

with his effort to keep a \$100-billion limit on the budget, a lid which he said last week may have to be lifted.

With a 2-to-1 Democratic majority in the House, President Johnson will be expected to surpass his legislative feats of the past year. It should be remembered, however, that his majority is not necessarily a 2-to-1 liberal majority. At least two unknowns are likely to be quite important. The first of these will be the conduct of the reduced Republican minority, which has leadership and policy problems of its own to settle. The second question mark hangs over the swollen ranks of the Democratic majority. It is one of the perverse facts of congressional history that a big majority is sometimes more awkward to manage than a small one. President Roosevelt learned this after his landslide victory of 1936, and the Senate Democrats, after their tribe increased sharply in the election of 1958, failed to find the unity which would have given them power proportionate to their numbers.

Seasoned observers note that many of the incoming congressmen may well be "one-term wonders," and that they know it. Under these circumstances the scope for absenteeism, back-biting, factionalism, and sheer eccentricity is greater than when the House is more narrowly divided. Errant behavior on a significant scale may very well not materialize, but the shape of the 89th Congress will be much clearer after the matter of the rules is settled, at the beginning of the session.—JOHN WALSH

### **Krebiozen: Government Indicts Sponsors of Alleged Cancer Drug; Ivy, Durovic, among Those Named**

The federal government has finally made its long-promised move against the sponsors of the alleged anticancer drug, Krebiozen. Late last month a federal grand jury returned an indictment against Andrew C. Ivy, former vice-president of the University of Illinois and one of the country's most prominent medical scholars and educators; Stevan Durovic, the Yugoslav refugee who discovered the drug; attorney Marko Durovic, his brother; and William F. P. Phillips, a Chicago general practitioner. Named with the four individuals was the Krebiozen Research Foundation, the organization which dispensed Krebiozen and was supposed to be responsible for scientific investiga-

tion of the drug. The indictment contained 49 charges, including one count of conspiracy, five counts of submitting false information to the government, 38 counts of violating the Food, Drug, and Cosmetic Act with intent to defraud, and five counts of mail fraud.

The following charges are among the grand jury's specific allegations.

1) In 1961 Durovic wrote to the National Cancer Institute concerning the cost of supplying Krebiozen for a government-sponsored test, saying that he would be able to produce up to 15 grams of Krebiozen for \$170,000 per gram (a single gram being equal to 100,000 doses). In fact, the grand jury charges, Krebiozen was "creatine monohydrate, a common substance which could be purchased at approximately 30 cents per gram." Even if Krebiozen could be produced by the alleged method, the indictment states, it would cost only about \$8000 per gram.

2) Krebiozen was falsely labeled as having been extracted from the blood of horses, and shipments of it contained misleading claims that the drug was the object of scientific study when in fact it was being sold commercially. Documenting this assertion, the grand jury claims that Krebiozen was once shipped for treatment of a patient reported to Ivy and Durovic as having had both lungs removed, a condition which would be immediately fatal, and that on two other occasions it had been sent to patients who reportedly had had both kidneys removed, which would also be fatal. As further evidence that the drug "was not intended solely for investigational use by experts," the indictment lists several instances in which, it claims, orders were sent directly to lay individuals.

3) In several instances, it is alleged, the defendants submitted false reports to the Food and Drug Administration regarding the results of their treatment of patients with Krebiozen. The indictment charges that a report submitted to FDA by Ivy and Durovic in 1963 about a patient, Leonard Taietti, contained the notation: "June, 1961: The patient has been well and free of complaints now for over nine years since the start of Krebiozen." In fact, according to the indictment, Taietti died of cancer in 1955. The defendants are also alleged to have submitted a report about another patient, Mrs. Helen Best, reading: "August, 1953: This patient contracted a virus pneumonia and died in August. Autopsy was refused." The

grand jury charges that the defendants knew that Mrs. Best died of cancer in 1954, that an autopsy was performed, and that her death certificate was signed by defendant Phillips, who had a copy of the autopsy report. The jury also charges that the defendants stated that Mrs. Best had received no radiation therapy, when in fact she "had been subjected to extensive radiation therapy upon orders of the defendant, William F. P. Phillips."

Despite the gravity of these and related charges, the Krebiozen forces do not appear to be disheartened. While it would be wrong to say that they actually welcome the trial, the defendants appear to be relieved that the charges that have been discussed *sub rosa* for such a long time have finally been brought into the open, and they believe that the trial may give them an opportunity to make an effective presentation of their case. "You can't settle scientific controversies with a big stick," Ivy said in a telephone interview last week, "you can only settle them by a cooperative scientific test. That is still what we are after."

The trial has been set for early January. The maximum penalty could be fines totaling several hundred thousand dollars, and extended prison sentences.

—ELINOR LANGER

### **Announcements**

The Herbert H. Lehman Fund has been established by the Institute of Physical Medicine and Rehabilitation at New York University Medical Center. Financed by a grant of \$250,000 from the Edith and Herbert Lehman Foundation, it will be used to establish an endowment fund enabling foreign physicians to receive postgraduate training in physical medicine and rehabilitation at the N.Y.U. Medical Center. The income from the grant will establish two annual **Herbert H. Lehman memorial fellowships**, the first of which is to be awarded early next year. Further information is available from the Office of Public Information at the Institute, New York 10016.

The **Boston Museum of Science** has announced the establishment of the **Bradford Washburn Award**. It will be given annually "to an individual, anywhere in the world, who has made an outstanding contribution toward public understanding of science, apprecia-

tion of its fascination, and the vital role it plays in our lives." The award will consist of a gold medal, carrying with it a \$5000 honorarium. Further information is available from Erskine N. White, Museum of Science, Science Park, Boston 14, Massachusetts.

### Meeting Notes

The 1965 international symposium on **microchemical techniques** will be held next 22–27 August at Pennsylvania State University, University Park. It is being organized by the American Microchemical Society, sponsored by the International Union of Pure and Applied Chemistry. A call has been issued for research papers directed toward small-scale operations, techniques, and methods in all phases of chemistry. Abstracts are required and should not exceed 300 words. Deadline for receipt of abstract and title: *31 January*. (H. Francis, Jr., Pennsalt Chemicals Corp., 900 First Avenue, King of Prussia, Pennsylvania)

A workshop in **teratology** will be held at the University of California, Berkeley 25–30 January. It will be sponsored by the National Academy of Sciences' Drug Research Board, the Teratology Society, and the University of California, under a grant from the Pharmaceutical Manufacturers Association. Lecture and laboratory sessions are scheduled to cover the fundamental considerations in research on problems of congenital disorders. (C. W. Asling, Department of Anatomy, University of California, Berkeley 94720)

A 2-day Symposium on **Noise in Industry** is scheduled 4–5 February in Cincinnati, Ohio. Topics to be covered are the various aspects of the industrial health problem. Tuition for the symposium will be \$35. (A. Badgley, Secretary, Institute of Industrial Health, Kettering Laboratory, Eden and Bethesda Avenues, Cincinnati, Ohio 45219)

San Francisco will be the site of a symposium on the role of **skin bacteria** in infection, 18–20 February. The discussion topics will include investigations in microbiology, public health, infectious diseases, dermatology, and surgery. (Administrative Secretary, Division of Dermatology, University of California, San Francisco Medical Center, San Francisco 94122)

Papers are being solicited for the sixth biennial **gas dynamics** symposium, scheduled 25–27 August, at Evanston, Illinois. It will be cosponsored by Northwestern University and the American Institute of Aeronautics and Astronautics. The symposium will deal with the status of and areas for future research in plasma dynamics, with emphasis on the astrophysical implications of the studies. Papers should focus on both experimental and analytical topics in the area, and deal especially with comparisons of astrophysical models with laboratory experiments, cosmic electrodynamics, vehicle design, and energy considerations. Deadline for 500- to 1000-word abstracts: *13 January*. (A. B. Cambel, Gas Dynamics Symposium, Northwestern University, Evanston, Illinois 60201)

A call for papers has been issued for a symposium on **optimization techniques**, scheduled 21–23 April at Pittsburgh. It will be cosponsored by the Institute of Electrical and Electronics Engineers and the Optical Society of America. Theme sessions will include engineering design by mathematical programming, comparison of various optimization techniques, methods of handling nonlinearities and constraints, optimization of discrete systems, and performance optimization of dynamic systems. Deadline for abstracts: *15 January*. (A. Lavi, Department of Electrical Engineering, Carnegie Institute of Technology, Pittsburgh, Pennsylvania)

The **Society of Motion Picture and Television Engineers** has issued a call for papers for its 97th semiannual conference and exhibit. SMPTE's meeting is scheduled 28 March to 2 April, in Los Angeles, California. Topics to be covered include: applications in science and technology; aerospace cinematography; instrumentation and high-speed photography; laboratory practices; motion pictures and television abroad, in education, and in medicine; new materials and processes; photographic science and engineering; rapid-access photography; and television developments. Abstracts must be accompanied by completed SMPTE author forms. Deadline for abstracts: *11 January*. Deadline for papers: *8 February*. (R. J. Goldberg, Technicolor Corporation, Research and Development Division, 2800 West Olive Avenue, Burbank, California 91505)

Papers are being solicited for a **Guidance and Control** Conference scheduled 16–18 August in Minneapolis, Minnesota. It will be sponsored by the Guidance and Control Committee of the American Institute of Aeronautics and Astronautics and the Institute of Navigation. Security sponsorship for classification up to "secret" has been requested from Air Force Systems Command; papers in each area may be unclassified or classified up to secret. The conference will cover the areas of navigation and guidance systems—military and civilian aircraft applications; low-cost navigation and guidance systems—drones, missiles, and light aircraft; modern control techniques including outer loop modes—flight proven and advanced concepts; pure fluid control systems; standardized space guidance systems; review of Apollo and LEM guidance systems; test pad stability systems; blind landing systems; terrain following and avoidance systems; and reentry guidance systems. Deadline for 500- to 1000-word abstracts: *5 January*. (David L. Mellen, Mail Station 677, Military Products Group, Aeronautical Division, Honeywell Inc., Minneapolis, Minnesota 55440)

Papers are being solicited for a **structural dynamics and aeroelasticity** conference scheduled 30 August to 1 September in Boston. It will be sponsored by the American Institute of Aeronautics and Astronautics. General topics to be included are hydroelastic and aeroelastic stability; dynamics of rotating systems; dynamics of spacecraft and space stations; dynamic stability of shells and plates; problems in related areas—biodynamics, meteorite impact, adaptive control systems, design criteria, dynamic testing, and thermoelastic analyses; and a review of applied problems in dynamics. Deadline for 500- to 1000-word abstracts in triplicate: *13 January*. (F. C. Hung, Space and Information Systems Division, North American Aviation, Inc., Downey, California)

Papers are invited for the sixth international conference on **medical electronics and biomedical engineering** to be held 22–27 August in Tokyo. It will be sponsored by the International Federation for Medical Electronics and Biological Engineering. The program will include the following topics: medical and biological applications of instrumentation, television, isotopes, ultrasonic and optical techniques, telemeter-

ing, computers, and radiation; and also mathematical analysis, bionics, artificial organs, human engineering, simulation, biological control systems, ergonomics, and hospital automation. Summaries must be submitted in English, and in triplicate. Deadline for submission: 15 January. (K. Suhara, c/o Japan Society of Medical Electronics and Biological Engineering, Old Toden Bldg., 1-1 Shiba-tamura-cho, Minato-ku, Tokyo, Japan)

## Courses

Control Technology, Inc., will present "Computer Applications in Science and Engineering—An Intensive Course for Management," 14-18 December, in Anaheim, California. The course is designed to provide a basic knowledge of computers and their most effective use as engineering and scientific research tools. It will cover the entire spectrum of available computers, and will emphasize the economic aspects of the use of computers. (Control Technology, Inc., 1232 Belmont Avenue, Long Beach, California)

## Scientists in the News

**G. Arthur Cooper**, head curator, Department of Geology, U.S. National Museum, Washington, D.C. has been named the 1965 recipient of the Paleontological Society Medal.

**Lyman Benson**, head of the botany department at Pomona College, Claremont, California, is on sabbatical leave for the 1964-65 academic year. He will direct research into cactus in the United States and Canada under a grant from the National Science Foundation.

A 2-year arid lands project at the University of Arizona, concerned with major desert areas of the world, "An Inventory of Geographical Research on Desert Environments," has been initiated under the direction of **William G. McGinnies**, former director of the University's Laboratory of Tree-Ring Research. The project, supported by the Department of the Army, will study 22 deserts located in Asia, Africa, North and South America, and Australia, covering a "total of nearly 5 million square miles." Arid lands work involved is in the fields of botany,

climatology, engineering, geology, geography, hydrology, meteorology, oceanography, soils, and zoology.

**Bryant Bannister**, associate professor of dendrochronology at the university, has been named to succeed McGinnies as director of the Laboratory of Tree-Ring Research.

**William H. Hatheway** has become executive director of the Organization for Tropical Studies, at the University of Costa Rica. He had been associate statistician of the Rockefeller Foundation, and professor of botany and experimental statistics at the Colegio de Postgraduados, Escuela Nacional de Agricultura in Mexico City, Mexico.

**Reidar F. Sognaes**, dean of dentistry and professor of oral biology and anatomy at the Center for the Health Sciences, University of California, Los Angeles, has been appointed to a 4-year term on the National Advisory Dental Research Council, National Institute of Dental Research.

**Herbert L. Ratcliffe**, director of the Penrose Research Laboratory, Zoological Society of Philadelphia, has been awarded the Gold Medal of the Royal Zoological Society of Antwerp, in recognition of his work on "nutritional requirements of captive wild animals."

**Maurice R. Nance**, medical director of Smith Kline & French Laboratories, has been appointed to the Panel on Handling of Toxicological Information of the President's Science Advisory Committee.

**Askell Löve**, former research professor at the University of Montreal, has been appointed associate professor of biology at the University of Colorado.

**John N. Howard** has been named to head the new office of chief scientist at the Air Force Cambridge Research Laboratories, Bedford, Massachusetts. He was formerly senior scientist in AFRL's optical physics laboratory.

## Recent Deaths

**Waldo Abbot**, 76; professor emeritus at the University of Michigan, and Michigan's first director of broadcasting; 14 November.

**George W. Downs**, 53; associate in engineering at the California Institute of Technology, and one of the founders and directors of the Applied Physics Corporation; 8 November.

**Murdock Equen**, 72; founder and chief of staff at the Ponce De Leon Eye, Ear, Nose and Throat Infirmary, Atlanta, Georgia, and designer of the Equen magnet, allowing the retrieval of foreign objects from the windpipe, lungs, and stomach without surgical incision; 11 November.

Col. **John A. Isherwood**, 62; head of the Radiology Clinic at the Santa Rosa Medical Center, San Antonio, Texas, former chief of the Radiological Service at Walter Reed General Hospital, and radiology consultant to the Army Surgeon General; 14 November.

**Marion A. Johnson**, 63; dean of the Graduate School at Rutgers University; 9 November.

**Russell Lord**, 69; former editor of *The Land*, and former consultant with the Agriculture Department and the Tennessee Valley Authority; 12 November.

**Edward H. Martin**, 48; editor and publisher of *Ocean Science News*; 11 November.

**Peter F. Salisbury**, 51; founder of the American Society for Artificial Internal Organs, and early developer of heart-lung machines and artificial kidney machines; 5 November.

**Leon P. Smith**, 65; former dean of the University of Maryland's College of Arts and Sciences; 10 November.

Sir **Henry Souttar**, 88; inventor of the eyeless needle for stitching wounds, and one of the first surgeons to operate successfully on heart valves; 12 November.

**George C. Williams**, 39; meteorologist with the U.S. Weather Bureau, and assigned to liaison with the Bureau and the Great Lakes-Illinois River Basin project of the U.S. Public Health Service; 14 November.

*Erratum:* In the announcement of the appointment of Gail L. Miller to the faculty of the University of Michigan (30 Oct., p. 682), Dr. Miller was erroneously described as a Nobel laureate.

*Erratum:* Misplaced punctuation changed the meaning of N. G. Neare's lyrical tribute to snails in his letter in the issue of 27 November. The correct version:

Let's not bewail the lowly snail  
At several ergs retrorse,  
But rather hail that for his scale  
He matches man or horse  
If each is first complete immersed.  
Test Jobin, dunked, or Ippen,  
One-third his weight athwart his pate;  
Assuredly he'd be slippin'!