The unique opportunity is to bring before those who seek to understand, those who understand deeply.

PRELIMINARY PROGRAM
AAAS ANNUAL MEETING
CHICAGO, ILLINOIS
26–31 December 1970

Co-Chairmen: George W. Beadle (Professor of Biology, University of Chicago) and Thomas H. Coulter (Chief Executive Officer, Chicago Association of Commerce and Industry).

AAAS INVITED LECTURES AND PANELS
☐ Special Lecture (26 Dec.).
   To be selected.

☐ Distinguished Lecture (27 Dec.).

☐ Address of the Retiring AAAS President (28 Dec.).
   H. Bentley Glass (State University of New York, Stony Brook).

☐ RESA Annual Address and Panel Discussion (29 Dec.).
   Lloyd M. Cooke (Union Carbide Corporation).

☐ Sigma Xi–Phi Beta Kappa Lecture (29 Dec.).
   To be selected.

☐ Frontiers of Science Lecture (30 Dec.).
   Thomas Eisner (Cornell University).

☐ Film Lectures (26–30 Dec.).
   Margaret Mead (American Museum of Natural History); Eugenie Clark (University of Maryland); Asen Balikci (University of Montreal); and William Pickering (Jet Propulsion Laboratory).

AAAS COMMISSION AND COMMITTEE SYMPOSIA

☐ Commission on Population and Reproduction Control (26, 28–30 Dec.).

☐ Commission on Science Education (29 Dec.).

☐ Committee on Arid Lands (26–27 Dec.).
   Urbanization in the Arid Lands. Arranged by Carl O. Hodge and Carl N. Hodges (University of Arizona).

☐ Committee on Environmental Alteration (27 Dec.).

AAAS GENERAL SCIENCE SYMPOSIA AND DISCUSSIONS

☐ Women in Science (27 Dec.).
   Arranged by Jean Simmons (Upsala College, East Orange, New Jersey).

☐ Women in Science Address (29 Dec.).
   Virus Vaccines, Past and Future, by Hope E. Hopps (National Institutes of Health, Bethesda, Maryland).

☐ Is There a Generation Gap in Science? (27 Dec.).
   Arranged by Aristide H. Esser (Rockland State Hospital).

☐ Mood, Behavior, and Drugs (27–28 Dec.).
   Arranged by Chauncey Leake (San Francisco Medical Center, University of California).

☐ Man's Impact on the Global Environment (28 Dec.).

☐ Public Policy for the Environment (28 Dec.).
   Arranged by Harold P. Green (George Washington University).

☐ Techniques and Status of Modern Parapsychology (27 Dec.).
   Arranged by E. Douglas Dean (Newark College of Engineering).

☐ The Teaching of Science (28–29 Dec.).
   Arranged by Arnold Ravin (University of Chicago).


☐ Law-Science Interface (29 Dec.).
   Arranged by Harold P. Green (George Washington University).
SYMPOSIA OF AAAS SECTIONS AND AFFILIATED SOCIETIES

Mathematics (A)

Section Program
- Vice Presidential Address and Mathematics in the Undergraduate Program in the Sciences (28 Dec.). Arranged by R. P. Boas (Northwestern University, Evanston, Illinois).

American Mathematical Society and Society for Industrial and Applied Mathematics
- Some Mathematical Questions in Biology (27 Dec.). Arranged by J. D. Cowan (University of Chicago).

Association for Computing Machinery
- Computers and Society (26 Dec.). Arranged by Robert Ashenhurst (University of Chicago).

National Council of Teachers of Mathematics
- Aspects of Mathematics: Kindergarten to College (29 Dec.). Arranged by Isabelle P. Rucker (State Department of Education, Richmond, Virginia).

Physics (B)

Section Program

Chemistry (C)

Section Program
- Chemical Memory (30 Dec.). Arranged by William Bryne (University of Tennessee).

- Teaching of Chemistry (30 Dec.) Arranged by William Cook (Colorado State University).

American Association of Clinical Chemists
- Genetic Diseases and the Quality of Life (29 Dec.). Arranged by Donald T. Forman (Evanston Hospital, Illinois) and Albert A. Dietz (Veterans Administration Hospital, Hines, Illinois).

- Contributed Papers in Clinical Chemistry (29 Dec.). Arranged by Donald T. Forman and Albert A. Dietz.

Astronomy (D)

Section Program

American Astronautical Society
- Interstellar Molecules and Chemistry (30 Dec.). Arranged by Bertram D. Donn (Goddard Space Flight Center).

American Astronautical Society
- Results of the Apollo Program (29 Dec.). Arranged by Louis S. Walter (Goddard Space Flight Center, Greenbelt, Maryland).

Geology and Geography (E)

Section Program

Geological Society of America

Biological Sciences (FG)

Section Program

- The Development of Cell Organelles (28 Dec.). Arranged by Joel L. Rosenbaum (Yale University).

- The U.S. Contribution to the International Biological Program (28–29 Dec.). Arranged by the U.S. National Committee for the International Biological Program, National Academy of Sciences.

American Fisheries Society
- Water Quality and Fisheries in the Upper Great Lakes (28 Dec.). Arranged by Clarence A. Carlson (Cornell University).

American Society of Naturalists and Society for the Study of Evolution
- Solutions to Environmental Problems (28 Dec.).
Arranged by Bruce Wallace (Cornell University) and David L. Jameson (University of Houston).

- **American Society of Zoologists/Division of Comparative Endocrinology**
  - Comparative Studies of Calcitonin and Ultimobranchial Bodies (29 Dec.). Arranged by Nancy B. Clark (University of Connecticut).

- **American Society of Zoologists/Division of Comparative Physiology and Biochemistry**
  - Satellite DNA's (27 Dec.). Arranged by Dorothy M. Skinner (Oak Ridge National Laboratory).
  - Contributed Papers (27–30 Dec.). Arranged by Hans Lafer (University of Connecticut).

- **American Society of Zoologists/Division of Developmental Biology**
  - Biology of Immunity in Amphibians (28 Dec.). Arranged by E. Peter Volpe (Tulane University).
  - Contributed Papers (26–29 Dec.). Arranged by Hans Lafer (University of Connecticut).

- **American Society of Zoologists/Division of Ecology**
  - Contributed Papers (29 Dec.). Arranged by David Grant (Davidson College).

- **American Society of Zoologists/Division of Invertebrate Zoology**
  - Parthenogenesis (27 Dec.). Arranged by James Oliver (Georgia Southern University).
  - The Libbie H. Hyman Memorial Symposium on Biology of the Turbellaria (28–30 Dec.). Arranged by M. Patricia Morse (Northeastern University), Nathan W. Riser (Northeastern University), and Horace W. Stunkard (American Museum of Natural History).
  - Contributed Papers (26–28 Dec.). Arranged by L. R. Kraemer (University of Arkansas, Fayetteville).

- **American Society of Zoologists/Division of Vertebrate Morphology**

- **Animal Behavior Society**
  - Separation and Depression: Clinical and Research Aspects (26–27 Dec.). Arranged by Edward C. Senay (University of Chicago) and John Paul Scott (Bowling Green University).
  - Analytic Problems in Animal Behavior (29 Dec.). Arranged by Stuart A. Altmann (University of Chicago).
  - Contributed Papers (27–31 Dec.). Arranged by John G. Vandenberg (North Carolina Department of Mental Health).

- **Beta Beta Beta**

- **Ecological Society of America and Wildlife Society**
  - Urban Ecology Today (30 Dec.). Arranged by Forest Stearns (University of Wisconsin), William S. Osburn (U.S. Atomic Energy Commission), Robert Brander (U.S. Forest Service), and Charles M. Kirkpatrick (Purdue University).

- **Ecological Society of America**

- **Herpetologists' League**

- **Human Ecological Society**
  - Human Ecology (28 Dec.). Arranged by George B. Happ (Institute of Human Ecology) and Eduard C. Brandt, Jr. (Radford College).

- **Society for the Study of Evolution**
  - Presidential Address (30 Dec.), by Richard C. Lewontin (University of Chicago).
  - Contributed Papers (27, 29–30 Dec.). Arranged by David L. Jameson (University of Houston).

- **Society of Systematic Zoology**
  - Methods and Problems in Cladistic Research (29 Dec.). Arranged by Joseph L. Simon (University of Southern Florida).

**Anthropology (H)**

- Vice Presidential Address and Film Lecture (26 Dec.), by Margaret Mead (American Museum of Natural History).
  - Contributed Papers (27 Dec.). Arranged by Anthony Leeds (University of Texas).
Biologic Relativity (28 Dec.). Arranged by E. R. N. Grigg (Chicago Medical School).

User participation in the Housing Process (29 Dec.). Arranged by John Turner (Cambridge, Massachusetts).


Psychology (L)

Section Program

- The Developmental Sciences: State and Fate of Research Funding (27 Dec.). Arranged by Victor Denenberg (University of Connecticut).

- University Open Admissions (27 Dec.). Arranged by Lloyd G. Humphreys (University of Illinois).

- The Impact of Colleges on Students (28 Dec.). Arranged by Alexander W. Astin (American Council on Education).


American Psychoanalytic Association

- The Interface between Psychoanalysis and Education (27 Dec.). Arranged by G. E. Blom (University of Colorado Medical Center).

Social and Economic Sciences (K)

Section Program

- Vice Presidential Address (27 Dec.), by Robert M. Solow (Massachusetts Institute of Technology).


- Science and Democracy (27 Dec.). Arranged by Harvey Sapolsky (Massachusetts Institute of Technology).

- Comparative Policies in Science and Technology (27 Dec.). Arranged by Dixon Long (Case Western Reserve University).

- How People React to Technology (28 Dec.). Arranged by Emmanuel G. Mesthene (Harvard University).


- The Economics and Politics of Large-Scale Technological Programs (30 Dec.). Arranged by Daniel Rich (University of Delaware).

American Sociological Association


Association for the Study of Grants Economy

- A Symposium on the Grants Economy (26–27 Dec.). Arranged by Janos Horvath (Butler University).

Metric Association


National Institute of Social and Behavioral Sciences


- Contributed Papers (26, 28 Dec.). Arranged by Donald P. Ray.

Population Association of America

- Social Consequences of Demographic Phenomena (27 Dec.). Arranged by David D. McFarland (University of Chicago).

Society for the Scientific Study of Religion

- Directions in Religious Organization (28 Dec.). Arranged by Ross P. Scherer (Loyola University, Chicago).

History and Philosophy of Science (L)

Section Program


- Approaches to the Philosophy of Biology (30 Dec.). Arranged by Dudley Shapere (University of Chicago).

History of Science Society

Science in the 19th Century (27 Dec.). Arranged by John L. Heilbron (University of California, Berkeley).

Renaissance Optics (27 Dec.). Arranged by David Lindberg (University of Wisconsin).

The Confrontation of Scientific Traditions in the Orient (27 Dec.). Arranged by John L. Heilbron.


History of Science Society and Society for the History of Technology

History of Science Society and Section L
- Recent Physical Science (29 Dec.). Arranged by John L. Heilbron.

Society for General Systems Research
- Presidential Address (27 Dec.). The Coming Era of Systematic Societal Change, by Bertram M. Gross (Hunter College).

World Cities of the Future (26–30 Dec.). Arranged by Bertram M. Gross.

Society for the History of Technology
- Presidential Address by Robert P. Multhauf (27 Dec.).


- Perspectives on Apollo History (29 Dec.). Arranged by Lloyd S. Swenson, Jr. (University of Houston).

- Topics in the History of Technology, Works-in-Progress (27 Dec.). Arranged by Melvin Kranzberg (Case Western Reserve University).

Engineering (M)

Section Program

American Institute of Aeronautics and Astronautics
- Education Toward Social Responsibilities for Engineers (28 Dec.). Arranged by T. Paul Torda (Illinois Institute of Technology).

- Biocybernetics of the Dynamic Communication of Emotions and Qualities (29 Dec.). Arranged by Manfred Clynes (Rockland State Hospital).

Medical Sciences (N)

Section Program

Alpha Epsilon Delta
- Advisory Programs for Careers in the Health Professions (28 Dec.). Arranged by Maurice L. Moore (Bronxville, New York).

American Association of Bioanalysts
- The Importance of the Bioanalytical Laboratory in Health Care (27 Dec.). Arranged by Edmond L. Morgan (Illinois Association of Clinical Laboratories, Des Plaines).

American Genetic Association
- Advances in Human Genetics and their Impact on Society (28 Dec.). Arranged by Digamber S. Borgaonkar (Johns Hopkins University School of Medicine) and Saleem A. Shah (National Institutes of Mental Health).

American Orthopsychiatric Association
- Unresolved Social Issues—Impact on Child and Family Mental Health (30 Dec.). Arranged by Herman P. Schuchman (University of Illinois).

Dentistry (Nd)

Section Program

Pharmaceutical Sciences (Np)

Section Program
- Vice Presidential Address (28 Dec.). Don E. Francke (University of Cincinnati).

- Distinguished Lecture (28 Dec.). Delivery of Health Care in the United States, by Ray E. Brown (Northwestern University McGaw Medical Center).


- Marine Pharmacology and Toxicology (29 Dec.). Arranged by Gary P. Carlson (University of Rhode Island).

- Soaps, Detergents, and Antibacterials (30 Dec.). Arranged by Joseph Jerome (United States Adopted Names Council).

- Contributed Papers on Pharmaceutical Sciences (30 Dec.). Arranged by John Autian (University of Tennessee Medical Units).
Agriculture (O)

Section Program
- Agriculture and the Quality of the Environment in the Seventies (28–29 Dec.). Arranged by Mathias Stelly (American Society of Agronomy).

Industrial Science (P)

Section Program
- Past Vice Presidential Address by Gordon Teal, and Presentation of Industrial Science Award (28 Dec.).
- Industrial Approaches to Urban Problems (28 Dec.). Arranged by Jordan D. Lewis (Battelle Development Corporation).
- New Roles for Old Research and Development Laboratories (30 Dec.). Arranged by James Carroll (Ohio State University).

Education (Q)

Section Program
- Surplus Ph.D.'s (27 Dec.). Arranged by Lee Grodzins (Massachusetts Institute of Technology).

American Junior Academy
- Contributed Papers (28 Dec.). Arranged by Frank Starr (Waterloo Community Schools, Iowa).

American Nature Study Society
- Presidential Address (29 Dec.) by Mrs. J. Lewis Scott.

Association of Academies of Science
- President-Elect Address (27 Dec.). Environmental Geology, by Glenn W. Stewart (University of New Hampshire).
- Science Teacher Education (27 Dec.). Arranged by Harry Bennett (Louisiana State University).

Joint Science Teaching Societies
- The Learner and His Future Environment: Perspectives (29 Dec.). Arranged by Mary Keegan (School District of Winnetka, Illinois) and Irwin Siegelman (Scott, Foresman, and Company).

National Science Teachers Association
- Individualizing Instructions in College Science Courses (27 Dec.). Arranged by Albert F. Eiss (National Science Teachers Association).

Information and Communication (T)

Section Program

American Medical Writers Association
- Dynamic Changes in Biomedical Communication in the Seventies (29 Dec.). Arranged by Abe Rubin (Ohio College of Podiatric Medicine).

National Association of Science Writers
- Science Literature for Children (27 Dec.). Arranged by Eugene Kone (American Institute for Physics).

Society of Technical Writers and Publishers
- Excellence in Scientific Writing (29 Dec.). Arranged by W. Earl Britton (University of Chicago).

Statistics (U)

Section Program

Operations Research Society of America
- Use of Statistics in Operations Research (26 Dec.). Arranged by John E. Walsh (Southern Methodist University).

Atmospheric and Hydrospheric Sciences (W)

Section Program

Committee on Environmental Quality of the American Geophysical Union
- Lake Restoration (29 Dec.). Arranged by Robert A. Ragotzkie (University of Wisconsin).

Operations Research Society of America

Further information, including housing, registration, and tours will appear in the 25 September issue of Science.