

# ASP NEWSLETTER

Volume 25, Number 2

Summer, 1989

# RESEARCH CONGRESS ON NATURAL PRODUCTS (30 ANNUAL MEETING OF THE ASP) TO BE HELD IN SAN JUAN

The Research Congress on Natural Products (XXX Annual Meeting of the American Society of Pharmacognosy) will be held at the Sands Hotel and Casino Beach Resort in San Juan, Puerto Rico, August 6-10, 1989. The congress is hosted this year by the University of Puerto Rico College of Pharmacy.

This year's symposium is comprised of two major topics:

# I. Symposium on Natural Products and the Disease Condition

Part A: <u>Documentation of Plant Use</u> Dr. Eloy Rodriguez, Professor, University of California at Irvine

"Selection and Chemistry of Medicinal Plants Used by Non-Human Primates"

Professor Peter G. Waterman, Director of Phytochemistry Research Laboratories, University of Strathclyde, Glasgow, Scotland

"Searching for Bioactive Compounds: Various Strategies"

(Please note: Dr. Waterman is a replacement for the previously scheduled Dr. Plutarco Naranjo, Secretary of Health, and Professor, Central University, Quito, Ecuador)

Part B: <u>Potential of Plant Use for Cancer and Acquired Immune Deficiency Syndrome (AIDS)</u>

Dr. Yu Rencun, Chief Physician

and Director of the Oncology Department, Beijing Hospital of Traditional Herbal Remedies, Peoples Republic of China

"Clinical Application of Chinese Herbal Remedies as Immunomodulators in the Treatment of Cancer"

Dr. John Cassady, Dean and Professor, The Ohio State Univ.

"Natural Products as a Source of Potential Cancer Chemotherapeutic and Chemoprevention Agents"

Dr. David G. I. Kingston, Professor, Virginia Polytechnic Institute and State University, Blacksburg, Virginia

"Chemistry of Taxol -- A Clinically Useful Anticancer Agent"

Dr. Kenneth Snader, Coordinator of Natural Products AIDS Testing, National Cancer Institute

"Recent Advances in Natural Products AIDS Research"

Dr. Kenneth L. Rinehart (ASP Research Award Recipient), Professor of Chemistry, University of Illinois of Urbana-Champaign

"Bioactive Compounds from Aquatic and Terrestrial Sources"

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### 1989 GRANT AND AWARD WINNERS ANNOUNCED

#### ASP RESEARCH AWARD

Kenneth L. Rinehart, Jr., Professor of Chemistry at the University of Illinois of Urbana-Champaign, is the winner of the 1989 Research Achievement Award of the ASP. The award, consisting of a check for \$2500, will be presented to Rinehart at the Research Congress on Natural Products in San Juan, Puerto Rico, in August. He was cited for his achievements in the structure elucidation of antibiotics and marine natural products, in the biosynthesis of antibiotics, and in the application of mass spectrometry to structure elucidation. Dr. Rinehart will address the participants on the subject of "Bioactive Compounds from Aquatic and Terrestrial Sources."

#### KILMER PRIZE WINNER

Si-Yu Liu, a student of the pharmacology/toxicology graduate program at Washington State University, Pullman, WA, is the 1989 recipient of the Kilmer Prize.

The Kilmer Prize was established in 1935 through a bequest from Dr. Frederick Barnett Kilmer, director of the Laboratories of Johnson & Johnson and father of the poet, Joyce Kilmer. The award is intended to recognize meritorious work in

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Annual meeting - Continued from Page 1, Column 2.

# II. Symposium on the Biotechnology of Natural Products

Dr. David Evans, DNA Plant Technology, Cinnaminson, N.J.

"Somaclonal Variation -- Its Promise for the Industry of Natural Products"

Dr. George N. Towers, University of British Columbia, Vancouver, British Columbia, Canada

"Role of Agrobacterium in the Production of Secondary Metabolites in Plants and Plant Tissue Culture"

# Workshop of "Simple Bioassays"

This workshop will be presented on Thursday, August 10, and will include the following topics:

"Brine Shrimp, Crown Gall Tumors on Potato Discs, and *Lemna*", Jerry L. McLaughlin, Purdue University

"Antimicrobial Screening," Alice Clark, University of Mississippi

"Simplified Antiviral and Cytotoxicity Screening," Robert G. Hughes, Jr., Roswell Park Memorial Institute

"Introduction of SOS: A Screening Tool for DNA Damaging Agents," S. Kadam, Abbott Laboratories

"Using the Phorbol Receptor System," John A. Beutler, PRI, NCI, Frederick Cancer Research Facility

"DNA as an Affinity Probe Useful in the Isolation of Biologically Active Natural Products," John M. Pezzuto, University of Illinois at Chicago

This year's Kilmer Prize winning paper will be presented on Thursday, August 10. The College of Pharmacy is also sponsoring a breakfast with an open lecture by Esteban Nunez Melendez, Ph.D., Professor Emeritus, entitled, "Medicinal Plants of Puerto Rico," on Tuesday morning, August 8.

The organizing committees for

this year's congress report that they have received close to 100 scientific papers for presentation at the meeting. Of these papers, some will be presented orally, and others will be presented by poster format. They anticipate severl hundredparticipants.

The local program committee has several forms of entertainment planned for the meeting. As usual, Sunday evening will commence with the social mixer. Monday evening includes music and entertainment aboard cruise boat sailing around San Juan Bay. You can enjoy the great view of the Old City and Fort "El Morro" from the boat. Tuesday evening will be "Puerto Rico Fiesta Night, a show of lively folkloric dances and music with the true Latin flavor. Native food and drinks will be served. Wednesday afternoon a tour of "El Yungue" Rain Forest is planned. This forest. which is located on the northeastern part of the island, has beautiful cascades, enormous tree ferns, and tropical vegetation. There will be stops at a waterfall and the observation tower for an opportunity to view the northeastern coast. Refreshments and snacks will be served. Thursday evening concludes the week's events with the annual banquet. The Spouses' program includes a tour of the Bacardi Rum Distillery and a tour of Old San Juan.

It seems quite obvious that this year's meeting will be one you will not want to miss!!

#### CONTINUING EDUCATION CREDIT AT THIS YEAR'S MEETING

Those holding practitioner's licensure in states of the US where continuing education (CE) credits are required and others wishing such credits may obtain these from attendance at this year's meeting under ACPE providership. This program is provided in accordance with ACPE criteria for a nominal fee. Participants may sign up for such credit without prior arrangement. when they arrive at the meeting.

# FROM THE EDITOR'S DESK

I wish to thank those of you who continue to make contributions to the ASP Newsletter. Without your contributions, the Newsletter would not be a success. I welcome any information which may be of interest to our members, including letters to the editor, publications, grant information, position openings, promotions, meeting information, and so on. For inclusion in the Fall issue of the ASP Newsletter, please have your information forwarded to me by September 15, 1989 at the following address:

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School of Pharmacy
3307 N. Broad St.
Philadelphia, PA 19140 U.S.A.
Phone: (215)221-4946

#### **BOOKS OF INTEREST**

CRC Handbook of MEDICINAL HERBS, James A. Duke, Ph.D., CRC Press, Inc., 2000 Corporate Blvd., N.W., Boca Raton, Florida 33431 (1-800-272-7737), 696 pp., \$255.00 (US).

THE ALKALOIDS, Chemistry and Pharmacology, Arnold Brossi, Ed., Volume 34 (410 pp., 1988, \$89.00) and volume 35 (302 pp., 1989, \$85.00 - tentative) are now available. Academic Press, Book Marketing Department, 1250 Sixth Avenue, San Diego, CA 92101-4311 (1-800-321-5068)

Tropical Rainforests: Diversity and Conservation, F. Almeda and C.M. Pringle, Eds., California Academy of Sciences & AAAS, 306 pp. 1988, \$32.25.

Chemistry of Nucleosides and Nucleotides, L.B. Townsend, Ed., Volume 1, 394 pp., Plenum Press, 1988, \$69.50.

AWARDS - Continued from Page 1, Column 3

pharmacognosy or natural products by an undergraduate or graduate pharmacy student.

The selection of the Kilmer Prize recipient was made by the APhA Academy of Pharmaceutical Research and Science Awards Committee. The award is sponsored jointly by the APhA and the ASP and was awarded at the APhA annual meeting in Anaheim on April 9, 1989.

Liu was awarded the Kilmer Prize for his paper entitled "Antithrombotic Activity of Tetramethylpyrazine." The paper discusses the natural substance, tetramethylpyrazine (TMP), that has been used for many years in China for treating cerebrovascular and cardiovascular diseases. The research demonstrated that TMP has potent inhibitory effects on platelet aggregation and thrombosis formation.

# ASP AWARDS AND GRANTS PROGRAM

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. This year's awards are \$2500 each.

This year's awardees are:

David P. Rotella, University of Mississippi School of Pharmacy. Topic: "Development and Utilization of a Rapid and Inexpensive Assay for Calmodulin Antagonists from Natural and Synthetic Sources."

John R. Peterson, University of Mississippi School of Pharmacy. Topic: "Development of an In-House Antiviral Assay: Lignan Natural Products as Models for Antivirals."

Regina Zibuck, Syracuse University. Topic: "Total Synthesis of Erythrophlamine and Cassamine Cardiotonic Alkaloids."

### Travel Grants for Active 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.

This year's recipients are:

Bradley S. Davidson, University of Utah

John R. Peterson, University of Mississippi

S. F. Dossaji, National Museums of Kenya, Nairobi

Sachiko Tsukamoto, University of Rhode Island

# 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.

This year's awardees are:

Gamal Dora, University of Connecticut

Alex R. Jurgens, University of Mississippi

Esra Bejar, University of the Pacific

L. Pieters, University of Antwerp, Belgium

Yu-Hua Hui, Purdue University Mehran F. Moghaddam, Oregon State University

# 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 s 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.

This year's recipients are:

Kimberly Wallace, University of Maryland School of Pharmacy, under the direction of Marilyn K. Speedie.

Thalia Rambalakos, University of Tennessee at Chattanooga, under the direction of Thomas G. Waddell.

#### Lloyd Library Museum Fellowships

These awards (\$500 for travel to an annual meeting) are awarded to outstanding graduate students who excel in both scholastic and research in the field of natural products.

This year's awardees are:

T. Mark Zabriskie, University of Utah School of Pharmacy

Tannis M. Jurgens, University of Mississippi School of Pharmacy

These awards will be presented at the Annual Meeting in San Juan, P.R. in August. Congratulations to all award winners!!

Watch future issues of the ASP Newsletter for deadlines for the 1990 Awards and Grants Program.

#### SOCIETY BUSINESS

#### Teller's Committee Report 1988 Election

The Tellers Committe reports the following results of the 1988 election:

Vice President - A. Douglas Kinghorn

Executive Committee Member (1989-1992) - Alice M. Clark

Constitution and By-Laws Amendment: Packages A and B passed.

A total of 843 ballots (457 United States and 386 non-United States) were mailed in late March and early April. Of this total, 276 ballots (199 United States and 77 non-United States) were returned and counted. Therefore, 33% of the qualified voting members of ASP participated in this election.

#### **NEW MEMBERS**

The ASP is pleased to welcome the following new members:

#### New Full Members:

Prof. Federico Arcamone Menarini Ricerche Sud Rome, Italy

Gil Belofsky Bristol-Myers Company Wallingford, CT

Neal S. Burres Harbor Branch Oceanographic Institute, Fort Pierce, Florida

David E. Cane Brown University

Nestor M. Carballeira University of Puerto Rico

Cesar Catalan University of Tucuman (Argentina)

Shieh Tom Chen Merck and Company

Bradley S. Davidson The University of Utah

John P. Devlin Boehringer Ingelheim Pharmaceuticals, Inc.

Carl A. Elliger Western Regional Research Center, U.S.D.A.

Steven Foster Eureka Springs, AR

Amanda M. Gillum Sterling Research Group

William F. Hagen University of California

B. David Halpern Polysciences, Inc. Warrington, PA Leslie J. Harrison National University of Singapore

James Jamison Kent State University (Ohio)

Yoel Kashman Tel Aviv University

Barry Katz Mycosearch, Inc., Durham, NC

Daniel Lednicer Starks C.P, Gaithersburg, MD

Chao-Min Liu Hoffmann-La Roche, Inc.

Yu-Tien Liu Defense Medical Center Taiwan, Republic of China

Anacleto Minghetti Bologna, Italy

Prem Mohan University of Illinois at Chicago

Per Christer Oden Swedish University of Agricultural Sciences

Melanie J. O'Neill Glaxo Group Research, Ltd.

Martha Quesada Merck and Company

Nahid Mokhtari Rejali University of Maryland

Elvera R. Richardson Transpharma, Inc., Poway, CA

Abimael D. Rodriguez University of Puerto Rico

David P. Rotella University of Mississippi

Fernando A. Souto University of Puerto Rico at Mayaguez

Olov Sterner University of Lund, Sweden Diane Shomin Swaffar University of Utah

Sachiko Tsukamoto The University of Rhode Island

Steven G. Wood Springville, UT

#### **New Associate Members:**

Edward K. Alstat Portland, Oregon

Hoang Do University of Mississippi

Peter J. Facchini University of Toronto

Keith Krabill Kent State University (Ohio)

Marlena M. Kraml University of Toronto

Marjorie Richardson University of Mississippi

Peter J. Rider Philadelphia College of Pharmacy and Science

Roger M. Rutz University of Illinois at Chicago

Rory Stauffer State College, PA

#### **FUTURE MEETINGS**

Future ASP Meetings 1989 - August 6-10, University of Puerto Rico (See Page 1)

1990 - July 17-22, Joint meeting with the Gesellschaft Fur Arzneip-flanzenforschung, University of Bonn, West Germany

1991 - University of Chicago 1992 - Washington - Baltimore American Association of Pharmaceutical Scientists Future Meetings

1989 - October 22-27 - Fourth Annual Meeting, Atlanta, Georgia Phytochemical society of Europe Future Meetings

Ecological Chemistry and Biochemistry of Plant Terpenoids, Murcia, Spain, September 13-15, 1989. Further details: Dr. F.A. Tomas-Barberan, C.S.I.C., Apdo. 195, Murcia E-30080, Spain.

Other Meetings of Interest

V International Congress of Toxicology, Brighton, England, July 16-21, 1989. For further information contact: Secretariat, IUTOX'89 Congress House, 65 West Drive, Sutton, Surrey SM27NB, U.K. Tel: 01-661 0877.

The 3rd International Symposium on Poisonous Plants (formerly called the U.S./Australian Symposium on Poisonous Plants) will be held in Logan, UT, USA, July 23-29, 1989. For more information contact: Dr. Lynn F. James, USDA-ARS Poisonous Plant Research Laboratory, 1150 East 1400 North, Logan, Utah 84321, U.S.A. Telephone: (801)752-2941.

Therapy With Amino Acids and Analogues 1st International Congress, Vienna, Austria, August 7-12, 1989. For details contact: Gert Lubec, University of Vienna, Department of Pediatrics, A 1090 Vienna, Wahringer Gurtel 18, Austria, Tel. (222)4800-3232 or (evening hours): (222) 23 40 424 = private. (NOTE: This meeting conflicts with our annual meeting.)

35th Congress of the International Pharmaceutical Students Federation (IPSF), hosted by the Philadelphia College of Pharmacy and Science, Philadelphia, PA, August 8-17, 1989. For further details contact: Maureen Maloney, Philadelphia College of Pharmacy and Sciences, Woodland Avenue at 43rd Street, Philadelphia, PA 19104. Phone: (215)596-8800. (NOTE: This meeting conflicts with our annual meeting.)

Sixth European Symposium on Organic Chemistry, September 3-8, 1989, Belgrade, Yugoslavia. for details contact: ESOC 6 Secretariat. Chairman Professor D. Vitorovic, Department of Chemistry, University of Belgrade, P.O. Box 998, 1101 Belgrade, Yugoslavia.

49th International Congress of Pharmaceutical Sciences of F.I.P., Munich, Germany, September 4-9, 1989. For details contact: F.I.P. Congress Department, Alexanderstraat 11, 2514 JL The Hague (The Netherlands) Telephone: (31)70 631925, Telex: 32 781 fip nl, Telefax: (31) 70 633914.

37th Annual Congress of the Medicinal Plant Research Society, Technical University of Braunschweig, September 5-9, 1989. For more information contact: Professor Dr. T. Hartmann, Institut fur Pharmazeutische Biologie, Mendelssohnstrasse 1, D-3300 Braunschweig, F.R.G.

Nature Conservation - The Rose of Corridors - Conference/Workshop, Busselton, Western Australia, September 11-15, 1989. For further information contact Miss P. Hussey, Roadside Vegetation Conservation Committee, P.O. Box 104, COMO Western Australia 6152.

Fifth International Conference on Chemistry and Biotechnology of Biologically Active Natural Products, Varna, Bulgaria, September 18-23, 1989. For further information: Dr. R. Vlahov, c/o Institute of Organic Chemistry with Centre of Phytochemistry, Bulgarian Academy of Sciences, 1113 Sofia, Bulgaria.

International Symposium on Drug Safety, Ottawa, Ontario, Canada, September 28-29, 1989. For details contact: G.T. Herbert, Canadian Pharmaceutical Association., 1785 Alta Vista Drive, Ottawa, Ont., Canada K1G 3Y6 Tel. (613)523-7877, FAX (613)523-0445.

Symposium on Semiochemicals and Pest Control, Wageningen, Netherlands, October 16-20, 1989. For more information contact: Dr. M. Dicke, Department of Entomology, Agricultural University, Haarweg 10, 6709 Wageningen, Netherlands.

III Argentine and VI Latinoamerican Symposium of Pharmacobotany, Corrientes City, Argentina, May 6-12, 1990. For details contact: Ing. Armando I. Ricciardi, Colegio Oficial de Farmaceuticos y Bioquimicos de la Capital Federal, Rocamora 4045/47 - 1184 - Buenos 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, ICSEB-IV, Department of Microbiology, University of Maryland, College Park, Maryland 20742 U.S.A.

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 Physiology Faculty of Medicine, Udayana University Denpasar 80232 A Indonesia. Phone (0361) 26132.

#### **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 \$70.00.

#### 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 Trian-

gle Institute, North Carolina

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

#### Patron, Sustaining, and Benefactor Memberships

These 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 membership may be obtained by writing to the Treasurer of the Society:

David J. Slatkin, Ph.D., Treasurer The American Society of Pharmacognosy

Department of Pharmaceutical Sciences

512 Salk Hall University of Pittsburgh Pittsburgh, PA 15261 U.S.A.

#### SOCIETY NEWS

#### From The Indianapolis Star, Sunday, April 16, 1989:

Dr. Gordon H. Svoboda, an authority on medicinal plants, is back in Indianapolis after a trip to England to join Prince Philip 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 1-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.

### SEE YOU IN SAN JUAN!!

