
CASW

COUNCIL FOR THE ADVANCEMENT OF SCIENCE WRITING, INC.

Fourteenth Annual Briefing New Horizons in Science

November 14 through 19, 1976

Flagship Hotel, Galveston, Texas

Co-Chairmen:

Albert Rosenfeld

Ben Patrusky

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and The Moody Foundation

**SUNDAY,
NOVEMBER 14**

Registration and Hospitality Suite
starting at 5:30 P.M.

**MONDAY,
NOVEMBER 15**

NASW DAY

An all-day series of seminars and workshops directed toward specific problems encountered by science writers and editors in newspapers, magazines and broadcast journalism.

**TUESDAY,
NOVEMBER 16**

**8:30 A.M.
to
11:30 A.M.**

THE EARLIEST AMERICANS

C. RAINER BERGER, Ph.D., *Professor of Anthropology, Geography and Geophysics, Department of Geophysics, University of California, Los Angeles*

It had been widely assumed that the peopling of the New World occurred in a single migration 12,000 years ago. Most anthropologists think otherwise. And now comes hard proof—based on just-completed radiocarbon dating studies—that there were Paleoindians here at least 40,000 years ago.

DID MAN ORIGINATE IN ASIA?

GEORGE J. TODARO, M.D., *Chief, Laboratory of Viral Carcinogenesis, National Cancer Institute, National Institutes of Health, Bethesda*

It's a given: humankind evolved in Africa. But that long-held truism is now open to serious question. Viral paleontology says no. Recent studies of viral gene transmission among primates lead to the inexorable conclusion that the human species probably got its start in Asia.

**2:30 P.M.
to
5:30 P.M.**

BUGS, BEANS AND POISONS

DANIEL H. JANZEN, Ph.D., *Professor of Biology, Leidy Laboratories, Department of Biology, University of Pennsylvania, Philadelphia*

To improve crop yield, man bred out many of the plant's natural chemical defenses against pest assault. Hence, the need for more—and ever more-potent—pesticides. Why not a new strategy? Breeding protection back into plants.

THE TOXIC ENVIRONMENT

MARVIN S. LEGATOR, Ph.D. *Professor of Preventive Medicine and Community Health, The University of Texas Medical Branch, Galveston*

A new, reliable technology is finally at hand to test man-made products for their mutagenic potential *before* they are introduced into the environment. With the passage of the Toxic Substances Act, this development is of special timeliness and importance.

7:00 P.M.

COCKTAILS AND DINNER

Sponsored by The University of Texas Medical Branch, Caduceus Room, Sixth Floor, Administration Building, University Campus

Speaker: JONAS E. SALK, M.D., *Founding Director and Resident Fellow, Salk Institute for Biological Studies, La Jolla*, on "Vaccinology: Empiricism or Science?"

WEDNESDAY,
NOVEMBER 17

8:30 A.M.

to

11:30 A.M.

CONTROLLED FUSION: THE NEW BOOM

MOSHE J. LUBIN, Ph.D., *Professor, Department of Mechanical and Aerospace Sciences and the Institute of Optics, Director, Laboratory of Laser Energetics, University of Rochester*

Efforts to control thermonuclear fusion by inertial confinement are proceeding rapidly. In fact, so much progress has been made with laser, ion beam and electron beam ignition systems that the time has come to begin assessing the contributions fusion may make to long-term energy needs.

HARNESSING THE WIND

ROBERT W. THRESHER, Ph.D., *Associate Professor of Mechanical Engineering, Oregon State University, Corvallis*

New, ingenious sources of useable energy are in the wind—literally. Among them: man-made tornados and artificial thunderstorms.

1:45 P.M.

to

5:00 P.M.

TOUR OF UNIVERSITY OF TEXAS MEDICAL BRANCH

Cocktails in the Caduceus Room at the conclusion of the tour.

6:30 P.M.

Hospitality Suite Open

THURSDAY,
NOVEMBER 18
8:30 A.M.
to
11:30 A.M.

THE THYMIC HORMONE

ALLAN L. GOLDSTEIN, Ph.D., *Professor and Director, Division of Biochemistry, Department of Human Biological Chemistry and Genetics, The University of Texas Medical Branch, Galveston*

Through a family of hormones called thymosin, the thymus gland helps to govern the development and function of the immune system. Now, a decade after its discovery, thymosin is being tested clinically in children with severely impaired immunity and patients with far-advanced cancer. Early results are in—and they are very promising indeed.

'WATERMELON' MAN

ROBERT A. ALDRICH, M.D., *Professor of Preventive Medicine and Pediatrics, University of Colorado Medical Center, Denver*

A pediatrician-cum-social scientist looks at the individual's life cycle much as an anthropologist scrutinizes tribal and cultural evolution. He has derived an extraordinary "watermelon" model of man, an important synthesis to help us better understand our cradle-to-grave progress.

2:30 P.M.
to
5:30 P.M.

THE MYSTERY OF SOLAR NEUTRINOS

JOHN N. BAHCALL, Ph.D., *Professor of Natural Science, The Institute for Advanced Study, Princeton*

Produced in the thermonuclear furnace of the sun, neutrinos offer a unique way of "looking" into the solar machinery. Recent experiments, however, have turned up a large, unexplained disagreement between observation and the supposedly well-understood theory of why the sun shines.

ELEMENTS—HEAVY AND SUPERHEAVY

ALBERT GHIORSO, D.Sc., *Lawrence Berkeley Laboratory, University of California, Berkeley*

Have we really reached the magic island of stable, super-heavy elements? Maybe not. The recent announcement of the discovery of traces of naturally occurring superheavy elements has been greeted with considerable skepticism, with many scientists calling the evidence extremely weak. Just-completed experiments could help clarify matters.

6:00 P.M. Hospitality Suite Open

FRIDAY,
NOVEMBER 19

8:30 A.M.
to
12:30 P.M.

GENE THERAPY

CARL R. MERRIL, M.D., *Research Scientist, Laboratory of General and Comparative Biochemistry, National Institute of Mental Health, Bethesda*

Bacterial genes transplanted via viral "surgeons" have cured genetic disorders in mammalian cells. Human trials may not be too far down the road.

THE NEW INTERFERON

SAMUEL BARON, M.D., *Chairman and Professor, Department of Microbiology, The University of Texas Medical Branch, Galveston*

Prospects look good for the imminent application of interferon to the control of rabies, respiratory virus infection, certain eye infections, hepatitis and viral encephalitis. Another form of interferon, an inhibitor of the immune response, was recently discovered. As such, it may prove vitally useful in heading off transplant rejection.

ON GETTING 'HOOKED'

RICHARD L. SOLOMON, Ph.D., *James M. Skinner Professor of Science, Department of Psychology, University of Pennsylvania, Philadelphia*

Compulsive gambling, smoking, excessive drinking and drug abuse. All are forms of addiction. Recent studies have led to a new theory to explain how these habits take root—as well as many behavioral phenomena associated with love and social attachment.

12:30 P.M. ADJOURNMENT

CASW

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