

SOCIETY OF TOXICOLOGY, INC.
1985-1986



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Swedish Society of Toxicology

Torbjorn Malmfors

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Daniel Acosta

***World Federation of
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Toxicology Centers and
Poison Control Centers***

Frederick W. Gebme

TWENTY-FIFTH YEAR OF THE SOCIETY

1985-1986

The twenty-fifth annual meeting of the Society of Toxicology was held at the Hyatt Regency Hotel in New Orleans, LA, on March 3-7, 1986. The President, Dr. Emil Pfitzer, called the business meeting to order at 4:00 p.m. on Wednesday, March 5, and announced that over 3,000 persons had registered for the meeting. He expressed his appreciation for having had the opportunity to serve the Society as its President in its Silver Anniversary year, and thanked all those who had participated in planning the scientific and social activities.

As a first order of business, the President asked the "Founders" to stand and be recognized. Those present were: Drs. Frederick Coulston, Victor A. Drill, William B. Deichmann, Harold C. Hodge, Paul S. Larson and C. Boyd Shaffer. Harry W. Hays was absent. Kenneth P. DuBois and Arnold J. Lehman are deceased. The President then asked the "Charter" members to stand and be recognized. He noted that of the original 183 charter members (see Appendix IV), 121 were still listed in the directory as either active or retired.

The membership, Dr. Pfitzer said, was growing steadily each year and that in 1985-86, 292 new members had been admitted to the Society and those who were present would be wearing green ribbons, and asked the older members to welcome them to the Society.

The Regional Chapters and Specialty Sections have added a new dimension to the Society of Toxicology and Dr. Pfitzer asked the officers to stand and be recognized.

A very important segment of the Society is made up of members from outside the United States with 26 nations being represented. The President asked those in attendance to stand. Dr. Torbjorn Malmfors, representing the Swedish Society of Toxicology, who had conducted the highly successful IUTOX summer school session, congratulated the Society on its 25th anniversary and said it has been a great inspiration to the Swedish Society and other societies throughout Europe and Asia.

Dr. Pfitzer read a letter from William E. Hays, Counsel to the Society of Toxicology from 1961 to 1971, congratulating the Society on its "remarkable growth and its great contribution to the field of toxicology," and expressed his pleasure in having served the Society in framing its constitution and bylaws. Neither William E. Hays, nor his son, William C. Hays, the Society's present Counsel, could be present.

The President asked the members to stand for a moment of silence in memory of those who had died during the year, and once again, to remember the two deceased Founders, Arnold J. Lehman and Kenneth P. DuBois.

The Constitution and By-laws provide for the election by the Council of no more than two honorary members per year who are not members of the Society but are recognized for outstanding and sustained achievement in toxicology. At its first annual meeting, the Society had conferred this honor on three distinguished scientists: Dr. Torald H. Sollmann, Dr. Felix Wolfgang von Gettingen and Dr. Eugene Maximillian Karl Geiling. Since then four others have

been added to the list: Dr. Ethel Browing, Dr. R. Tecwyn Williams, Dr. Norton Nelson, and Dr. George Hitchings. The Council this year nominated and approved two honorary members, Dr. Bernard B. Brodie retired from the National Institutes of Health, with Dr. Allan H. Conney reading the citation, and Dr. Herbert Remmer, Institute of Toxicology, Tubingen, Federal Republic of Germany, with Dr. Marion Anders reading the citation. President Pfitzer presented plaques to each of these new honorary members.

A special award was given to the National Library of Medicine in recognition of its service to toxicology. The citation read, "On the occasion of the sesquicentennial of the National Library of Medicine, the Society of Toxicology acknowledges the sustained high quality of the specialized services provided for the past two decades by the library's toxicology information program to the biomedical services and to toxicology in particular."

The Secretary, Dr. I. Glenn Sipes, announced the newly elected officers and committee members and said Council was particularly pleased with the membership's response in voting. Effective May 1, 1986, the Vice President-Elect is Dr. James E. Gibson and new Councilors will be Drs. Michael A. Gallo and Christopher Wilkinson. Elected to the Education Committee were Drs. Donald R. Buhler and Mary Jo Vodcicnik, and to the Membership Committee, Drs. Rogene Henderson and William R. Hewitt.

The representative on the nominating committee for the Regional Chapters was Dr. Sheldon Murphy; for the Specialty Sections, Dr. Meryl Karol; for the past presidents, Dr. Robert Dixon, and for the membership-at-large, Dr. Ian Munro. They were all requested to stand and be recognized. The new procedure for nominating candidates for officers and elected committees appeared to work very well and brought more Society participation into the election process.

*Presentation of
Honorary Membership in the Society of Toxicology
to Dr. Bernard B. Brodie
(Society of Toxicology Meeting, New Orleans, LA,
March 5, 1986)*

I am delighted and greatly honored to have been asked by our Society's President, Dr. Emil Pfitzer, to make some brief comments about Dr. Bernard B. Brodie, who is being awarded an honorary membership in the Society of Toxicology. Dr. Brodie was born in Liverpool, England, and he received his B.S. degree at McGill University and his Ph.D. degree at New York University with a major in chemistry. He spent most of his research career as head of the Laboratory of Chemical Pharmacology at the National Heart Institute in Bethesda. Dr. Brodie, with his fertile and questioning mind, has made so very many seminal contributions to our understanding of the function and regulation of neurotransmitters and to our understanding of drug metabolism and the multiple factors that influence drug metabolism that he is considered by many of us to be the father of modern biochemical pharmacology. In addition to his research contributions, Dr. Brodie has trained large numbers of students from all over the world, and many of today's leaders in pharmacology, toxicology and in the related biomedical sciences received their training from Dr. Brodie. I am particularly pleased to be here today because of my very, very great esteem for Dr. Brodie.

Probably more than any other person, Dr. Brodie has moved pharmacology-toxicology from a physiologically-oriented science to a science based on biochemical measurements. Early in his career, Dr. Brodie recognized the need to develop sensitive and specific analytical methods for the quantitation of drugs in biological fluids and tissues. His pioneering research in this area led to the formulation of general principles for the development of many specific, sensitive and simple methods for rapidly measuring drugs and their metabolites in blood and tissues. His studies with fluorescent drugs provided the impetus which led to the development of the Aminco-Bowman Spectrophotofluorometer, an instrument that made possible a host of additional studies with neurotransmitters, as well as additional studies with a variety of drugs. The development by Dr. Brodie of simple analytical methods for quantifying drugs in biological samples stimulated much additional research on drug disposition, not only in his laboratory but throughout the world. As part of a team at the Goldwater Hospital in New York during the Second World War, Dr. Brodie studied the relationship between blood levels of antimalarial drugs and their therapeutic effect in the management of malaria. This research resulted in the control of malaria for the Allied troops in the Pacific and also resulted in an appreciation of the importance of drug metabolism studies during the development and use of drugs.

With the development of specific and sensitive methods for the quantitative assay of drugs and their metabolites, Dr. Brodie went on to provide us with fundamental principles for the absorption of drugs from the gastrointestinal tract and for the passage of drugs across various membrane barriers. In these studies, Dr. Brodie demonstrated that the rate of absorption of most acidic and basic drugs depended mainly on passive diffusion and was greatly influenced by the lipid solubility of the unionized form of the drug, on its pK_a and on the pH of the medium.

Dr. Brodie and his colleagues discovered that enzymes in liver microsomes catalyze the oxidative metabolism of a wide variety of drugs, and they found that NADPH and oxygen were required for the activity of these enzymes. Dr. Brodie and his colleagues went on to discover that many factors such as drug administration (i.e., SKF 525A), age, sex, species and strain can influence the activity of these enzymes and that the level of drug-metabolizing enzymes in the liver has a profound effect on the duration and intensity of drug action.

Dr. Brodie pioneered in research indicating that drugs can exert toxic effects by being metabolized to reactive intermediates and that the metabolism and toxicity of chemicals can be altered by treatment of animals with modulators of microsomal metabolism or by modulators of glutathione levels. The increased awareness of the role of biotransformations for drug-induced tissue injury has led to the development of safer drugs. Dr. Brodie's pioneering research on factors influencing xenobiotic metabolism provided us with a better understanding of the difficult problem of the extrapolation of data on drug action from animals to man, and his research also pointed out large person-to-person differences in the metabolism and action of drugs in humans-a problem that is very important to physicians treating patients with drugs and to environmental biologists concerned with the toxicity of environmental chemicals in large populations.

Steve, the members of our Society very much appreciate your profound contributions to toxicology. It is a very great personal pleasure for me to be here today to congratulate you on the occasion of your receiving an honorary membership in the Society of Toxicology and to say for all of us-congratulations and thank you!!

Dr. A. H. Conney

***Biography of Prof. Dr. Herbert Remmer, recipient of
Honorary Membership in SOT, New Orleans, LA,
March 5, 1986:***

Herbert Remmer was born in Berlin, Germany, and studied medicine in Berlin and Jena. He received the degree “Dr. med.” in 1945. From 1946 to 1950, Prof. Remmer was Research Assistant and Lecturer at the Department of Pharmacology at the newly established Free University of Berlin and he completed his “habilitation” to Docent in Pharmacology in 1950. In 1958, he was promoted to Associate Professor of Pharmacology. During Prof. Remmer’s years in Berlin, he began studies on drug and chemical metabolism and, shortly thereafter, demonstrated the phenomenon of enzyme induction by barbiturates; these studies have had a significant impact on toxicology and on basic and clinical pharmacology. In 1964, Prof. Herbert Remmer was named Professor and Head of the Institute of Toxicology in Tübingen, West Germany. At Tübingen, Prof. Remmer continued his important studies on enzyme induction, on the role of cytochrome P-450, and on barbiturate tolerance and, as always, demonstrated the relevance of his experimental findings to clinical medicine. Later studies demonstrated, for example, the alkylation of tissue constituents by drug metabolites, the role of lipid peroxidation in carbon tetrachloride-induced hepatotoxicity, the role of lipid peroxidation in alcohol-induced liver disease, the use of alkane expiration to quantify lipid peroxidation *in vivo*, and the *in vivo* formation of nitrosamines. His current studies deal with the hazards of passive smoke inhalation and alcoholic liver disease.

In addition to his substantial research contributions, Prof. Remmer has trained many toxicologists, who now occupy leadership positions around the world. Moreover, under the direction of Prof. Remmer, the Institute of Toxicology in Tübingen attracted many visiting scientists and professors.

Finally, it is Prof. Remmer’s ability to place toxicology in a global perspective that is his most outstanding contribution. He is certainly the philosophical leader of the field of toxicology, and his contemporary reviews and lectures are most stimulating.

Prof. Remmer is the recipient of many awards including *Doctor honoris causa* from the Medical Faculty of the University of Turku in 1980, the “LucieBolte-Preis” in 1982 for his studies on liver disease and the “Schmiedeberg-Plakette,” the highest award of the German Pharmacological Society, in 1985.

Hence, the SOT is proud to confer Honorary Membership on Prof. Dr. Herbert Remmer.

Dr. M. W. Anders

The Treasurer, Dr. Gary Lage, presented a fairly detailed report on the financial status of the Society and said the total assets were over \$700,000. The excellent attendance at the meeting in San Diego and again this year, and the income from the continuing education courses, have added substantially to the total reserves. He said the move of the offices from Akron, Ohio to Washington, D.C. was accomplished with little impact on the Society's finances and that the computer facilities now available should prove to be a great benefit in determining monies available for the various programs. Dr. Lage said that due to the strong financial position, the Council was able to provide a substantial increase in travel grants for graduate students, and the additional corporate support of \$20,000 made it possible to expand the social programs for the 25th anniversary meeting.

The Finance Committee recommended that stipends for some of the awards be increased to bring them in line with other Society awards and that a committee be appointed to investigate the purchase of property in the District of Columbia area as an investment and a potential future building for SOT headquarters.

President Pfitzer asked committee members to stand as he read their names. By means of slides, Dr. Pfitzer presented the highlights of the committees' activities. This was a marked departure from past procedure of having the chairperson of each committee present a resume of the activities of the committee.

At the conclusion of the business meeting, the President turned over the gavel to the incoming President, Dr. John Doull, and in turn, Dr. Doull presented Dr. Pfitzer with a replica of the official gavel. This custom has been observed every year since its inauguration at the second annual meeting in Cincinnati, Ohio in 1962.

The Program Committee did an outstanding job in sorting and arranging 1,277 abstracts for presentation at the scientific meetings. These were divided into 15 platform sessions with 190 papers and 34 poster sessions with 1,087 posters. This was the largest number of abstracts in the history of SOT. In 1963, at the first scientific meeting, there was a total of 70 platform papers. The program in 1963 measured 8 1/2 x 3 3/4," and consisted of six pages. This year's program was 11 1/2 x 8 1/2," with 84 pages.

The meeting began on Monday, March 3, with six continuing education courses. There were three concurrent sessions in the morning and three in the afternoon. The first was on "Quantitative Methodology for Cancer Risk Assessment," and was chaired by Dr. R. L. Sielken, Jr., Department of Statistics, Texas A&M University, College Station, TX. The lecture covered the experimental and epidemiological evidence in attempting to quantify the human cancer risk from exposure to chemicals. It included such topics as time to response, low-dose extrapolation, short-term tests, and value judgments.

The second course on the "Developmental Toxicology for the General Toxicologist," was chaired by Dr. Granville A. Nolen of the Procter & Gamble Co., Cincinnati, OH. The speakers were Drs. Richard M. Hoar, Findley Research, Inc.; James L. Schardein, International Research and Development Corp.; and E. Marshall Johnson, Jefferson Medical College. They discussed the principles of teratological studies and how they apply to design, construction, and interpretation.

The third course dealt with "TOXNET Systems Files." The speakers were Drs. C. B. Haberman and J. C. Gordon of the National Library of Medicine. They described TOXNET software for the Hazardous Substances Data Bank, which contains toxicological data on approximately 4,000 chemicals known to be toxic or potentially hazardous.

Three concurrent sessions continued in the afternoon. The first was on "Hematology of Laboratory Animals" and was chaired by Dr. Farrel R. Robinson, Purdue University, who discussed the morphology and biochemistry of normal and abnormal red blood cells, and Dr. N. B. DeNicola, Purdue University, who discussed the basic biochemistry, morphology, and kinetics of blood leucocytes.

The second session was on "Environmental Toxicology" and was chaired by Dr. Gordon V. Loewengart of Allied Corp., Morristown, NJ. The lecture provided an overview of the effects of the environment on chemicals and why both need to be considered in making an environmental hazard assessment. The speakers were Drs. K. L. Dickson, J. A. Fava, H. Pritchard and D. M. DiToro.

The third session on the "Use of Innovative Methodology in Toxicology," was chaired by Dr. Donald J. Reed, Oregon State University. The participants, Drs. Lance R. PohI, National Heart, Lung and Blood Institute, National Institutes of Health; I. C. P. Smith, National Research Council, Ottawa, Canada; and M. L. Deinzer, Oregon State University; discussed immunochemical techniques, nuclear magnetic resonance, and various techniques in mass spectrometry and how they apply to the study of mechanisms of toxicity of chemicals.

The enthusiasm for these courses has been very rewarding in terms of the Society meeting the needs of its members and they continue to be a very important part of the annual meeting. Several of the courses were sold out weeks in advance of the meeting while others were nearing full capacity.

In addition to the Platform Sessions running concurrently from Tuesday to Friday noon, there were 13 symposia, an increase of five over the previous year. This was due to the very active participation of the Specialty Sections and the increasing awareness by the Council of major problems that can best be dealt with in this manner.

Two symposia were scheduled for Tuesday morning. The first, "The Ovary as a Target Organ for Toxicity," was sponsored by the SOT Reproductive and Developmental Toxicology Section. It was co-chaired by Drs. Bernard Schwetz of the National Institute for Environmental Health Sciences and Granville A. Nolen of Procter & Gamble Co. The other was on "*In vitro* Methods for Assessment of Neurotoxicology," and was sponsored by the SOT Neurotoxicology Section. It was chaired by Dr. Alan M. Goldberg of the Johns Hopkins School of Public Health.

On Tuesday afternoon, March 4, a third symposium was on "Complex Mixtures and Multiple Agent Interactions." This was co-chaired by Drs. Joseph Borzelleca and Richard A. Carchman of the Medical College of Virginia. Honorary chairman was Dr. William B. Deichmann, a Founder of SOT. A fourth symposium, sponsored by the SOT Committee on Public Communications, was on "Toxicologists and the News Media." It was chaired by Dr. James S. Woods of Battelle Seattle Research Center with Dr. C. Boyd Shaffer, a Founder of SOT, as

honorary chairman. This attracted a great deal of attention because of the adverse publicity toxicology has gotten over the past ten years.

On Wednesday morning, March 5, the Program Committee arranged for a 25th anniversary symposium on "Scientific Accomplishments and the Future." This was chaired by Dr. Leon Golberg with Dr. Herbert Remmer, Institute of Toxicology, Tübingen, Federal Republic of Germany, as honorary chairman. The participants in the symposium were Drs. Marion W. Anders, Peter S. Spencer, P. Grasso and Leon Golberg.

On Wednesday afternoon, a fifth symposium on "Current Understanding of Metal-Membrane Interactions" was sponsored by the SOT Metals Specialty Section. The co-chairmen were Drs. Bruce J. Kelman, Battelle Laboratories, Richland, WA, and Ernest D. Foulkes, University of Cincinnati College of Medicine. Honorary chairman was Dr. Paul S. Larson, a Founder of the Society.

The Education Committee again sponsored a "New Investigators' Colloquium," which was chaired by Dr. Anne Blacker, Rhone-Poulenc, Monmouth Junction, NJ. This program began in 1983 in Las Vegas and was called "Student/Post Doctoral Colloquium," but was changed to the present title at the Atlanta meeting in order to include a wider group of participants.

Two symposia were scheduled for Thursday morning, March 6. One was on "Mechanisms of Cell Injury" and was sponsored jointly by the Society of Toxicology and the European Society of Toxicology. In the absence of Dr. Wilfred N. Aldridge, Medical Research Council, Carshalton, England, Dr. Emil Pfitzer served as chairman. The other was on "Basic Concepts of Immunotoxicology" and was sponsored by the SOT Immunotoxicology Section. Co-chairmen were Drs. Donald E. Gardner, Northrop Corp. and Jack Dean, Research Triangle Park, NC.

On Thursday, March 6, from Noon to 1:00 p.m., Dr. Alan Poland, who received the award in 1981, delivered the "First Burroughs Wellcome Toxicology Scholar Award Lecture." Dr. Tom Miya, who was instrumental in getting the Burroughs Wellcome Fund to establish the award, served as chairman. Although the hour was in competition with lunchtime, the room was filled with those wanting to hear Dr. Poland's progress report.

Two symposia were scheduled for the afternoon. The first was on "Neonatal Toxicology" with Drs. Wayne Galbraith of the Food & Drug Administration and Ira W. Daly, Bio/Dynamics, Inc., East Millstone, NJ, serving as co-chairmen, and Dr. Fred Coulston, an SOT Founder, as honorary chairman. The second was entitled "Frontiers in the Study of Toxic Lung Damage" and was chaired by Dr. Hanspeter R. Witschi of Oak Ridge National Laboratory. Honorary chairman was Dr. Harold C. Hodge, a Founder and first President of SOT.

On Friday morning, March 7, the SOT Mechanisms Specialty Section sponsored the symposium, "Cell to Cell Communication: Its Regulation and Role in Toxic Injury." This was chaired by Drs. Frank Welsch of the Chemical Industry Institute of Toxicology, Research Triangle Park, NC, and James Trosko, Michigan State University. The final symposium was on "NTP: Selected Issues" and co-chairmen were Drs. E. E. McConnell and J. E. Huff of the National Institute of Environmental Health Sciences, Research Triangle Park, NC. The participants, all from NIEHS, discussed various aspects of toxicological studies with particular reference to reproductive effects and carcinogenesis.

In addition to serving as Honorary Chairmen for symposia, Past Presidents also were assigned to serve as Honorary Chairman at one of the Platform Sessions. Those so designated and the year of his presidency is as follows:

Joseph F. Borzelleca	1973-74	Tom S. Miya	1979-80
Robert L. Dixon	1982-83	Sheldon D. Murphy	1974-75
Victor A. Drill	1972-73	Frederick W. Oehme	1984-85
Robert B. Forney	1981-82	Gabriel L. Plaa	1983-84
Seymour L. Friess	1975-76	Robert A. Scala	1976-77
Perry J. Gehring	1980-81	Carrol S. Weil	1968-69
Leon Golberg	1978-79	John A. Zapp	1967-68
Wayland J. Hayes, Jr.	1971-72		

The Membership Committee met on two separate occasions to review the applications for membership. At its meeting in Detroit on August 28, 1985, 74 persons were recommended for active membership, 51 for associate, and 25 for student membership. At its meeting on February 19, 1986, at the headquarters office, the Committee recommended 61 for active, 32 for associate, and 49 for student membership, making a total of 292 new members. Of the 50 states, only four are not represented in the membership of the Society: Alaska, Nevada, Vermont and Wyoming.

The Information Handling Committee (INFOCOM), established in 1982, undertook several major projects that the Council felt were needed to improve the image of toxicology and make the Society more responsive to the needs of its members. The Committee responded as follows:

1. A membership survey was undertaken by means of a questionnaire that was sent to 2,096 members. Fifty-nine percent (1,240) responded. Data on 811 members, or about 65%, were entered into a computer to form a data base that now makes it possible to search and retrieve information electronically. The headquarters office now has on file information on such topics as degrees, specialty data, board certification employment, areas of research interest, foreign language ability, experience in acute and chronic toxicity studies, carcinogenicity, reproduction and toxicokinetics, all of which will be useful in organizing various activities and in meeting emergency situations. It was interesting to note that the areas of research interest were almost equally divided between basic and applied. The survey also revealed that of the 811 selected for processing, 606 had access to a computer and 431 use it regularly; 296 have a modem and 163 use it regularly.
2. Another major project was the automation of the Placement Service. Although it was first used in San Diego in 1985, efforts were made this year to improve the computer processing by designing a Candidate Resume Form that would facilitate electronic storage, search and retrieval. Working with the Placement Service in preparation for the New Orleans meeting, the

INFOCOM provided support on the input of data, purchase or rental of equipment, and searching and retrieval of data on request of people seeking employment. The system worked very well but became overloaded at times because the machine was serving two functions.

3. For the first time an electronic message bulletin board service was available through a contract with TEC Communications, Washington, D.C. The message center was located near the registration area and monitors were placed in high traffic areas of the hotel. A staff of two handled incoming calls, provided message pads, and filed messages for pickup to maintain confidentiality. It worked very well and at last eliminated the many slips of paper scattered throughout the registration area, although it, too, became overloaded when used for Placement Service messages.

4. The Committee proposed an automated registration system for both pre- and on-site registrants with redesign of the registration form, and recommendations for appropriate software/hardware, the SOT headquarters office provided automated registration for the first time at the 1986 meeting.

5. Some 50 boxes of SOT materials were transferred from the Akron office to the new headquarters in Washington, D.C. The Committee recommended that historical records be put on microfiche and all duplicate materials be destroyed.

The Committee, under the leadership of Dr. George Cosmides, has made a very significant contribution during the few years it has been in operation. It has moved the Society into the age of telecommunications technology with the use of microcomputers. It can now be said that the Society has become a leader in this area, due in large measure to the toxicology information program of the National Library of Medicine.

In the July/August 1985 issue of the Newsletter, Dr. Pfitzer announced the selection of the new headquarters office. A Task Force composed of Drs. John Doull (Chairman), Perry Gehring, Robert Scala, Marshall Steinberg and Richard Waritz, had made several on-site visits during the early part of 1985, and talked with a number of people who had expressed an interest in managing the Society. In May 1985, they recommended to Council, the International Management Group in Washington, D.C. as an organization well qualified to meet the needs of the Society. Council approved the recommendation and on July 1, 1985, the headquarters office was transferred from Akron, OH, to 1133 15th Street, N.W., Washington, D.C. 20005. Mrs. Joan Walsh Cassidy, Chairman of the International Management Group, was named Executive Secretary of the Society. The transfer, of course, created some problems but it also brought some important changes and the Group has done an excellent job in preparing for, and carrying out, all of the details involved in a meeting that had over 3,000 registrations for this special occasion.

The Board of Publications was faced with a difficult task when Dr. A. Wallace Hayes submitted his resignation as Editor of *Toxicology and Applied Pharmacology (TAP)* and, Dr. William Carlton resigned as Editor of *Fundamental and Applied Toxicology (FAAT)* effective December 31, 1985. After a careful search to find equally competent editors, the Board recommended, and Council approved, the appointments of Dr. I. Glenn Sipes as Editor of *TAP* and, Dr. Bernard A.

Schwetz as Editor of *FAAT*. Both Drs. Hayes and Carlton have done an outstanding job in maintaining a standard of quality and excellence that will be a challenge for the new editors to maintain.

The Placement Service had an extremely busy year handling employment activities and developing new ventures. Under the leadership of Drs. Richard Parent and Carl Hake, the Committee has made some major revisions that should please the Council and those who have followed this very important activity in SOT for the past 25 years. They have developed an "Outreach Program," aimed primarily at reaching students and academicians in learning of opportunities within the Society through the following means:

- Mailed applications to all universities having a toxicology program and to all student members of SOT.
- Arranged a seminar on "Job Applications, Resource and Interview" for Monday afternoon at the New Orleans meeting.
- Contacted the regional chapters and discovered significant interest in having the Placement Service attend their meetings to explain procedures at the local levels.
- A postal card survey in 1985 showed that of the 267 candidates registered and looking for jobs, 88 responded and 60 found positions. Of the 96 positions registered with the Placement Service, 44 responded and 29 positions were filled.
- Of the 267 candidates registered for the 1985 meeting in San Diego, 189 were preregistered and 78 registered at the meeting.
- A major effort was the computerization of the Placement Service. With the assistance of the INFOCOM, software was developed which, with the aid of two computers, permitted data input and searching at the same time.

Plans for the future are very extensive and, if successful, will make the Service even more efficient and helpful to both employers and those seeking employment. The Placement Service has come a long way since 1962, and the Society is deeply grateful to all those who served to make it an outstanding part of the many activities. Their total income for 1985 was \$16,950. Registration of members, non-members and students prior to the meeting in San Diego was significantly higher than in previous years largely due to the "outreach" program and the penalty of higher registration fees at the time of the meeting.

Two special events were scheduled for Monday through Thursday. The 25th Anniversary Committee has prepared a video display of some of the early history of SOT and the Founders and Past Presidents were asked to respond to a series of questions about their experiences and predictions for the future of the Society. This was on display in the Grand Room during the week.

A Poster/Demonstration session, arranged by the SOT Public Communications Committee and INFOCOM, provided an opportunity for registrants to explore and discuss innovative educational reading materials, slide presentations, and computer-based teaching devices for the

purpose of communicating basic concepts in toxicology to non-scientists. This has been a subject of concern for many years and this novel approach should help to bring about a better understanding among professionals and non-scientists of what the Society is doing to protect man and the environment from potentially hazardous chemicals.

The Issues Session on Tuesday, March 4, was well attended and there were a number of questions of general interest to all those present. In particular, was the matter of the increase in attendance and finding a place large enough to accommodate a scientific meeting of this size. A suggestion was made that having two meetings per year might alleviate some of the problem, but there are already a great many meetings and this might only make matters worse. Another suggestion was to find a suitable convention hall in a city with good hotel facilities. There have been few obstacles in the past in finding accommodations for the meetings and I am sure the Society will be equal to the task.

In addition to the symposium sponsored by the Committee on Public Communications (CPC) and the Poster/Demonstration Session with the assistance of INFOCOM, the CPC has made several recommendations that could enhance the image of toxicology. It recommends first, organize a one-day workshop between toxicologists and members of news media at the local regional level under the auspices of the regional chapters. A workshop was, in fact, held in Seattle in April 1985, in collaboration with the University of Washington and the Northwest Chapter. The results were presented to the regional chapter presidents at the 1986 meeting and were enthusiastically received. Second, develop a program for enhancing public school curriculum content in toxicology. Regional chapters could develop videotaped material of a half-hour to one hour length to be presented by chapter members in their particular areas along with pamphlets and monographs that would be easy to read. Third, improve communications between SOT and health care practitioners by preparing a series of articles on timely subjects for publication in *JAMA*. Fourth, prepare radio spots dealing with toxicology issues. This is in the process of being done for presentation to the Council.

The Regulatory Affairs and Legislative Assistance Committee spent a considerable amount of time reviewing legislation concerning animal welfare and alternatives to animal use. The Committee met with Senator Gore at breakfast to discuss regulation of biotechnology and the role of toxicology. It also offered its services to the Department of Agriculture in the development of guidelines as mandated by the amendment to the Animal Welfare Act.

The Use of Animals in Research Committee was requested by Council to develop a position statement regarding the use of animals in toxicological research. A draft statement was sent to the membership for review and comment, and the final statement appeared in the January/February 1986 issue of the Newsletter. It restated the Society's dedication to the pursuit of knowledge through research; a commitment to the proper design and conduct of the best possible scientific research; the need for animal experimentation except where alternative techniques are available; a pledge supporting the code of ethics; encouragement of a reduction in the number of animals when scientifically feasible, and support for the development of valid, scientific alternatives to animal research testing. The Committee has developed a draft set of principles for the use and care of animals used in toxicological research and is in the process of

preparing several one-page information brochures that can be used by the news media. All of these activities should be of special interest to the regional chapters.

Exhibits, first introduced in 1976 at the meeting in Atlanta, GA, were once again a very important part of the annual meeting. These were located near the poster sessions, which allowed free movement from one to the other and at the same time provided a pleasant atmosphere to meet friends while visiting the more than 74 booths. The exhibits included a variety of interesting and educational materials such as laboratory equipment and supplies, computer systems, commercial laboratories involved in toxicological research, scientific journals, books and new types of instrumentation. The Exhibit Liaison Committee (ELC), formed in 1985, expressed a desire to have more direct contact with the Council of SOT and suggested that the Council appoint a subcommittee to work with the ELC in developing more effective display of exhibits so as to attract more attention.

The concept of regional chapters and specialty sections first began in 1979, and by 1985, there were 11 regional chapters and six specialty sections. Upon the recommendation of the presidents of the regional chapters, the Council this year approved two new chapters: the Central States Chapter, covering Iowa, Kansas, Missouri and Nebraska, and the Northeast Chapter covering the New England states and adjacent part of Canada. This brings the total to 13 chapters with more than 2,400 members. Of this number, approximately 80% are not members of SOT. All of the chapters have been active and have had very successful programs. The terms of office for officers now coincide with that of SOT, May 1 to April 30.

The chapter presidents and the council representatives meet each year at the Society's annual meeting to review their activities and financial status, for each chapter must receive authorization from the Council to continue as a chapter. This formal link between the regional chapters and the parent Society has been good for both parties. It is perhaps too soon to measure their impact on local and national problems in the area of toxicology. This provides a heterogeneity that is so essential for strength and vigor of a learned society.

The Council this year approved a new specialty section on "Carcinogenesis" with Drs. Harold Grice as President; Hans Drobeck, President-Elect; Carl Schultz, Secretary-Treasurer; Robert Squire, Robert Kroes (The Netherlands), and G. M. Wang as Councilors. This brings the total number of specialty sections to seven. As part of the scientific program in New Orleans, six of these sections organized and sponsored symposia that were enthusiastically received and well attended. Membership in the sections has steadily increased and several have given awards to young persons for papers judged to be worthy of presentation at the platform or poster sessions. All of the sections have demonstrated a high degree of professionalism and all were financially sound.

The Education Committee received 68 applications for travel grants for the New Orleans meeting, of which 56 were approved. Each awardee received airfare for the most economical route and a lump sum to help defray daily expenses. A total of \$30,000 was allocated for this program. Recipients of the grant were required to present a paper at either the platform or poster session. This program, which started in 1982-83, has proved to be a very wise investment, for it is the young people to whom we must look for new and improved technologies for the future.

The Committee also is responsible for selecting the recipients of the graduate student fellowship awards and, this year, 29 applications were received. Five were selected for interview at the New Orleans meeting. Leonard J. Sauers, University of West Virginia, was given the Procter & Gamble Fellowship Award of \$8,000, and Lisa J. Naser, Massachusetts Institute of Technology, received the Hazleton Laboratories Award of \$4,000. The fourth New Investigators' Colloquium was, as previously mentioned, highly successful.

For a number of years, Dr. John Autian published a roster of toxicology programs in the Forum for the Advancement of Toxicology. This publication was discontinued following the 1984 issue and the Committee on Education has assumed the responsibility for preparing a roster, which will be compiled at the headquarters office and appear in the Newsletter.

The Technical Committee sponsored a symposium on "Neonatal Toxicology" and has now developed a detailed proposal for a symposium on "Potential Use of Human Tissues for Toxicity Testing," which it hopes will be considered by the Program Committee for the 1987 meeting in Washington, D.C. The Committee believes it should concentrate its efforts on organizing symposia, workshops, and short courses that would be helpful in maintaining and developing technical skills of toxicologists.

At the banquet on Thursday evening, following a delightful reception by the President of the Society for recipients of awards, invited guests, officers and councilors, Dr. Pfitzer presented the following awards:

The Merit Award, established in 1966, is given to a member of SOT who has had a long and distinguished career in toxicology. As of March 1985, 20 members have been so honored. The recipient this year was Dr. Ted A. Loomis, University of Washington, School of Medicine, Seattle, WA. The award consisted of a certificate, a bronze plaque and a cash stipend.

The Achievement Award, established in 1967, is presented to a member of the Society who is less than 41 years of age and has made significant contributions to toxicology. This year's award went to Dr. Sam Kacew, Department of Pharmacology, University of Ottawa, Ottawa, Canada. The award consisted of a bronze plaque, a certificate and a cash stipend.

The Frank R Blood Award, established in 1974, was presented to Drs. Calvin C. Willhite, Regional Research Center, U.S. Dept of Agriculture, Berkeley, CA; Marcia I. Dawson, Bio-Organic Chemistry Laboratory, Menlo Park, CA; and Kandace Williams, Dept. of Pharmacology, Dartmouth Medical School, Hanover, NH, for their paper on Structure-Activity Relationship of Retinoids in Developmental Toxicology. I. Studies on the Nature of the Polar Terminus of the Vitamin A Molecule." (*TAP* 74:397-410 1984). The recipients received a scroll and a cash stipend.

The Education Award, established in 1975, was presented to Dr. Robert I. Kneger, Dept. of Veterinary Medicine, University of Idaho, Moscow, ID, for his outstanding career in teaching and training toxicologists. The award consisted of a bronze plaque.

The Arnold J. Lehman Award, first given in 1980, is intended to recognize individuals who have made major contributions in the control of chemical agents, with particular reference to

studies that have influenced regulatory processes. The awardee was Dr. Gerrit J. van Esch, Former Director of the Sector Toxicology, National Institute of Public Health and Environmental Hygiene, Bilthoven, The Netherlands.

The *Burroughs Wellcome Toxicology Scholarship Award*, established in 1981, is intended to support the career development of toxicologists in academic institutions that have a commitment to toxicology as a basic science. The recipient this year was Dr. Daniel Acosta, Dept. of Pharmacology and Toxicology, College of Pharmacy, University of Texas, Austin, TX, whose institution will receive \$50,000 per year for five years. The award was based on the University's dynamic environment, Dr. Acosta's research and expertise in *in vitro* systems, and his potential for developing an outstanding toxicology program.

Another highlight of the banquet was the recognition of the Founders by the President, who presented each with a silver medallion bearing his name. In presenting the medallions, Dr. Pfitzer read the following citation:

“On the occasion of this Silver Anniversary, I am empowered by the 25th Council of the Society of Toxicology to present this medallion of honor to you, with all rights and privileges attendant thereto, *honoris causa*.”

On the obverse side of the medallion was the official Seal of the Society with the dates, 1961-1986. On the reverse side was inscribed the recipient's name and the word, “Founder.” The medal was attached to a blue and silver ribbon. The Founders were dressed in semi-formal attire and each made a brief remark. The Chairperson of the Anniversary Committee, Dr. Anne Wolven-Garrert, had arranged for hundreds of balloons to be dropped from the ceiling at the end of this auspicious occasion.