

# ASP NEWSLETTER

Volume 26, Number 1

Spring, 1990

### MONROE E. WALL TO RECEIVE 1990 RESEARCH ACHIEVEMENT AWARD

Dr. Monroe E. Wall, Chief Scientist, Research Triangle Institute, Research Triangle Park, North Carolina, has been named as the 1990 recipient of the American Society of Pharmacognosy Research Achievement Award. He will give the Award Lecture and receive the Award, which consists of a plaque and a prize of \$2500, at the ASP Annual Meeting in July, 1990 in Bonn, West Germany.

The award is made in recognition of Dr. Wall's long and distinguished career in natural products research, including work in isolation, characterization, total synthesis, metabolism, and pharmacology, in a career spanning over 50 years from his initial days as a graduate student in 1936 to the present. He has done internationally recognized work in a number of diverse areas, including early work on carotenoids, studies on steroidal sapogenins related to cortisone and other steroid hormones, isolation and characterization of antitumor agents, total synthesis of antitumor agents and structure-activity studies in the camptothecin series, and extensive work on the metabolism and pharmacology of marihuana.

Dr. Wall received a Ph.D. degree from Rutgers University in 1939, and then joined the Eastern Regional Research Laboratory of the U.S. Department of Agriculture. At the ERRL he

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### 30th ANNUAL ASP MEETING IN SAN JUAN IS A VERY SUCCESSFUL

The annual meeting of the American Society of Pharmacognosy was held August 6-10, 1989 in San Juan, Puerto Rico. This beautiful tropical island was a perfect location to hold a meeting in pharmacognosy due to its abundant flora and fauna. The meeting was well organized by both the scientific (Pedro I. Chavez, Chairman, M. Antoun, D.G.I. Kingston, J. McLaughlin, E. Nunez, G. Escalona, G. Infante, O. Rosario, and R. Krueger) and the local program (Ricardo O. Guerrero, Chairman, A. Malave, P. Chavez, M. Velez, D. Irizarry, S. Fabregas, E. Sanchez, and W. Keller, ex officio) committees.

The scientific portion of the meeting was quite successful and consisted of nine plenary lecturers speaking in two major symposia: "Symposium on Natural Products and the Disease Condition: Part A: Documentation of Plant Use and Part B: Potential of Plant Use for Cancer and Acquired Immune Deficiency Syndrome (AIDS)" and "Symposium on the Biotechnology of Natural Products". The scientific program also included a workshop on "Simple Bioassays" which consisted of seven speakers. This workshop was an informative addition to the usual ASP meeting. Both podium and poster papers were also presented by meeting attendees. were 49 podium papers presented as

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### NEW NCI NATURAL PRODUCTS SCREENS ANNOUNCED

The NCI is currently increasing emphasis on natural products as a source of compounds for its new screens. In order to more efficiently handle its effort in this area, responsibilities for this program have been recently realigned. The acquisition of characterized natural products is now carried out by the Drug Synthesis and Chemistry Branch headed by Dr. Ven Narayanan. The Natural Products Branch, Dr. Gordon Cragg, Acting Branch Chief, is responsible for the acquisition of plants, microorganisms and marine specimens intended for the in house isolation and characterization program carried out at the Frederick Cancer Research Facility.

One of the new assays, which is intended to identify compounds which have potential AIDS antiviral activity is now operating at high capacity. Results from this test, which measures the protective effect of new agents of the cytopathic effect of live HIV on human T lymphocytes, are made available to donors within an average of three months of receipt of sample. The *in vitro* tissue culture based antitumor screen which uses sixty cell lines derived from human tumors is currently operational.

Natural products are of particular interest because compounds isolated from nature have proven a rich source of therapeutic agents or leads for

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did extensive work on the utilization of vegetable leaf waste material and on the isolation, characterization, chemical reactions, and spectroscopy of sterols and steroidal saponins and sapogenins which were so important in the search for cortisone-like materials. This work has been described as some of the classical work in the field and is extensively cited in standard reference works on steroid chemistry.

In 1960, he left the ERRL, USDA to become one of the first chemists to join the newly formed Research Triangle Institute and began a new career in the chemistry of flavonoids and especially in the isolation and characterization of antitumor agents from plants. Some of the very notable antitumor compounds discovered by Wall are camptothecin, taxol, undulatone and colubrinol, of which camptothecin and taxol were both developed to clinical study. Dr. Wall's extensive synthetic experience from his earlier steroid work was then used to develop a number of camptothecin syntheses including the most practical route for large scale preparation. His continuing structure activity work on camptothecins has led to many interesting new compounds, some of which may have clinical potential.

Starting in the late 1960's Dr. Wall began a program of studies in the area of marihuana constituents, first with development of chemical reaction profiles and methods for analytical detection of minute amounts of various constituents and then extended these methods to the investigation of metabolism of tetrahydrocannabinol and related compounds. His laboratory was the world recognized leader in marihuana metabolism and he has presented papers at many international conferences on the metabolism and pharmacology of this important drug.

Dr. Wall's career also rose administratively, starting at RTI as the director of the natural products laboratory and ultimately becoming vice-president of the entire Division of Life Sciences at RTI, a position he held from 1971-1983. Since 1983 he has been Chief Scientist at RTI, a position which has allowed him to return full time to research in the laboratory. He has active programs in camptothecin chemistry, isolation of plant antitumor agents, and marihuana metabolism.

Annual meeting - Continued from Page 1, Column 2

well as 99 poster papers.

The local portion of the meeting was a delight. A warm, tropical sun combined with various activities of local flavor - a trip to a local rum distillery, a boat excursion around San Juan, a Puerto Rico Fiesta Night, a tour of Old San Juan, and a bus trip to "El Yunque", a rain forest tour.

It certainly was a meeting which will not be easily forgotten! It was both enjoyable and enlightening thanks to the hard work of the organizing committees.

37th Annual Congress of the Society for Medicinal Plant Research in Braunschweig, FRG, September 5-9, 1989.

The annual meeting of the Society for Medicinal Plant Research was held September 5-9, 1989, at the Technical University of Braunschweig (FRG). Located in Northern Germany, Braunschweig is known for its research in biotechnology, one of the topics covered at the meeting. The congress, perfectly organized by Prof. T. Hartmann and his coworkers, was attended by over 450 participants Contributions from 36 countries. were divided into five scientific sections covering medicinal plant research: I) phytochemistry/analytical methods, II) biological activities, III) biochemistry/physiology, IV) biotechnology, and V) cultivation/breeding. Plenary lectures were given by E. Leete (Minnesota, USA), M. Zenk (Munich, FRG), F. Constable (Saskatoon, Canada), K. Hahlbrock (Cologne, FRG) and K. Hostettmann (Lausanne, Switzerland). Poster sessions were followed by oral presentations (no parallel sessions), and a final 45 minutes discussion round. Posters were on display during the entire period of the congress, thus allowing enough time to view the over 200 posters. Abstracts of all contributions will be published in a special issue of "Planta Medica". The very successful meeting concluded in historic downtown Braunschweig with a "medieval witchdoctor's banquet" with a never ending supply of German beer.

The next meeting of the Society for Medicinal Plant Research will be held in Bonn (FRG), July 17-22, 1990, as a joint meeting with the American Society of Pharmacognosy, the Association Francaise pour l'Enseignement et la Recherche en Pharmacognosie, and the Phytochemical Society of Europe. The organizers are expecting many Americans and are looking forward to sharing German hospitality with the members of the ASP!

Daniel E. Schaufelberger

(NCI Screens - Continued from Page 1, Column 3)

such agents. They consequently receive priority treatment.

The amount of sample required for the screen has been carefully evaluated keeping in mind the scale of todays' natural product isolation and structure determination. We currently request 10 mg for routine testing in each screen; this will permit initial screening at the level of about 100 µ/ ml. If you supply larger amounts testing can begin at correspondingly higher levels while lesser amounts will allow only a single test without the possibility of confirmatory assays. A minimum of 2 mg is however required. To have compounds considered for the screen, simply send structures to:

Dr. Ven L. Narayanan Drug Synthesis & Chem. Branch National Cancer Institute Executive Plaza North, Suite 831 Bethesda, MD 20892 Phone (301)496-8795

#### **FUTURE MEETINGS**

**Future ASP Meetings** 

1990 - July 17-22 - Joint meeting with the Gesellschaft Fur Arzneipflanzenforshcung, the Association Francaise pour l'Enseignement et la Recherche en Pharmacognosie, and the Phytochemical Society of Europe, University of Bonn, West Germany.

1991 - July 21-26 - University of Illi-

nois at Chicago

1992 - Williamsburg, Virginia (Formerly Washington-Baltimore)

1993 - San Diego, California

1994 - Halifax, Nova Scotia

1990 - October 14-16 - Second Wenkert Symposium on Natural Products Research - for the former students, post-docs, and colleagues of Ernie Wenkert on the occasion of his 65th birthday. This symposium will be held at the University of Mississippi. If you would like to attend or participate by presenting a podium or poster paper please contact Dr. McChesney at your earliest convenience: James D. McChesney, Ph.D., Director, Research Institute of Pharmaceutical Sciences. School of Pharmacy, The University of Mississippi, University, MS 38677. Phone: (601)232-7132.

American Association of Pharmaceutical Scientists Future Meetings

1990 - November 4-9 - Fifth Annual Meeting, Las Vegas, Nevada

Phytochemical Society of Europe Future Meetings

1990 - July 17-22 - Joint International Symposium on the Biology and Chemistry of Active Natural Substances (With ASP, GA, and FERP - See Above)

1990 - December 19-21 - Bioformation of Flavours - A Joint International Symposium with Royal Society of Chemistry, King's College London, U.K. For further details contact: Dr. B.V. Charlwood, Plant Cell and Molecular Biology Group, King's College London, Campden Hill Road, London W8 7AH, UK.

Other Meetings of Interest

Advances in Near-Infrared Spectrometry, University of Kentucky College of Pharmacy, April 19-20, 1990. For details contact: Robert A. Lodder, Ph.D., College of Pharmacy, Room 320, University of Kentucky, Lexington, KY 40536-0082. Phone (606)257-5305.

III Argentine and VI Latinoamerican Symposium of Pharmacobotany, Corrientes City, Argentina, May 6-12, 1990. For further information contact: Ing. Armando I. Ricciardi, Colegio Oficial de Farmaceuticos y Bioquimicos de la Capital Federal, Rocamora 4045/47 - 1184 - Burnos Aires - Argentina. Telex: 26167 ENYS AR.

First International Congress on Ethnopharmacology, Strasbourg (France), June 5-9, 1990. For information contact: Professeur Robert Anton, Faculte de Pharmacie, Laboratoire de Pharmacognosie, B.P. 24, 67401 Illkirch Cedex France.

International Conference on Chirality, Sheraton Resort, Cancun, Mexico, June 7-9, 1990. For further details contact: Dr. Daniel W. Armstrong, Department of Chemistry, University of Missouri-Rolla, Rolla, Missouri, U.S.A. Phone: (314)341-4429.

The Fourth International Congress of Systematic and Evolutionary Biology, University of Maryland at College Park, July 1-7, 1990. For more information: Congress Secretary, ICSEBIV, Department of Microbiology, University of Maryland, College Park, Maryland 20742 U.S.A.

Fifteenth International Conference of the Group Polyphenols, University of Strasbourg, France, July 9-11, 1990. For details contact: Professor Raymond Brouillard, JIEP 90, Universite Louis Pasteur, Institut de Chimie - BP 296 R8, 1 rue Blaise Pascal, 67008 Strasbourg Cedex, France.

Molecular and Physiological Aspects of Plant Peroxidases, University of Lubin, Poland, August 27-29, 1990. For further information contact: Dr. Jerzy Lobarzewski, Department of Biochemistry, The University of Maria

Curie-Sklodowska, 20-31 Lublin 41, Poland.

International Congress on Traditional Medicine and Medicinal Plants, Denpasar, Bali, Indonesia, October 15-17, 1990. For details contact: Secretariat of the International Congress on Traditional Medicine and Medicinal Plants, Department of Pysiology Faculty of Medicine, Udayana University Denpasar 80232 A Indonesia. Phone (0361) 26132.

2nd North American Tannin Conference, Makinac Island, Michigan, August 5-9, 1991. For information contact: Peter E. Laks, Institute of Wood Research, Michigan Technological University, Houghton, MI 49931 OR Richard W. Hemingway, Southern Forest Experiment Station, 2500 Shreveport Highway, Pineville, LA 71360.

FIP and 1991 Pharmacy World Congress - Washington, D.C., September. For further information contact Dr. Roland Hardman, President, Medicinal and Aromatic Plants Section, FIP, 'Holly Leigh', Holt Road, Bradford-On-Avon, Wiltshire, U.K. BA15 1TR

# THE EDITOR'S DESK

Your contributions to the Newsletter are essential to its success. I wish to thank all those who have contributed to this issue of the Newsletter. I welcome any information which would be of interest to our members, including letters to the editor, publications, grant information, position openings, promotions, meeting information, books of interest, and so on. For inclusion in the Summer issue of the Newsletter, please have your contributions forwarded to me by June 1, 1990 at the following address:

Joy B. Reighard, Ph.D., Editor ASP Newsletter Temple University School of Pharmacy 3307 N. Broad St. Philadelphia, PA 19140, U.S.A. Phone: (215)221-4946 FAX: (215)221-3678

### **NEW MEMBERS**

The ASP is pleased to welcome the following new members:

**New Full Members:** 

Kim F. Albizati Wayne State Univ., Michigan

Stanley Allured Wheaton, Illinois

Americo Anglero, N.M.D. Carolina, Puerto Rico

Jacques Beliveau Montreal University, Canada

Matthew W. Bernart Oregon State University

Jnanabrata Bhattacharyya Southeastern Mass. University

Herbert Budzikiewicz Univ. of Cologne, Germany

Hermann R. Bueno Planta Amica, Inc., New York

Kevin M. Byrne Merck & Co., Inc., New Jersey

Thomas Corbett Detroit, Michigan

Phil Crews University of California

Sue Cross Ft. Pierce, Florida

Bradley Davidson University of Utah

Sarah Rivera Diaz San Juan, Puerto Rico

Charles Dombek St. Louis, Missouri

Memory Elvin-Lewis Washington Univ., Missouri

Norberto A. Cintron Fiallo Rio Piedras, Puerto Rico

Scott G. Franzblau Carville, Louisiana

Jacob Friedman Tel Aviv University, Israel Philip L. Fuchs Purdue University, Indiana

A.K. Ganguly Schering-Plough Corp., N.J.

Raymond V. Gilden Frederick, Maryland

Katherine B. Gloer University of Iowa

Meledath Govindan University of the Virgin Islands

M. Grubert Johannes Gutenberg Univ.

Leslie J. Harrison National Univ. of Singapore

Rolland Hebert Bellevue, Washington

Robert L. Hendrickson Panlabs, Inc., Washington

Randall K. Johnson Smith, Kline & French Lab., PA

Osama Kandil Callaway, Florida

Barry Katz Mycosearch, Inc., N.C.

Teodoro S. Kaufman Rosario, Argentina

Edmundo N. Kraiselburd University of Puerto Rico

Ming-Shang Kuo The Upjohn Co., Michigan

R.P. Labadie Univ. of Utrecht, Netherlands

Anderson Maxwell University of the West Indies

Susan McCormick USDA - Peoria, Illinois

Carolyn McGary Chesterfield, Missouri

Peter A. Melendez Isabela, Puerto Rico

Prem Mohan University of Illinois at Chicago Richard L. Monaghan Merck & Company, New Jersey

P. Radharrishna Murthy Kakatiya University, India

Claude H. Nash Schering-Plough Res., N.J.

William L. Parker Squibb Institute for Med. Research, New Jersey

Mahesh Patel Schering-Plough Corp., N.J.

D.W. Phillipson Squibb, Princeton, New Jersey

Chayan Picheansoonthon Khon Kaen University, Thailand

Kathryn S. Prickett Immunex Corp., Washington

Arnoldo Ramirez Univ. Del Valle, Colombia

Lorraine Romero Ramsey University of Puerto Rico

Jared L. Randall Miami Valley Labs, Ohio

B. Ravindranath Vittal Mallya Scientific Research Foundation India

Michael E. Rogers National Institutes of Health, Maryland

Gerald A. Rosenthal University of Kentucky

Mariano Ortiz Ruiz San Juan, Puerto Rico

Luis Sepulveda Juana Diaz, Puerto Rico

Kenneth M. Snader National Cancer Institute Maryland

Ester Speroni Bologna, Italy

Ghee Teng Tan University of Illinois at Chicago Hayden Thomas Antigua, West Indies

Manuel Vaaquez Tineo Univ. Autonoma de Santo Domingo Dominican Republic

Edna Iris Vila Rio Piedras, Puerto Rico

Ernest Wenkert University of California - San Diego

Robert R. West University of Utah

John W. Westley Smith Kline & French Labs., PA

Sui-Ming Wong Sterling Drug, Inc., PA

New Associate Members:

Cindy K. Angerhofer University of Minnesota

Hoang Do University of Mississippi

Nancy Fregeau University of Illinois at Urbana-Champaign

Jee H. Jung Purdue University, Indiana

Erguang Li University of Mississippi

Gail B. Mahady University of Illinois

Mehran Fallah Moghaddam Oregon State University

Dale George Nagle Oregon State University

Marjorie Richardson University of Mississippi

Peter J. Rider Philadelphia College of Pharmacy and Science, PA

### SOCIETY NEWS

## Dr. Svoboda Attempts to Save Rain Forests

The following article appeared in The Indianapolis Star on April 16, 1989:

Dr. Gordon H. Svoboda, an authority on medicinal plants, is back in Indianapolis after a trip to England to join Prince Phillip in a fund-raising effort for rain forests.

A conference for the media kicked off a British campaign to raise \$35 million. Svoboda and two other experts spoke at the one-day meeting.

Spotlighted were the loss of an estimated 2,000 acres of rain forest every hour to farming and living sites in places such as Southeast Asia, Madagascar and the Amazon.

Forest loss kills many plants as yet unstudied by scientists; a few might be important in human medicine, said Svoboda, who is from Indianapolis.

Rain forests cover only 8 percent of the earth, but have 50 percent of the animals, insects and plants, he said.

Svoboda's interest in these plants stems from his discovery of vincristine, an anti-leukemia drug found in the Madagascan periwinkle. Since that discovery, farms have been established to raise the plant.

Another plant familiar to many people is foxglove, the source of the heart medicine digitalis.

Svoboda's lament is that plant species destroyed in rain forests will forever be unavailable as a possible medicinal source.

"We haven't had a chance to investigate. We're probably investigating too slowly, but it's a jungle," he said. "Vincristine was discovered in 1961-62; where have we been since?"

The odds are long, he admits. Of the estimated 250,000 known plants, only about 40,000 have been tested for medicinal use and about 120 have yielded something of value.

But to Svoboda, that points up the

need to save rain forests; one plant, yet unknown, might be worth it all.

# Prof. Dr. Hildebert Wagner Receives Honorary Doctorates

Prof. Dr. Hildebert Wagner, Institut fur Pharmazeutische Biologie, University of Munich, W. Germany, has received honorary doctorates from the University of Budapest and the Kossuth University of Debrecen (Hungary).

#### Mr. Kouzi Recipient of Rho Chi Scholarship

Samir A. Kouzi, University, MS, is the recipient of the 1989 graduate scholarship from Rho Chi, the national pharmacy honor society. Kouzi, who is a doctoral student at the University of Mississippi, School of Pharmacy, Department of Pharmacognosy working under the direction of Professor James D. McChesney, is one of the two 1989 Rho Chi graduate scholars nationwide, and the third Ole Miss recipient of the award.

#### Honorary Member Recouperating

Honorary member Jonathan L. Hartwell is recouperating from a broken hip at a nursing home in Maryland. Those who wish to correspond with him may do so at: Bethesda Rehabilitation and Nursing Home, 3700 Jones Mill Road, Chevy Chase, Maryland 20815. Phone: (301) 913-9714.

# Call For Information - American Horticultural Society

The American Horticultural Society is compiling a new, expanded edition of North American Horticulture, A Reference Guide. To make this guide as complete as possible, we urge all readers to send us the names and addresses of local, state, and regional horticultural organizations and programs, including plant societies, trade associations, professional associa-

tions, conservation organizations, educational programs, significant plant collections, horticulture libraries and museums, and major flower shows. One area of expansion intended for the upcoming edition will include historical horticultural displays, zoological parks with plant collections and natural history museums with horticultural and botanical exhibits. Please send information to Tom Barrett, American Horticultural Society, 7931 East Boulevard Dr., Alexandria, VA 22308, 703/768-5700 or 1-800-777-7931.

## Looking for Out-of-Print Books?

If you are looking for out-of-print books on garden history, herbals, horticulture, landscape architecture and the like, you might try The American Botanist Booksellers. The have a large selection of books of this type and are located at 1103 West Truitt Avenue, Chillicothe, Illinois 61523 Phone: (309) 274-5254.

# Having Difficulty Finding Old Journal Articles?

The Institute for Scientific Information (ISI) has announced the expansion of the back-year coverage offered by The Genuine Article document delivery service.

The Genuine Article Extended Service -- providing coverage of nearly 3,000 journals dating back as far as the 1800's -- will be offered along with The Genuine Article Standard Service, which currently covers nearly 7,000 journals from 1985 to date.

For further information contact Jacqueline H. Trolley, ISI, 3501 Market Street, Philadelphia, PA 19104, U.S.A. Phone: (215) 386-0100.

### MORE SOCIETY NEWS

#### National Cooperative Natural Products Discovery Groups Awards

The National Cancer Institute has made awards to two consortia under the above program. These are:

Purdue University - \$361,207 from 7/15/89 - 4/30/90 (First period of a five-year award)

"Mechanism-Based Discovery of

Antitumor Agents"

Principal Investigator:

Ching-jer Chang

Program Leaders:

Curtis Ashendel

(Purdue University)

Robert Geahlin

(Purdue University)

Jerry McLaughlin

(Purdue University)

J. Patric McGovren

(Upjohn Company)

Cornell University - \$428,587 from 9/1/89 - 6/30/90 (First period of a five-year award)

"New Anticancer Drugs from Cultured and Collected Marine Organisms"

Principal Investigator:

Jon C. Clardy

Program Leaders:

D. John Faulkner (Scripps Institute of Oceanography)

William Fenical (Scripps Institute of Oceanography)

Chris Ireland (University of Utah)

Yuzuru Shimizu (University of

Rhode Island) Anna-Maria Casazza

(Bristol-Myers)

### PERIODICALS OF INTEREST

Phytochemical Analysis, an international journal of plant biochemical technique. Published by Heyden and Son Ltd, Spectrum House, Hillview Gardens, London NW4 2JQ, U.K. Tel: 01-203 5171. Telex: 28303 Fax: 01-203 1027. Subscription Price: Volume 1, 1990 (bimonthly, 3 issues, commencing mid-1990): £82/ US \$139.00 (North American addresses only)

Phytotherapy Research, an international journal devoted to medical and scientific research on plants and plant products. Published by Heyden and Son Ltd, Spectrum House, Hillview Gardens, London NW4 2JQ, U.K. Tel: 01-203 5171. Telex: 28303 Fax: 01-203 1027. Subscription Price: Volume 4 £127/U.S. \$215.00.

### **OBITUARIES**

We report the death of three outstanding researchers in the field of natural products chemistry:

Professor Tetsuji Kametani, president of Hoshi University in Tokyo, died on October 11, 1988, after a long illness. Professor Kametani was one of the most prolific contributors to natural product synthesis, particularly alkaloids, and was founder and editor of the Japanese journal "Heterocycles".

Dr. Ulrich Weiss, a native of Prague, Czechoslovakia, and a retired researcher at the National Institutes of Health in Bethesda, died on July 17, 1989, at a hospital in Denpasa, Bali, Indonesia, after a heart attack. Dr. Weiss, a collector of American Indian and Indonesian textiles, was an authority on opium alkaloids.

Dr. Bo Sup Chung of the Seoul National University College of Pharmacy in Soul. Korea has also passed away in recent months.

### AWARDS AND GRANTS

To stimulate interest in all phases of natural products research, the American Society of Pharmacognosy offers the following awards and grants:

#### 1. Research Starter Grants:

Members of the Society who are within the first five years of assuming their first professional position are eligible for a grant of \$2000 to \$5000 to aid in their research. These grants will not provide overhead monies to the grantee institution. Applications are due March 1.

#### 2. Travel Grants for Members:

Members of the Society who are within the first five years of assuming their first professional position are eligible for a grant of \$300 to \$500 to enable them to present a paper at an annual meeting of the Society. Applications are due May 1.

### 3. Travel Grants for Graduate Students

Graduate students under supervision of a Society member are eligible for a grant of \$300 to \$500 to enable them to present a paper at an annual meeting of the Society. Applications are due May 1.

# 4. Lloyd Library and Museum Grants

This is the second year of a new grant program established in cooperation with the Lloyd Library and Mu-

seum. In keeping with the Lloyd Library's interest in promoting student activities, two \$500 travel awards to attend the national ASP meeting will be awarded. These awards will be made based on excellence in both scholastic and research activities in the field of natural products. Applications are due May 1.

## 5. Undergraduate Research Awards:

Undergraduate students interested in investigating a career in natural products research are eligible for a research award to study under the direction of a Society member on the faculty of an American college or university. These awards (\$2000 to the student and \$500 to the advisor) do not provide overhead monies to the grantee institution. The research project is to be accomplished in a summer during the student's academic program leading to the B.S. or Pharm.D. degrees. Applications are due March 1.

Address inquiries and requests for application information to:

Alice M. Clark, Ph.D.
Chairman, Awards Committee
American Society of Pharmacognosy
Department of Pharmacognosy
School of Pharmacy
University of Mississippi
University, MS 38677
(601)232-7143

# BOOKS OF INTEREST

Pharmaceuticals and the Sea, Charles W. Jefford, Kenneth L. Rinehart, and Lois S. Shield, Eds., Technomic Publishing Company, Inc., 851 New Holland Ave., Box 3535, Lancaster, PA 17604, U.S.A. Phone: 1-800-233-9936, 1988, 167 pp., \$65.00.

Trease and Evans' Pharmacognosy, 13th Edition, William Charles Evans, (Bailliere Tindall), The Marketing Department, Harcourt Brace Jovanovich Ltd., 24-28 Oval Road, London, NW1 7DX, U.K. 1989, 832 pp., £29.95.

The following books of interest to researchers in natural products are available from: CRC Press, Inc., 2000 Corporate Blvd., N.W., Boca Raton, Florida 33431. Phone 1-800-272-7737 (Continental U.S. only) or (407) 994-0563.

Antiviral Compounds from Plants, J.B. Hudson, 1989, 216 pp., \$95.00 U.S./\$112.00 Outside U.S.

Icons of Medicinal Fungi from China, Jianzhe Ying, Xiaolan Mao, Qiming Ma, Yichen Zong, and Huaan Wen, 1989, 592 pp., \$99.50 U.S./\$117.00 Outside U.S.

Color Atlas of Chinese Traditional Drugs, Vol.1, Edited by the National Institute for the Control of Pharmaceutical and Biological Products, 1987, 300 pp., \$99.50 U.S./\$117.00 Outside U.S.

Handbook of Ayurvedic Medicinal Plants, Edited by L.D. Kapoor, 1989, 416 pp., \$195.00 U.S./\$229.00 Outside U.S.

CRC Handbook of Medicinal Herbs, James A. Duke, 1985, 696 pp., \$235.00 U.S./\$265.00 Outside U.S.

VIDEO: Edible Wild Plants, Jim Duke and Jim Meuninck, 60 minute videocassette, VHS Format, \$49.95 U.S./\$59.00 Outside U.S.

SEE YOU IN BONN!!

Dr. James E. Robbers School of Pharmacy & Pharm Sci Purdue University West Lafayette, IN 47907



SAVE THE STESTS American Society of Pharmacognosy David J. Slatkin, Ph.D., Treasurer P.O. Box 13145 Pittsburgh, PA 15243

#### **MEMBERSHIP**

Membership in the American Society of Pharmacognosy is recognized in several categories:

Full Membership

Full membership is open to any scientist interested in the study of natural products. Dues are \$45.00 per year. If overseas airmail is requested, the dues are \$80.00.

Associate Membership

Associate membership is open to students of pharmacognosy and allied fields. These members are not accorded voting privileges, and dues are \$35.00 per year.

Honorary Membership

Honorary members are selected by the Executive Committee of the American Society of Pharmacognosy on the basis of meritorious service to pharmacognosy.

Present Honorary Members are:

Dr. Jack L. Beal, Columbus, Ohio

Dr. Norman R. Farnsworth, University of Illinois

Dr. Jonathan L. Hartwell, Washington

Dr. R. Hegnauer, Leiden, Netherlands

Dr. Albert Hofmann, Switzerland

Dr. Richard E. Schultes, Harvard Botanical Museum

Dr. Arthur E. Schwarting, Florida

Dr. Gordon Svoboda, Indianapolis, Indiana

Dr. Varro E. Tyler, Purdue University

Dr. Monroe E. Wall, Research Triangle Institute, N.C.

Dr. Heber W. Youngken, Jr., University of Rhode Island

Patron, Sustaining, and Benefactor Memberships

There memberships are open to any person or organization wishing to support the aims and objectives of the Society.

Dues are as follows:

Patron Member - \$200.00 per year

Sustaining Member - \$500.00 per year

Benefactor Member - \$1,000.00 per year

Additional information about memberships may be obtained by writing to the Treasurer of the Society:

David J. Slatkin, Ph.D., Treasurer

The American Society of Pharmacognosy

School of Pharmacy

University of Pittsburgh

Pittsburgh, PA 15261 U.S.A.

#### **SOCIETY BUSINESS**

# Honorary Membership Committee Seeking Nominations

If you wish to nominate a Society member for Honorary Membership, you may do so by contacting Dr. Lynn R. Brady, School of Pharmacy, Washington State University, Seattle, WA 98195. Phone: (206)543-2453.

Need Help Getting to Bonn?

Society members who wish to go to Bonn but are in

need of some verification of service to the Society should contact President Matthew Suffness. He is willing to write an official letter stating your service to the society. You can contact Dr. Suffness at: Grants and Contracts Operations Branch, National Cancer Institute, Room 832 Executive Plaza North, National Institutes of Health, Bethesda, MD 20892 Phone: (301)496-8783 FAX: (301) 496-8333.