

# SOT HONOR AND AWARD DESCRIPTIONS

In recognition of distinguished toxicologists and students, SOT presents Honorary Membership and awards each year. In addition to receiving a plaque, recipients are honored at a special Awards Ceremony at the SOT Annual Meeting and their names are listed in SOT publications. The deadline for 2009 Honorary Membership and award nominations is October 9, 2008.

SOT Council reviews nominations for Honorary Membership and the Awards Committee reviews applications for SOT Awards and most Sponsored Awards. Awards Committee members are not eligible to receive any awards conferred by this Committee while serving on the Committee and for one subsequent year.

The Best Paper Awards are reviewed by the Board of Publications. The Education Committee selects the recipients of the Pfizer Undergraduate Travel Award and the Committee on Diversity Initiative selects the other undergraduate student travel recipients.

Nominations for most awards must be submitted by a sponsor and a seconder who are full members of SOT

using the On-Line Award Nomination Form. The supporting documentation must indicate the candidate's achievements in toxicology and is critical in the review of each application. See the award description for the additional requirements for some of the awards, including the Sponsored Awards. There are specific applications for Fellowships and Graduate Travel Support.

Other graduate student and postdoctoral fellow awards are available through Regional Chapters, Specialty Sections, and Special Interest Groups. A student or postdoc may apply for any award for which he or she is eligible and may apply for and receive multiple awards, whether SOT, Regional Chapters, Special Interest Groups, or Specialty Sections sponsor the awards. Policies related to travel support are determined by the sponsor (SOT, Regional Chapter, Special Interest Groups, or Specialty Section). **Students may only receive one SOT national travel award.**

Full descriptions of all awards, awards no longer being offered, application procedures, and names of past recipients may be found on the SOT Web site at [www.toxicology.org](http://www.toxicology.org).

## SOT Honor Descriptions



### Honorary Membership

The Society of Toxicology recognizes non-members who embody outstanding and sustained achievements in the field of toxicology with Honorary Membership. Candidates are nominated by two full or associate members of the Society. Seconding letters and information regarding career achievements in toxicology should accompany the nomination. A two-thirds vote of Council determines recipients, with not more than two Honorary Members elected during any one term of Council. Nominations should be sent to SOT Headquarters by October 9.

#### Inductees

1962 ..... Eugene M.K. Geiling\*  
1962 ..... W. F. Von Oettingen\*  
1962 ..... Torald H. Sollman\*  
1963 ..... Ethel Browning\*  
1966 ..... R. Tecwyn Williams\*  
1976 ..... Norton Nelson\*  
1982 ..... George H. Hitchings\*  
1986 ..... Bernard B. Brodie\*  
1986 ..... Herbert Remmer\*  
1991 ..... Hyman J. Zimmerman\*  
1994 ..... Ronald W. Estabrook  
1994 ..... Wendell W. Weber  
1995 ..... Gertrude B. Elion\*  
1995 ..... Charles S. Lieber

1996 ..... Sten G. Orrenius  
1996 ..... Dennis Parke  
1997 ..... John E. Casida  
1997 ..... Roger W. Russell\*  
1998 ..... Jud Coon  
1998 ..... Michel Mercier  
1999 ..... William O. Robertson  
1999 ..... Takashi Sugimura  
2000 ..... Findlay Russell  
2001 ..... Herbert Needleman  
2007 ..... Mario Molina  
2008 ..... Lee Hartwell  
2008 ..... H. Robert Horvitz



Indicates an SOT Sponsored Award

\*Deceased

## SOT Award Descriptions



### Achievement Award

The Achievement Award is presented to a member of the Society of Toxicology who has less than 15 years experience since obtaining his/her highest earned degree (in the year of the Annual Meeting of the Society of Toxicology) and who has made significant contributions to toxicology. This award consists of a plaque and a cash stipend.

#### Award Recipients

1967 ..... Gabriel L. Plaa  
1968 ..... Allan H. Conney  
1969 ..... Samuel S. Epstein  
1970 ..... Sheldon D. Murphy\*  
1971 ..... Yves Alarie  
1972 ..... Robert L. Dixon\*  
1974 ..... Morris F. Cranmer  
1975 ..... Ian C. Munro  
1976 ..... Curtis D. Klaassen  
1977 ..... James E. Gibson  
1978 ..... Raymond D. Harbison  
1979 ..... Michael R. Boyd  
1980 ..... Philip G. Watanabe\*  
1982 ..... Frederick P. Guengerich  
1984 ..... Melvin E. Andersen  
1985 ..... Alan R. Buckpitt  
1986 ..... Sam Kacew  
1987 ..... James S. Bus  
1988 ..... Jeanne M. Manson  
1989 ..... James P. Kehrer  
1990 ..... Michael P. Waalkes  
1991 ..... Debra Lynn Laskin  
1992 ..... Michael P. Holsapple  
1993 ..... David L. Eaton  
1994 ..... James L. Stevens  
1995 ..... Lucio G. Costa  
1996 ..... Kenneth S. Ramos  
1997 ..... Kevin E. Driscoll  
1998 ..... Rick G. Schnellmann  
1999 ..... Michel Charbonneau  
2000 ..... Christopher Bradfield  
2001 ..... Martin A. Philbert  
2002 ..... Ruth A. Roberts  
2003 ..... Lois D. Lehman-McKeeman  
2004 ..... David C. Dorman  
2006 ..... Jose E. Manautou  
2007 ..... Jeffrey M. Peters  
2008 ..... Ivan Rusyn



### Arnold J. Lehman Award

The Arnold J. Lehman Award is presented to recognize an individual who has made a major contribution to risk assessment and/or the regulation of chemical agents, including pharmaceuticals. The contribution may have resulted from the application of sound scientific principles to regulation and/or from research activities that have significantly influenced the regulatory process. The nominee may be employed in academia, government, or industry and must be an SOT member. This award consists of a plaque and a cash stipend.

#### Award Recipients

1980 ..... Allan H. Conney  
1981 ..... Gabriel L. Plaa  
1982 ..... Gary M. Williams  
1983 ..... David P. Rall\*  
1984 ..... Tibor Balasz  
1985 ..... Frederick Coulston\*  
1986 ..... Gerrit Johannes Van Esch  
1987 ..... John P. Frawley\*  
1988 ..... Kundan S. Khera\*  
1989 ..... Richard H. Adamson  
1990 ..... Harold C. Grice  
1991 ..... Bernard A. Schwetz  
1992 ..... Roger O. McClellan  
1993 ..... Thomas W. Clarkson  
1994 ..... Bruce Ames  
1995 ..... Emil A. Pfitzer  
1996 ..... John F. Rosen  
1998 ..... Helmut Alfred Greim  
2000 ..... Carole A. Kimmel and Janardan K. Reddy  
2001 ..... Samuel M. Cohen  
2002 ..... Dennis Paustenbach  
2003 ..... Michael L. Dourson  
2004 ..... Melvin E. Andersen  
2005 ..... Rory B. Conolly  
2006 ..... Kathryn R. Mahaffey  
2007 ..... Harvey J. Clewell  
2008 ..... Vicki Dellarco



## Best Postdoctoral Publication Awards

The Best Postdoctoral Publication Awards recognize talented postdoctoral researchers who have recently published exceptional papers in the field of toxicology. Applications are reviewed by the Postdoctoral Assembly Board and outside reviewers with appropriate scientific expertise. The research reported in the paper must have been conducted while the applicant was engaged in a postdoctoral research position. The applicant will be the first author on a peer-reviewed paper published on-line or in print, or in press, in the preceding interval of June 1 and May 31.

### Award Recipients

- 2007 ..... Nadine Dragin  
Kristen Mitchell  
Drobna Zuzana
- 2008 ..... Joshua P. Gray  
Christie M. Sayes  
Khristy J. Thompson



## Board of Publications Best Paper in Toxicological Sciences Award

The Board of Publications Award for the Best Paper in *Toxicological Sciences* is presented to the author(s) of the best paper published in this official SOT publication during a 12-month period, terminating with the June issue of the calendar year preceding the Annual Meeting at which the award is presented. The author(s) need not be a member of the Society of Toxicology. Submissions should include a one-page summary of the paper's contribution to the science of toxicology and a copy of the article for which the nomination is being made. Any member of the Society may submit one title for consideration. In addition, the titles of no more than six papers to be considered are submitted by the editor of *Toxicological Sciences*. All papers submitted will be evaluated by the Board of Publications. This award consists of a plaque and a cash stipend. (This award was formerly known as the Frank R. Blood Award.)

## Best Paper in Toxicological Sciences

(formerly published as *Fundamental and Applied Toxicology*)

### Award Recipients

- 1995 ..... J. L. Larson, D. C. Wolf, B. E. Butterworth
- 1995 ..... M. I. Luster, C. Portier, D. G. Pait,  
G. J. Rosenthal, D. R. Germolec, E. Corsini,  
B. L. Blaylock, P. Pollock, Y. Kouchi, W. Craig,  
K. L. White, A. E. Munson, C. E. Comment
- 1996 ..... B. C. Allen, R. J. Kavlock, C. A. Kimmel,  
E. M. Faustman
- 1997 ..... F. L. Fort, H. Ando, T. Suzuki, M. Yamamoto,  
T. Hamashima, S. Sato, T. Kitazaki,  
M. C. Matony, G. D. Hodgen
- 1998 ..... D. D. Parrish, M. J. Schlosser, J. C. Kapeghian,  
V. M. Traina
- 1999 ..... C. A. Franklin, M. J. Inskip, C. L. Baccanale,  
C. M. Edwards, W. I. Manton, E. Edwards,  
E. J. O'Flaherty
- 2000 ..... H. A. Boulares, C. Giardina, C. L. Navarro,  
E. A. Khairallah\*, S. D. Cohen
- 2001 ..... Jinqiang Chen, Yunbo Li, Jackie A. Lavigne,  
Michael A. Trush, James D. Yager
- 2002 ..... M. J. Bajt, J. A. Lawson, S. L. Vonderfecht,  
J. S. Gujral, H. Jaeschke
- 2003 ..... S. Haddad, M. Beliveau, R. Tardif, K. Krishnan
- 2004 ..... Abraham Nyska, Carolyn Moyer, Allen Ledbetter,  
David Christiani, Mette Schlasweiler,  
Daniel Costa, Russ Hauser, Urmila Kodavanti,
- 2005 ..... Nicole V. Soucy, Michael A. Ihnat, Linda Hess,  
Chandrashekhar D. Kamat, Aaron Barchowsky,  
Mark J. Post, Linda R. Klei, Callie Clark,
- 2006 ..... Hiroshi Sawada, Kenji Takami, Satoru Ashai
- 2007 ..... Trevor Green, Robert Lee, Sara Lloyd, James  
Noakes, Timothy Pastoor, Richard Pepper, Mervyn  
Robinson, Patrick Rose, Alison Toghil, Felix  
Waechter, Edgar Weber
- 2008 ..... Sarah Snykers, Tamara Vanhaecke, Peggy  
Papelue, Aernout Luttun, Yuehua Jiang, Yvan  
Vander Heyden, Catherine Verfaillie, Vera Rogiers

## Best Paper in Toxicology and Applied Pharmacology

### Award Recipients

- 1995 ..... M. F. Denny, M. F. Ware, W. D. Atchison
- 1996 ..... T. A. Slotkin, C. Lau, E. C. McCook, S. E. Lappi,  
F. J. Seidler
- 1997 ..... P. R. S. Kodavanti, T. R. Ward, J. D. McKinney,  
C. L. Waller, H. A. Tilson
- 1998 ..... J. S. Landin, S. D. Cohen, E. A. Khairallah\*
- 1999 ..... S. K. Ramaiah, M G. Soni, T. J. Bucci,  
H. M. Mehendale,
- 1999 ..... C. L. Zuch, D. J. O'Mara, D. A. Cory-Slechta
- 2000 ..... J. E. Staples, N. C. Fiore, D. E. Frazier, Jr.,  
T. A. Gasiewicz, A. E. Silverstone
- 2001 ..... Barbara J. Mounho, Brian D. Thrall
- 2002 ..... G. S. Ratra, S. G. Kamita, J. E. Casida
- 2003 ..... J. Doorn, M. Schall, D. Gage, T. Talley,  
C. Thompson, R. Richardson

## **Frank R. Blood Award**

### **Award Recipients**

- 1974 ..... Yves Alarie  
1975 ..... Donald J. Ecobichon, G. J. Johnstone,  
O. Hutzinger  
1976 ..... Richard D. Brown  
1977 ..... J. Dedinas, George D. DiVincenzo, C. J. Kaplan  
1978 ..... Perry J. Gehring\*, E. O. Madrid, G. R. McGowan,  
Philip G. Watanabe\*  
1979 ..... R. Fradkin, E. J. Ritter, W. J. Scott,  
James G. Wilson  
1980 ..... Jerold A. Last, Peter F. Moore, Otto G. Raabe,  
Brian K. Tarkington  
1981 ..... Yves Alarie, Martin Brady, Christine Dixon,  
Meryl Karol  
1982 ..... Melvin E. Andersen, Michael L. Gargas,  
Lawrence J. Jenkins, Jr., Robert A. Jones  
1983 ..... Henry D. Heck  
1984 ..... Erik Dybing, Sidney Nelson, Erik Soderlund,  
Christer Von Bahr  
1985 ..... Nobumasa Imura, Masae Inokawa, Kyoko Miura  
1986 ..... Calvin C. Wilhite, M. I. Dawson, K. J. Williams  
1987 ..... John Kao, Frances K. Patterson, Jerry Hall  
1988 ..... Debra L. Laskin, Sungchul Ji, Anne M. Pilaro  
1989 ..... R. G. Cuddihy, W. C. Griffith,  
Rogene F. Henderson, Joe L. Mauderly,  
Roger O. McClellan, M. D. Snipes,  
Ronald K. Wolff  
1990 ..... William P. Beierschmitt, Joseph T. Brady,  
John B. Bartolone, D. Stuart Wyand,  
Edward A. Khairallah\*, Steven D. Cohen  
1991 ..... Jay Babcock Silkworth, Daryl Cutler,  
LuAnn Antrim, Don Houston,  
Casimir Tumasonis, Laurence S. Kaminsky  
1992 ..... Donald A. Fox, Steve D. Rubinstein,  
Pauline Hsu  
1993 ..... Thomas Mably, Robert W. Moore,  
Robert W. Goy, Richard E. Peterson  
1994 ..... Susan J. Borghoff, William H. Lagarde



## **Contributions to Public Awareness of the Importance of Animals in Toxicology Research Award**

The Contributions to Public Awareness of the Importance of Animals in Toxicology Research Award is presented annually to an individual (or organization) in recognition of the contributions made to the public understanding of the role and importance of experimental animals in toxicological science. This award may be for either a single seminal piece of work or a longer-term contribution to public understanding of the necessity of the use of animals in toxicological research both to ensure and enhance the quality of human and animal health and the environment. The award consists of a plaque and a cash stipend.

### **Award Recipients**

- 2000 ..... Allegheny-Erie Chapter  
2001 ..... Massachusetts Society for Medical Research  
2002 ..... George Nethercutt  
2003 ..... Michael Derelanko  
2004 ..... North Carolina Association for Biomedical  
Research (NCABR), Americans for Medical  
Progress (AMP)  
2005 ..... Orrin G. Hatch, Foundation for Biomedical  
Research (FBR)  
2006 ..... Jayne Mackta



## **Distinguished Toxicology Scholar Award**

The Distinguished Toxicology Scholar Award is presented to a member of SOT who has made substantial and seminal scientific contributions to our understanding of the science of toxicology. Nominees should be active scientists involved in toxicological research. The prime consideration for this award is scientific accomplishments. This award consists of a plaque and a cash stipend. (This award was presented in 2001 as the Scientific Achievement Award.)

### **Award Recipients**

- 2001 ..... James E. Troska  
2003 ..... Henry C. Pitot  
2004 ..... Gerald N. Wogan  
2005 ..... Daniel Nebert  
2006 ..... Sten G. Orrenius  
2007 ..... Stephen H. Safe  
2008 ..... Toshio Narahashi

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## Education Award

The Education Award is presented to an individual who is distinguished by the teaching and training of toxicologists and who has made significant contributions to education in the broad field of toxicology. This award consists of a plaque and a cash stipend.

### Award Recipients

1975 ..... Harold C. Hodge\*  
1976 ..... Ted A. Loomis  
1977 ..... Robert B. Forney\*  
1979 ..... Sheldon D. Murphy\*  
1980 ..... Herbert H. Cornish\*  
1981 ..... Frederick Sperling\*  
1982 ..... Lloyd W. Hazleton\*  
1983 ..... Julius M. Coon\*  
1984 ..... Frank Guthrie, Ernest Hodgson  
1985 ..... William B. Buck  
1986 ..... Robert I. Krieger  
1987 ..... Gabriel L. Plaa  
1988 ..... John Autian  
1989 ..... Tom S. Miya  
1990 ..... Charles H. Hine  
1991 ..... Hanspeter R. Witschi  
1992 ..... Dean E. Carter  
1993 ..... Curtis D. Klaassen  
1994 ..... Robert A. Neal  
1995 ..... William Carlton  
1996 ..... Robert Snyder  
1997 ..... Albert E. Munson  
1998 ..... David J. Holbrook  
1999 ..... Jules Brodeur  
2000 ..... Gary Carlson  
2001 ..... Harihara Mehendale  
2002 ..... Joseph Borzelleca  
2003 ..... Frederick W. Oehme  
2004 ..... A. Jay Gandolfi  
2005 ..... Nobuyuki Ito  
2006 ..... Robert A. Schatz  
2007 ..... Torbjörn Malmfors  
2008 ..... Steven Cohen



## Enhancement of Animal Welfare Award

The Enhancement of Animal Welfare Award is presented annually to a member of the Society in recognition of the contribution made to the advancement of toxicological science through the development and application of methods that replace, refine, or reduce the need for experimental animals. This award recognizes outstanding/significant contributions made by members of the Society of Toxicology to the sound and responsible use of animals in scientific research. The achievement recognized may be either a seminal piece of work or a long-term contribution to toxicological science and animal welfare. The award consists of a plaque and a cash stipend.

### Award Recipients

2000 ..... Yves Alarie  
2001 ..... Alan Goldberg  
2002 ..... Gary Williams  
2003 ..... G. Frank Gerberick, Ian Kimber  
2005 ..... Daniel Acosta  
2006 ..... William S. Stokes  
2007 ..... Thomas Hartung



## Founders Award

The SOT Founders Award is presented to a full or retired full member of the Society of Toxicology who has demonstrated outstanding leadership in fostering the role of toxicological sciences in safety decision-making through the development and/or application of state-of-the-art approaches that elucidate, with a high degree of confidence, the distinctions for humans between safe and unsafe levels of exposures to chemical and physical agents.

### Award Recipient

2008 ..... John Doull



## Graduate Student Travel Support

Graduate Student Travel Support defrays expenses for students presenting platform talks or posters at the SOT Annual Meeting. To be eligible, the student must be a SOT member (or have submitted a membership application) who has not previously received SOT Graduate Student Travel Support.

# SOT HONOR AND AWARD DESCRIPTIONS

**NEW**



## **Leading Edge in Basic Science Award**

The Leading Edge in Basic Science Award is presented to a scientist who, based on his/her research, has made a recent (within the last 5 years), seminal basic scientific contribution to understanding fundamental mechanisms of toxicity. The recipient may be a respected basic scientist, member or non-member, including toxicologists as well as other scientists who may not identify themselves with the discipline of toxicology but whose research findings are likely to have a pervasive impact on the field of toxicology.

- 1997 ..... Mary O. Amdur\*
- 1998 ..... John A. Thomas
- 1999 ..... Thomas Clarkson
- 2000 ..... Philippe Shubik\*
- 2001 ..... Donald Reed
- 2002 ..... Bernard Schwetz
- 2003 ..... M. W. Anders
- 2004 ..... Robert Goyer
- 2005 ..... Roger McClellan
- 2006 ..... A. Wallace Hayes
- 2007 ..... James A. Swenberg
- 2008 ..... Hanspeter Witschi



## **Merit Award**

The Merit Award is presented to a member of the Society of Toxicology in recognition of distinguished contributions to toxicology throughout an entire career in areas such as research, teaching, regulatory activities, consulting, and service to the Society. This award consists of a plaque and a cash stipend. The recipient delivers the Merit Awardee Lecture at the SOT Annual Meeting.

### **Award Recipients**

- 1966 ..... Henry F. Smyth, Jr.\*
- 1967 ..... Arnold J. Lehman\*
- 1968 ..... R. T. Williams\*
- 1969 ..... Harold C. Hodge\*
- 1970 ..... Don D. Irish
- 1971 ..... Kenneth P. DuBois
- 1972 ..... O. Garth Fitzhugh\*
- 1973 ..... Herbert E. Stokinger\*
- 1974 ..... William B. Deichmann\*
- 1975 ..... Frederick Coulston\*
- 1976 ..... Verald K. Rowe\*
- 1977 ..... Harry W. Hays\*
- 1978 ..... Julius M. Coon\*
- 1979 ..... David W. Fassett\*
- 1980 ..... Bernard L. Oser
- 1981 ..... John H. Weisburger
- 1982 ..... Harold M. Peck
- 1983 ..... Perry J. Gehring\*
- 1984 ..... Tom S. Miya
- 1985 ..... Carrol S. Weil\*
- 1986 ..... Ted A. Loomis
- 1987 ..... Bo Holmstedt
- 1988 ..... Seymour L. Friess
- 1989 ..... Wayland J. Hayes, Jr.\*
- 1990 ..... Sheldon D. Murphy\*
- 1991 ..... Toshio Narahashi
- 1992 ..... W. Norman Aldridge
- 1993 ..... John Doull
- 1994 ..... Ernest Hodgson
- 1995 ..... Robert A. Scala
- 1996 ..... Gabriel L. Plaa



## **Minority Undergraduate Student and Advisor Awards**

The Minority Undergraduate Student and Advisor Awards provide support for awardees to participate in the Undergraduate Education Program at the SOT Annual Meeting. This program is an introduction to the discipline of toxicology for undergraduate science majors and includes an orientation, a special poster session with scientists, and activities with an SOT mentor. The travel awards are for those from races and ethnic groups underrepresented in the sciences (African American, American Indian, or Hispanic American) and for their advisors. The advisors are eligible regardless of racial or ethnic background. Meeting registration and support for travel, lodging, and meals are provided for students and advisors who are not local to the meeting site. Students and advisors from local institutions receive meeting and program registration and meals. In the past, the program has been supported in part by NIH-MARC, Pfizer, Johnson & Johnson, Covance, and other supporters. The recipient list is available on the Web site.



## **Public Communications Award**

The Public Communications Award is presented by the Society of Toxicology to recognize an individual who has made a major contribution to broadening the awareness of the general public on toxicological issues through any aspect of public communications. The award should reflect accomplishments made over a significant period of time. Examples of qualifying media in which the nominated communication may appear are as follows: books, brochures, continuing education courses, data bases, extension bulletins, magazines, newspapers (local or national), outreach, public presentations, public forums, radio and television scripts, and workshops. The award consists of a plaque and a cash stipend.

### **Award Recipients**

- 1994 ..... Michael A. Kamrin
- 1995 ..... Philip Abelson\*
- 1996 ..... Bruce N. Ames

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1997 ..... Audrey Gotsch  
1999 ..... Ann de Peyster  
2001 ..... Anna Shvedova  
2002 ..... Sam Kacew  
2003 ..... Charlene A. McQueen  
2004 ..... Kenneth Olden  
2005 ..... Robert Kreiger  
2007 ..... Linda S. Birnbaum

2008 ..... Gafe Rageh Ahmed (Egypt)  
Sayed Bakry (Egypt)  
Phillip Burcham (Australia)  
Kemal Buyukguzel (Turkey)  
Jin-Ho Chung (Korea)  
Hande Gurer-Orhan (Turkey)  
Lyndy McGaw (South Africa)  
Zdravko Paskalev (Bulgaria)



## SOT AstraZeneca IUTOX Fellowship

The AstraZeneca, Ltd. and SOT sponsor travel fellowship awards annually, which are administered by IUTOX. Awards are available to senior scientists from a country where toxicology is underrepresented to assist with travel to attend the Society of Toxicology Annual Meeting.

### Award Recipients

2002 ..... Christophor Dishovsky (Bulgaria)  
Zoltan Gregus (Hungary)  
Maritza Rojas Martini (Venezuela)  
Choon-Nam Ong (Singapore)  
W. Wasowicz (Poland)  
Ping-kun Zhou (China)

2003 ..... Jian-Hui Liang (China)  
Eman A. Seif (Egypt)  
Marjan G. Vracko (Slovenia)

2004 ..... Cristina Bolaton (Phillippines)  
P. K. Gupta (India)  
Salmaan Inayat-Hussain (Malaysia)  
Xianping Ying (China)

2005 ..... Diana B. Apostolova (Bulgaria)  
Marite Arija Bake (Latvia)  
Teresa I. Fortuoul (Mexico)  
Mary Gulumian (South Africa)  
He Jiliang (China)  
Khalidya Khamidulina (Russia)  
L. Orish Orisakwe (Nigeria)  
Songsak Srianjata (Thailand)  
Sinan Suzen (Turkey)

2006 ..... Olanike Adeyemo (Nigeria)  
Deepak Argwal (India)  
Carlos Colangelo (Argentina)  
Sandra Demichelis (Argentina)  
Mumtaz Iscan (Turkey)  
Karolina Lyubomirova (Bulgaria)  
Osman Aly Osman (Egypt)  
Shuang-Qing Peng (China)  
Julia Radenkova-Saeva (Bulgaria)

2007 ..... Hatem Ahmed (Egypt)  
Jiri Bajgar (Czech Republic)  
Ismet Çok (Turkey)  
Carlos García (Peru)  
Wenceslao Kiat (Philippines)  
Calivarathan Latchoumycandane (Singapore)  
Fateheya Metwally (Egypt)  
Hilmi Orhan (Turkey)  
Nwoha Umunna (Nigeria)



## SOT Regional Chapter Awards

Most SOT Regional Chapters provide awards to recognize outstanding students, postdoctoral fellows, or scientists throughout their career. Application requirements and deadlines vary. For more details refer to the Award descriptions on the SOT Web site at [www.toxicology.org](http://www.toxicology.org), under Regional Chapters or the Awards and Fellowships section.



## SOT Special Interest Group Awards

SOT Special Interest Groups provide awards to recognize outstanding students, postdoctoral fellows, or scientists throughout their career. Application requirements and deadlines vary. For more details refer to the Award descriptions on the SOT Web site at [www.toxicology.org](http://www.toxicology.org), under Special Interest Groups or the Awards and Fellowships section.



## SOT Specialty Section Awards

Most SOT Specialty Sections provide awards to recognize outstanding students, postdoctoral fellows, or scientists throughout their career at the SOT Annual Meeting. Application requirements and deadlines vary. For more details refer to the Award descriptions on the SOT Web site at [www.toxicology.org](http://www.toxicology.org), under Specialty Sections or the Awards and Fellowships section.

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**NEW**



## **Translational Impact Award**

The Translational Impact Award is presented to a scientist whose recent (in the last 10 years) outstanding clinical, environmental health, or translational research has improved human and/or public health in an area of toxicological concern. Scientists who are leaders in multidisciplinary team efforts who have contributed to alleviating toxicity-related health problems are particularly attractive candidates. The nominee may be a member or non-member from any background (toxicologists, clinicians, basic scientists, epidemiologists, engineers, etc.).



## **Undergraduate Toxicology Education Award**

The Undergraduate Toxicology Education Awards provide support for awardees to participate in the Undergraduate Education Program at the SOT Annual Meeting. This program is an introduction to the discipline of toxicology for undergraduate science majors and includes an orientation, a special poster session with scientists, and activities with an SOT mentor. The travel awards are for those from institutions that receive a limited amount of Federal funding in science and technology (list is available on the Web site). Preference in selection will be students who are first generation college attendees (that is, neither parent graduated from a four-year academic institution).

Meeting registration and support for travel, lodging, and meals are provided for students who are not local to the meeting site. Students from local institutions receive registration, meeting materials, and an expense stipend. The recipient list is available on the Web site.



## AstraZeneca Traveling Lectureship Awards

The AstraZeneca Traveling Lectureship Awards are presented through the Society of Toxicology to recognize excellence in research and service in toxicology. AstraZeneca, Ltd., provides one or two awards annually to promote greater collaboration between European and North American toxicologists and to enable North American toxicologists to undertake a three-four week lecture tour of Europe. The awards are intended to familiarize recipients with research and regulatory issues in Europe as well as bring a North American perspective to these issues. Candidates for these awards should be established, mid-career North American scientists who are members of the Society and who demonstrate the ability to develop collaborative relationships with European colleagues. The awards are given each year in the amount of \$6,000 each.

### Award Recipients

1990 ..... Robert I. Krieger, Joseph R. Landolph  
 1991 ..... Sam Kacew  
 1992 ..... Charles V. Smith, Jerold A. Last  
 1993 ..... Terrence James Monks, Harihara H. Mehendale  
 1995 ..... David L. Eaton, Hanspeter R. Witschi  
 1996 ..... Rick G. Schnellmann, James P. Kehrer  
 1997 ..... Lucio G. Costa, Durisala Desaiiah  
 1998 ..... Syed F. Ali, Curtis J. Omiecinski  
 1999 ..... Alvaro Pugo  
 2000 ..... Kenneth Ramos, Garold Yost  
 2001 ..... Ronald Hines, Richard Seegal  
 2003 ..... William D. Atchison  
 2004 ..... Charlene A. McQueen  
 2005 ..... Kevin M. Crofton  
 2006 ..... Robert A. Roth  
 2007 ..... Michael S. Denison  
 2008 ..... José E. Manautou

## Colgate-Palmolive Awards for Student Research Training in Alternative Methods

The purpose of the Colgate-Palmolive Awards for Student Research Training in Alternative Methods is to enhance student research training using *in vitro* methods or alternative techniques to reduce, replace or refine use of animals in toxicological research. The Awards Committee will present the awards to graduate students. Up to five awards, at \$3,500 each, are available. Deadlines for applications are February 15, June 15, and October 9.

The award is for expenses for training consistent with the goal of this award program. The training may include, but is not limited to, use of *in vitro* and *ex vivo* procedures, non-mammalian animal models, computer modeling, and structure-activity relationships. Graduate students may propose to develop expertise in relevant methodologies at 1) a laboratory away from their home institution; 2) a laboratory at their home institution that would not be available to

them otherwise; or 3) approved workshops, symposia, or continuing education programs where hands-on training will be received. The training should help toxicology graduate students enhance their thesis or dissertation research. The overall goal is to support the replacement, reduction, or refinement of currently used animal models in toxicology research and testing. Awards of up to \$3,500 per student will defray travel, *per diem*, and training expenses.

### Award Recipients

2000 ..... Jason Gross  
 2001 ..... Jason Biggs, Victoria Richards  
 2002 ..... Kartik Shankar, Chad M. Vezina, Ryan L. Williams  
 2003 ..... Sachin Devi, Midhun Korrapati, Pallavi Limaye  
 2004 ..... Jaya Chilakapati  
 2005 ..... Vishaka Bhave, Ankur Dnyanmote, Johnathan Maher  
 2006 ..... Mary Hassani, Prajakta Palkar  
 2007 ..... Renee Gardner, Prajakta Palkar, Rohit Singhal, René Vinas  
 2008 ..... Kimberly A. Hays, Haitian Lu

## Colgate-Palmolive Grants for Alternative Research

The Colgate-Palmolive Grants for Alternative Research will identify and support efforts that promote, develop, refine, or validate scientifically acceptable animal alternative methods to facilitate the safety assessment of new chemicals and formulations. Scientists at any stage of career progression may submit a proposal.

High priority will be given to projects that use *in vitro* or non-animal models, reproductive and developmental toxicology, neurotoxicology, systemic toxicology, sensitization, and acute toxicity.

The maximum award is \$40,000. Awards are made as a single lump payment. An expert panel from the SOT *In Vitro* and Alternative Methods Specialty Section will recommend a prioritized list of applicants for funding, with the final awards designated by the SOT Awards Committee. Awardees can apply again for funding.

### Award Recipients

2006 ..... Rola Barhoumi, Abby Benninghoff, Jodie Flaws, Courtney Sulentic, Xiaouzhong Yu  
 2007 ..... Rita L. Caruso, Daniel R. Cerven, Anne R. Greenlee, Glenn M. Walker  
 2008 ..... Daniel R. Cerven, Duncan C. Ferguson, Shashi K. Ramiah

# SPONSORED AWARD DESCRIPTIONS

## **Colgate-Palmolive Postdoctoral Fellowship Award in *In Vitro* Toxicology**

The Colgate-Palmolive Company sponsors the Colgate-Palmolive Postdoctoral Fellowship Award in *In Vitro* Toxicology through the Society of Toxicology to advance the development of alternatives to animal testing in toxicological research. The award is given in alternate years and includes stipend and research-related costs (up to \$38,500) for one year. The award may be extended for an additional year upon agreement between Colgate-Palmolive and the postdoctoral fellow. The award is available to postdoctoral trainees employed by academic institutions, federal/national laboratories, or research institutes worldwide. Preference will be given to applicants in their first year of postdoctoral study. Applications are due in even calendar years and the fellowship is awarded for the following year. The next application deadline: October 9, 2008.

### **Award Recipients**

1988 ..... Ernest Bloom  
1989 ..... Gin Hsieh  
1990 ..... Dennis E. Chapman  
1991 ..... Anne Walsh  
1992 ..... Qin Chen  
1993 ..... Erika Cretton  
1994 ..... William Chan  
1995 ..... Bob Van de Water  
1997 ..... Alan Parrish  
1999 ..... Russell Thomas  
2001 ..... Kevin Kerzee, Christopher Reilly  
2002 ..... Kevin Kerzee  
2003 ..... Kimberly Miller  
2004 ..... Kimberly Miller  
2005 ..... Francis Tukov  
2007 ..... Aaron Rowland  
2008 ..... Aaron Rowland

## **Colgate-Palmolive Traveling Lectureship in Alternative Methods in Toxicology Award**

The Colgate-Palmolive Company sponsors the Colgate-Palmolive Traveling Lectureship in Alternative Methods in Toxicology Award annually through the Society of Toxicology. This award covers expenses for an individual scholar to visit institution(s) for the dissemination of knowledge and for stimulating research that takes advantage of modern *in vitro* toxicology approaches. The overall goal of this program is to make scientists aware of the benefits of modern *in vitro* toxicology approaches and to stimulate research for the replacement, reduction, or refinement of currently used animal models.

Lecturing scholars should be established, mid-career through late-career scientists who are members of SOT and who are developing collaborative relationships with scientists at other institutions.

Requests for funds can be made by the individual scholar or by a host from an academic institution, SOT Regional Chapter, SOT Special Interest Group, SOT Specialty Section, or another toxicology organization. Up to \$15,000 is available for all the awards. The Awards Committee reviews the applications, which must be accompanied by a statement detailing the applicants expertise in alternative methods, a brief overview of the techniques to be discussed in the lecture, the budget request, and a letter from the host indicating interest in serving as host and the potential benefits to the institution.

### **Award Recipients**

1996 ..... University of Mississippi Medical Center  
Visiting Professor: Tetsuo Satoh  
1996 ..... University of Illinois at Urbana  
Visiting Professor: Julio Davila  
1996 ..... Mississippi State University  
Visiting Professor: Michael Holsapple  
1996 ..... Washington State University  
Visiting Professor: Daniel Acosta  
1997 ..... Indiana University School of Medicine  
Visiting Professor: A. Jay Gandolfi  
1997 ..... University of Arizona Health Science Center  
Visiting Professor: Kevin E. Driscoll  
1997 ..... University of New Mexico Health  
Sciences Center  
Visiting Professor: Sam Kacew  
1997 ..... University of Illinois  
Visiting Professor: Michael Denison  
1998 ..... University of Washington  
Visiting Professor: Bruce Fowler  
1998 ..... San Diego State University  
Visiting Professor: Leigh Ann Burns-Naas  
1999 ..... San Diego State University  
Visiting Professor: Robert Chapin  
2000 ..... Yale University, School of Medicine  
Visiting Professor: Narendre Singh  
2001 ..... Medical College of Wisconsin  
Visiting Professor: Garold Yost  
2003 ..... Washington State University  
Visiting Professor: Marc W. Fariss  
2004 ..... University of Louisiana at Monroe  
Visiting Professor: Snorri S. Thorgeirsson  
2008 ..... George Michalopoulos  
Institution to be Visited: University of Louisiana  
at Monroe

## **Graduate Student Fellowship Award—Novartis Award**

The Graduate Student Fellowship—Novartis Award is available for student members of the SOT engaged in full-time graduate study towards a Ph.D. degree in toxicology. The major professor must be an SOT member. The evaluation is based primarily on originality of the dissertation research, research productivity, relevance to toxicology, scholastic achievement, and letters of recommendation. Finalists are interviewed at the Annual Meeting and receive travel support.

### **Award Recipients**

1989 ..... Timothy Zacharewski  
1990 ..... Mary Suzanne Stefaniak  
1991 ..... Donald Bjerke  
1992 ..... Lhanoo Gunawardhana  
1993 ..... Christopher Martenson  
1994 ..... Nyla Harper  
1995 ..... Heather E. Kleiner  
1996 ..... Russell Thomas  
1997 ..... Melva Rios-Blancos  
1998 ..... Kent Carlson  
1999 ..... Mark Hickman  
2000 ..... Jeffrey Moran  
2001 ..... Vishal Vaidya  
2002 ..... Kartik Shankar  
2003 ..... Sachin Devi  
2004 ..... James Luyendyk  
2005 ..... Andrea W. Wong  
2006 ..... Sheung P. Ng  
2007 ..... Atrayee Banerjee  
2008 ..... Helen J. Badham

*(Recipients of Graduate Fellowship Awards no longer offered may be found on the SOT Web site at [www.toxicology.org](http://www.toxicology.org).)*

## **Pfizer Undergraduate Student Travel Award**

Pfizer Undergraduate Student Travel Awards are presented through the Society of Toxicology to foster an interest in graduate studies in the field of toxicology by bringing promising undergraduate students to the SOT Annual Meetings. Pfizer, Inc., will provide up to five awards per year to undergraduate students presenting research at the Annual Meeting. Awardees will be selected by the Education Committee based on the quality of the submitted abstract and the advisor's supporting recommendation. Those selected will receive travel assistance for the Meeting, a plaque presented at the annual Awards Ceremony, and recognition at a special Pfizer function. Awardees will be matched with a graduate student and a Pfizer scientist to mentor them during the Annual Meeting, and will have the opportunity to attend the Society of Toxicology Undergraduate Education Program on the Sunday of the SOT Annual Meeting.

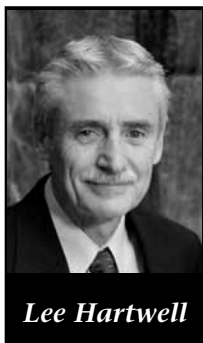
### **Award Recipients**

2006 ..... Shawntay Chaney, Theresa M. Eagle,  
Natalie Malek, Adeliada Segarra, Ryan Vaughan  
2007 ..... Kay Gonsalves, Lisa Koselke, Basharat Sanni,  
Sonia Talathi, Anna Zimmerman  
2008 ..... Amy DeMicco, Tharu Fernando, Yamel Perdomo,  
Amy Yi Hsan Saik, Kelly Sullivan

# 2008 HONOR AND AWARD RECIPIENTS



## Honorary Membership



Lee Hartwell has made important contributions to our understanding of cell division and cancer through his study of genes that control cell division in yeast. For this work Hartwell has received many scientific awards, including the 2001 Nobel Prize in Physiology or Medicine. Other honors include the Albert Lasker Basic Medical Research Award, the Gairdner Foundation International Award and the Alfred P. Sloan Award in cancer research.

Many of the genes that control yeast division also control cell division in humans and often are the site of alteration in cancer. Hartwell discovered a new class of gene responsible for accurate cellular reproduction: the "checkpoint" gene. These genes halt cell division when mistakes are made during cellular reproduction so that repair can take place. His insights into cell-cycle control are being used to develop treatments for cancer and other diseases. In collaboration with Steve Friend, Hartwell explored the potential to identify cancer therapeutics using a panel of yeast mutants defective in DNA repair. He and Lee Hood have founded a company to use transcript profiles and yeast mutants to identify new therapeutic targets.

As part of his efforts to use the enormous knowledge that has accumulated over the last 50 years in genetics and biochemistry to benefit cancer patients, he strives to improve molecular diagnostics to identify individuals at high risk for disease, detect cancer and other diseases at an early stage when they can be cured, provide prognostic information, and monitor therapeutic response. Proteins will likely provide the best diagnostic information because of their greater diversity and because their state reflects biological function. The technology for protein diagnostics, however, is in its infancy. He is involved in national and international projects to increase the number of laboratories working in protein diagnostics, develop more team science, improve the availability of informatics for data sharing, provide standardized reagents, and stimulate new technology development. He and Michael Birt organized the first international Pacific Health Summit held in June 2005.

Hartwell earned a Ph.D. from the Massachusetts Institute of Technology under the mentorship of Boris Magasanik. He engaged in postdoctoral work at the Salk Institute for Biological Studies with Renato Dulbecco. He then joined the University of Washington faculty and has been a genetics professor there since 1973. In 1996 he joined the faculty of Seattle's Fred Hutchinson Cancer Research Center and in 1997 became its president and director. He is a member of the National Academy of Sciences.



Pioneering studies by H. Robert Horvitz have made him one of the central figures in research on programmed cell death (apoptosis). He discovered key genes that control cell death in *C. elegans*. For this work and for his studies concerning organ development in *C. elegans*, Horvitz won the 2002 Nobel Prize in Physiology or Medicine, an award he shared with Sydney Brenner and John Sulston.

Horvitz's work with *C. elegans* began during a postdoctoral fellowship in Brenner's laboratory in Britain in the 1970s. There, Horvitz teamed with Sulston to trace the ultimate fate of each cell as it developed from an embryo into an adult. Their work revealed that cell division in the worm produces many more cells than survive to make up the mature animal.

In the mid-1980s at the Massachusetts Institute of Technology, Horvitz identified the first "cell death" genes, called *ced-3* and *ced-4*. "Discovering that programmed cell death is specified by particular genes established that programmed cell death is a basic biological process, much like cell division, cell migration, and cell differentiation," Horvitz explained. Later, Horvitz showed the gene *ced-9* protects against cell death by regulating both *ced-3* and *ced-4*.

Horvitz's graduate studies at Harvard were under the guidance of James Watson and Walter Gilbert (who developed a method to determine the exact sequence of the nucleotides in DNA). Both men are also Nobel laureates.

"As a graduate student, I came away with two beliefs that have driven my research career," Horvitz said. "First, do the 'doable.' I recognized early on that working on an important but intractable problem would not suit me. Second, it is no harder to work on an important problem than one that is not important; this bit of advice, from Jim Watson, was engraved in me."

Horvitz has also identified many additional apoptosis genes. His studies may improve the understanding of neurological disorders such as amyotrophic lateral sclerosis (ALS), a disease that killed Horvitz's father. Horvitz collaborated in identifying a gene involved in the inherited form of ALS, and he is pursuing other genes involved in the disease.

He has also worked to understand how genes control other aspects of development and behavior and has discovered genes that are involved, again using *C. elegans*. His work reveals specific pathways shared by both worms and humans that are involved in a variety of human diseases.

Dr. Horvitz is a David H. Koch Professor of Biology at the Massachusetts Institute of Technology and Neurobiologist and Geneticist at Massachusetts General Hospital, in Boston.

# 2008 HONOR AND AWARD RECIPIENTS



## Achievement Award



**Ivan  
Rusyn**

Ivan Rusyn, M.D., Ph.D., is recognized by the Society of Toxicology for his outstanding research in elucidating the mechanisms of adverse health effects of environmental agents. His M.D. was earned at Ukrainian State Medical University, and the University of North Carolina conferred the Ph.D. He has been a major contributor to the Toxicogenomics Consortium where his research led to a better understanding of the molecular basis of the hepatotoxicity of acetaminophen. Dr. Rusyn's early

work with Dr. Thurman stands as a classic in teasing out the pathway of toxicity of non-genotoxic rodent liver carcinogens related to oxidative stress. His recent work has focused on systems biology, toxicogenetics and the use of computational approaches to elucidate and predict toxicity of xenobiotics. Dr. Rusyn is the exemplar of the spirit of the Achievement Award. He is an outstanding mentor, facilitator, and educator, as well as the director of several toxicology courses and the toxicology seminar series at UNC-Chapel Hill. He is an active member of the SOT, serving on the Program Committee. In addition, Dr. Rusyn has been the recipient of the Leon and Bertha Golberg Memorial Postdoctoral Fellowship at UNC, an NIEHS TIP Award and is a Principal Investigator or Co-Principal Investigator on multiple grants funded by NIH and the U.S. EPA. It is an honor to recognize Dr. Ivan Rusyn as the Society of Toxicology's 2008 Achievement Award recipient.



## Arnold J. Lehman Award



**Vicki  
Dellarco**

Vicki Dellarco, Ph.D., has provided strong leadership within the U.S. EPA and the international community for risk assessments that utilize the best scientific information available. Dr. Dellarco, a senior science advisor in the Office of Pesticide Programs, has worked effectively to develop methods for mode of action analyses in risk assessment and to implement those methods through case studies and Agency assessments for specific chemicals. She has promoted revisions of toxicity testing guidelines

including the thyroid developmental toxicity study guidance, development of toxicity testing strategies for improving and refining approaches to health risk assessment, development of common mechanism policy decisions and cumulative risk assessment methods and guidance. Her energy, enthusiasm, and collaborative skills have greatly enriched the work of Agency and international scientific and risk assessment groups.



# 2008 HONOR AND AWARD RECIPIENTS



## Best Postdoctoral Publication Award

The Postdoctoral Assembly recognizes these three recipients of their 2008 awards:



**Joshua P. Gray**, University of Medicine and Dentistry of New Jersey

Paraquat Increases Cyanide-Insensitive Respiration in Murine Lung Epithelial Cells by Activating an NAD(P)H:Paraquat Oxidoreductase: Identification of the Enzyme as Thioredoxin Reductase, *The Journal of Biological Chemistry*, Vol. 282, No. 11, pp. 7939–7949, (March 16, 2007).



**Christie M. Sayes**, DuPont Haskell Laboratory for Health and Environment

Assessing Toxicity of Fine and Nanoparticles: Comparing *In Vitro* Measurements to *In Vivo* Pulmonary Toxicity Profiles, *Toxicological Sciences* 97(1), 163–180 (2007).



**Khristy J. Thompson**, Elizabethtown College

Olfactory Uptake of Manganese Requires DMT1 and is Enhanced by Anemia, *The FASEB Journal* Vol. 21, 223–230 (January 2007).



## Board of Publications Award for the Best Paper in Toxicological Sciences



The Board of Publications has unanimously selected the paper entitled “Sequential Exposure to Cytokines Reflecting Embryogenesis: The key for *In Vitro* Differentiation of Adult Bone Marrow Stem Cells into Functional Hepatocyte-like Cells” as the best paper published in *Toxicological Sciences* in the past year (December 2006; 94:330-341). The

authors of the paper, comprising an international research team, are Sarah Snykers, Tamara Vanhaecke, Peggy Papeleue, Aernout Lutun, Yuehua Jiang, Yvan Vander Heyden, Catherine Verfaillie, and Vera Rogiers.

The plasticity of stem cells renders them capable of overcoming germ lineage restrictions to develop molecular characteristics of cells from a different tissue. It has previously been shown that adult bone marrow stem cells (BMSC) can differentiate into hepatocyte-like cells when exposed to a cocktail of cytokines and growth factors. However, in the recognized paper, Snykers and colleagues applied basic knowledge of liver embryogenesis and development to design an experimental paradigm in which BMSC were treated sequentially with liver-specific factors that regulate hepatocyte differentiation in a manner that reflected their temporal expression during *in vivo* hepatogenesis. They evaluated the morphological, molecular, and functional characteristics of the resulting hepatocyte-like cells and compared these features to BMSCs treated simultaneously to the cocktail of differentiation factors. Their innovative approach produced polygonal cells that presented with many features of differentiated hepatocytes which included binucleated morphology, expression of  $\alpha$ -fetoprotein early in the course of the culture that then disappeared, expression of maximal levels of albumin and cytokeratin 18, markers of later stage differentiated hepatocytes, only after 18 days in culture, and evidence for constitutive and inducible cytochrome P450 1A1/2 and 2B1/2. These features comprise a profile that is consistent with the array of developmental stages that is comparable with liver development, whereas the simultaneous exposure paradigm induced an aberrant pattern of differentiation.

The use of stem cells in clinical and preclinical research is an important, timely, and controversial topic. As such, the work by Snykers *et al.* is a major scientific achievement relative to the development of a method that yields hepatocyte-like cells from BMSC and represents a significant contribution to the field of stem cell research. The model provides important new methods for the purification and culture of pluripotent stem cells from nonembryonic origin. Furthermore, the work offers new opportunities to study fundamental biological processes involved in development and differentiation, and it yields an unlimited source of hepatocyte-like cells for pharmacology and toxicology research.

# 2008 HONOR AND AWARD RECIPIENTS



## Distinguished Toxicology Scholar Award



**Toshio  
Narahashi**

Toshio Narahashi, D.V.M., Ph.D., is the John Evans Professor of Pharmacology in the Department of Molecular Pharmacology and Biological Chemistry, Feinberg School of Medicine, Northwestern University. Since the 1950s his discoveries have elucidated the mode-of-action of important toxicants that impact human lives across the globe. Dr. Narahashi has been considered as the person responsible for driving the field of the effects of chemicals on excitable cell membrane function.

Some of his publications are listed as Citation Classics. His studies have added immeasurably to our understanding of basic neuronal physiology and the action of a variety of neurotoxicants and drugs on axonal and junctional physiology. He is respected around the world and has received numerous scientific honors.



## Education Award



**Steven  
Cohen**

Steven D. Cohen, M.S., D.Sc., ATS, has contributed to the field of toxicology in education by developing new scientists and leaders in toxicology, providing professional leadership, and fostering the scientific growth of toxicology. He has received international recognition for his scientific contributions to understanding the mechanisms of acetaminophen-induced hepatotoxicity.

Dr. Cohen joined the University of Connecticut Storrs in 1972. In the early 1980s he founded the Center for Biochemical Toxicology and the Interdepartmental Graduate and Postdoctoral Research Training Program in Environmental Toxicology at the University of Connecticut at Storrs. He directed both for nearly 20 years until leaving the University in 2000 as Emeritus Professor of Toxicology. The Center was supported by the State of Connecticut as a "Center for Excellence" and became a statewide resource for toxicology expertise and training. The Toxicology Program was supported by funds from the University, the State, the chemical and pharmaceutical industry and importantly, by an Environmental Toxicology Research Training Grant from the National Institute of Environmental Health Sciences. Over 50 alumni of the Connecticut program are making important contributions to toxicology through their professional positions in academia, industry and government. His career contributions in toxicology education were recognized with the establishment in 2004 of an endowed graduate fellowship at the University of Connecticut (Rosenberg/Cohen Graduate Fellowship in Pharmacology and Toxicology) in his honor. In 2007 the School of Pharmacy Alumni Association further honored him with the Distinguished Emeritus Professor Award.

In 2000 Dr. Cohen joined the Leadership Team for establishment of the Massachusetts College of Pharmacy and Health Sciences School of Pharmacy–Worcester where he is Professor of Pharmacology and Toxicology and Chair of the Department of Pharmaceutical Sciences. For his dynamic leadership in toxicology education, his guidance of toxicology programs for over 30 years, and his outstanding example as a scientist-educator, the Society of Toxicology honors Dr. Steven D. Cohen with the 2008 Education Award.

# 2008 HONOR AND AWARD RECIPIENTS



## Founders Award



John Doull, M.D., Ph.D., ATS, is the recipient of the first Founders Award for his illustrious career in toxicology with more than 50 years of productive contributions to teaching, research, and the application of toxicological principles to safety evaluation in the support and enhancement of public health. Dr. Doull is trained and experienced both as a physician and as a scientist. He obtained his Ph.D. in pharmacology and his M.D. from the University of Chicago, spent several years at the University of Chicago,

then more than 40 years at the University of Kansas where he is currently Professor Emeritus of Pharmacology and Toxicology. Dr. Doull has had the experience of diagnosing and treating individuals who have been poisoned and has counseled many individuals who were concerned that they may have been poisoned. He has had far-reaching influence on the development and application of the safety evaluation of chemicals through his extensive research (with particular emphasis on modes of action) as evidenced by his numerous high quality publications. Particularly noteworthy has been his leadership in promulgating a most authoritative source of toxicology principles presented in the serial publication of *Casarett and Doull's Toxicology: The Basic Science of Poisons*. Furthermore, he has advanced the safety evaluation of chemicals through his formal participation in numerous national and international authoritative groups including the National Academy of Sciences, the International Life Sciences Institute, and the National Institute of Environmental Health Sciences. Dr. Doull has served on numerous governmental and non-governmental committees, and has been a leader in promoting use of the best science to understand problems and how to deal with them. In the face of emotionally-charged issues, Dr. Doull has been a source of reason in objectively approaching the issues and using common sense in decision-making, typically resulting in a report that is highly regarded and respected. His contributions to the use of sound science in safety evaluations have led to major improvements in governmental and non-governmental initiatives aimed at protecting and enhancing public health.

One of Dr. Doull's outstanding contributions in toxicology is the training and guidance that he has provided to many productive scientists. At the University of Chicago and the University of Kansas, Dr. Doull helped train many young and aspiring toxicologists in the sound, fundamental principles of toxicology and the application of these principles to real-world toxicological problems in both medicine and the environment. In addition, Dr. Doull has served as a role model, mentor, colleague, and friend to many scientists in the field of toxicology. Those fortunate to have learned from his scientific creativity and insights have greatly expanded the field, and have helped to provide toxicology with a high degree of respect and recognition.

Dr. Doull displayed great foresight in 1961 when he joined the group that founded the fledgling Society of Toxicology. Since that time, he has fostered the aims of the Society by engaging in major leadership roles including serving ably as its President. He has been a major force in molding the future of the Society and in having it recognized worldwide as the central organization in the field of toxicology and in the enhancement of public health. The Society of Toxicology is pleased to recognize Dr. John Doull as the recipient of the first Founders Award for his leadership and integrity as a premier scientist and physician.



## Merit Award



Hanspeter Witschi, M.D., is Professor Emeritus, University of California –Davis. Dr. Witschi was an enthusiastic proponent of the value of mechanistic toxicology in contributing to risk assessment. He represented the thinking man's pathologist. As an experimentalist, Dr. Witschi put much thought into the design of a study and what the outcomes could be. Consequently, his studies were precise, economical, and always produced results. His studies were a stimulus to himself and others to reveal a

greater understanding of the phenomenon under investigation. He published seminal articles in pulmonary toxicology, adaptation to toxicant exposure, second-hand smoke, and lung carcinogenesis. He made an enormous contribution to teaching and education, and was the recipient of the SOT Education Award in 1991. His service to toxicology has been exceptional as he served on many local, regional, and national offices. He is considered a complete scientist—always interested in discussing the dilemmas of toxicology and never tempted to arrive at the quick and easy conclusion.



## SOT AstraZeneca IUTOX Fellowship

**Gafer Rageh Ahmed** (Egypt)

**Sayed Bakry** (Egypt)

**Phillip Burcham** (Australia)

**Kemal Buyukguzel** (Turkey)

**Jin-Ho Chung** (Korea)

**Hande Gurer-Orhan** (Turkey)

**Lyndy McGaw** (South Africa)

**Zdravko Paskalev** (Bulgaria)



# 2008 SPONSORED AWARD RECIPIENTS

## AstraZeneca Traveling Lectureship Award



José Manautou, Ph.D., Associate Professor of Toxicology at the University of Connecticut, receives the 2008 AstraZeneca Traveling Lectureship Award. The award recognizes excellence in research and service in toxicology and enables a lecture tour of Europe to promote collaboration between European and North American toxicologists. Dr. Manautou's research in the fields of hepatotoxicity and drug transporters has gained international recognition for excellence. In addition to

an impressive publication record, he has been Associate Editor of *Toxicology and Applied Pharmacology* and a member of an NIH study section. Dr. Manautou has been a contributor to SOT programs since 1998, serving as a member of several committees, as principal investigator of the SOT's NIH grant that supports its undergraduate educational program and as SOT Councilor. Dr. Manautou's planned visits to Switzerland, Portugal, France, Hungary, and England will expand his collaborative network and bring new perspectives to his research efforts.

## Colgate-Palmolive Awards for Student Research Training in Alternative Methods



**Kimberly A. Hays**, Oklahoma State University

**Project Title:** AFLP-Based Assessment of Small Mammal Populations from a Metal Contaminated Superfund Site

**Host Institution:** Tarleton State University



**Haitian Lu**, Michigan State University

**Project Title:** Gene Microarray Analysis of the 2, 3, 7, 8-Tetrachlorodibenzo-p-Dioxin (TCDD) Effects on *Ex Vivo* Activated Human Peripheral Blood B Lymphocytes

**Host Institution:** The Hamner Institutes for Health Sciences

## Colgate-Palmolive Grants for Alternative Research



**Daniel Cerven**, MB Research Laboratories

**Project Title:** Pre-Validation of the Porcine Corneal Opacity and Reversibility Assay (PorCORA)



**Duncan Ferguson**, University of Illinois at Urbana-Champaign

**Project Title:** Human Neural Stem Cell Line in Defined Medium as a Screen for Neurodevelopmental Toxins



**Shashi Ramaiah**, Texas A&M University

**Project Title:** Evaluation of Osteopontin as a Potential *In Vitro* Biomarker for Chemically-Mediated Hepatic Inflammation

## Colgate-Palmolive Traveling Lectureship in Alternative Methods in Toxicology Award



George Michalopoulos, M.D., Ph.D., is the Professor and Head of the Department of Pathology, University of Pittsburgh School of Medicine. Dr. Michalopoulos is an eminent researcher and an authority on hepatocyte culture techniques and their use in research. His current areas of research focus are growth factors and receptors in hepatocytes, mechanisms of liver regeneration, growth regulation in human hepatocytes, and hepatic carcinogenesis. He will be hosted by the Toxicology program at University of

Louisiana—Monroe College of Pharmacy where he will demonstrate the newest hepatocyte culture techniques, present liver toxicity and *in vitro* techniques lectures, and participate in hepatobiology and carcinogenesis discussion forums.

# 2008 SPONSORED AWARD RECIPIENTS

## **Graduate Student Fellowship—Novartis Award**



**Helen J. Badham**  
*Queens University*

## **Pfizer Undergraduate Student Travel Award**



**Amy DeMicco**  
*Rutgers University*



**Amy Yi Hsan Saik**  
*University of Western Australia*



**Tharu Fernando**  
*Wright State University*



**Kelly Sullivan**  
*Colorado State University*



**Yamel Perdomo**  
*Medgar Evers College*

## 2008 Society of Toxicology Graduate Travel Support

**Joel Anderson**, University of North Carolina Greensboro

**Pergentino Balbuena**, VA MD Regional College of Veterinary Medicine

**Atrayee Banerjee**, Texas A&M University

**Ilona Bebenek**, University of California Los Angeles

**Lisa Beilke**, University of Arizona

**Heather Brechbuhl**, University of Colorado Health Sciences Center

**Neal Burton**, Johns Hopkins Bloomberg School of Public Health

**Kok Meng Chan**, Universiti Kebangsaan Malaysia

**Tom Cherng**, University of New Mexico

**Kim de Bruijne**, University of North Carolina at Chapel Hill

**Xiaomin Deng**, Michigan State University

**Joseph Dever**, University of Wisconsin-Madison

**Mengyuan Du**, University of Illinois at Urbana-Champaign

**Tareisha Dunlap**, University of Illinois at Chicago

**Ashley Fisher**, University of Arizona

**Eliud Garcia-Montalvo**, CINVESTAV-IPN

**Renee Gardner**, Johns Hopkins Bloomberg School of Public Health

**Renee Good**, University of Colorado Health Sciences Center

**Lakshmi Gopinathan**, Pennsylvania State University

**Maia Green**, University of Louisville

**Jill Harvilchuck**, Purdue University

**Shoba Iyer**, Johns Hopkins Bloomberg School of Public Health

**Jeannett Izquierdo-Vega**, CINVESTAV-IPN

**Irida Kastrati**, University of Illinois at Chicago

**Sowmya Koppula**, Southern University and A&M College

**Lata Koshy**, Cardiff University

**Ian Lai**, University of Iowa

**Heather Leitner**, University of Colorado Health Sciences Center

**Na Li**, University of Rochester

**Qing Liu**, University of Wisconsin

**Sandra Luecke**, Karolinska Institutet

**Belinda Luo**, University of Connecticut

**Zuzana Majkova**, University of Kentucky

**Satori Marchitti**, University of Colorado Health Sciences Center

**Carlyn Matz**, University of Saskatchewan

**Rhea Mehta**, University of Toronto

**Matthew Merrell**, University of Arizona

**Mark Miller**, University of Michigan

**Magally Morales**, CINVESTAV-IPN

**Supraja Narasimhan**, Boston University Medical Center

**April Neal**, Johns Hopkins Bloomberg School of Public Health

**Rachel Novick**, University of Wisconsin-Madison

**Kuanwei Peng**, University of Illinois at Chicago

**Norma Perez**, CINVESTAV-IPN

**Melinda Prucha**, University of Florida

**Erica Rogers**, University of Louisville

**Keegan Sawyer**, University of North Carolina at Chapel Hill

**Bibek Sharma**, Texas Tech University

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