chair-Elect: John T. Slattery. *Member-at-Large:* Jessie L.-S. Au. *Electorate Nominating Committee:* K. S. Pang, David Ross.

Section on Physics

Chair-Elect: Julia M. Phillips. *Member-at-Large:* Jeremiah D. Sullivan. *Electorate Nominating Committee:* Susan N. Copper-smith, Gloria B. Lubkin.

Section on Psychology

Chair-Elect: Jeffrey R. Alberts. *Member-at-Large:* Michael Davis. *Electorate Nominating Committee:* John T. Cacioppo, Patricia K. Kuhl. *Council Delegate:* Robyn M. Dawes.

Section on Social, Economic, and Political Sciences

Chair-Elect: Charles Hirschman. *Member-at-Large:* David L. Featherman. *Electorate Nominating Committee:* Bradford H. Gray, T. Paul Schultz. *Council Delegate:* Linda G. Martin.

Section on Societal Impacts of Science and Engineering

Chair-Elect: Sheila S. Jasanoff. *Member-at-Large:* Sheldon Krinsky. *Electorate Nominating Committee:* Catherine (Kitty) Jay Didion, Jeremy Sugarman.

Section on Statistics

Chair-Elect: Robert E. Kass. *Member-at-Large:* Joel B. Greenhouse. *Electorate Nominating Committee:* Mitchell H. Gail, John E. Rolph.