CHAPTER 2

PROFILES. PAST PRESIDENTS, FELLOWS, HONORARY MEMBERS, RESEARCH ACHIEVEMENT AWARD AND TYLER PRIZE WINNERS

Bill Baker President (2007-2008)

Bill Baker, originally from Salinas, CA, received his B.S. from the CA Polytechnic State University in San Luis Obispo (1982) and his Ph.D. from Univ. Hawaii (1986) working with Paul Scheuer. He did postdoc research with Ronald Parry at Rice University (1987-1988), and

with Carl Djerassi at Stanford Univ., spending considerable time at Hopkins Marine Station in Monterey, where the Djerassi lab did much of their field work. He moved to Florida in 1990 where he advanced through the academic ranks at the Florida Institute of Technology before moving to his current position at the Univ. South Florida in Tampa in 2001. His research focuses broadly on the discovery and generation of new chemical diversity from marine organisms, taking him to many of the world's oceans, including ten field seasons in Antarctica. As a postdoc, he attended his first ASP meeting at the Univ. Rhode Island in 1988, and since has missed only a few meetings, bringing over thirty students with him. He and his students have



presented nearly 50 presentations and/or posters including half a dozen posters presented by undergraduate students, three of whom have gone on to do their graduate studies with ASP members. Several of his graduate students have received ASP awards for their presentations. Over the years, Bill has served on many ASP committees, and was Chair of the Organizing Committee for the 1998 meeting in Orlando, and is currently a member of the Organizing Committee for the 2010 meeting, to be held in Tampa (St. Petersburg Beach). During his Presidential year, Bill focused on involving members more directly in the business of the society and building membership. (BB)

Jack L. Beal (1924-1998) President (1962-1963) Honorary Member (1984)

Originally from Kansas, Jack Beal joined The Ohio State University (OSU) as a graduate student in 1950 under the supervision of the then Dean, Bernard V. Christensen. Following his graduation in 1952, he was appointed Assistant Professor in the College of Pharmacy that same

year. His main research interests focused on isoquinoline-type alkaloids of the genus *Thalictrum* and their biological activities. Dr. Beal's collaborations with Raymond W. Doskotch and Popat N. Patil led to numerous articles on the constituents of *Thalictrum*, describing more than 175 alkaloids, 80 of which were novel. In a career that spanned over 40 years, Dr. Beal served as the advisor for 15 doctoral and 12 master's level students, of whom many pursued positions in active research and teaching. Dr. Beal was a founding member of ASP and he served as its third president. Dr. Beal contributed remarkably to the Society through his



tenure as Editor-in-Chief of *J. Nat. Prod.* (*Lloydia*) (1977-1983), during which time the journal changed its name and was established as a forum for high-quality publications on natural products research. Dr. Beal was the recipient of many awards, among them the Research Achievement Award in Natural Products Chemistry from the American Pharmaceutical Association Foundation in 1982 and Honorary Membership of ASP. He was designated as "Distinguished Economic Botanist" in 1989 by the Society of Economic Botany. In recognition

of his outstanding contribution to the College of Pharmacy at OSU, where he also served as Assistant Dean and co-founded the Pharmacy Alumni Association, the "Jack L. Beal Professorship and Endowed Chair" was established for a prominent natural products chemist and pharmacognosist. (Mark Bahar)

Ralph N. Blomster President (1972-1973)

Ralph Blomster received his B.S. in Pharmacy from the Massachusetts College of Pharmacy (1953), his M.S. in Pharmacognosy from the University of Pittsburgh (1958) and his Ph.D. from the University of Connecticut (1963). He became a member of the Plant Science Seminar (1956)

and is a founding member of the ASP. He is the Millard Fillmore of the Society (13th president). He taught at U. Pittsburgh (Instructor 1958-1959; Assistant Professor 1963-1966, Assoc. Professor 1966-1968) and the Univ. Maryland, (Professor 1968-1986). He served as department chair for twenty years, ten of them as head of the department of Pharmacognosy and ten as head of Medicinal Chemistry/Pharmacognosy. He served as the second editor of the ASP Newsletter. Some of his enjoyable moments in the Society were acting as local host for the fifth annual meeting in Pittsburgh "The International Symposium on



Catharanthus." Apart from the scientific program, the Riverboat ride on the Allegheny River and the notorious Vincatini spring to mind, as does the first meeting with the European pharmacognosists in Munich and Vienna in 1970. He was local host in 1975 for the Society of Economic Botany meeting titled "Symposium on Plants and Cancer." He has served in various capacities in the Teachers of Biological Sciences section of the American Association of Colleges of Pharmacy and the Pharmacognosy and Natural Products Section of the American Pharmaceutical Association. He is currently Professor Emeritus in the Department of Pharmaceutical Sciences, University of Maryland Baltimore, and continues his thirty plus years role with the American Chemical Society Speakers Bureau on "Herbalism" and "Plants as a Source of drugs". He is also involved in church and civic programs and carving decoys. (RNB)

Ezio Bombardelli Tyler Prize (2004)

Ezio Bombardelli was born in Ronzone, Trentino, Italy, in 1939. He received a B.Sc. (Biology) from the Univ. Pavia in 1962, and then joined Inverni Della Beffa SpA, Milan. After a 5-year joint appointment as Assistant Professor at the Biochemistry Institute, Univ. Pavia, he became

Deputy Director of Research and Development at Inverni Della Beffa. Since 1986 he has been Scientific Director of Indena SpA, Milan. He has carried out seminal research in an impressive range of fields related to the discovery of new natural product drugs and botanical ingredients, encompassing isolation, structure elucidation, bioactivity, formulation, and clinical validation. Of particular relevance are his contributions to the area of the discovery of new anticancer, anti-inflammatory, antimicrobial, antiviral and neuroactive natural products. His commitment to the field is evident in his sincere and contagious enthusiasm for plants and their constituents, and he



has published almost 400 papers and is inventor on over 120 patents. In 2004, he received the Tyler Prize for his outstanding contributions to complementary herbal medicine. (EB)

Robert P. Borris President (1997-1998)

Robert Borris completed degrees in Biology and Pharmacy prior to receiving his Ph.D. in Pharmacognosy (1981) from the Univ. Illinois at Chicago. Following postdoctoral research at the Univ. Zurich, he held a faculty position at Rutgers University before joining the drug discovery

program at Merck Research Laboratories, where he spent the majority of his career. More recently he has served as Vice President for Botanical Science at the Council for Responsible Nutrition in Washington DC. Currently, he is Associate Dean for Research & Associate Professor at the newly created College of Pharmacy Univ. Hawaii at Hilo, where he is helping to establish the Pacific Basin's first school of Pharmacy. He attended his first ASP meeting in 1979 at Purdue University, and over the years he has presented/co-authored a dozen or more posters and presentations at ASP meetings. As ASP president he worked to increase the



participation of industrial scientists in the Society. Robert has enjoyed every ASP meeting he has attended, but if he absolutely "had to single out one meeting as his favorite, it would be the Oaxaca (2001) meeting." Also, he has enjoyed the excellent science and spectacular social programs at the numerous ASP meetings he has attended. (Scott Baggett)

Lynn Brady (1933-1992) President (1970-1971) Honorary Member (1991)

Lynn R. Brady received B.S. and M.S. degrees from the University of Nebraska. He then moved to the University of Washington, following his advisor, Varro Tyler, and completed his Ph.D. in Pharmacognosy in 1959. He was a founding member of the ASP and served as its 11th President.

Although he was a native of Nebraska, he spent most of his professional life at the University of Washington School of Pharmacy. He made full professor in 1966, and continued to move up the ranks, serving as Director of the Pharmaceutical Sciences and Associate Dean for Academic and Student Programs. His scholarship and scientific credentials have been internationally recognized, as was his service to his profession. Lynn served on the Editorial Advisory Board of the Society for more than twenty years. He never missed an Annual Meeting of the ASP, at which he always found time to help roast the outgoing President. For many years, he provided the wood from which the gavel of each retiring



president was made. This wood was from the *Cascara sagrada* tree, and was native to Lynn's area of the Pacific Northwest. Lynn's research interests were in the area of secondary metabolites of higher fungi, and his research led to the publication of nearly one hundred scientific papers. He also served as a co-editor (with Varro Tyler and Jim Robbers) of the standard American textbook *Pharmacognosy* for the 7th – 9th editions. In 1991, he was made an Honorary Member of the ASP. Among his many other honors, the he was recognized by the establishment of the Lynn R. Brady Endowed Scholarship Fund at the University of Washington and the ASP established the Lynn Brady Student Travel Award for graduate students to help with the cost of travel to the annual ASP meeting. (Dave Carew)

Arnold R. Brossi Honorary Member (1991)

Born in Winterthur, Switzerland, in 1923, Dr. Arnold Brossi obtained his Ph.D. from ETH in Zurich in 1952 under Professor L. Ružička and working with Professor O. Jeger. In 1952, he joined Hoffmann La Roche in Basel, and in 1963 was appointed Director of the Chemical

Research Department at Hoffmann La Roche in Nutley, New Jersey (NJ), becoming Director of Chemical Research Worldwide at the company headquarters in Basel in 1973. In 1976, he joined Dr. B. Witkop at the NIH National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) as Chief of the Natural Products Section of the Laboratory of Structural Biology. From 1976 to 1991 he directed the research of 41 postdoctoral associates from 17 countries, and in 1991 he was named NIH Scientist Emeritus. From 1992-1994 he was Visiting Research Professor in the



Chemistry Department at Georgetown University, Washington, D. C., and from 1991 to 1997 was a member of the faculty of the Residential School of Medicinal Chemistry at Drew University, Madison, NJ. Dr. Brossi has served on the Advisory and Editorial Boards of many research organizations and major journals, and was Editor of Volumes 21-40 and Co-Editor of Volumes 41-45 of the series, *The Alkaloids: Chemistry and Biology*, as well as serving on the WHO Steering Committee on Malaria Chemotherapy in Geneva from 1978-1989. Currently he is Research Professor at the School of Pharmacy, University of North Carolina, Chapel Hill. His research interests have included the synthesis and study of biologically active natural products and drugs for the treatment of malaria, and he has published over 400 papers. (AB)

John H. Cardellina II President (2000-2001)

John Cardellina earned bachelor degrees in Chemistry and Russian from Pennsylvania State University, and a Ph.D. from the Univ. Hawaii (1979). Following an academic position at Montana State University, he headed the Natural Products Chemistry Section of the NCI Lab. of

Drug Discovery Research and Development. Research, and in 1998 joined the Council for Responsible Nutrition (CRN) as V. P. of Botanical Science and Regulatory Affairs, guiding member companies in the manufacture of high quality, safe, beneficial herbal products for the ever-growing number of consumers. From 2002-2007, he served as an expert chemist in the NCI Screening Technologies Branch, focusing on the identification and preclinical development of novel antitumor, antiviral and anti-infective agents from libraries of natural product extracts and synthetic compounds. Currently, he consults for the dietary supplement industry, the NIH Office



of Dietary Supplements and the US Army Research Institute for Infectious Diseases. John attended his first ASP meeting in 1981 in Pittsburgh where President Jack Rosazza introduced himself to John within three minutes of his arrival! Other meeting highlights have been getting extra lobster(s) from President Yuzuru Shimizu at the Rhode Island meeting, and precipitating a lobster consumption challenge with Norm Farnsworth and others in an unlimited crab feed at 2006 Washington/Crystal City meeting. Since 1981, John has been very active on numerous ASP committees, and during his Presidential year he established the Younger Members Committee. (Scott Baggett)

David P. Carew President (1965-1966) Honorary Member (1991)

David P. Carew is a native of Massachusetts. He became interested in pharmacognosy while he was working on an undergraduate research project at the Massachusetts College of Pharmacy, under the direction of Maynard Quimby. He received B.S. and M.S. degrees from the

Massachusetts College of Pharmacy, and, in 1957, received his Ph.D. in Pharmacognosy from the University of Connecticut (UConn). His major professor at UConn was Arthur E. Schwarting. He has been on the faculty of the University of Iowa College of Pharmacy since 1957, and at present he is Emeritus Professor of Pharmacognosy. Dave was a pioneer in medicinal plant tissue culture research and secondary product metabolism. Much of his research involved members of the Apocynaceae, and with the genus *Catharanthus* in particular. Dave has enjoyed a lifetime with the ASP. He is a charter member as well as being a three-year member of the first Executive Committee. He later was the



sixth President of the Society and has served on numerous committees. In 1991 he was recognized for his long association and contributions to the ASP by induction as an Honorary Member. (DPC)

Guy T. Carter President (2008-2009)

Guy Carter received a bachelor's degree in Chemistry from Lehigh Univ. (1971) and a Ph.D. in Biochemistry from the Univ. Wisconsin (1976), and was an NIH Postdoctoral Fellow with Kenneth Rinehart at the Univ. Illinois. In 1981, he joined American Cyanamid (Lederle

Laboratories) as a natural product chemist working on antibiotic discovery. His research resulted in the discovery of nemadectin, which was the lead compound for the commercial antiparasitic agent Moxidectin®. He became Head of Natural Products Chemistry in 1994, just prior to the merger with Wyeth. At present, he is Assistant VP of Chemical Technologies, in the Chem. Sci. Department at Wyeth Research, and is responsible for Natural Products Discovery (sourcing to chemistry), Analytical Chemistry support, and Pharmaceutical Profiling. Guy is inventor or co-inventor on 21 US Patents and as an



author on more than 100 publications. He served on the Exec. Committee of the ASP (1998–2001) and as president. His first ASP was at UNC Chapel Hill (1985). He recalls that, "The sessions were held in classrooms, and most of us stayed in the dorms. I gave a presentation on the partial structure of a unique antibiotic... It was another thirteen years before the structure of saccharomicin was solved by Fangming Kong, and presented at the ASP Meeting in Orlando. By that time, our accommodations had improved considerably, as the venue was the Coronado Springs Resort at Walt Disney World." However, the most memorable meeting for him was the 2001 meeting in Oaxaca, Mexico, "In addition to a stellar scientific program, our hosts provided a true cultural experience featuring fireworks, music, and opportunities to absorb some of the artistic and historical richness of that region of Mexico." Guy serves on the Editorial Boards of *J. Antibiotics* (1995–present), *J. Nat. Prod.* (2006–present), and *Antimicrob. Agents Chemother.* (2009–), and was a member of the NIH Synthetic Biological Chemistry B Study Section (2005–2008). He was Vice Chair of the Marine Natural Products Gordon Research Conference in 2008 (and is slated to be Chair again in 2010). (GTC)

John M. Cassady President (1993-1994) Honorary Member (2006)

John Cassady was born in 1938 and grew up in Illinois. He received a B.A. from DePauw University in 1960 (in chemistry) and an M.S. (1962) and Ph.D. (1964) from Western Reserve Univ. (Organic Chemistry). He was an NIH postdoctoral fellow (1965-1966) at the Univ.

Wisconsin in Morris Kupchan's lab, working on the isolation and structure elucidation of tumor inhibitors from plants. In 1966 he joined the faculty of the Purdue University School of Pharmacy as an Assistant Prof. in the Department of Medicinal Chemistry and Pharmacognosy. He was promoted to Associate Professor (1970) and Professor (1974). Shortly after that, he was appointed Associate Department Head (1976) and then Department Head (1980), and in 1987, he was named the Glenn L. Jenkins Distinguished Professor of



Med. Chem. and Pharmacognosy. In 1988, he accepted the position of Dean of The Ohio State University College of Pharmacy, a post he held until 2003, when he returned to the faculty as Professor Emeritus. In 2005 he was appointed Vice President for Research at Oregon State University, and he still serves in that position. John has been a member of the ASP since 1966, and has been very active in the Society. He served on the nominating and publicity committees, was scientific program chairman for the 1976 annual meeting, was elected to the Executive Committee (1978-1981), and serves as Chair of the ASP Foundation Board (1994-present). John's research interests involve the discovery and design of anticancer drugs from natural products, specifically, the isolation, structure elucidation, and chemical studies of antitumor and chemopreventive agents from plants, and the synthesis of potential antitumor agents. He received the Research Achievement award in Natural Products Chemistry from the APhA (1990). (JMC)

Philip Catalfomo President (1975-1976)

Phil Catalfomo received a B.S. in Biology from Providence College and a B.S. in Pharmacy from the University of Connecticut, where, incidentally, he received the Kilmer Prize under the tutelage of Art Schwarting. He then obtained M.S. and Ph.D. degrees in Pharmacognosy from

the University of Washington (1960 and 1962, respectively), with Varro Tyler as his Ph.D. mentor. Phil's research interests included secondary metabolism of higher fungi, and chemical ecology of marine fungi. He began his career at Oregon State University in 1963, where he progressed from Asst. Professor to Professor, also serving as Guest Professor at the Univ. Zurich (1969-1970). In 1975, he moved to Univ. Montana to take up the position of Dean of the College of Pharmacy and Allied Health Sciences in Billings,



MT. In 1986, he became Dean of the College of Health Sciences at the Univ. Wyoming. Phil retired in 1991, and enjoys boating and the natural beauty around his home in Dayton, MT. (PC)

Jon Clardy President (2003-2004) Research Achievement Award (2004) Fellow (2006)

An ardent Redskins fan, Jon Clardy grew up in Arlington, VA. He graduated Phi Beta Kappa from Yale University and went on to earn a Ph.D. at Harvard University. After serving as Assistant Professor at Iowa State University, he joined the faculty at Cornell University where he

remained for over twenty years. In 2002, he joined the Harvard Medical School Department of Biological Chemistry and Molecular Pharmacology where he is currently the Hsien Wu and Daisy Yen Wu Professor. He recalls joining ASP and attending his first meeting around 1987. When delivering his Research Achievement Award talk at the 2004 meeting, he chose not to present a retrospective of his career, but focused instead on the lab's latest work discovering new natural products and new signaling pathways from heterologously expressed environmental DNA. His most memorable ASP meeting was in Santa Cruz in 1996, when grad students who accompanied him



to the meeting went to the beach on the last day of the meeting, missing his talk. They reappeared at the banquet that evening with hideous sunburns that gave them away. He also fondly remembers the joint meeting in Amsterdam, where he and his wife Andrea, whose parents grew up in Amsterdam, were able to revisit some of the places she had heard about when she was a child. They also stayed at the hotel where John Lennon and Yoko Ono held their Bed-In for Peace in 1969. As president, he was most proud of his efforts to get more young people (including the author of this biography!) involved on the committees, where the real work of the society is done. (Katherine Maloney)

Alice M. Clark President (1994-1995)

In 1976 Alice Clark travelled to her first ASP meeting in Cable, WI, to present her recently completed Master's research. Being her first oral presentation at her first national meeting, she was naturally nervous and had practiced repeatedly. Unfortunately, the final slide with the

structure of the new compound she had isolated was missing (left in the projector at home!), and trying to "think on her feet", she drew the entire structure from memory, forgetting that she had shown it just two slides before! Despite this misstep, she recalls feeling nothing but overwhelming support from the audience, and a sense of belonging to a family she had not known until that moment. As President, the final incorporation of *J. Nat. Prod.* into ACS Journals occurred, and although this move seemed like a huge "leap of faith" at the time, it has since proven highly beneficial to *JNP* and the Society. After 32 years, and hosting two annual and two interim



meetings, her first meeting remains her favorite; "the setting was beautiful, the people were friendly, and as a first time experience it was invigorating and empowering." Today she still attends meetings whenever her duties as Vice Chancellor for Research & Sponsored Programs allow, enjoying interacting with friends and colleagues and staying current in the field. Of her participation in ASP, she recalls it "was one of three major experiences during my professional career that helped to prepare me for the leadership roles I was called to take on later in life. Without the friendships made through ASP and the words of encouragement and support, I would not have had as rewarding a career." She reminds us "if you embrace the society and stay involved, it will encourage you and support you," and could become your professional family as well. (Christina M. Coleman)

George H. Constantine, Jr. President (1976-1977)

George Constantine started his academic career at San Jose State, obtained a B.S. in Pharmacy and M.S. from Univ. Utah (1960; 1962), and completed his Ph.D. at Oregon State Univ. (OSU) in 1966. During his academic career at OSU he became Associate Dean and advised several

graduate students and student groups. He has been an ASP member since attending the Rhode Island meeting in 1964, has served on many committees, and co-hosted the 1969 and 2005 ASP meetings at OSU. He was active in the OSU Sea Grant program (1970-1976), did a sabbatical with the Scheuer group at Univ. Hawaii (1973-1974), and attended the first Gordon Marine Natural Products Conference in 1975. He was also active in the "Teachers of Biological Sciences" section of American Association of Colleges of Pharmacy and the Pharmacognosy and Natural Products section of the American Pharmaceutical Association, but in 1980,



administrative opportunities took him away from natural products research. Currently he is serving on the expert committee to the United States Pharmacopeia on botanical diet supplements (2005-2010), and he has devoted time to civic activities where he was co-founder of the Benton Hospice. In 2000, he became re-involved with natural products, writing a book with Varro Tyler entitled *Tyler's Tips, the Shoppers Guide for Herbal Remedies*. He continues to make presentations to professional and public audiences on dietary supplements and new natural medicines. (GHC)

Geoffrey A. Cordell President (1985-1986) Honorary Member (2006)

Geoff Cordell obtained his undergraduate and graduate degrees at the Univ. Manchester (UK) where his mentors included Arthur Birch and George Smith. Following a postdoc at MIT with George Büchi, he joined the College of Pharmacy, Univ. Illinois at Chicago (UIC) in 1972,

became a Professor in 1980, and retired in 2007. During this period he served in several administrative positions, including as a Department Head for 12 years, and as Interim Dean of the College of Pharmacy for nearly three years. His research has spanned the discovery of anticancer and antimalarial agents from plants, the application of new NMR techniques, the chemistry of acronycine, and the biosynthesis of indolocarbazole alkaloids. He has published over 560 papers, book chapters, and reviews, has been the editor of 32 books, including 27 volumes in the series "The Alkaloids: Chemistry and Biology", and has



also served as a member of the Editorial Advisory Board of 18 journals; he is very proud of his book "Introduction to Alkaloids: A Biosynthetic Approach." He is the Foreign Director of the Sichuan Institute for TCM in Chengdu, China; an Honorary Professor at Sichuan University; was a co-founder of a US-Thai collaboration, initiating six new Thai schools of pharmacy and many new grad. programs; has spoken worldwide about the need to enhance research on the quality control and sustainable development of traditional medicines as a global health care issue; is studying the use of vegetables as sustainable reagents for chiral synthesis; serves as a consultant in several countries for the development of natural product research programs; and is an elected Fellow of the Royal Chemical Society, the Linnean Society of London, and the American Association of Pharmaceutical Scientists. His wish for the future of the ASP is that it take up the challenge of promoting natural products research as an integral aspect of global health care. (GAC)

Gordon M. Cragg President (1998-1999) Honorary Member (2003) Fellow (2008)

Gordon did his undergraduate training at Rhodes University, South Africa, and obtained his D. Phil. from Oxford University in 1963. After a postdoc at UCLA, he returned to S. Africa in 1965 where he served on the faculties of the Univ. South Africa, and the Univ. Cape Town. In 1979,

he returned to the US to join the Cancer Research Institute at Arizona State University, working with Bob Pettit, and in 1985 he moved to the NCI where he was appointed Chief of the Natural Products Branch in 1990. He retired in 2004, and is currently serving as an NIH Special Volunteer. He was awarded NIH Merit Awards for his contributions to the development of taxol (1991), leadership in establishing international



collaborative research in biodiversity and natural products drug discovery (2004), and contributions to developing and teaching NIH technology transfer courses (2004). In 2006 he was awarded the "William L. Brown Award for Plant Genetic Resources" by Missouri Botanical Garden at a two day Symposium held in his honor, where a recently discovered Madagascar plant, *Ludia craggiana*, was named in his honor. At NCI, his primary focus was the importance of multidisciplinary and international collaboration in drug discovery and development; he has established collaborations between NCI and organizations in many countries promoting drug discovery from their natural resources, and he has given invited talks at conferences worldwide emphasizing this point. Thus it was a privilege and pleasure to join the fellow presidents of European societies in promoting international collaboration at the joint meeting in Amsterdam in 1999. Gordon is proud of the international character of the ASP and the leadership the Society has taken in establishing natural products as the prime source of drug leads, both through the outstanding research performed by its members, and the record of top quality publications appearing in the *J. Nat. Prod.* (GMC)

Phillip Crews Norman R. Farnsworth Research Achievement Award (2008) Fellow (2008) Phil Crews is a California native, and has spent most of his academic career in the State. He received his B.S. from the University of California at Los Angeles and his Ph.D. from UC Santa Barbara working with Domenick Bertelli. After a postdoc at Princeton University, he started as

an assistant faculty member at UC Santa Cruz in 1970, and remains there until the present day. The primary goals of his research group are to understand the chemistry of tropical marine sponges and marine-derived fungi. Bioassay-guided isolation assists in the discovery of natural products potent against human diseases such as cancer and neglected tropical diseases. The search for novel active compounds incorporates elements of structure elucidation, employing state-of-the-art nuclear magnetic resonance (NMR) techniques. He first joined



ASP in the early 1990's and attended his first meeting in Chicago in 1991. Since then, he attends meetings often, and was elected as an ASP Fellow in 2008. A review paper his ASP Research Achievement Award address at the joint meeting in Athens will be published in the *J. Nat. Prod.* (Katharine Watts)

John W. Daly Research Achievement Award (1997)

John Daly was born in Portland, OR, and attended Oregon State College, receiving his B.S. (1954) and M.A. (1955). He received his Ph.D. at Stanford University (1958) under Richard

Eastman, studying the constituents of peppermint oil. He joined the NIH as a postdoc with Bernhard Witkop and became the founding chief of the Lab. of Bioorganic Chemistry (NIDDK), serving from 1978-1997. In 2003, he became a Scientist Emeritus. He made seminal discoveries in the biochemical oxidation of arenes and the NIH shift, as well as the structure of the blow-dart poison, batrachotoxin, that stimulated his passion for the chemistry and pharmacology of amphibian alkaloids, leading to the characterization of over 800 different alkaloids from the brightly colored poison frogs as well as the arthropods from which most



derive their alkaloids. He was a world's authority on the pharmacology of caffeine, making foundational contributions to the pharmacology of nicotinic and other neurotransmitter receptors. He published over 700 papers, chapters and reviews and is an ISI highly cited researcher. He was a member of the National. Academy of Sciences, and received many awards, including the ACS Ernest Guenther Award, the Karl von Wilhelm Scheele Award from the Swedish Acad. Pharmaceutical Sciences, and the Arthur E. Schwarting Award. Joining ASP in 1993, he regarded ASP meetings as among his favorite to attend, and he found there a highly congenial atmosphere. He served as an editor for *J. Nat. Prod.* and on numerous ASP committees. Sadly, John passed away in March, 2008 following a battle with pancreatic cancer. He was one of the giants in natural products chemistry and is sorely missed. (Richard Fitch)

J. Michael Edwards President (1984-1985)

Michael Edwards held degrees from the Univ. Cambridge, England, and from Melbourne University, Australia, both in Organic Chemistry. His Ph.D. studies involved the structure and chemistry of chorismic acid, which led him to a lasting interest in the shikimic acid pathway of

amino acid biosynthesis, and to formation of natural products containing aromatic systems in general. After postdoctoral studies in Georgetown and Birmingham (UK), he spent three years at NIH, working with Ulrich Weiss, who was an ASP member for many years. Dr. Edwards then moved to the Univ. Connecticut to take up a position in the School of Pharmacy which became available when Arthur Schwarting was elected to the Deanship. Dr. Edwards was granted sabbatical leaves at the Universities of Surrey (UK), Cape Town (S. Africa), and Western Australia, where he was able to study the occurrence and biosynthesis of



the unusual phenalenone pigments of the Haemodoraceae, his major academic interest. Dr. Edwards retired from the Univ. Connecticut where he had been the Associate Dean of the School of Pharmacy for sixteen years. (JME)

Norman R. Farnsworth President (1961-1962) Honorary Member (1985) Fellow (2006) Norman R. Farnsworth Research Achievement Award (2005) Tyler Prize (2001)

After gaining his B.S. and M.S. (Massachusetts College of Pharmacy), Norm earned his Ph.D. at the Univ. Pittsburgh, and while still a grad student, served as the first ASP Vice President. He joined Univ. Illinois at Chicago (UIC) in 1970, and has served in numerous capacities, currently

being Distinguished Professor and Director of the UIC/NIH Center for Botanical Dietary Supplements Research. His research has been well funded by NIH (top 3% of all grant awardees), NSF, WHO, USDA, industry and private foundations, leading to over 500 scientific publications and reviews. Among his many honors are Honorary Doctorates from the Univ. Paris (Rene Descartes), Upsalla University and MA College of Pharmacy. He was one of the founding fathers of the ASP, and, as its second president, he contributed to the implementation of the new constitution and recruitment of members. Over the years,



Norm has encouraged innumerable UIC students and postdocs to present at ASP meetings, and many of them have become longtime active members. His favorite meeting was in Pittsburgh (1964) where every scientist who had a significant role in the development of anticancer agents from *Catharanthus roseus* attended a very spirited meeting; also noted was Norm's introduction of "vincatini" (Smirnoff vodka, chlorophyll, and other proprietary ingredients), greatly enjoyed by all attendees. He notes "It has been a privilege and honor to have seen the development of ASP over the last 50 years; I have missed probably only three or four meetings of the Society. My research skills, if any, have been greatly enhanced with contacts and information provided by and through the ASP and its annual meetings. I hope to be around for a few more." (NRF)

John Faulkner (1942-2003) Research Achievement Award (2003)

John Faulkner of UC San Diego, Scripps Institution of Oceanography (SIO), was a pioneer and one of the most influential scientists in the field of marine natural products, and a leader in exploration and discovery of potential pharmaceuticals from the oceans. He was born on June 10,

1942, in Bourne-mouth, England. He received his B.Sc. in 1962, and a Ph.D. in organic chemistry in 1965 from Imperial College, London. After postdocs at Harvard University and Stanford University, he joined SIO in 1968 as assistant professor. Active in synthesis, chemical ecology and drug discovery, he dedicated his scientific career to the discovery and isolation of chemicals from marine organisms, including chemicals used for defense in marine invertebrates, such as sponges and nudibranchs, and explored the possibility of these chemicals being used as pharmaceuticals. His contributions included the discovery of new anti-



inflammatory agents, new entities for the treatment of cancer and various new antibiotics. John forged new relationships between pure scientific research and applications, resulting in creative approaches in the development of new drugs, and through his research contributions, scientists are learning more about organic molecules in the ocean and their effect on the adaptations of marine life. He was a member of the Royal Society of Chemistry and the ACS, and he also had the distinction of being a visiting scholar to many prominent universities around the world, such as the Cambridge University, Univ. New South Wales, and Univ. British Columbia. He published over 350 scientific papers, including the invaluable review series on marine natural products in *Natural Products Reports*. (Based on the tribute in the Spring 2003 ASP Newsletter.)

William Fenical President (2005-2006) Norman R. Farnsworth Research Achievement Award (2006) Fellow (2006)

Bill Fenical was born in Chicago, and at age 12 moved to California, where he has lived ever since. He obtained his B.S. from California State Polytechnic University (1964), his M.S. from San Jose State University (1965), and his Ph.D. from the University of California at Riverside in

1968. He remained briefly at UC Riverside as an American Cancer Society postdoc, and then worked at the Shell Development Company in Emeryville, CA for a year before joining the Scripps Institution of Oceanography at UC San Diego, where he is currently Distinguished Professor of Oceanography. He also holds an appointment as Distinguished Professor of Pharmaceutical Science within the UC San Diego Skaggs School of Pharmacy and Pharmaceutical Sciences. He has been a member of ASP for over 20 years, joining after his original interest in chemical ecology widened to include a commitment to biomedical discovery consistent with the mission of the Society. He received the



Research Achievement Award in recognition of an investment he made about 15 years ago to develop marine microbiology. This proved to be an enormously challenging and risky endeavor which continues to pay off with the discovery of remarkably diverse and potent molecules, some of which have gone into clinical trials. As President, he established an ASP Annual Meeting Committee, which has brought order to the process of organizing and scheduling future society meetings. (Katherine Maloney)

Earl B. Fischer (1892-1961) Honorary Member (1961)

Earl Fischer was born on 27 August, 1892. He obtained a B.S. (Chemistry) from the University of Minnesota, and was appointed as an Instructor in Pharmacognosy on January 1, 1922. In 1926, he became an Assistant Professor, and was appointed Acting Head of Pharmacognosy on

January 1, 1927. In 1933-1934 he was enrolled as a graduate student, and with Pharmacognosy being established as a Department in 1936-1937, he became Professor in 1944. He was a delegate to the United States Pharmacopoeia (USP) Convention in 1929-1930, and appointed in 1939-1940 to the Subcommittee on Pharmacognosy, National Formulary, Revision Committee. He was a co-editor on the 3rd edition of Kraemer's Scientific and Applied Pharmacognosy. He died on 5 March, 1961 in Hennepin County, Minneapolis, MN. In the accompanying photo, Earl is on the right in



the back row. This photo was taken in 1938 during a visit by Dr. Edward Kremer of the University of Wisconsin who is front row center (John Staba; Source: Netz's History of the University of Minnesota Pharmacy and the University Board of Regents minutes. *Photo courtesy of Wisconsin Historical Society*)

Heinz G. Floss President (1977-1978) Research Achievement Award (1988) Fellow (2006)

Heinz Floss was born and raised in Berlin, Germany. He received degrees of Diplomchemiker (M.S., 1959) from the Technical University Berlin and Dr. rer. nat. (Ph.D., 1961) from the Technical University Munich, where he stayed for another 5 years to complete his

"Habilitation." During this time he was a postdoctoral researcher with Eric E. Conn at the Univ. California at Davis (1964–1965). In 1966, he joined Purdue University where he rose through the ranks to become Head of the Department of Medicinal Chemistry and Pharmacognosy and Lilly Distinguished Professor. In 1982 he joined The Ohio State University as Professor and Chair of the Department of Chemistry, and in 1987 he moved to the University of Washington, where, since 2000, he has been Professor Emeritus of Chemistry. He joined the ASP in 1967, the Editorial Board of *Lloydia* in 1971. As president, he pushed for expanding the scope of the



ASP beyond the traditional focus on higher plant natural products. In 1988 he was the second recipient of the Research Achievement Award. He has published over 400 papers in the field of natural product biosynthesis and trained over 100 Ph.D. students and postdoctoral fellows, many of whom now hold prominent academic positions throughout the world. Among other recognitions, he received the Volwiler Award of the AACP, a Humboldt Senior Scientist Award, and he holds honorary doctorates from Purdue and from the Univ. Bonn, Germany. (HGF)

Harry H.S. Fong President (1978-1979) Honorary Member (2004)

Harry H.S. Fong, a Charter Member of the ASP, is Professor Emeritus of Pharmacognosy at the Univ. Illinois at Chicago (UIC), Associate Director of the WHO Collaborating Centre on Traditional Medicine at UIC, and Adjunct Prof., RMIT Univ., Melbourne, Australia. His

research interests include natural agents useful against cancer, malaria, HIV and TB, and standardization of herbal medicines/botanical dietary supplements. Harry immigrated to the US at age 14, and thought that, like his father and grandfather, he would make his fortune as a pharmacy owner. However, as a pharmacy student at Univ. Pittsburgh (Class 1959), he met Norm Farnsworth, who enlisted Gordon Svoboda to convince Harry that \$100/month as a grad. student was better than \$500/month as a



pharmacist. As Farnsworth's first graduate student (MS, 1961), Fong learned to smoke cigars and swear like a sailor. It took Jack Beal at Ohio State four years (1961-1965) to undo some of those habits (and to impart some of the Beal humility). Among the things Harry prizes most are his service to the ASP, the Society of Economic Botany (SEB), and WHO. He has served on numerous committees of ASP, and as Associate Editor of *J. Nat. Prod.* (1993-1998), and he is a past president of ASP and SEB. He is a member of the WHO Traditional Medicine Expert Panel (1997-present) and sits on the International Advisory Board on Hong Kong Chinese *Materia Medica* Standards (1992-present). He is an author or co-author on over 165 research papers, book chapters, etc., including the *WHO Monographs on Selected Medicinal Plants* Vol. 1-4, the WHO Guidelines on GACP, and he is a drafter of the National Policy on Traditional Medicine for Papua New Guinea (2000-2010). He has received many awards, but he is most proud of the many former graduate students at UIC, whom he mentored, formally and informally, and of his three children who followed him into the academic world as Ph.D./M.D. research scientists. (HF)

William H. Gerwick President (2002-2003) Fellow (2008)

Bill Gerwick received a B.S. in Biochemistry from the University of California Davis in 1976, and a Ph.D. in Oceanography (1981) from the Scripps Institution of Oceanography (SIO), University of California San Diego (UCSD), mentored by Bill Fenical. In 2005 he returned to La

Jolla to hold a joint professorship at SIO and the Skaggs School of Pharmacy and Pharmaceutical Sciences, UCSD. His research focuses on the discovery of novel bioactive natural products from marine algae and cyanobacteria, especially those with anticancer, anti-tropical disease or neurotoxic properties. He is also interested in the biosynthetic pathways these organisms utilize to create these oftentimes exotic molecular structures. He served as Assoc. Editor of *J. Nat. Prod.* (2002-2008), and on the NIH Review Committee



for Natural Products Research (2003-2007). He was elected Chair of the Gordon Research Conference on Marine Natural Products Chemistry (1996), and the Foreign Chair of the US-Japan Symposium on Marine Natural Products Chemistry in 2003. He attended his first ASP meeting in 1985 (UNC Chapel Hill), and Bill and his students have presented numerous posters and talks at ASP meetings. He was conference chair for the 2005 annual meeting of the ASP held on the Oregon State University campus, which is also his favorite (so far). He was honored to be the lead organizer. The science was exceptional, the Oregon State University provided a great venue, we had some really fun excursions, and the night of wine tasting/salmon bake/folk music seemed to bring it all together. As ASP President, he expanded the number of awards for undergraduate and graduate students to attend the annual meeting, and started the student poster award program at the annual meeting. Because of his ongoing service to ASP, he was made a Fellow of the Society. (WHG)

Melvin R. Gibson (1920-2008) President (1964-1965)

Melvin Gibson received a B.S. in Pharmacy from the Univ. Nebraska in 1942. While there, he played trumpet in the University Symphony, and achieved the rank of Major in the ROTC. After graduating, he served in the army and received a Bronze Star and Purple Heart. He then

completed a M.S. degree in pharmaceutical chemistry at the Univ. Nebraska and went on to the Univ. Illinois at Chicago to complete his Ph.D. In 1949, he joined the faculty at Washington State University College of Pharmacy, where in 1955, he was appointed full professor, and was a leader in pharmacy education until his retirement in 1985. He served as editor of the *American Journal of Pharmaceutical Education* from 1956-1961, and was a co-author and editor of *Remington's Pharmaceutical Science* from 1965 to 1985. He received many honors and awards, including the American Association of Colleges of Pharmacy (AACP) Pharmacy Educator of the Year Award and the Rufus A. Lyman Award from the AACP. He was a



Senior Visiting Fellow of the Organization for Economic Cooperation and Development at the Royal Pharmacy Institute in Stockholm, Sweden, and at the University of Leiden, Holland. (Based on the obituary by the MRG Family in the Summer 2008 ASP Newsletter)

James B. Gloer President (1999-2000)

James Gloer received a B.S. in Chemistry from the University of Florida in 1978, and a Ph.D. with Ken Rinehart from the Univ. Illinois in 1983. His thesis work involved the isolation and structure elucidation of a family of novel depsipeptide anticancer agents from a marine tunicate

(didemnins). He was a postdoc at Cornell University with Jerry. Meinwald from 1983-1984, and joined the faculty at the Univ. Iowa as an Assistant Professor in 1984. He was promoted to Associate Professor in 1990 and to Professor in 1994, and was recently named the Roy J. Carver/Ralph L. Shriner Professor of Chemistry. His research interests focus on the discovery, isolation, and structure determination of new bioactive natural products from fungi, with an emphasis on compounds having antifungal, insecticidal, and potential anticancer effects. His program is distinguished by its emphasis on application of ecological rationale and taxonomic considerations to the selection of target



fungi for chemical investigation. He has published some 20 papers and is a co-inventor on ten patents. His research has been supported continuously since 1989 by grants from NSF and NIH, as well as by the Frasch Foundation, Biotechnology Research and Development Corporation, and other industrial sources. He has received an NIH Research Career Development Award, a Burlington Northern Foundation Faculty Achievement Award, an NSF Grant Extension for Special Creativity, and an Alfred P. Sloan Foundation Fellowship, and is a Collegiate Fellow in the Univ. Iowa College of Liberal Arts and Sciences. He has served many times as an *ad hoc* member of NIH review panels, and is currently a member of the editorial advisory board of *J. Nat. Prod.* (JBG)

Jonathan L. Hartwell (1906-1991) Honorary Member (1973)

Jon Hartwell was a native of Boston and studied at Harvard University where he received his bachelor's, master's, and doctoral degrees in 1927, 1929, and 1935, respectively. He joined NCI in 1939 shortly after its formation (1937) and served for 36 years until his retirement in 1975.

Among his positions were Assistant Chief of the Cancer Chemotherapy National Service Center (CCNSC) and Head of Natural Products Section, Drug Research and Development Branch. He also did extensive laboratory work in the area of lignans, particularly those derived from *Podophyllum peltatum*, (Mayapple), which formed the basis for the subsequent discovery of etoposide, now a commonly used anticancer drug. His interest in plants as a source of anticancer agents led him to compile a thorough work on traditional and folkloric uses of plants for treatment of cancer that covered references to literature from ancient Chinese, Egyptian, Greek, and Roman eras through the period of European discovery in the Americas and Africa to the 1900s. This

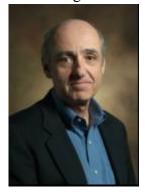


was originally published in 11 installments in *Lloydia* from 1967-1971, later reprinted in a single volume, *Plants Used Against Cancer: A Survey*. He was personally responsible for the initiation and early development of research programs for natural products at the NCI, which led to the continuing funding of major US research groups, including those of pioneers such as Jack Cole, Norman Farnsworth, S. Morris Kupchan, G. Robert Pettit, and Monroe Wall. Without his trail-blazing efforts, there would certainly be much less support for plant and marine biomedical research today. (GMC)

Sidney M. Hecht Norman R. Farnsworth Research Achievement Award (1998) Fellow (2006)

Sid Hecht is a native of New York City. He obtained his B.A. in Chemistry from the University of Rochester, where he began his research career in the laboratory of Professor Stanley Tarbell carrying out synthetic studies pertinent to the chemistry of the natural product fumagillin. His

graduate work at the Univ. of Illinois, carried out under the direction of Professor Nelson Leonard, dealt with the chemistry and biochemistry of naturally occurring plant hormones known as cytokinins. Parallel studies in chemistry and biochemistry characterized his postdoctoral studies at the University of Wisconsin, where he studied with Professors Robert Bock and Folke Skoog. As a faculty member at MIT, he began his studies on bleomycin and transfer RNA function, which have continued until this day. His natural products isolation work began shortly after his move to the University of Virginia in 1979, and these studies intensified when he began a concurrent appointment at Smith, Kline & French Laboratories in 1981. These studies led to the identification of camptothecin as the first



topoisomerase I poison, and to the discovery of Hycamtin, now marketed for the treatment of ovarian cancer. His recent retirement from the University of Virginia and concomitant appointment as Director of the Center for BioEnergetics at Arizona State University have opened a new chapter in his research studies, dealing with definition of the function of the mitochondrial electron transport chain, and the development of therapeutic strategies to blunt the effects of mitochondrial dysfunction. (SMH)

Robert Hegnauer (1919-2007) Honorary Member (1970)

Robert Hegnauer obtained a pharmacist diploma in Zürich. Then, after a year working as a pharmacist, he enrolled at Eidgenössischen Technischen Hochschule (ETH) Zürich, where, in 1948, he completed his doctoral studies on the subject of the chemistry and morphology of Swiss

Thymus. In 1949, he moved to the Netherlands and took an academic post at the Institute of Pharmacy in Leiden University, quickly rising to Professor of Pharmacognosy (1952). By 1962, his interest in chemotaxonomy led him to move from the Institute of Pharmacy to the Biology department, where he held the post of Professor of Experimental Systematics. It was in 1962 that he published the first volume of what many consider to be his life's work, *Chemotaxonomie der Pflanzen*, which continued for 13 volumes and more than 9000 pages, the last being published in 2001. He was an active ASP member, and, in remembering Robert, Norm Farnsworth noted that "Professor Hegnauer was one of the



finest gentlemen that I have ever met. His major claim to fame was the magnificent series of volumes of the *Chemotaxonomie der Pflanzen*, which are widely used by anyone interested in secondary metabolites from higher plants." He received many awards and honors throughout his career. He was awarded honorary membership in Gesellschaft für Arzneipflanzenforschung (GA) and the Deutsche Botanische Gesellschaft, and received the ESA in Gold (the highest scientific honor of the GA), the Flückiger Medal, and the Silver Medal of the Phytochemical Society of Europe. (Based on the obituary by JJC (Hans) Scheffer in the Summer 2007 ASP Newsletter.)

Albert Hofmann (1906-2008) Honorary Member (1974)

Albert Hoffman was one of a rare group of scientists whose scientific discoveries make for interesting reading to those outside of their circle of professional colleagues. His passing in 2008 at the age of 102 made international headlines as the world remembered this remarkably

successful industrial chemist, gentleman of science, dedicated pharmaceutical researcher, and voice for the importance of natural product chemistry in medical research. He received his Ph.D. from the Univ. Zurich on the subject of the structure of chitin. In 1929, he began to work at Sandoz in Basel, Switzerland, where he worked in pharmaceutical and chemical research until retiring in 1971. Throughout much of his long career he studied bioactive natural products, including cardiac glycosides from squill and ergot alkaloids from *Claviceps*, and developed a number of successful pharmaceuticals based on the ergot



alkaloid class (including Hydergine®, Methergine®, and Dihydergot®). As part of his research on the synthesis of analogs of the ergot alkaloids, in 1943 he made the now famous serendipitous discovery of the psychoactive properties of LSD, one of a series of derivatives of lysergic acid. Although he referred to LSD as his "problem child", the fields of psychopharmacology and neurochemistry owe a great deal to this discovery. In addition to over 100 scientific papers, he published several books, including a history of the research that led to the discovery of LSD and early experiments in humans, as well as more reflective and philosophical works. (Based on the obituary by Otto Sticher in the Summer 2008 ASP Newsletter.)

Susan Band Horwitz Fellow (2008)

Susan Horwitz was born in 1937 in Cambridge MA, and graduated with a B.S. from Bryn Mawr College in 1958. She received her Ph.D. in biochemistry from Brandeis Univ. (1963), and, after part-time postdocs at Tufts and Emory Universities, she moved as a research associate to Albert

Einstein College of Medicine in the Bronx, NY in 1967, becoming Assistant Professor in the Pharmacology Dept. in 1970. She is now Distinguished Professor in the Departments of Cell Biology and Molecular Pharmacology, as well as Co-Chair of the latter department and Rose C. Falkenstein Professor of Cancer Research. Her pioneering work in the late 1970s identified the unique mechanism of action of taxol® and played a critical role in advancing paclitaxel and other members of the taxane class to becoming first line treatments for breast, ovarian and non-small cell lung cancer. Her research is focused on the development of drugs derived from



natural sources, and the problem of drug resistance, and she has published over 180 papers. She was President of the American Association for Cancer Research (2002-3), and her many accolades include receipt of the Medal of Honor from the American Cancer Society, the Warren Alpert Foundation Prize from Harvard Medical School, the Bristol-Myers Squibb Freedom to Discover Award for Distinguished Achievement in Cancer Research, and the Mayor's Award for Excellence in Science & Technology, as well as election to the National Academy of Sciences, the Institute of Medicine, and the American Academy of Arts and Sciences. (SBH)

Charles Hufford President (1996-1997)

After joining the ASP during his grad studies at the Ohio State University in the early 1970s, Charles Hufford attended his first ASP meeting in 1972, and has since made more than 50 presentations of his research, including his life-long research on herbal dietary supplements. He

has enjoyed many ASP meetings, including the 1973 meeting at Jekyll Island, GA, the 1976 meeting in Cable, WI, and the 1983 and 1995 meetings held at the University of Mississippi. The 1997 meeting at the Univ. Iowa was also memorable due to the quality of the academic setting and the overall scientific excellence. As president, he instituted policies which streamlined business meetings, and helped establish the independent position of website manager. His most significant long range contribution was, perhaps, his administrative reforms of the ASP Foundation, where he introduced the idea of a permanent chair, and persuaded John Cassady to accept the position. The Foundation has since greatly benefited from John's



administrative and fund-raising experience, as well as from the longer term stability of the relationships built with its potential funding sources. Throughout his long involvement with the ASP and other societies, he has come to greatly admire the ASP and its members for their dedication and high level of involvement. As a primarily volunteer-based society, he remarks that he is often "surprised at how well the society works without a paid staff," and that the "society functions quite well and is financially sound due to huge contributions by key members of the society and to a large group of loyal people." (Christina M. Coleman)

C. Richard Hutchinson Research Achievement Award (2000)

C. Richard Hutchinson, was born in Dayton, OH (1943), attended the Ohio State University (B.S., 1966) and the Univ. Minnesota (Ph.D., 1970). Following postdoctoral work at Cambridge University (1971), he was an Assistant Professor of Pharmacognosy at Univ. Connecticut (1971-

1974). He then moved to the Univ. Wisconsin (UW), taking a post in the Medicinal Chemistry department (1974), and rising to Professor of Medicinal Chemistry and Bacteriology at UW. He retired in March 2000, and joined Kosan Biosciences, Hayward, CA as a Vice President and head of New Technologies. In 2004 he returned part-time to UW, and in 2007 co-founded Centrose LLC, where he is President and Chief Scientific Officer, and he conducts ad hoc teaching and research advising at UW. During the past 37 years, a major focus of his research was been in understanding the biosynthesis of naturally



occurring drugs through studies of the molecular genetics and biochemistry of antibiotic production in microorganisms. Through work on the genetic manipulation of polyketide genes, his laboratory created novel metabolites, devised methods to purify and study polyketide synthase enzymes, established fermentation routes to pharmaceutically important compounds, and used genetic engineering to develop improved strains of commercially important microorganisms. He combined biochemical, chemical, and genetic methods in his research. Richard has published over 240 papers, held numerous federal and industrial research grants and received many awards, including Guggenheim and Fullbright fellowships, the Charles Thom Research Achievement Award of the Society for Industrial Microbiology, the AACP Paul Dawson Biotechnology Award, and a Distinguished Alumni Award from OSU. (CRH)

Chris Ireland President (1991-1992)

Chris Ireland received his B.A. from the University of California at San Diego and his Ph.D. from the Scripps Institution of Oceanography. He joined the faculty of the Univ. Utah as an Assistant Professor of Medicinal Chemistry in 1983. His current appointment is Professor and

Chair, Department of Medicinal Chemistry and Adjunct Professor of Chemistry. He has established himself as a world leader in natural product drug discovery, focusing on antitumor agents from natural product sources, including marine invertebrate animals, tropical plants, and fungi. He and his co-workers have published over 150 peer reviewed research articles, eight book chapters and five patents. He has been invited to speak at many national and international symposia and has served as Chair of the Marine Natural Products Gordon Conference and the organizing committee of two highly successful ASP meetings



(Park City 1987, San Diego 1993), as well as on a number of review panels at NIH, and most recently as an ad hoc member of the Board of Scientific Counselors. His awards include an Alfred P. Sloan Foundation Fellowship, an NIH Career Development Award, and several from the University and State of Utah for research and teaching excellence. He has been awarded over \$20 million research funding from agencies including the NIH (including NCDDG and ICBG), the US Dept. of Commerce, the Petroleum Research Fund and the Alfred P. Sloan Foundation, and was recognized (2007) for being in the top 5 percentile for NIH funding worldwide for the past two decades. He has served on the board of directors and/or scientific advisory boards of six US biotechnology companies and as a senior consultant to Wyeth Research. (CI)

Tatsuo Kariyone (1893-1977) Honorary Member (1967)

Tatsuo Kariyone was probably the most noted Japanese pharmacognosist and phytochemist. As the leader of the Kyoto group, he educated a number of noted scholars who were responsible for the present prospering Japanese natural product research. He was also one of a few Japanese

scholars who promoted Japanese academia on the international scene during the chaotic years after World War II. He graduated from the Imperial Tokyo Univ. in 1917 and entered the government service as a chief scientist in charge of crude drugs at the Japanese National Institute of Health Sciences (JNIHS). In 1940, he joined the newly created Faculty of Pharmaceutical Sciences, Kyoto Univ. as the first professor of pharmacognosy. Since 1953, he also served as the director of JNIHS. His research field was broad, from the chemical and pharmcognostic studies of medicinal plants, to the cultivation of medicinal plants. In his later years, he



started an extensive photochemical investigation of conifers and ferns. He had incomparable knowledge of medicinal plants and surprised everyone with his vast memory. He authored hundreds of papers and a number of books, some of which became the standard textbooks in Japan. Not only was he a distinguished scholar, but he was also an outstanding statesman, representing the pharmaceutical societies of Japan, both academia and industry. He was thrice the president of Japanese Pharmaceutical Society and the president of Japanese Pharmacist Association. He presided over various government and public committees, and represented Japan at the WHO and other international organizations. He made great efforts to establish international collaborations with the US and European countries, and received a number of honors including an honorary doctorate from University of Paris. (Yuzuru Shimizu)

William Kelleher (1929-2007) President (1973-1974)

Bill Kelleher received B.S. and M.S. degrees from the Univ. Connecticut (UConn) School of Pharmacy, and his Ph.D. from the Univ. Wisconsin (under Marvin J. Johnson). He was a professor of Pharmacognosy for 28 years at the UConn School of Pharmacy, and, for part of that

time, he served as Assistant Dean for Graduate Education & Research. He had many collaborations, including work with Dr. Arthur Schwarting, and also was known to work many long hours helping him edit *Lloydia*, which later became *J. Nat. Prod.*. His main research interests were in microbial biochemistry, fermentation, and applied microbiology. Much of his work focused on the secondary products of *Claviceps paspali* (which produced lysergic acid derivatives), *Amanita muscaria*, and others. Jack Rosazza and Bob Krueger have shared stories about working with Dr. Kelleher, and it is



clear that he was an outstanding mentor and stern taskmaster who took research, teaching, and training scientists very seriously. He also had a quirky sense of humor, loved to play practical jokes, and knew how to motivate students to make their best effort. Jack worked for him in the late 1960s on a project entitled "The production of lysergic acid derivatives in submerged culture: Inorganic nutrition studies". Despite what one might imagine about the inner workings of a laboratory engaged in such projects in the late 1960s, Jack had this to say about the experience: "Anyone who worked with Bill realized very quickly that they would be held to the highest standards of performance and levels of accountability for everything." (Based on the obituary by WPJ, Jack Rosazza, and Bob Krueger in the Summer 2008 ASP Newsletter)

A. Douglas Kinghorn President (1990-1991) Honorary Member (2008) Fellow (2007)

Douglas Kinghorn has received degrees from the Universities of Bradford, Strathclyde (MSc), and London (Ph.D. Pharmacognosy, 1975, advisor Fred Evans; D.Sc. Pharmacy, 1990). After postdocs at Ole Miss and Univ. Illinois at Chicago (UIC), he quickly rose through the UIC ranks

to full Professor (1986), and also served in various administrative roles, including Asst. Department Head (1995-2004). He has held Visiting Professorships at ETH-Zurich (1990), Univ. Salerno (1996) and Univ. Sao Paulo (1997). In 2004, he was appointed Professor and Jack L. Beal Chair in Natural Products Chemistry and Pharmacognosy, College of Pharmacy, The Ohio State University. His research centers on the isolation and characterization of bioactive compounds from plants, botanical dietary supplements, cancer chemopreventive and chemotherapeutic agents,



antimicrobials, and noncariogenic sweeteners and sweetness modifiers. Since 1988, he has served as a NIH grant reviewer, and since 2005, has been Chair of the Dietary Supplements-Botanicals Expert Committee of the U.S. Pharmacopeia. Among his many awards and honors, he is a Fellow of the Linnean Soc. of London, the Royal Pharmaceutical Soc. of Great Britain, the AAPS, the AAAS, and the School of Pharmacy, Univ. of London. He served as President of the Soc. of Economic Botany (1991-1992). His skill at teaching garnered him recognition as the B. Kenneth West University Scholar (1993), awarded by the Univ. Illinois Foundation, and the UIC Award for Excellence in Teaching (2002-2003). He is Editor-in-Chief of *J. Nat. Prod.* (since 1994), Series Editor-in-Chief of *Progress in the Chemistry of Organic Natural Products*, and is on the Advisory Boards of 15 other scientific journals. He has published about 425 scientific papers and chapters, and supervised some 40 graduate students and 60 postdocs and visiting scholars. (ADK)

David G.I. Kingston President (1988-1989) Research Achievement Award (1999) Fellow (2006)David Kingston became interested in natural products as an undergraduate at Cambridge University, discovering through a series of lectures by Lord Todd that natural products were not just interesting structures, but were also medicinally important. He received a B.A. and Ph.D.

with Don Cameron and Lord Todd, and began his research career at the State University of New York at Albany in 1966. He moved to Virginia Polytechnic Institute and State University in 1971, where he began his studies of potential anticancer agents from plants. He became interested in the ASP in part through the series of review papers published in *Lloydia* by Jonathan Hartwell (which was later published as a bound volume: *Plants Used Against Cancer*. *A Survey*), leading him to attend his first ASP meeting in 1974 in Chicago. He found the ASP to be very friendly and its members very helpful, something



that has not changed over the years since. He initiated the Book Review section of *J. Nat. Prod.* in 1979, serving as Book Review Editor from 1979-2002, and as Associate Editor from 1983-1998, where as the first chemistry professor to serve as an editor, he helped to increase the journal's visibility among other chemists. The Research Achievement Award (RAA), his first major award, aided his promotion to University Distinguished Professor and led to additional honors, including the Ernest Guenther Award of the ACS in 2008, as well as almost 200 invited lectures. For the 1985 joint meeting in Chapel Hill, he served as the Chair of the Scientific Program Committee, and this was also the first meeting where the attendance broke 300. That meeting and the 1999 meeting in Amsterdam where he received the RAA, are two of many special meetings that stand out as particularly memorable. (Russell B. Williams)

Kuo-Hsiung Lee Norman R. Farnsworth Research Achievement Award (2009)

Kuo-Hsiung Lee received his B.S. in pharmacy at Kaohsiung Medical University, Taiwan (1961), M.S. in pharmaceutical chemistry at Kyoto University, Japan (1965), and Ph.D. in medicinal chemistry at University of Minnesota, Minneapolis (1968), and was a postdoctoral

scholar in organic chemistry at UCLA (1968-1970). Since 1970, he has been at the Eshelman School of Pharmacy, University of North Carolina at Chapel Hill as Assistant Professor (1970-1973), Associate Professor (1974-1976), Full Professor (1977-1991), and Kenan Professor of Medicinal Chemistry, Endowed Chair (1992-present). In 1983, Dr. Lee became Director of the Natural Products Research Laboratories and has discovered over 3,000 bioactive natural products and their synthetic analogs, providing leads for new generation drug design against AIDS, cancer, and other diseases. Currently, dimethyl succinyl betulinic acid (bevirimat), a modified



triterpene, is first in a new class of HIV drug candidates called "maturation inhibitors" and will begin Phase III clinical trials in 2009. His productive, internationally known research has resulted in over 635 research articles and over 68 patents, and led to numerous awards, including the Lifu Academic Award for Chinese Medicine (1994), Outstanding Achievement Award, University of Minnesota (1999), Taiwanese-American Foundation Achievement Award in Science and Engineering (2003), and Kitasato Microbial Chemistry Medal, Japan (2005), as well as election as Academician of Academia Sinica, Taiwan (1996). Dr. Lee is honored to receive the 2009 Norman R. Farnsworth Research Achievement Award from ASP for his contributions in medicinal and natural products chemistry. (KHL)

John T. Lloyd (1884-1970) Honorary Member (1962)

John Thomas Lloyd received his B.S. in 1909 from Cornell University and continued at Cornell as an instructor and doctoral student in entomology. As part of his research, he traveled to South America with A. A. Allen to collect specimens for the American Museum of Natural History.

His graduate career was interrupted in 1917, when he joined the American Ambulance Corps in France. After the war, he resumed his doctoral studies, and received his Ph.D. (thesis topic of "*The biology of the North American caddis fly larvae*") from Cornell in 1920. He then returned to Cincinnati and the family business, Lloyd Brothers Pharmacists, Inc., where he worked as an assistant chemist, and then manager, and by the late 1920s, he was acting head of research. After the death of John Uri Lloyd, and the subsequent sale of the firm, in 1938, John T. Lloyd started a new pharmaceutical company, John T. Lloyd Laboratories, Inc., but legal

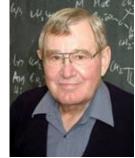


disputes over the use of the Lloyd name were ongoing for many years. His collected papers are stored at the Lloyd Library and Museum in Cincinnati, OH, and include writings on entomology and Eclectic medicine. (WPJ, with thanks to the staff at the Lloyd Library and Museum; Photo credit: Lloyd Library and Museum, Archives Collection, Photo Collection, SC106, Box 1, loose photos)

Tom J. Mabry Research Achievement Award (2001)

Tom Mabry was born on the outskirts of Commerce, Texas, where his time spent outdoors in the fields inspired a curiosity about the natural world that led him to study biology and chemistry. He obtained his B.S./M.S. in Chemistry (1953) from Texas A&M-Commerce, then worked at

Chance Vought Aircraft in Dallas for six months before beginning his service as a US Air Force Research Chemist at the Wright-Patterson Air Development Center in Ohio. Following his dreams to become a chemist instead of a pilot, he moved to Rice University, where he obtained a Ph.D. in Organic Chemistry (1960). He began the career in natural products research, for which he is best known, as a post-doctoral fellow at the University of Zurich (1960-1962). In 1963, he joined the faculty of the Department of Botany at the Univ. Texas (UT) at Austin where he has continued his research for more than four decades, serving as the Chairman



of Botany (1980-1985), and then continuing in the Section of Molecular Cell and Developmental Biology upon restructuring of the School of Biological Sciences. Tom's pioneering phytochemical research has contributed significantly to the understanding and analysis of the chemistry, distribution, biogenesis, and medicinal value of a number of natural products, including flavonoids, betalains, and terpenoids. He is now Professor Emeritus, having supervised more than 70 students to doctoral and master's degrees, authored 700 publications and collaborated with scientists all over the world. He was the organizer and first President of the Phytochemical Society of North America (1966-1968). His many honors over the years include the "Pergamon Phytochemistry Prize" (1998), UT-Austin Graduate School's "Outstanding Doctoral Teaching Award." (1999), and the ASP Research Achievement Award. (Barbara Timmerman)

James McAlpine President (2004-2005)

Jim McAlpine was born in tropical North Queensland and grew up in almost all of the eastern states of Australia. He received a B.Sc. (Hons., 1962), M.Sc. (1964) and a Ph.D. (1968) from the Univ. New England with Noel Riggs, on the stereochemistry of natural products from the New

South Wales bitter vine, *Piptocalyx moorei*. A postdoc at Northwestern Univ. on the mode of action and biosynthesis of the erythromycins segued into a research position in the Pharmaceuticals Division of Abbott Laboratories, where Jim spent 24 years devoted to the discovery of principally anti-infectives and anticancer agents. From 1980-1996 he headed up Abbott's natural product discovery efforts, which yielded a large number of novel bioactive microbial secondary metabolites and a series of 9-dihydrotaxol analogs inspired by the discovery of the parent from *Taxus brevifolia*. He was a member of ASP's Taxol Historical Committee, which,



prior to the 2000 ASP meeting in Seattle, scoped out the collection sight of the first *T. brevifolia* samples and chose a nearby location in the La Wis Wis campground, populated with *Taxus*, for a historical marker. From 1996-2002 he was Vice President of Chemistry at Phytera Inc., working on manipulated plant cell cultures and marine derived microbes, and from 2002-2008 he was with Ecopia BioSciences Inc (later Thallion Pharmaceuticals Inc.) concentrating on the discovery of microbial secondary metabolites via analysis of the biosynthetic genes of the producing organism. As president of ASP he worked with committee chairs Nick Oberlies and Eric Schmidt to revamp the 45 year old constitution of the Society and the establish the rank of ASP Fellow. (JM)

James D. McChesney President (1986-1987).

Jim McChesney received a B.S. (Iowa State University), and an M.A. and Ph.D. from Indiana University. He became Prof. of Botany and Medicinal Chemistry at Univ. Kansas (1975), and moved to Univ. Mississippi (1977), chairing the Dept. of Pharmacognosy (1978-1986), and

teaching in Brazil as a Fulbright Fellow (1985). While Director of the Research Institute of Pharmaceutical Sciences (1986-1995), he conceived and implemented the establishment of the National Center for Natural Products Research (1989), and was named F.A.P. Barnard Distinguished Professor of Pharmaceutical Sciences (1993). In 1996 he became V.P. R&D at NaPro Biotherapeutics, renamed Tapestry Pharmaceuticals (2003) with the sale of its development group to ChromaDex, Boulder, CO. He became CSO of the latter group while remaining CSO at Tapestry. His



research interests include the chemistry, metabolism, function and production of bioactive natural products, chemotherapy of tropical diseases, and the control of plant growth and development. His current focus is development of cancer chemo-therapeutics. His achievements include: development of Ironstone Separations, a new technology for the separation and purification of natural product drug candidates; a strategy for economical production of paclitaxel from cultivated *Taxus* biomass; design of pharmaceutically improved taxanes, including, TPI 287, currently in Phase II clinical trials; discovery of a new 8-aminoquinoline analog, NPC 1161, having lower toxicity and broad anti-parasitic activity, and expected to enter clinical trials. An advisor to the WHO and UNESCO, and an elected Fellow of the AAAS (1995), he has received numerous awards and over \$40 million funding (NIH, NSF, FDA, USDA, WHO), and has authored nearly 200 publications and over 40 patents. (JDM)

Jerry L. McLaughlin President (1982-1983) Tyler Prize (2007)

Jerry McLaughlin grew up in Coldwater, MI. He received his B.S. in Pharmacy (1961), and M.S. (1963) and Ph.D. (1965) in Pharmacognosy all from the Univ. Michigan, studying under Ara Paul. After appointments on the faculty at the Univ. Michigan (1966), the Univ. Missouri Kansas

City (1967), and the Univ. Washington (1967-1971), he joined the faculty at Purdue Univ. (1971-1999). After over 30 years in academia, he took a position as VP at Nature's Sunshine (1999-2004). Now retired, he can be found hunting and fishing in Alaska during the summer months. He joined the ASP around 1963, and attended his first meeting in 1964 in Pittsburgh, which he refers to as the "Vincatini" meeting because of the emphasis on Vinca alkaloids and the mixed drinks that were consumed copiously by many members while on a boat tour. He enjoyed all ASP



meetings thereafter, but especially the meeting in Halifax (1994). By this time he had a large research group at Purdue, and they all drove in two vans from Indiana to Halifax, a trip of more than 30 hours one way. Jerry believed in bringing all his students to the ASP meetings, usually by van because of the great bonds between the students and postdocs that formed on these road trips. When he was President of the ASP, he was instrumental in convincing James Robbers to take the Editorship of the *J. Nat. Prod.* He also championed keeping the Journal in the discussions within the Society of whether or not to sell the Journal. He won the Tyler Prize for his research on the Annonaceous acetogenins, which he studied for about 20 years, leading to the description of nearly 200 new structures. (Nicholas Oberlies, Holly Showalter, and Craig Hopp; picture courtesy of William Keller)

Lester A. Mitscher President (1992-1993) Norman R. Farnsworth Research Achievement Award (2007), Fellow (2007)

Les Mitscher received his Ph.D. from Wayne State Univ. (1958), working on the structure of coffee diterpenes and optical rotatory dispersion under Carl Djerassi. After working on natural product chemistry at Lederle Labs (1958-1967) and rising to group leader in antibiotic discovery,

he became Asst. Prof. in Natural Products Chemistry at The Ohio State Univ. (1967), soon rising to Professor. In 1975, he became Univ. Distinguished Professor and Chair in the Dept. of Medicinal Chemistry at Univ. Kansas, retiring with a halftime appointment (2007). Les held joint academic appointments at Univ. Missouri, Kansas City and the Victorian College of Pharmacy, Melbourne. His research has centered on spectroscopy, synthesis, screening and structure determination of natural antimicrobial, anticancer and antimutagenic agents, and development of combinatorial methodologies.



He has authored or co-authored over 280 papers, including on herbal medicines, and 7 books on drug discovery and properties. He is a member of the Executive Committee of the International Organization for Chemical Sciences in Development and the Senior Advisory Committee of the Global Alliance for TB Drug Development, and has traveled widely lecturing and performing research. He consults extensively in Industry and for NIH, and is on the editorial board of several journals. Among his awards are the Smissman Award in Med. Chem. (ACS), Volweiler Award (Am. Assoc. for Pharmaceutical Education), the Research Achievement Award in Nat. Prod. Chem. (Am. Pharmaceutical Assoc.), the Award in Med. Chem. (ACS Med. Chem. Div.). He is a Fellow of AAAS and member of the ACS Medicinal Chem. Roll of Honor. (LAM).

Richard E. Moore (1933-2007) Research Achievement Award (2002)

Richard Moore grew up in San Francisco, and he received his B.S. and M.S. in chemistry (1957 and 1959) from the Univ. San Francisco. In 1962 he completed his Ph.D. at UC Berkeley with Henry Rapoport. He then took a postdoc with Paul Scheuer in Hawaii. In 1966, he was hired at

the Univ. Hawaii, and he quickly rose to full professor, a post he held until retiring in 2003. He was a traditional chemist, and an expert in the use of NMR for structural analysis, and he trained his students to use these tools, along with a rigorous, scientific, interdisciplinary approach to problem solving. In the early days, his research focused on volatile compounds from seaweeds, including many halogenated compounds. He also spent many years working on the complex problem of the structure of palytoxin. Its large size and the limits of analytical methods made the structure extremely



difficult to solve, but in the 1980s Moore's group and that of Hirata independently succeeded. In the late 1970s, he began to focus on a new and very fruitful research topic, searching for anticancer agents from cyanobacteria, first from wild sources, but later collaborating with Gregory Patterson to pioneer the cultivation of cyanobacteria. This led to the discovery of many new compounds, including several classes of potent antitumor agents. A synthetic analog of one, cryptophycin 52, was developed with Eli Lilly and went to Phase II clinical trials. A major research focus from the late 1980s until his retirement was the biosynthesis of cyanobacterial metabolites using stable isotopes and unique 2D NMR experiments to aid in structure elucidation of new skeletons, and to probe the biosynthesis of some of the unique structures. This work then led him to a foray into enzyme biochemistry and genetics of cyanobacterial biosynthesis. (Based on the obituary by John Cardellina and Brad Moore in the Spring 2008 ASP Newsletter.)

Kurt Mothes (1900-1983) Honorary Member (1974)

Born in 1900 in Plauen, in the Vogtland region, Kurt Mothes became a leader in the development of the biogenesis of alkaloids. He obtained his doctorate at the Univ. Leipzig in 1925. His 1928 paper on "Nicotine Metabolism in Higher Plants" secured him a position at Halle, and in 1935 he

moved as a professor to the Univ. Königsburg. At the end of WW II, he spent 4½ years in Russian prisoner-of-war camps, and upon his release in 1949 he headed up the Chemisch-Physiologische Abteilung of the Institut für Kulturpflanzenforschung in Gatersleben. There he worked on ergot and solanaceous alkaloid biosynthesis, and studied the plant growth hormone, kinetin. In 1958, the Deutsche Akademie der Wissenschaften provided a new facility for him, the Institut für Biochemie der Pflanzen in Halle, which became a European center for research on alkaloids, attracting many outstanding scientists. He



published over 400 papers, book chapters, and books and received many honors, including the Hoest-Mandel, Gregor Mendel, Otto Warburg, Carl Mannich, and Döbereiner Medals. For many years he was a member of the Editorial Advisory Board of *J. Nat. Prod. (Lloydia)*. He became a champion of the human rights causes of others, and an outspoken advocate of what was "right". His scientific achievements were recognized with a National Prize (1953), and part of the honorarium was given to a local church for the acquisition of a new set of bells. He was tireless in his advocacy for close scientific relationships between the German Democratic and the German Federal Republics, and was the President of Leopoldina from 1954-1974. A vigorous, generous, and optimistic man with a zest for life, his achievements were notably recognized locally in Halle, where a street was named after him. (Geoff Cordell)

Koji Nakanishi Research Achievement Award (1985) Fellow (2006)

Koji Nakanishi is a natural product chemist with a long list of papers, awards, and honors. He received his B.Sc. and Ph.D. (under Dr. F. Egami and Dr. Y. Hirata) from Nagoya University in Japan, and he did his postdoctoral work at Harvard University with L. Fieser. He then taught at

Nagoya University, Tokyo Kyoiku University, and Tohoku University, before arriving at Columbia University. He has been influential in the field of natural products, particularly in the application of circular dichroism spectroscopy to structure elucidation. His dedication and success in research has led to the establishment of the Nakanishi Prize; this was established in 1995 by American Chemical Society and the Chemical Society of Japan to acknowledge achievement using chemical and spectroscopic methods to study biological phenomena.



He was the first recipient of the Research Achievement Award in 1985 (now the Norman R. Farnsworth Research Achievement Award). The first ASP meeting he attended was in 1972 at the Univ. Rhode Island. (John Berger)

Adolf Nahrstedt Tyler Prize (2009)

Adolf Nahrstedt was born in Northeim/Harz, Lower Saxony, Germany, in 1940. After studying Pharmacy and Food Chemistry, and receiving a PhD (1971) and Habilitation at the Univ. Freiburg (1976), he became Assoc. Prof. at Tech. Univ. Braunschweig. He was full Prof. at

Univ. Muenster (1986-2004), also served in various capacities, including as Vice-Dean and elected Dean of the College of Chemistry and Pharmacy, and as Vice-Dean of the Faculty of Natural Sciences. He was as a member of the Founding Commission for the Institute of Pharmacy at Univ. Leipzig, and on retiring in 2004, served as Visiting Prof. at Univ. Mahasarakham, Thailand, and as Adjunct Faculty Member, Dept. of Pharmaceutics, Univ. Florida, Gainesville. His research covers the bio-

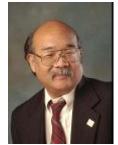


chemistry and physiology of secondary metabolites, particularly cyanogenic glycosides in plants and insects, as well as the phytochemistry of traditional herbal drugs. He is well known for his major contributions on St. John's wort and its active constituents, he demonstrating that coeffectors procyanidin B2 and hyperoside influence the biopharmaceutical properties of hypericin. He has published over 200 papers and chapters, and delivered some 200 lectures worldwide, and has devoted over 25 years to editorial duties with *Planta Medica*, including over 10 years as Editor-in-Chief and now Senior Editor. His honors include Hon. Membership of the European Academy of Natural Medicine, the Rudolf Fritz Weiss Award of the German Soc. of Phytotherapy, and an honorary doctorate from Ovidius Univ. Constanta, Romania. He is a member of many societies, including ASP, and has served on various boards and commissions, including Commission E, making a significant contribution to the standardization and control of herbal medicines. (Veronika Butterweck)

Roy Okuda President (2006-2007)

Roy Okuda is from Hilo, Hawaii. He received his B.A. from the University of California at San Diego (Chemistry & Biology) (1979) and his Ph.D. from Univ. Hawaii (Chemistry) (1983). He did his postdoctoral research under Koji Nakanishi at Columbia University in 1985. As a new

assistant professor in 1985 he attended his first ASP at the University of North Carolina where Koji Nakanishi received the first ASP Research Achievement Award. Afterwards Koji told Roy "this is a good society, you should get involved." Roy has been involved ever since. According to Roy, the award of an ASP Research Starter Grant in 1986 to research halo-peroxidases from marine algae provided results that led, directly or indirectly, to seven NIH or NSF grants. Over the last 27 years, he recalls, only missing one meeting, and he has presented over 15 posters and oral presentations at these meetings. In

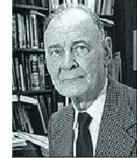


addition, he has organized two past ASP meetings, in 1987 at the Univ. Rhode Island and 1996 at UC Santa Cruz. Also, he is organizing the 2009 ASP 50th Anniversary Meeting to be held in Honolulu. He is planning a number of activities to commemorate this significant milestone in ASP's history. During his tenure as ASP President, he helped to establish the archives with the Lloyd Library, which he notes allows "the history of ASP to be properly preserved." He also worked hard to get the younger members move involved in the Society. (Scott Baggett)

S. William Pelletier (1924-2004) President (2001-2002) Honorary Member (1995) Research Achievement Award (1991)

William Pelletier received his B.S. degree in chemical engineering in 1947 from the Univ. Illinois. Three years later he completed a Ph.D. degree at Cornell. From 1950 to 1951, he was an instructor at the Univ. Illinois. In 1951, he joined the organic chemistry department at

Rockefeller Institute in New York, and in 1962 he moved to the Univ. Georgia, where he was head of the chemistry department, rising through the ranks to the position of Distinguished Professor of Chemistry. Under his leadership, the number of chemistry faculty and chemistry students more than doubled. In 1969, he took the position of provost of the Univ. Georgia, then in the mid-1970s, he took up the directorship of the Institute of Natural Products Research, and he continued in this position until his retirement in 2000. He was a consummate natural products chemist, and he had a keen interest in isolation and structure elucidation, especially of diterpene



alkaloids. For many years he edited the *Alkaloids: Chemical and Biological Perspectives*, a series that went into 15 volumes under his leadership from 1983 to 2001. He also was an author on more than 350 scientific manuscripts. He was a fellow of the American Association for the Advancement of Science and of the Royal Society of Chemistry. He was also a distinguished member of the ACS, receiving the Herty Award from the Georgia Section of the ACS in 1971 and the Southern Chemist Award from the ACS Memphis Section in 1972. He also was a founding member of the Northeast Georgia Section of ACS and its first chairman in 1968. Dr. Pelletier was also an avid art collector and a published art historian. (WPJ)

George Robert Pettit Research Achievement Award (1995) Fellow (2006)

Bob Pettit's career began with a B.S. in chemistry in 1952 at Washington State Univ., followed by an M.S. in heterocyclic chemistry in 1954 and a Ph.D. in steroid chemistry in 1956, both at Wayne State Univ. His early research was focused on steroidal anticancer agents, and he

particularly targeted marine organisms as a source for anticancer agents. Among his successful compounds are the bryostatins, isolated from the marine organism *Bugula neritina*, dolastatins and their analogs, isolated from the marine organism *Dolabella auricularia*, and the plant-based combretastatins, from *Combretum caffrum*, to name a few. Richard Powell noted, "My association with Bob Pettit began in the late 1960s during various meetings convened by the NCI to report on the progress of fractionation of natural product extracts that had demonstrated



significant antitumor potential in several in vivo and in vitro screens." Bob was a member of the US National Academy of Sciences Pharmacology Delegation to China in 1974, and he has held a range of positions, including Sr. Research Chemist at Norwich Eaton Pharmaceuticals (1956), Assistant and Full Prof. at the Univ. Maine (1957-1965), and Prof. in the Chemistry Dept. at Arizona State Univ. starting in 1965. Bob also directed the University's Cancer Research Laboratory (1974-1975), serving as Director of the Cancer Research Institute since 1975. He is author or co-author on more than 700 scientific papers, book chapters, and books, and is an inventor or co-inventor on 58 patents. His many honors include the State of Arizona Governor's Excellence Award (1993), the Ernest Gunther Award in the Chemistry of Natural Products from the ACS (1998), and the Outstanding Investigator distinction from the NCI. (Based on the profile by Gordon Cragg, Richard Powell and Sheo Singh in *J. Nat. Prod.* **2008**, *71*, 297-299)

Maynard W. Quimby (1905-1988) President (1968-1969)

Maynard W. Quimby received Masters and Ph.D. degrees from Cornell (1934 and 1939, respectively). He joined the faculty at the Massachusetts College of Pharmacy (MCP), Boston, eventually becoming Professor of Pharmacognosy and Botany. At MCP, he worked for many

years with another distinguished ASP member, Heber Youngken, Sr. Throughout his career he maintained an interest in both botany and chemistry of a wide range of medicinal plants. His interest in ethnobotany and classic pharmacognosy took him on collecting trips, including at least one to North Africa. After many years on the faculty at MCP, he was recruited to the University of Mississippi College of Pharmacy (Ole Miss COP) in 1967. This was a transformative time for the Ole Miss COP, and he was a major force in the development of the Economic Plant Garden and greenhouses and the

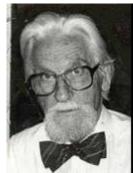


Marijuana Research Project. Although he retired in 1972, he continued to be active at Ole Miss for several years after that. In 1976, he was honored with the renaming of the research garden as the Maynard W. Quimby Medicinal Plant Garden. He had a strong commitment to cultivating other scientists, especially younger scientists, and many current members of ASP can trace their pharmacognosy roots to Dr. Quimby (including David Carew and Norm Farnsworth). He was an active member of Kappa Psi Pharmaceutical Fraternity for over 40 years, serving as editor of the Mask (1948-1955). Among his many accomplishments and honors, he was the 8th president of the ASP, he served as president of the Society for Economic Botany (1972-1973), and was made a Fellow of the American Pharmaceutical Association (APhA, now American Pharmacists Association). (Photo Credit: Ole Miss) (WPJ, David Carew and Norman Farnsworth)

Egil Ramstad (1912-2007) President (1966-1967)

Egil Ramstad graduated with a degree in Pharmacy from the University of Oslo in 1935. He then obtained his Ph.D. from Liege University in Belgium. He then joined the staff of Oslo University, taking a post as acting head of pharmacognosy. While there, he was co-author of one

book and author of another, both on the subject of medicinal natural products. In 1949, he moved to Purdue University to take a position as Professor of Pharmacognosy in the College of Pharmacy. While at Purdue, he wrote *Modern Pharmacognosy*, which marked a departure from previous textbooks of pharmacognosy that were organized on botanical principles, rather than the chemical approach that he took. In 1971, he accepted an appointment at the University of Ibadan in Nigeria, and quickly became Dean of Pharmacy. In 1974, he took a post at Rhodes University in South Africa, soon becoming Head of the School of Pharmaceutical Sciences. As Head, he spearheaded many major changes



that are credited with establishing the School as one of the leading schools of pharmacy in Africa. Dr. Ramstad was the recipient of numerous awards and honors, including the Research Achievement Award from the American Pharmaceutical Association (1969), and he was active in the scientific community, serving as chairman of committees of the American Association of Colleges of Pharmacy and the American Academy of Pharmaceutical Sciences, and on the editorial board of *Lloydia*. (Based on the obituary by Isadore Kanfer in the Summer 2007 ASP Newsletter.)

Henry Rapoport (1918-2002) Research Achievement Award (1992)

Henry Rapoport, also known as "Rap" to his close friends, was a distinguished professor of chemistry as at UC Berkeley, where he had spent almost his entire career from 1946 to his retirement in 1989. After receiving a B.S. at MIT, he continued to a Ph.D. in 1943. After a brief

stint in industry and a fellowship at NIH, he started his career as an instructor at UC Berkeley in 1946, rising to full professor in 1957. While his synthesis of many important natural products such as opiate alkaloids, antibiotics and antitumor compounds are best known, he also worked extensively on difficult structure problems, including such challenging molecules as complex carotenoids in marine organisms, bacterial pigments and an important biotoxin, saxitoxin; as such, he was one of the pioneers of marine natural product chemistry. His many students and postdocs later became leading scientists in their own right, including the late Richard

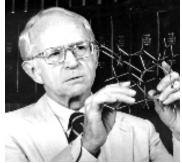


Moore of the Univ. Hawaii. He eagerly adopted new techniques, such as NMR. In the early 60s, he was invited to Japan to lecture on the phycobilins, where Yuzuru Shimizu first met him. He recalls being impressed with Rap's warm and generous personality, and his willingness to share insights on the elucidation of structures. He spent many years on the structure of saxitoxin, laboriously degrading it by different chemical means and identifying the degradation products by synthesis, but in the very last step linking the fragments, ironically, it was the newly introduced NMR that led him to a structure with a wrong ring juncture (the supposedly doublet proton signal coincidentally appeared as a sharp singlet). Incidentally, the correct X-ray determined structure was later presented by Jon Clardy. (Yuzuru Shimizu; Photo credit: UC Berkeley)

Kenneth L. Rinehart (1929-2005) President (1995-1996) Research Achievement Award (1989)

Until his passing in 2005, Dr. Rinehart was a University Scholar, professor, and researcher in the School of Chemical Sciences at the Univ. Illinois. His career began as a chemist with an interest in natural products. Initially researching antibiotics from *Actinomycetes*, he investigated a new

class of antibiotics, neomycins, from *Streptomyces fradiae*. He went on to invent a method known as mutasynthesis, later used by Pfizer. Later, he started studying natural products of marine organisms, and, most notably, he and his group discovered didemnins, a class of cyclic depsipeptides. Several of these compounds have been in clinical trials for anticancer activity. These compounds have also been found to reduce the function of the immune system and inhibit viruses of DNA and RNA. Also discovered by his group were the anticancer compounds known as ecteinascidins from the marine



animal *Ecteinascidia turbinata*. One of the ecteinascidins, ET 743 (Yondelis®), was approved in the EU for use in the treatment of sarcoma in late 2007, and has been granted orphan drug status by the European Commission for treatment of soft tissue sarcoma and ovarian cancer. His achievements culminated in many awards. In 1988, he was awarded an Anniversary Medal from the Kitasato Institute in Tokyo, and he later earned the Ernest Guenther Award in the Chemistry of Natural Products from the ACS in 1997. In 1998, the Univ. of Missouri awarded him an Honorary Doctor of Science degree. He graduated 139 grad students, 67 undergraduates, and 124 postdocs. His career resulted in 390 publications, 35 patents, and seven books. (Based on the obituary by Amy Keller in the Summer 2007 ASP Newsletter.)

James E. Robbers President (1979-1980) Honorary Member (1993)

James Robbers, Professor Emeritus of Pharmacognosy, Purdue Univ., was born in Everett, WA. He received B.S., B.Phar. (1957) and M.S. (1961) degrees from Washington State U. (WSU), and his Ph.D. (1964) degree from Univ. Washington, where he studied with Varro Tyler, who

was both mentor and a close personal friend. Jim began his career in academia at Univ. Houston in 1964, joining the faculty at Purdue in 1966, retiring in 1997. His research interests included isolation, biosynthesis, genetics, and physiology of fungal metabolites. He is coauthor of three editions of the text *Pharmacognosy* and senior author of the latest version, *Pharmacognosy and Pharmaco-biotechnology*. He also assumed the authorship of *Tyler's Herbs of Choice* for its first revision. He recalls that his first ASP meeting was in 1964 at U. Pittsburgh, where



Norm Farnsworth and Swede Blomster set the standard for years to come. It featured an International Vinca Alkaloids Symposium and also a case of champagne brought from France by one of the speakers. Jim roomed with the gregarious Lynn Brady, who introduced him to some of the ASP founding fathers. Since that time Jim only missed two meetings until he retired. He culminated his ASP Presidency by the challenge of holding the Exec. Comm. meeting in a crowded café in Strasbourg. He served as Editor of *J. Nat. Prod.* (1984-1993), when it went from bimonthly to monthly publication. He also served on the Journal Management Board (1995-1997), and was involved in the negotiations with ACS that led to its joint publication. He is an honorary member of the Association Francaise pour l'Enseignement et la Recherche en Pharmacognosie, and in 2004, WSU honored him with an Alumni Achievement Award for a career of distinguished advancement in pharmacognosy and pharmacobiotechnology. (JER)

John P. N. Rosazza President (1981-1982)

Jack received the B.Sc. in Pharmacy (1962), and M.Sc. (Kelleher) and Ph.D. (Schwarting, Bobbitt) in Pharmacognosy (1966, 1968) at Univ. Connecticut (UConn). While at UConn Jack was a Trainee in the first multidisciplinary, NIH Natural Products program in the US. After a

postdoc with Charlie Sih at Wisconsin, he joined the Pharmacy faculty at the Univ. Iowa (1969), rose to associate (1972) and full professor (1977), and served as Head of Medicinal & Natural Products Chemistry for 18 years. Jack was mentor to 30 Ph.D. students and 30 postdocs publishing 220 papers and patents over 40 years. His research examined all facets of biocatalysis, discovered many new natural product biotransformations, probed reaction mechanisms and characterized the enzymes involved. Jack's lab defined the concept of microbial models for xenobiotic



metabolism as a means of predicting patterns of metabolism expected in mammals, plants, soil and insects. His lab identified the first NOS system in the bacterial world, and the intricate second messenger implications of bacterial NOS continue to be elaborated. Jack was founder and first director of the Univ. Iowa, Center for Biocatalysis & Bioprocessing, a multidepartmental research group with 60 faculty from 8 departments. The well-supported CBB boasts one of the finest fermentation, bioprocessing labs in the world including a newly opened cGMP fermentation/downstream processing facility. Jack was Co-Director of a massive NSF ERC Center for Environmentally Beneficial Catalysis awarded to a consortium led by Kansas, Iowa, Prairie View A&M, and Washington Univ. in St. Louis. Jack served widely as a consultant to many pharma, chemical and agro-industries, the NCI, and was a member of nine editorial boards. (JPNR)

František Šantavý (1915-1983) Honorary Member (1970)

František Šantavý was born in a small town in Southern Moravia. A talented student, he had already published his first 23 papers during his university years. Studies of medicine, interrupted by the War, finished in 1945 at Brno, Czechoslovakia. After serving a short period in a hospital

(Prague), he joined the re-opened Medical faculty at the University of Palacký in Olomouc (Czech Republic) as a lecturer (1946), and over the next 29 years becoming Director of the Institute of Biology, Professor of Medical Biology (1948), and Director of the Chemical Institute. He had broad scientific interests, ranging from physiology and biochemistry to natural product chemistry. His bibliography contains 388 papers, some reviews, book chapters, and textbooks. Regarding experimental work, he was among the first to use polarography, IR, MS, NMR, ORD, etc. He



collaborated fruitfully with many leading chemists of his time (e.g., T. Reichstein, A. R. Batterby, G. Snatzke, A. D. Cross). Valuable contacts and friendships acquired during his travels were used for the benefit of research and the education of his pupils. Šantavý's institute was widely known for research on natural compounds, especially alkaloids (colchicines - for which he became famous, pyrrolizidines, and Papaveraceae alkaloids). Besides the State Prize (1957), he was awarded many honorary titles and medals both at home and abroad; among these, he is listed among the Distinguished Chemists of Central and Eastern Europe, and a lectureship was named in his honor by the Czech Chemical Society. (Petr Sedmera)

Paul J. Scheuer (1928-2003) Honorary Member (2000) Research Achievement Award (1994)

Paul Scheuer was born in Heilbronn, Germany in May 1915, and immigrated to the US in 1938. He received his Ph.D. under the supervision of R. B. Woodward at Harvard, later joining the Univ. Hawaii which at that time was not known as a research university. Undaunted, he began to

research some of the plants indigenous to Hawaii. Collaboration with colleagues in marine biology in the early 1960s led him to investigate the secondary metabolites from marine organisms. Widely regarded as the father of marine natural products chemistry, he made numerous seminal discoveries, and trained several generations of scientists, including 33 Ph.D. and 25 M.S. students, and over 110 postdocs and visiting scientists from over 25 countries. His interest in marine toxins led him to work on the toxin from the soft coral *Palythoa*, and other important marine toxins. Other projects included the isolation and structure of many unique metabolites, including the first marine



isocyanide from the nudibranch *Phyllidia*. His research included biosynthesis, chemical ecology, and drug discovery, and he was one of the first to use deep sea submersibles to collect organisms for chemical studies. His nearly unbroken NSF grant support from 1952-2001 is believed to be the longest on record for the Foundation which was founded in 1951. Among numerous awards, he received the ACS Ernest Guenther Award. Members of his research group established and funded the "Paul J. Scheuer Award in Marine Natural Products," in 1992, a perpetual award given every two years at the Marine Natural Products Gordon Conference. A special symposium in his honor was held during PACIFICHEM 2000 in Honolulu, to mark the 50th year of his tenure at Univ. Hawaii. (Adapted from a tribute in the Spring 2003 ASP Newsletter.)

Paul L. Schiff, Jr. President (1983-1984)

Paul Schiff was born in Columbus, Ohio. He received his B.S. degree in pharmacy from The Ohio State University in 1962, and his M.S. (1964) and Ph.D. (1967) degrees in pharmacognosy/natural products chemistry from the same institution. He became interested in pharmacognosy

after his first class with Jack Beal as an undergraduate student in 1959, later studying for his graduate degrees with Jack and Ray Doskotch. He joined the ASP in 1962, attended his first meeting in 1967, and later served as a member of many ASP committees and as president. After holding positions at Butler University and the Univ. Mississippi, Paul joined the faculty at the Univ. Pittsburgh in 1970, where he chaired the Department of Pharmacognosy until 1985 and the Dept. of Pharmaceutical Sciences



(1985-1996). His research focused upon the isolation and identification of benzylisoquinoline-derived alkaloids from medicinal plants. He is a fellow of both the APhA Academy of Pharmaceutical Sciences and of the American Association of Pharmaceutical Scientists (AAPS), serving as chair of the Medicinal and Natural Products Section of AAPS (1986-1987). He served as chair of the Section of Teachers of Biological Sciences (1989-1990) and of the Section of Teachers of Chemistry (1998-1999) of the American Association of Colleges of Pharmacy. He received the Jack L. Beal Post-baccalaureate Award in 1990 from his alma mater in recognition of outstanding contributions made to the pharmaceutical sciences and professional practice of pharmacy. Most recently he has served with colleagues at the United States Pharmacopeia (USP) in the development of botanical dietary supplement monographs. He was an elected member of the USP Subcommittee on Natural Products (1995-2000) and a member (2000-2010) and chair (2000-2005) of the Dietary Supplements-Botanicals Expert Committee. (PLS)

Richard E. Schultes Honorary Member (1984)

Richard Evans Schultes is considered by many to be the father of Ethnobotany. He received his B.A. (1937), M.A. (1938), and Ph.D. (1941) degrees from Harvard University. After graduation, he joined Harvard as research associate and lecturer in Botany. That same year, he was named a

Fellow of the National Research Council, and began to conduct research in the Amazon. For about ten years he held various posts that allowed him to continue to undertake field work in the Amazon. Then in 1953, he returned to the US again taking a position at Harvard, where he remained until retiring in 1985, having served as Curator of Economic Botany (1958-1985), Executive Director of the Botanical Museum (1967-1970), and director of the Museum (1970-1985). He was also on the teaching faculty, starting in 1970, and he was



named the Paul C. Mangelsdorf Professor of Natural Sciences in 1973, and the Edward C. Jeffrey Professor of Biology in 1980. Although he was interested in diverse medicinal properties of traditional medicines, his particular interest and contribution was in the area of hallucinogenic plants and arrow poisons, as well as a substantial amount of expertise and research on natural rubber. He was author and co-author of over 450 scientific papers and a number of books, including some that have become popular in the lay press, such as the 1979 book *The Plants of the Gods: Their Sacred, Healing, and Halucinogenic Powers*, which he co-authored with Albert Hoffman. Dr. Schultes served as Editor for *Economic Botany* (1962-1979), and was on the editorial boards of many other scientific journals, including the *Journal of Ethnopharmacology*. Among his numerous accolades, in 1992, he had the rare distinction of receiving the Gold Medal from the Linnean Society of London. (WPJ)

Arthur E. Schwarting (1917-1996) Honorary Member (1981)

Professor Schwarting was one of the founding members of the ASP. He had the distinction in 1943 of receiving the first Ph.D. awarded by the Ohio State College of Pharmacy. That same year, he accepted a position at Univ. Nebraska. He then accepted a faculty position at Univ.

Connecticut School of Pharmacy in 1949. He was promoted to dean in 1970 and remained at UConn until retiring in 1980. He had a profound effect on the field of Pharmacognosy, mainly through his teaching and the students he mentored as a graduate advisor. He was an outstanding teacher, inspiring both undergraduate and graduate students. His approach to Pharmacognosy was radical in that he treated the field first from a chemistry perspective, classifying drug plants by their active components rather than traditional taxonomic and morphological groupings, and believed in the importance of



considering the biosynthesis and biochemistry of the active principles. It is because of this that he is credited with setting the stage for modern pharmacognosy, with its emphasis on bioactive natural products and drug discovery. He was instrumental in the formation of the ASP, and in 1960, he took on the editorship of *Lloydia* (which did not became officially affiliated with the ASP until 1961), and served as editor for seventeen years, during which time the journal underwent many changes, including the change from a quarterly to a bi-monthly publication. He was the recipient of numerous honors and awards including the American Pharmaceutical Association Foundation Research Achievement Award in 1964; the UConn. Alumni Association Award for Faculty Excellence (1965); and the Centennial Achievement Award from Ohio State Univ. (1970). (Based on the profile by David Carew and Jack Rosazza; ASP Website)

A. Ian Scott (1928-2007) Research Achievement Award (1993)

Ian Scott was a pioneering biochemist and professor. He received his Ph.D. from Glasgow Univ. in 1952, and held posts at the Univ. British Columbia, Univ. Sussex, and Yale Univ. before beginning a 30-year career at Texas A&M in 1977, where he was named Distinguished Professor

of Chemistry and Biochemistry in 1981, held the Robert A. Welch Chair in Chemistry, and was the D.H.R. Barton Professor of Chemistry. An expert in spectroscopy, he was an early adopter of NMR as a tool for structure elucidation and to study biochemical processes in living cells. Koji Nakanishi recounted Ian's pioneering work: "In 1994, Ian disclosed that recombination of 12 biosynthetic enzymes in a single flask led to the 17-step synthesis of the corrin, hydrogenobyrinic acid in high yield. This approach is applicable to the synthesis of many natural substances



including plant alkaloids, antibiotics, and hormones. Thus by transferring the genes encoding the synthesis of plant alkaloids from the cDNA library to *E. coli* and coupling the resultant expressed enzymes, the biochemical machinery of the plant can be specifically directed to produce alkaloids in bacteria. This discovery opened up a new field of synthesis of natural products." Ian published over 400 journal articles and book chapters, and three books. He was a fellow of the Royal Societies of London (RSL), Edinburgh (RSE), and Chemistry (RSC), and the AAAS. He received numerous awards, including the Queen's Royal Medal (2001; RSE), the Davy Medal (2001) and Bakerian Lectureship (1996) (RSL); the Corday-Morgan (1964) and Natural Products (1996) Awards (RSC), the Tetrahedron Prize and Medal for Creativity in Organic Chemistry (1995), and the Nakanishi Prize for elucidating the biosynthesis of vitamin B₁₂ (2003). (Based on the tributes by Shana K. Hutchens and Koji Nakanishi in the Summer 2007 ASP Newsletter)

John E. Seybert (1890-1972) Honorary Member (1961)

John Seybert was born in Howe, Indiana on January 4, 1890, and graduated in pharmacy from Purdue University in 1911. He was a registered pharmacist in Indiana, and joined Eli Lilly and Company as a scientific analyst in 1911, becoming a pharmaceutical chemist in 1919. In 1934, he was named Chief Botanist. Upon retirement in 1955, he and his wife moved to a retirement home in Duarte, California where he died on March 31, 1972. (Thanks to Lisa Bayne, Archivist, Eli Lilly, for information)



Yuzuru Shimizu President (1987-1988) Honorary Member (2008) Fellow (2008)

Yuzuru Shimizu received his B.S. in Pharmaceutical Sciences in 1958 from Hokkaido University (HU), and received M.S. and Ph.D. degrees in 1960 and 1963 in Pharmacognosy/Natural Products Chemistry from HU as well. After several positions, including a post-doc with S. W.

Pelletier and an Assistant Professor position at HU, he joined the faculty of the Department of Pharmacognosy at the Univ. Rhode Island (URI) in 1969. He quickly rose through the ranks, serving as Professor of Pharmacognosy (1977-present), and holding a joint position as Professor of Chemistry (1982-2006). He is currently the Omar-Youngken Distinguished Chair Emeritus of Natural Product Chemistry and Professor Emeritus of Biomedical Sciences. He also served as Director of URI College of Pharmacy, Medicinal Plants Garden, and Director, NMR



Facility (1995-2006). His research interests have included the search for new drugs and drug

sources in the marine phytoplankton, the development of aquaculture system for medicinal production, the chemistry and pharmacology of aquatic toxins, and the evaluation of traditional drug plants as alternative drugs. He has received many honors, including an Honorary Doctorate of Pharmaceutical Sciences from Toho University (2006). Professional service very important to him, and he has served on several NIH study sections and review committees. He is an Expert Consultant for National Marine Fisheries Contracts on Toxic Shellfish (1980-present). He served as Vice Chairman (with the late Paul Scheuer), of the first Gordon Research Conference (GRC) on Marine Natural Products (1974), helping to start what has become one of the premier natural product forums. He later was Chairman of the GRC (1976). He is a Past President of ASP, and served for many years on the Editorial Advisory Board of *J. Nat. Prod.* (1977-2000). (WPJ)

David J. Slatkin Honorary Member (2004)

David Slatkin was born in 1942 in Brooklyn, NY. He holds a B.S. from Wayne State Univ. (1966) and Mercer University's Southern School of Pharmacy, Atlanta, where he received the Merck Award (1968), and M.S. (1971) and Ph.D. (1972) degrees from the Univ. Mississippi School of

Pharmacy, where he was an American Foundation for Pharmaceutical Education-Edwin Leigh Newcomb Memorial Fellow. He taught at the Northeast Louisiana University School of Pharmacy (1972-1973), and served on the Faculty of the Univ. Pittsburgh School of Pharmacy as Assistant Dean for Student Affairs and Director of Graduate Programs (1973-1991). In 1991, he joined Midwestern University (MWU) as Founding Dean of the Chicago College of Pharmacy, and from 1998 served as Founding Dean and Professor of Pharmaceutical Sciences at the MWU College of Pharmacy, Glendale. He is now Dean of the College of Pharmacy at Chicago State University, thus



providing the leadership in establishing his third college of pharmacy. His research covers several areas within Pharmacognosy, and he has been the major advisor for 12 grad. students, publishing over 80 papers and serving as a reviewer for *J. Nat. Prod.* and *J. Pharm. Sci.* He is a member of Rho Chi Honor Society and Phi Delta Chi pharmacy fraternity, and has been very active in many professional and scientific organizations, including serving as Treasurer of the ASP since 1981, and chairing two annual meetings of the Society. In addition, he served as Advisor to the Academy of Students of Pharmacy Chapter at each institution in which he has taught, was twice selected as the Hygeia Teacher of the Year for the Univ. Pittsburgh School of Pharmacy and received the Academy of Student of Pharmacy's Faculty Recognition Award in 1988. In 1999, Dr. Slatkin was selected by American Pharmacist magazine as one of the 50 most influential pharmacists in the US. (DJS)

E. John Staba President (1971-1972) Honorary Member (1998)

John Staba was born in 1928 in NYC, and served in the US Navy (1946-1947). He obtained a B.S. from St. John's Univ., NYC (1952), an M.S. from Duquesne University, Pittsburgh (1954), and his Ph.D. from Univ. Connecticut (UConn, 1957). He taught at Univ. Nebraska, Lincoln

(1957-1967) and the Univ. Minnesota (1968-1995), where he is now Professor Emeritus of Pharmacognosy (and Med. Chem.). From 1974-1976 he was an Assistant Dean for Professional Education. Among several other appointments are Visiting Professor at UConn (1966); National Academy of Science Visiting Scientist to Poland, Czechoslovakia, Hungary (1969); Fulbright Hays Research Fellow to Germany (1970); CSIR Visiting Scientist to India (1973); NASANSF Summer Research Fellow at General Electric, Philadelphia (1976);

International Visiting Professor Award, Medical Research Council of Canada (1983); and UK Visiting Fellow to Univ. Manchester (1989). He has served on committees of the APhA, Academy of Pharmaceutical Sciences, and Amer. Assoc. of Colleges of Pharmacy, and was elected to the US Pharmacopeia Committee of Revision-Natural Products for four consecutive terms (1980-2000). Other services include membership of the NASA Advisory Council on Life Sciences (1984-1987); NSF projects in Pakistan and Egypt; 3 World Bank IX/XVII/USAID projects in Indonesia (1985-1994); Indonesia Workshop on Steroid Biotechnology (1986); NATO Advanced Study Institute Program, Portugal (1987); and a USAID visit to Thailand (1989). His research has covered economically significant plant tissue cultures, aquatic plants, herbal remedies, and pharmacy education, and he has published over 160 papers and four patents, and one book. He is an AAAS Fellow. (EJS)

Otto Sticher Honorary Member (2007) Fellow (2007)

Otto Sticher received his diploma in pharmacy (1962) and his Ph.D. in Pharmaceutical Sciences (Pharmacognosy) (1965), both from the Swiss Federal Institute of Technology (ETH) in Zurich. After two years as a manager of a pharmacy in Winterthur, he was a postdoc. with Hans Schmid

at the Univ. Zurich (1967-1968), and was Professor of Pharmacognosy and Phytochemistry at ETH from 1972-2002, also serving as Dean of the Faculty of Pharmacy and Head of the Institute of Pharmacy. He has been an ASP member since attending his first ASP/GA joint meeting at the Univ. Vienna in 1970, and attended the first of over 20 ASP meetings in the USA in 1979 (Purdue Univ.), and he has presented two lectures and several posters. He has served as President of GA, a member of the



Boards of Directors of the ASP Foundation and the Supervising Editors of the European Scientific Cooperative on Phytotherapy (ESCOP). He has also been a member and chair of various Pharmacopeias' Expert Committees on Phytochemistry/Medicinal Plants/Botanicals (European and Swiss Pharmacopeias, USP), and of the WHO Expert Advisory Panel on the International Pharmacopeia and Pharmaceutical Preparations. His awards and honors include Honorary Membership of the GA, Fellow of the Swiss Society of Pharmaceutical Sciences, and an Honorary Doctorate of the Univ. London, England. (OS)

Matthew Suffness (1942-1995) President (1989-1990)

Matthew Suffness received a bachelor's degree in pharmacy from Howard University in 1965, and a doctorate in pharmaceutical chemistry from the Univ. Wisconsin in 1970. After a postdoc at Stanford University, he served on the faculty of Ohio Northern University until 1976 when he

joined the NCI Natural Products Branch as head of the plant and animal products section. In 1983 he became chief of the Branch, and in 1989 was appointed Natural Products Grants Program coordinator. He played a major role in the evolution of the NCI natural products program as we know it today, and traveled widely delivering lectures on anticancer drug discovery and development, playing an important role in the development several drugs, including homoharringtonine, didemnin B, and bryostatin. His greatest contribution, however, was to the development of taxol for



which he was a tireless advocate, organizing several workshops and administering many grants, mainly aimed at more efficient large-scale production of this valuable drug. His selfless devotion

to taxol was best illustrated by his editing and contributing to the volume, *Taxol*, *Science and Applications*, which was published just before his untimely death in 1995. As testimony to his commitment, the Matt Suffness Memorial Yew Grove was dedicated in July, 2000 on Weyerhaeuser land on the Olympic Peninsula, WA. Matt was also a strong advocate of young members of the ASP, and was largely responsible for initiating the Young Investigator's Award, with the first Young Investigators' Symposium being held in 1992 at the ASP meeting in Williamsburg, The name of the award was changed to the Matt Suffness Award in 2000, and the first Matt Suffness Symposium held at the ASP meeting in Seattle that year. (GMC)

Gordon H. Svoboda (1922-1994) President (1963-1964) Honorary Member (1986)

Gordon H. Svoboda, was a giant in natural products cancer drug discovery and development research, having not only discovered vincaleukoblastine (Vinblastine) and leurocristine (Vincristine), along with dozens of other "Vinca" alkaloids, but also through the force of his

personality, convinced his employer, Eli Lilly & Co, to develop and market Vinblastine and then Vincristine. The discovery and marketing of these first major natural product anti-cancer chemotherapeutic agents profoundly altered the landscape in pharmacognosy and natural products chemistry research, with many of us being inspired to take up our own cudgels in this area of research. In a quirk of time line, Gordon's monumental discoveries coincided with the birth of the ASP, and the establishment of the Natural Products Branch at NCI (Dr. Jonathan Hartwell, Director). Gordon received his Ph.D. (Pharm. Sci.) from the U. Wisconsin (1949), followed by an



academic post at the Univ. Kansas before joining Eli Lilly & Co., where he remained until retiring in 1980 after 28 years. Gordon considered himself a pharmacognosist and was an active member of ASP from its early years. He served as its 4th president, and was later designated an Honorary Member. His research achievements and publication record (including numerous patents and over 65 peer reviewed articles) garnered him many honors, and although his career was in industry, Gordon maintained his academician's mentality and strove to serve as an inspiration to his colleagues and as an informal mentor to young scientists and graduate students, at least one of whom he inspired to stay in school eventually became a president and honorary member of the ASP. Gordon was so highly regarded, that three former Presidents (Tyler, Fong and Robbers) attended his Memorial Service to eulogize/celebrate his life. Gordon lived and worked by the credo, "Work hard, play hard". He was an unforgettable character to those who knew him. (Harry Fong and Norman Farnsworth)

Elmore H. Taylor President (1968-1969)

Elmore Taylor received his bachelor's degree in Pharmacy from the Univ. Saskatchewan in 1956, and a M.S. in 1957. He received a Ph.D. in Pharmaceutical Sciences from Purdue University in 1960. In the fall of 1960, he accepted a faculty position at the College of Pharmacy

at the Univ. Tennessee Medical Center, and in the following year was appointed Chairman of the Department of Pharmacognosy, establishing an active research program in pharmacognosy there. In 1966, he was elected Chairman of the Biological Sciences section of the American Association of Colleges of Pharmacy. During the academic year 1969-1970, he served as a visiting professor of pharmacognosy at the Univ. London. In 1971, he was invited to join the faculty at the Univ. Illinois Medical Center (now,



UIC) in the Department of Pharmacognosy and Pharmacology. Shortly thereafter, he was asked to serve as Associate Dean of the College of Pharmacy, and in 1986, he was appointed Executive Dean of the UIC College of Pharmacy. In 1972-1973, he served as Chairman of the Pharmacognosy and Natural Products section of the Academy of Pharmaceutical Sciences. At UIC, he was actively involved in developing the B.S. of Pharmacy Degree Program in both conventional and self-study formats, and was key to developing a mandatory Pharm. D. program at UIC. Since retiring, he volunteers many hours each year through AARP-TCE, SHIP, Habitat for Humanity, and Samaritans Purse. (EHT)

George Edward Trease (1902-1986) Honorary Member (1963)

George Trease studied Pharmacy in London and joined the staff of Univ. College, Nottingham, in 1926. He remained an academic pharmacist at Nottingham throughout his career, apart from World War II, when he was seconded to the Ministry of Economic Warfare. When the College

became the Univ. Nottingham he was appointed Reader in Pharmacognosy, becoming Professor in 1957. He was head of the department of Pharmacy from 1943 until his retirement in 1967. The first edition of his book *A Textbook of Pharmacognosy* was published in 1934, and it emphasized the use of chemical tests for supporting botanical observations in the analysis of plant drugs. At that time, chemical tests were not included in the monographs of plant drugs in either the *British Pharmacopoeia* or the *British Pharmaceutical Codex*. Several editions of his book were published, but from the 10th edition of 1972, it was co-authored by his colleague W.C. Evans. Later editions underwent considerable changes, and the book continued to be published after his death as *Trease and Evans' Pharmacognosy*. The 16th edition is now in

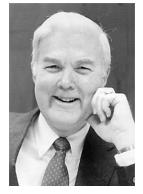


press. Other books include *The Chemistry of Crude Drugs* (1928) co-authored with J. E. Driver, *Aids to Pharmaceutical Latin* (1929) and *Pharmacy History* (1964). In collaboration with W. C. Evans, he researched the botany of *Rauwolfia* species. He served on numerous examining bodies and pharmacognosy committees and was awarded honorary doctorates from the Universities of Strasbourg (1954) and Clermont-Ferrand (1962). (J. David Phillipson with assistance from W. C. Evans, E. J. Shellard and the library of the Royal Pharmaceutical Society of Great Britain)

Varro E. Tyler (1926-2001) President (1959-1961) Honorary Member (1985)

Tip Tyler was one of those unique individuals who cast a long shadow in life having had a profound impact on pharmacy education, natural product science, and the use of herbal medicine by the American public as well as the worldwide community. He was a renowned educator

serving Purdue as Dean of Pharmacy for twenty years before his selection as executive VP for academic affairs. While a professor at the Univ. Washington, he conducted research on the chemistry of toxic mushrooms and other fungi. He was the senior author of the most widely used text in pharmacognosy in the US (*Pharmacognosy*, co-authored with Lynn Brady and Jim Robbers). Incidentally, he also published on the subject of stamp forgeries. The ASP owes Tip a tremendous debt. He served as its first president, guiding the organization through the critical first two years of its existence, and he was the principal force in the negotiations to obtain *Lloydia* (*J. Nat. Prod.*). In addition, he played a major role in forging the friendly ties with the Gesellschaft für Arzneipflanzenforschung (GA),



which has resulted in our joint international meetings (later expanded to include Association Francaise pour L'Enseignement et la Recherche en Pharmacognosie and the Phytochemical Society of Europe) every five years, starting with Vienna in 1970. He was elected to the GA Board of Directors and was an honorary member. He thoroughly enjoyed sharing his knowledge, and he was a master of communication. After he retired in 1991, he devoted his efforts to the area of herbal medicine, writing four books as well as numerous articles in the scientific and lay press. He received many honors and accolades, but he often stated that even though these meant a lot to him, what he cherished most was the many friendships he established during his life's work. (Adapted from a memorial written by James E. Robbers; ASP website.)

Hildebert Wagner Honorary Member (1992)

Hildebert Wagner was born in 1929 in Laufen on Salzach (Germany). He received his degree in pharmacy (1953), and after completing his thesis in 1956, was awarded his Habilitation in 1960. He became Professor of Pharmacognosy at the University of Munich in 1965, served as Dean of

the Faculty of Chemistry/Pharmacy (1981-1983), and as Director of the Institute of Pharmaceutical Biology until 1999. His research covers the isolation, structure determination, synthesis and analysis of biologically and pharmacologically active compounds of medicinal plants, particularly alkaloids, cardiac glycosides, flavonoids and lignans, having antiviral, antiasthmatic, antiphlogistic, immunostimulating and adaptogenic activity, as well as the standardization of Chinese medicines. He has published over 800 original papers and 30 review articles, 8 books, and



Volumes I-VI of *Progress in Economic and Medicinal Plant Research* (1985-1994). He is Editor of the *International Journal of Phytomedicine*, and serves on several editorial and advisory boards, including *J. Nat. Prod.* His many honors include Distinguished Visiting Professorship at The Ohio State University, Columbus (1970-1971), and honorary doctorates from the Universities of Budapest and Debrecen (Hungary), Dijon (France) and Helsinki (Finland). (HW)

Monroe Wall (1916-2001) Honorary Member (1987) Research Achievement Award (1990)

Monroe Wall was one of Research Triangle Institute's research giants. A native of Newark, New Jersey, he received his B.S., M.S., and Ph.D. degrees from Rutgers University. He was co-discoverer (with Mansukh C. Wani) of the anti-cancer compounds taxol and camptothecin. A

senior scientist in Chemistry and Life Sciences (CLS), he joined RTI in 1960 from the US Department of Agriculture (USDA) specifically to start chemistry research groups, including the Natural Products Laboratory. In addition to carrying out his own research, he served as Vice President for CLS from 1971-1983, during which time he helped build up RTI's staff and capabilities in the areas of analytical and environmental chemistry, life sciences and bioorganic chemistry, organic and medicinal chemistry, and toxicology. He was also an adjunct professor at the University North Carolina and North Carolina State University, and was a consultant to the NCI and other federal agencies. His experience in isolating small quantities



of natural products from plants helped him pioneer techniques for isolating drug metabolites. In the 1970s he became one of the first individuals to use mass spectroscopy and NMR to obtain the structures of drug metabolites. He and long-time colleague Mansukh Wani were awarded the

prestigious Charles F. Kettering Prize in 2000, the highest honor in the field of cancer research, for their pioneering work in medicinal chemistry. In addition, Dr. Wall was the recipient of the USDA's Superior Accomplishment award (1955), and the American Pharmaceutical Association's top research prize for natural products chemistry (1970). In 1994 he received the Bruce F. Cain Memorial Award from the American Association for Cancer Research, and in 1998 he was awarded the ACS's Alfred Burger Award, the most prestigious award in medicinal chemistry. (From RTI)

Mansukh C. Wani Honorary Member (2000) Fellow (2007)

Mansukh Wani was born in Nandurbar, Maharastra, India. He attended grade school in Nandurbar, Maharastra and graduated in 1943. He received his bachelor's degree in Chemistry from the University of Bombay in 1947 and his master's degree in Organic Chemistry from the

same University in 1950. In 1958 he came to the US and obtained his Ph.D. degree from Indiana University (IU) at Bloomington in 1962, followed by a postdoc fellowship at the Univ. Wisconsin at Madison. He joined the Research Triangle Institute (RTI) in NC in 1962, where he held the position of Principal Scientist (now retired). Dr. Wani's main areas of research have included the isolation and characterization of biologically active natural products and synthesis of anticancer and antifertility agents. He was involved in the isolation, purification, and characterization of a wide variety of antineoplastic agents including camptothecin and taxol. He is an author or co-



author on over 200 research publications. He has been an invited speaker at a number of national and international symposia on taxol and camptothecin. He is the recipient of many awards, including the Bruce F. Cain Memorial Award given by the American Association for Cancer Research, the City of Medicine Award given by the Greater Durham Chamber of Commerce, the NCI Award of Recognition, the 2000 Charles F. Kettering Prize of the General Motors Cancer Research Foundation, the Ranbaxy Research Award from the Ranbaxy Science Foundation, and the 2003 Distinguished Alumni Award from IU. In April 2003, the ACS designated the discovery of camptothecin and taxol at RTI a National Historic Chemical Landmark. In 2005, Dr. Wani received the North Carolina Award in Science from the Governor of NC. (From RTI)

Richard Wasicky (1884-1970) Honorary Member (1966)

Richard Wasicky was born in Silesia. He received Doctor of Pharmacy and Doctor of Medicine degrees, and later served as Professor of Pharmacology and Director of the Institute of Pharmacognosy in Vienna. He and his family left Austria to escape the war, immigrating to

Brazil in 1941. He took a position as Professor of Pharmacology and Pharmacognosy at the Univ. São Paulo. He was later promoted to Director of the Institute of Biochemical Research and Professor at the University of Santa Maria in the State of Rio Grande do Sul in 1959. Beginning in 1920, his teaching emphasized the importance of the active principles of medicinal plants, and he was a leader in promoting pharmacognosy as an experimental science. He authored or co-authored many scientific papers, and the text book *Physiopharmakognosie*, which he organized by medical indication. After moving to Brazil, he continued to be active in the area of research on



active agents form medicinal plants. Interestingly, his son, also named Richard Wasicky, joined

the Univ. of São Paulo in 1954 and had a long career in pharmacognosy as well. (WPJ; *photo: http://ub.meduniwien.ac.at/blog/?p=724*; source: *Quart. J. Crude Drug Res.* Vol. 13, p. 175, 1975)

Jack K. Wier President (1980-1981)

Jack K. Wier is a charter member of the ASP. He served the Society in the capacity of Secretary from 1970–1979. Jack is a native of Hastings, Nebraska and served in the US Navy during World War II. After his service he earned his B.S. in Pharmacy from the University of Nebraska

in 1958. He then went to the University of Washington for his graduate studies, and he obtained his M.S. and Ph. D. degrees in Pharmacognosy (completed in 1959 and 1961, respectively) under the mentorship of Varro (Tip) Tyler. In 1961, Jack started his teaching career at the University of North Carolina, rising through the ranks until he retired in 1987. Jack chaired the ASP Local Program Committee twice when he hosted the annual meeting at the University of North Carolina in 1961 and an International meeting in 1985. In addition to being a popular teacher and prepharmacy counselor at the University of North Carolina, Jack was the



computer expert for the College of Pharmacy in the early 1980's, and he was responsible for the introduction of computers into the student record system. (Jim Robbers)

John J. Willaman (1889-1982) Honorary Member (1973)

John Willaman had a long career at the US Department of Agriculture, but little detail of his career is now available, but his publication record suggests that he had a wide interest in botany and natural products. His research papers spanned many years, and cover a diverse range of

topics, including the following: "Notes on the composition of the sorghum plant" (1919), "Some modifications of the picric acid method for sugars" (1924), "The chemical composition of girasole and chicory grown in Minnesota" (1929), "Uses for vegetable wastes" (1943), "Many are the uses of apples" (1950), and "Recent trends in alkaloid hunting" (1971). He received degrees from the University of Wisconsin and University of Chicago (Ph.D., 1920), and he started as a chemist at the Division of Agricultural Biochemistry, Minnesota Agricultural



Experiment Station, rising through the ranks over the years. His research interests included the chemistry of plant diseases and the manufacture of sorghum syrup. In 1940 he moved to the Eastern Regional Research Laboratory of the Agricultural Research Service (ARS) in Philadelphia, PA, where he headed the Biochemical Division. In the 1960s, after retiring from the ARS, Dr. Willaman began a second career of sorts working as a research associate and volunteer with the Morris Arboretum of the Univ. Pennsylvania, near Philadelphia. He continued to contribute to the pharmacognosy literature into the 1970s. In 1985, the John J. Willaman Laboratory at the Arboretum was dedicated in his honor. (WPJ, with thanks to the staff at the National Agriculture Library and Robert Gutowski at the Morris Arboretum; Photo courtesy of the Morris Arboretum Newsletter.)

Leonard R. Worthen President (1974-1975)

Leonard Worthen is Professor of Pharmacognosy and Associate Dean, Emeritus of the College of Pharmacy, University of Rhode Island. His particular area of research was the fungi, with emphasis on mushrooms. This work included natural product isolation, and antibiotic and

antitumor screening. Leonard joined ASP in 1962, and attended the Third Annual Meeting, which was held at the Univ. West Virginia. During the early years of ASP, most of the members were faculty and graduate students from Colleges of Pharmacy. In looking back, he notes that attendance at the annual meeting was typically no more than one hundred, and the meetings were held on university campuses. This made it possible to visit many academic institutions and their associated research facilities, medicinal plant gardens, and other areas of interest. As the group increased in number, it



became necessary to hold the ever-growing annual meeting in different venues. His service to ASP included six years as Treasurer (1967-1973), and later as President. It was also during this period that the Society undertook the Editorship of *Lloydia*, both an important scholarly activity and a significant financial challenge. We were fortunate in that a number of ASP members made anonymous contributions, which, along with the support of a number of other patrons, made it possible to meet expenses. He particularly enjoyed the two meetings that were held here in Rhode Island, in 1965 and again in 1987. The first meeting included a symposium on chemotaxonomy, which was supported by a grant from the NIH. Perhaps his greatest joy as a long-time member of ASP has been to witness the phenomenal growth of the Society, both in membership and in scientific scope, as well as the international reputation and financial stability that have been achieved through the dedication and hard work of the members. (LRW)

Heber W. Youngken, Jr. (1913-2001) President (1969-1970) Honorary Member (1982)

Heber W. Youngken, Jr. was Professor of Pharmacognosy and Dean of the College of Pharmacy, University of Rhode Island from 1957-1981, as well as Provost for Health Sciences Affairs. Born in Philadelphia, he received his A.B. from Bucknell University in 1935, his B.S. from the

Massachusetts College of Pharmacy in 1938, his M.S. in 1940, and his Ph.D. from the University of Minnesota in 1942. Before moving to Rhode Island to become the first Dean of the College, he was Professor and Chairman of the Department of Pharmacognosy at the University of Washington. He was Chairman of the Plant Science Seminar (the progenitor of ASP) from 1950-1951. He was a pioneer in the biosynthetic and pharmacological approach to pharmacognosy research and curricula. In Rhode Island, he saw the potential of marine natural products as drugs, and pursued this area of research. He hosted the first Drugs from the Sea Conference at the University of Rhode Island in 1967 and again in 1969,



which triggered tremendous interest in marine natural products in the following years. After his retirement in 1981, he continued to be active on and off campus, and served in various capacities. The entire University community honored him for his contributions just a week before his sudden death. (From the ASP website; by Yuzuru Shimizu.)

Heber Wilkinson Youngken, Sr. (1885-1963) Honorary Member (1961)

Heber Youngken, Sr., a founding member of the ASP, was known as the "father of American pharmacognosy." Born in Richland, Bucks County, PA, he earned a pharmacy degree from the Medico-Chirurgical College (MCC) of Pharmacy. After obtaining an A.B. degree from Bucknell

University (1909), he took a medical course at MCC, becoming Asst. Prof. (Botany & Pharmacognosy) and Director of the Botanical Lab. in 1912. He earned a Ph.D. in botany and zoology at the Univ. Pennsylvania in 1915. Upon closure of the MCC (1916), he joined the Philadelphia College of Pharmacy, became Acting Prof. in 1917, and also directed the botanical gardens. In 1923, he moved to the MA College of Pharmacy (MCP) where he chaired the *Materia Medica* and Botany Dept. as Prof. of Pharmacognosy until his retirement in 1956. His enormous teaching load included a course on Technical Microscopy, which Norm Farnsworth took



in 1957, recalling how he recited from memory the course material from his textbooks. Despite his demanding teaching schedule, he published many important papers, monographs and reviews, and his textbooks included several editions of *Pharmaceutical Botany* and *Pharmacognosy*. He stressed the need to microscopically inspect every drug batch sold, citing cases of toxic species found in batches of crude drugs, and tablets diluted with cornstarch. He was awarded the Ebert Medal in 1925, America's oldest pharmacy award, and in 1928, served as President of the Plant Science Seminar, later to become the ASP. In 2000, his personal herbarium (~7,000 specimens) was donated to the American Botanical Council, who in 2005, transferred it to the Botanical Research Institute of Texas, thereby prolonging his legacy. (Based on an article by Kimberley Bean, ASP Newsletter, 44(4), 2008)

Meinhart H. Zenk Research Achievement Award (1996)

Meinhart Zenk is a Member and Principle Investigator at the Donald Danforth Plant Science Center in St. Louis, where he has lived since April 2006. He is also an Adjunct Professor in the Medical School of Washington University in St. Louis. Previously he lived and worked in

Germany, holding positions as Honorary Professor at the University of Halle-Wittenberg (2000-2006), Department Head of Pharmaceutical Biology at the University of Munich (1980-2000), and Professor and Department Head of Plant Physiology at Ruhr-University of Bochum (1968-1980). His research interests have included the biosynthesis and enzymology of plant natural products, such as pigments, flavor components, quinones, aliphatic compounds and the mechanism of detoxification of heavy metals within plants (phytochelatins). He has studied extensively the enzymology of indole and isoquinoline alkaloids.



Presently, his main research focus is on the discovery and function of morphine in human cells and tissue. He has published 400 reviewed articles covering research in plant biochemistry. He received the Research Achievement Award in recognition for the elucidation of the morphine pathway in the opium poppy plant from tyrosine to morphine at the enzyme level. Nineteen chemical steps were involved in the biosynthesis of this medicinally important compound. In addition the enzymology of several other isoquinoline alkaloids were clarified. (MHZ)