

In This Issue



A New President

On the cover—Marvin L. Goldberger, Joseph Henry Professor of Physics at Princeton University. On July 1 he will become President of Caltech. On page 11, an introduction to the new president and his wife. Though they came to the campus to meet the faculty at a reception on May 8, they will not take up permanent residence in the President's house until July 1. Dr. Goldberger's formal inauguration takes place on October 27.

Sherlock Fowler

Playing detective is the name of the game in scientific research, and William A. Fowler, Institute Professor of Physics, is a real pro at it. He is also effective at describing for the layman what's going on. So when he recently gave a Watson Lecture on the discrepancy between theory about and observation of solar neutrinos, we had the talk transcribed. With minor editing, it appears on page 4 as "The Case of the Missing Solar Neutrinos."

Neutrinos have not been the only subjects of Fowler's investigations in the course of a distinguished career. He has done research on nuclear forces and reaction rates, nuclear spectroscopy, the structure of light nuclei, thermonuclear sources of stellar energy, the synthesis of chemical elements in stars, and general relativistic effects in quasar and pulsar models.

All this started professionally when Fowler received his PhD from Caltech in 1936. He joined the faculty that same year and became Institute Professor in 1970. Most recently the Royal Astronomical Society honored Fowler with its prestigious Eddington Medal. He has also received the Vetlesen Prize from Columbia University, the Tom W. Bonner Prize of the American Physical Society, the Medal for Merit from President Truman, and the National Medal of Science from President Ford. He is a member of the National Academy of Sciences, and in 1976 he served as president of the American Physical Society.



Fowler

Prescription for the Future

David A. Hamburg, MD, is a psychiatrist, whose main research interests are in coping and adaptation; behavioral,



Hamburg

endocrine, and genetic aspects of stress; and the biological basis and development of aggressive behavior. He is currently president of the National Academy of Sciences' Institute of Medicine. He is also Reed-Hodgson Professor of Human Biology and professor of psychiatry of the Stanford University School of Medicine, a position he has held since 1972. For 11 years before that he was chairman of the department of psychiatry, coming to Stanford's Medical School from the National Institutes of Health where he was chief of the adult psychiatry branch. And he spent the year 1974-75 at Caltech as a Sherman Fairchild Distinguished Scholar.

When The Next Eighty Years conference was held at Caltech last year, the speaker for the dinner meeting was Hamburg. He took the opportunity to take a wide-ranging look at the medical possibilities and problems ahead, particularly in the light of what has been accomplished in the developed countries in the last 100 years or so. "Health in the Decades Ahead" on page 14 was adapted from that speech by Hamburg and Sarah Spaght Brown, MPH, who is special assistant to the president and director of the Division of Sciences Policy of the Institute of Medicine.

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