

# SOT HONORS, AWARD DESCRIPTIONS, AND HISTORY

In recognition of distinguished toxicologists and students, SOT presents Honorary Membership and Awards each year. In addition to receiving a plaque, featured recipients are honored at a special Awards Ceremony at the SOT Annual Meeting and their names are listed in SOT publications. The deadline for 2016 Honorary Membership and many Award nominations is October 9, 2015.

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

The Best Paper Awards in *Toxicological Sciences* are reviewed by the Board of Publications. The Education Committee selects the recipients of the Pfizer SOT Undergraduate Travel Award and the Committee on Diversity Initiatives selects the recipients of other undergraduate student awards. The Postdoctoral Assembly selects those receiving the Best Postdoctoral Publication Awards and the Graduate Student Leadership Committee selects the recipients of the Outstanding Leadership Award. Nominees for the Congressional Science Leadership Award are approved by Council.

Nominations for many awards must be submitted by a sponsor and a seconder who are Full members of SOT using the online 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 and details. There are specific applications for Fellowships and Graduate Student Travel Support.

Other graduate student and postdoctoral scholar awards are available through Regional Chapters, Special Interest Groups, and Specialty Sections (many of these awards are funded through the various Named Endowment Funds). A student or postdoctoral scholar may apply for any award for which he or she is eligible and may apply for and receive multiple awards, whether administered by SOT, Regional Chapters, Special Interest Groups, or Specialty Sections. Policies related to travel support are determined by the sponsor (SOT, Regional Chapter, Special Interest Group, or Specialty Section). **A Student may only receive one SOT national travel award.**

Full descriptions of all current awards, awards no longer being offered, application procedures, and names of past recipients can be found on the "Awards and Funding" section of the SOT website at [www.toxicology.org/awards](http://www.toxicology.org/awards).

## SOT HONOR DESCRIPTIONS



### HONORARY MEMBERSHIP

The Society of Toxicology recognizes nonmembers 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*	1995	..... Gertrude B. Elion*	2008	..... H. Robert Horvitz
1962	..... W. F. Von Oettingen*	1995	..... Charles S. Lieber*	2009	..... Gilbert S. Omenn
1962	..... Torald H. Sollman*	1996	..... Sten G. Orrenius	2009	..... Sir John E. Walker
1963	..... Ethel Browning*	1996	..... Dennis Parke*	2010	..... Sir Philip Cohen
1966	..... R. Tecwyn Williams*	1997	..... John E. Casida	2010	..... Ferid Murad
1976	..... Norton Nelson*	1997	..... Roger W. Russell*	2011	..... William C. Hays
1982	..... George H. Hitchings*	1998	..... Jud Coon	2011	..... Frances Oldham Kelsey*
1986	..... Bernard B. Brodie*	1998	..... Michel Mercier	2012	..... Frank J. Gonzalez
1986	..... Herbert Remmer*	1999	..... William O. Robertson	2012	..... Leroy Hood
1991	..... Hyman J. Zimmerman*	1999	..... Takashi Sugimura	2013	..... Bruce A. Beutler
1994	..... Ronald W. Estabrook*	2000	..... Findlay Russell*	2013	..... Jeremy K. Nicholson
1994	..... Wendell W. Weber	2001	..... Herbert L. Needleman	2014	..... John B. Gurdon
		2007	..... Mario Molina	2014	..... Donald E. Ingber
		2008	..... Lee Hartwell	2015	..... Shawn Douglas Lamb



INDICATES AN SOT SPONSORED AWARD

\*DECEASED



# SOT HONORS, AWARD DESCRIPTIONS, AND HISTORY

## SOT AWARD DESCRIPTIONS



### ACHIEVEMENT AWARD

The Achievement Award is presented to a member of the Society of Toxicology who has within 15 years since obtaining his/her highest earned degree (in the year of the SOT Annual Meeting) made significant contributions to toxicology. This award consists of a plaque and monetary 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 Bradford  
2001 ..... Martin A. Philbert  
2002 ..... Ruth A. Roberts  
2003 ..... Lois D. Lehman-McKeeman  
2004 ..... David C. Dorman  
2006 ..... José E. Manautou  
2007 ..... Jeffrey M. Peters  
2008 ..... Ivan Rusyn  
2009 ..... Russell S. Thomas  
2010 ..... Gary W. Miller  
2011 ..... Nathan Cherrington  
2012 ..... Donna D. Zhang  
2013 ..... Wei Xu  
2014 ..... Matthew J. Campen  
2015 ..... Vishal S. Vaidya



### 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 monetary 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  
2009 ..... Michael Bolger  
2010 ..... Edward V. Ohanian  
2011 ..... Bette Meek  
2012 ..... Joe L. Mauderly  
2013 ..... Moiz Mumtaz  
2014 ..... B. Bhaskar Gollapudi  
2015 ..... Richard A. Becker



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## 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 Executive 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 must be the first author on a peer-reviewed paper published online, in print, or in press, during the preceding interval of October 1, 2014, and September 25, 2015. The review process follows NIH conflict of interest, confidentiality, and nondisclosure rules.

### Award Recipients

- 2007 ..... Nadine Dragin, Kristen Mitchell, Drobna Zuzana  
2008 ..... Joshua P. Gray, Christie M. Sayes, Khristy J. Thompson  
2009 ..... Jeffrey W. Card, Kembra Howdeshell, Lewis Zhichang Shi  
2010 ..... Bret F. Bessac, Manabu Nukaya, Nicholas Radio  
2011 ..... Dieldrich S. Bermudez, Joshua A. Harrill, Jordan Ned Smith  
2012 ..... Maryse Lemaire, Xuefeng Ren, Nisha S. Sipes  
2013 ..... Petra Haberzettl, Anne Loccisano, Yuanyuan Xu  
2014 ..... Annie Lumen, Gul Mehnaz Mustafa, Phoebe A. Stapleton  
2015 ..... John Clarke, Yong Ho Kim, Christina Powers



## BOARD OF PUBLICATIONS AWARD FOR THE BEST PAPER IN TOXICOLOGICAL SCIENCES

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-in-chief of *Toxicological Sciences*. All papers submitted will be evaluated by the Board of Publications. This award consists of a plaque and monetary stipend. (This award was formerly known as the Frank R. Blood Award from 1974–1994.)

### Best Paper in Toxicological Sciences

#### 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. Bacchanale, 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 ..... J. Chen, Y. Li, J. A. Lavigne, M. A. Trush, J. 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 ..... A. Nyska, C. Moyer, A. Ledbetter, D. Christiani, M. Schlasweiler, D. Costa, R. Hauser, U. Kodavanti,  
2005 ..... N. V. Soucy, M. A. Ihnat, L. Hess, C. D. Kamat, A. Barchowsky, M. J. Post, L. R. Klei, C. Clark,  
2006 ..... H. Sawada, K. Takami, S. Ashai  
2007 ..... T. Green, R. Lee, S. Lloyd, J. Noakes, T. Pastoor, R. Peffer, M. Robinson, P. Rose, A. Toghil, F. Waechter, E. Weber  
2008 ..... S. Snykers, T. Vanhaecke, P. Pappelue, A. Luttun, Y. Jiang, Y. V. Heyden, C. Verfaillie, V. Rogiers  
2009 ..... Q. Yang, T. Nagano, Y. Shah, C. Cheung, S. Ito, F. J. Gonzalez  
2010 ..... R. L. M. Dobson, S. Motlagh, M. Quijano, R. T. Cambron, T. R. Baker, A. M. Pullen, B. T. Regg, A. S. Bigalow-Kern, T. Vennard, A. Fix, R. Reimschuessel, G. Overmann, Y. Shan, G. P. Daston  
2011 ..... K. Lu, L. B. Collins, H. Ru, E. Bermudez, and J. A. Swenberg  
2012 ..... J. G. DeKeyser, E. M. Laurenzana, E. C. Peterson, T. Chen, and C. J. Omiecinski  
2013 ..... R. Sellamuthu, C. Umbright, J. R. Roberts, R. Chapman, S. Young, D. Richardson, H. Leonard, W. McKinney, B. Chen, D. Frazer, S. Li, M. Kashon, and P. Joseph  
2014 ..... Anja Schinwald, Fiona A. Murphy, Adriele Prina-Mello, Craig A. Poland, Fiona Byrne, Dania Movia, James R. Glass, Janet C. Dickerson, David A. Schultz, Chris E. Jeffree, William MacNee, and Ken Donaldson  
2015 ..... Russell S. Thomas, Scott C. Wesselkamper, Nina Ching Y. Wang, Q. Jay Zhao, Dan D. Petersen, Jason C. Lambert, Ila Cote, Longlong Yang, Eric Healy, Michael B. Blank, Harvey J. Clewell III, Bruce C. Allen, and Melvin E. Andersen.

# SOT HONORS, AWARD DESCRIPTIONS, AND HISTORY

## Frank R. Blood Award

Presented 1974–1994

### Award Recipients

- 1974 ..... Y. Alarie  
1975 ..... D. J. Ecobichon, G. J. Johnstone, O. Hutzinger  
1976 ..... R. D. Brown  
1977 ..... J. Dedinas, G. D. DiVincenzo, C. J. Kaplan  
1978 ..... P. J. Gehring\*, E. O. Madrid, G. R. McGowan,  
P. G. Watanabe\*  
1979 ..... R. Fradkin, E. J. Ritter, W. J. Scott, J. G. Wilson  
1980 ..... J. A. Last, P. F. Moore, O. G. Raabe, B. K. Tarkington  
1981 ..... Y. Alarie, M. Brady, C. Dixon, M. Karol  
1982 ..... M. E. Andersen, M. L. Gargas, L. J. Jenkins Jr,  
R. A. Jones  
1983 ..... H. D. Heck  
1984 ..... E. Dybing, S. Nelson\*, E. Soderlund, C. Von Bahr  
1985 ..... N. Imura, M. Inokawa, K. Miura  
1986 ..... C. C. Wilhite, M. I. Dawson, K. J. Williams  
1987 ..... J. Kao, F. K. Patterson, J. Hall  
1988 ..... D. L. Laskin, S. Ji, A. M. Pilaro  
1989 ..... R. G. Cuddihy, W. C. Griffith, R. F. Henderson,  
J. L. Mauderly, R. O. McClellan, M. D. Snipes, R. K. Wolff  
1990 ..... W. P. Beierschmitt, J. T. Brady, J. B. Bartolone, D. S.  
Wyand, E. A. Khairallah\*, S. D. Cohen  
1991 ..... J. B. Silkworth, D. Cutler, L. Antrim, D. Houston,  
C. Tumasonis, L. S. Kaminsky  
1992 ..... D. A. Fox, S. D. Rubinstein, P. Hsu  
1993 ..... T. Mably, R. W. Moore, R. W. Goy, R. E. Peterson  
1994 ..... S. J. Borghoff, W. H. Lagarde



## CONGRESSIONAL SCIENCE LEADERSHIP AWARD

Presented 2009–2014

The Congressional Science Leadership Award provides recognition of a Congressional leader who demonstrates reliance upon sound scientific principles in either 1) public policy or decision-making relating to health and safety or 2) dedicated advancement of legislation for the protection of human, animal, and environmental health. This award consists of a plaque.

### Award Recipients

- 2009 ..... Congressman David Wu (D-OR)  
2010 ..... Senator Johnny Isakson (R-GA)  
Congressman David Price (D-NC)  
2011 ..... Congresswoman Judy Biggert (R-IL)  
Senator Amy Klobuchar (D-MN)  
2012 ..... Representative Rush Holt (D-NJ)  
2013 ..... Congressman Dave Reichert (R-WA)  
2014 ..... Senator Tom Udall (D-NM)  
Congressman Fred Upton (R-MI)



## CONTRIBUTIONS TO PUBLIC AWARENESS OF THE IMPORTANCE OF ANIMALS IN TOXICOLOGY RESEARCH AWARD

Presented 2000–2006

*(Recipients of Contributions to Public Awareness of the Importance of Animals in Toxicology Research Award no longer offered may be found on the SOT website at [www.toxicology.org](http://www.toxicology.org).)*



## 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 monetary stipend. The recipient delivers the Distinguished Toxicology Scholar Award Lecture at the SOT Annual Meeting. (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\*  
2009 ..... Lance R. Pohl  
2010 ..... Harihara M. Mehendale  
2011 ..... Oliver Hankinson  
2012 ..... Ernest Hodgson  
2013 ..... John J. Lemasters  
2014 ..... Richard E. Peterson  
2015 ..... Ian Kimber



## 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 monetary stipend.

### Award Recipients

- 1975 ..... Harold C. Hodge\*  
1976 ..... Ted A. Loomis  
1977 ..... Robert B. Forney\*  
1979 ..... Sheldon D. Murphy\*  
1980 ..... Herbert H. Cornish\*





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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
2009	Janice E. Chambers, Serrine S. Lau
2010	Tetsuo Satoh
2011	Michael Gallo
2012	John H. Duffus
2013	Rick G. Schnellmann
2014	Herman N. Autrup
2015	Theodore A. Slotkin



## ENHANCEMENT OF ANIMAL WELFARE AWARD

The Enhancement of Animal Welfare Award is presented annually to a member of the Society in recognition of a 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. The achievement recognized may be either a seminal piece of work or a long-term contribution to toxicological science and animal welfare. This award consists of a plaque and monetary stipend.

### Award Recipients

2000	Yves Alarie
2001	Alan Goldberg
2002	Gary Williams
2003	G. Frank Gerberick
2003	Ian Kimber
2005	Daniel Acosta
2006	William S. Stokes
2007	Thomas Hartung
2009	Sally Robinson

2010	Leonard M. Schechtman
2013	Martin L. Stephens
2015	Marcel Leist



## FOUNDERS AWARD

The SOT Founders Award, sponsored by the SOT Endowment Fund, is presented to a Full, Emeritus 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. This award consists of a plaque and monetary stipend.

### Award Recipients

2008	John Doull
2009	Roger O. McClellan
2010	James S. Bus
2011	Joseph F. Borzelleca
2012	John A. Moore
2013	William Alfred Suk
2014	John A. Thomas



## GLOBAL SENIOR SCHOLAR EXCHANGE PROGRAM

The Global Senior Scholar Exchange Program (GSSEP) funds two mid-career to Senior Scholar toxicologists from developing countries in Latin America, Africa, or Asia to attend the SOT Annual Meeting and spend up to four weeks with one or more hosts from established toxicology programs academic, government, or industry organization(s) worldwide. The Host will in turn visit the Scholar's institution. The program provides monetary stipend and travel support for each pair. The 2015 recipients can be found under the GSSEP section on page 289.

### Award Recipients

2012	Jesus Olivero-Verbel (Hosts: Miroslav Styblo, NC University at Chapel Hill and Michael P. Waalkes, NIEHS) and Orish Ebere Orisakwe (Host: Judith T. Zelikoff, NYU School of Medicine)
2013	Sri Noegrohati (Hosts: Michael L. Dourson and Bernard K. Gadagbui, Toxicology Excellence for Risk Assessment) and Mohamed Mosaad Salama (Host: Mohamed Abou-Donia, Duke University Medical Center)
2014	Gonzalo J. Diaz (Host: Wilson Kiiza Rumbeiha, Iowa State University College of Veterinary Medicine), and Ebenezer O. Farombi (Host: James E. Klaunig, Indiana University)
2015	Sunisa Chaiklieng (Host: Norbert E. Kaminski, Michigan State University), and Deepak Dhakal (Host: Aaron Barchowsky, University of Pittsburgh)

# SOT HONORS, AWARD DESCRIPTIONS, AND HISTORY



## GRADUATE STUDENT TRAVEL SUPPORT

Graduate Student Travel Support defrays expenses for doctoral students presenting platform talks or posters at the SOT Annual Meeting. The student must be an SOT member or pending member who has not previously received SOT Graduate Student Travel Support. Funding priority is based on seniority in graduate school. A full listing of recipients can be found under the Graduate Travel Support section on page 296.



## 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 member or nonmember, 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. This award consists of a plaque and monetary stipend. The recipient delivers the Leading Edge in Basic Science Award Lecture at the SOT Annual Meeting.

### Award Recipients

2009 ..... John Katzenellenbogen  
2010 ..... Richard S. Paules  
2011 ..... Masayuki Yamamoto  
2012 ..... Myung-Haing Cho  
2013 ..... Donald E. Ingber  
2014 ..... Vishal S. Vaidya



## 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 monetary stipend. The recipient delivers the Merit Award 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\*  
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 O. McClellan  
2006 ..... A. Wallace Hayes  
2007 ..... James A. Swenberg  
2008 ..... Hanspeter Witschi  
2009 ..... Gary M. Williams  
2010 ..... Marion F. Ehrich  
2011 ..... Michael Aschner  
2012 ..... Curtis D. Klaassen  
2013 ..... Frederick P. Guengerich  
2014 ..... Jay I. Goodman  
2015 ..... Günter Oberdörster



## OUTSTANDING GRADUATE STUDENT LEADERSHIP AWARDS

The Outstanding Graduate Student Leadership Award is presented by the SOT Graduate Student Leadership Committee in recognition of graduate student representatives who have contributed to the Society in a significant manner beyond the routine duties of a representative of a Regional Chapter, Specialty Section, or Special Interest Group.

### Award Recipients

2009 ..... Enrique Fuentes-Mattei, Sheppard A. Martin  
2010 ..... Haitian Lu, Prasad Krishnan, Erica N. Rogers  
2011 ..... Heather M. Bolstad, James Michael Borland  
2012 ..... Chad Bocker, Azita Cuevas  
2013 ..... Shirisha Chittiboyina, Hannah Pope-Varsalona  
2014 ..... Alessandro Venosa, Christin M. Grabinski, Brittany Baisch  
2015 ..... Sanket Gadhia, Jessica M. Sapiro



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## PERRY J. GEHRING DIVERSITY STUDENT TRAVEL AWARD

The Perry J. Gehring Diversity Student Travel Award recognizes a student who was selected to participate in a previous SOT Undergraduate Program, is from an ethnic group underrepresented in toxicology (for example, African American, Hispanic, Native American or Pacific Islander), and is presenting a paper at the upcoming SOT meeting. The award recipient is selected by the Committee on Diversity Initiatives.

The Gehring Student Travel Award is provided through the Society of Toxicology Endowment Fund. This award recognizes Dr. Perry J. Gehring, who served as SOT President in 1980–1981 and made important scientific contributions, especially in biological modeling and evidence-based assessment. Dr. Gehring had a strong interest in encouraging individuals from racial/ethnic groups under-represented in the sciences to enter biomedical sciences and toxicology.

### Award Recipients

- 2009 ..... Vanessa De La Rosa
- 2010 ..... Nygerma L. Dangleben
- 2011 ..... Eva A. Amouzougan
- 2012 ..... Alba K. Gonzalez Rivera
- 2013 ..... Alexandra Colón-Rodríguez
- 2014 ..... Pamella B. Tijerina
- 2015 ..... Latisha T. Pryor



## PFIZER SOT UNDERGRADUATE STUDENT TRAVEL AWARD

Pfizer SOT Undergraduate Student Travel Awards are presented by 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., and SOT provide awards 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 attend the Society of Toxicology Undergraduate Education Program on the Sunday of the 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
- 2009 ..... Sherine Crawford, Trish T. Hoang, Kelly Krcmarik, Cory M. Mathias, P. Sean McGrath
- 2010 ..... Annie L. Carlton, Alisha Chitrakar, Megan E. Culbreth,

Chang Woo Lee, Sharon Ochs

- 2011 ..... Brandon Haghverdian, Jessica H. Hartman, Camila Odio, Viviana Vidal Anaya, Phillip Alan Wages
- 2012 ..... Ashley Press, Darien Shapiro, Qi Wang, Brittany Winner, Frances A. Xin
- 2013 ..... Amy Ashworth, Naing Bajaj, Adrienne R. Klinger, Anna Lang, Douglas J. Saforo
- 2014 ..... Wesley Cai, Cory V. Gerlach, Lukas Gora, Elaine Kuo, Virginia Mitchell, Kia Z. Perez-Vale, Ricardo Rivera-Soto, Bradley Rowland, Kelly Schlotman, Jennette Shoots, Kelly VanDenBerg
- 2015 ..... Weelic Chong, Zuania Ideliz Cordero Badillo, Emily A. Daniel, Gifty Aboagye Dominah, Scott H. Freeburg, Kathryn E. Fulda, Samantha Hall, Alexander Jones, Megan M. Koenecke, Sloane Kathryn Miller, Latisha T. Pryor, Yssa A. Rodriguez, Nicole A. Sidebotham, Anna V. Wojcicki



## PUBLIC COMMUNICATIONS AWARD

The Public Communications Award is presented by the Society of Toxicology to 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, databases, extension bulletins, magazines, newspapers (local or national), outreach, public presentations, public forums, radio and television scripts, and workshops. This award consists of a plaque and monetary stipend.

### Award Recipients

- 1994 ..... Michael A. Kamrin
- 1995 ..... Philip Abelson\*
- 1996 ..... Bruce N. Ames
- 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
- 2010 ..... Philip Wexler
- 2012 ..... Martin A. Philbert
- 2013 ..... Martha A. Lindsey
- 2014 ..... David L. Eaton
- 2015 ..... Andrew D. Maynard

# SOT HONORS, AWARD DESCRIPTIONS, AND HISTORY



## SOT/ASTRAZENECA/ SOT ENDOWMENT FUND/IUTOX TRAVEL AWARDS

The Society of Toxicology sponsors travel awards administered by IUTOX and sponsored by AstraZeneca, the Society of Toxicology and the SOT Endowment Fund. 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 (Philippines)  
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 Srianujata (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 Gàrcia (Peru)  
Wenceslao Kiat (Philippines)  
Calivarathan Latchoumycandane (Singapore)  
Fateheya Metwally (Egypt)  
Hilmi Orhan (Turkey)  
Nwoha Umunna (Nigeria)
- 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)
- 2009 ..... Sema Burgaz (Turkey)
- 2010 ..... Estefania G. Moreira (Brazil)  
Kolawole V. Olorunshola (Nigeria)  
Kelly P. K. Olympio (Brazil)  
Betzabet Quintanilla-Vega (Mexico)  
Jalila Ben Salah (Tunisia)  
Suleeporn Sangrajang (Thailand)  
Asongalem Emmanuel Acha (Cameroon)  
Ayse Basak Engin (Turkey)  
Ronnie A. D. Frazer-Williams (Sierra Leone)  
Yan Li (China)  
Jesus T. Olivero-Verbel (Colombia)  
Suresh V. S. Rana (India)  
Ganna Shayakhmetova (Ukraine)  
Vanessa Steenkamp (South Africa)  
Marcelo J. Wolansky (Argentina)  
Motao Zhu (China)
- 2011 ..... Sonali Das (India)  
Rawiwan Maniratanachote (Thailand)  
Anoka A. Njan (Nigeria)  
Daam Settachan (Thailand) \*\*  
Osman S. Shaik (India)  
Songsak Srianujata (Thailand)  
Omoniyi Kayode Yemitan (Nigeria) \*\*  
Qinli Zhang (China)  
Bin Zhao (China)
- 2012 ..... Oladipo Ademuyiwa (Nigeria)  
Murali Badanthadka (China)  
Sunisa Chaiklieng (Thailand) \*\*  
Xianju Huang (China)  
Zhenlie Huang (China)  
Guojun Li (China)  
Jianlin Lou (China) \*\*  
Maria Samayoa (Guatemala)  
Haixue Wang (China)  
Jingshu Zhang (China)  
Xiaofeng Zhang (China)  
Li Zhou (China)
- 2013 ..... John I. Anetor (Nigeria)  
Kailen Boodhia (South Africa)  
Karina R. Caballero-Gallardo (Colombia)  
Osama S. El-Tawil (Egypt)  
Miriam Carolina Guzmán Quilo (Guatemala)  
Wafa Hassen (Tunisia)  
Saleem Khan (India)  
Wenceslao A. Kiat Jr (Philippines)  
Ravinesh Mishra (India)  
Olubanke O. Ogunlana (Nigeria)
- 2014 ..... Samir Abbès, (Tunisia)  
Wafa Hassen, (Tunisia)  
Gopabandhu Jena, (India)  
Sameeh A. Mansour, (Egypt)  
Siti N. Mubarakah, (Indonesia)  
Olufunke E. Ola-Davies, (Nigeria)  
Iyekhoetin M. Omoruyi, (Nigeria)  
Ishiaq Omotosho, (Nigeria)  
Muneeb U. Rehman, (India)  
Yang Song, (China)  
Jing Zhang, (China)
- 2015 ..... Khaled Abdou, (Egypt)  
Amos O. Abolaji, (Nigeria)  
Motunrayo G. Akande, (Nigeria)  
Huawei Duan, (China)





# SOT HONORS, AWARD DESCRIPTIONS, AND HISTORY

Patient Guedenon, (Benin)  
Jin Hongtao, (China)  
Carine J. Marks, (South Africa)  
Davaadorj Rendoo, (Mongolia)  
Palanisamy Sankar, (India)  
Tawit Suriyo, (Thailand)

\*\* Sponsored by the SOT Endowment Global Fund.



## 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 website at [www.toxicology.org](http://www.toxicology.org), under Regional Chapters or the Awards and Funding 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 website at [www.toxicology.org](http://www.toxicology.org), under Special Interest Groups or the Awards and Funding section.



## SOT SPECIALTY SECTION AWARDS

Most SOT Specialty Sections provide awards at the SOT Annual Meeting 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 website at [www.toxicology.org](http://www.toxicology.org), under Specialty Sections or the Awards and Funding section.



## SOT UNDERGRADUATE INTERN TRAVEL AWARDS

Each year SOT funds several undergraduates for summer research projects in toxicology. To encourage these students to continue to pursue toxicology, SOT provides travel support for eligible students to present the work they completed during the summer at the next Annual Meeting.

### Award Recipients

2015 ..... Hillary K. Markey, Royce Harrison Nichols



## 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 nonmember from any background (toxicologists, clinicians, basic scientists, epidemiologists, engineers, etc.). This award consists of a plaque and monetary stipend. The recipient delivers the Translational Impact Award Lecture at the SOT Annual Meeting.

### Award Recipients

2009 ..... Thomas W. Kensler  
2010 ..... Kenneth E. McMartin  
2011 ..... Weida Tong  
2012 ..... John G. Benitez  
2014 ..... Timothy D. Phillips  
2015 ..... Jefferey Burgess



## TRANSLATIONAL/BRIDGING TRAVEL AWARD

Two awards may be given annually to assist with travel to the SOT Annual Meeting for either mid- or senior-level scientists or clinicians with at least ten years postdoctoral research or clinical practice experience and who have an active research program, are currently active either in the practice of clinical toxicology, medical toxicology, disease prevention, or in the application of transitional toxicology. Applicants may be either members or non-members of SOT and should provide a statement describing how they will benefit from the travel award and be willing to write an article about the experience for the SOT *Communiqué*, attend the Clinical and Translational Toxicology Specialty Section meeting (held during the SOT Annual Meeting), and contribute to the process for developing ideas for the scientific sessions at the following SOT Annual Meeting. This award consists of monetary stipend and a complimentary registration for the SOT Annual Meeting.

### Award Recipients

2012 ..... Xuemei Huang  
2013 ..... M. Shane Hutson

# SOT HONORS, AWARD DESCRIPTIONS, AND HISTORY



## UNDERGRADUATE DIVERSITY PROGRAM STUDENT AND ADVISOR AWARDS

*(Supersedes the Minority Undergraduate Student and Advisor Awards)*

The Undergraduate Diversity Program Student and Advisor Awards provide support for awardees to participate in the Undergraduate Education Program at the SOT Annual Meeting. The program is an introduction to the discipline of toxicology for undergraduate science majors and includes toxicology presentations, information about graduate school and careers in toxicology, scientific sessions, and SOT mentors. The awards provide travel support for students from a diversity of backgrounds, including students from groups that are under-represented in the sciences (for example, African American, Hispanic/Latino, or Native American, including Alaskan or Pacific Islander) and from institutions that receive low amounts of federal science, math, and engineering funding. Advisors of undergraduate students from diverse backgrounds who are not SOT members also receive funding. Support for this program has been provided by NIH, Pfizer, and other contributors. The recipient list is available on the website.



## UNDERGRADUATE EDUCATOR AWARD

The Undergraduate Educator Award, sponsored by the SOT Endowment Fund, is presented to an SOT member who is distinguished by outstanding contributions to the teaching of undergraduate students in toxicology and toxicology-related areas, and whose efforts support SOT's strategic efforts to "Build for the Future of Toxicology." Members of the Society of Toxicology who have made significant contributions to undergraduate education in toxicology may be nominated and should have a faculty appointment with primary responsibilities in the teaching of undergraduates and demonstrate a distinguished undergraduate teaching record. This award consists of a plaque and monetary stipend.

### Award Recipients

2011 ..... Joan B. Tarloff\*  
2012 ..... Sue M. Ford  
2013 ..... Sidhartha D. Ray  
2014 ..... William D. Atchison  
2015 ..... Mindy F. Reynolds



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\*DECEASED



**SOT** | Society of Toxicology

***Creating a Safer and Healthier World  
by Advancing the Science and Increasing  
the Impact of Toxicology***

*Do you know a toxicologist  
who deserves to be recognized?*

SOT recognizes distinguished toxicologists and students with many prestigious awards each year. In addition to receiving the specific award, recipients are honored at a special Awards Ceremony during the SOT Annual Meeting and their names are listed in SOT publications. Most award nominations and applications are submitted through a quick online process.

***Applications for most 2016 national SOT awards are due October 9, 2015.***

***Regional Chapter Awards, Special Interest Group Awards, and Specialty Section Awards have various deadlines throughout the year.***

Visit the Awards and Funding section of the website to view award details to make nominations.

**[www.toxicology.org](http://www.toxicology.org)**



# SPONSORED AWARD DESCRIPTIONS AND HISTORY



## UNDERGRADUATE TOXICOLOGY EDUCATION AWARDS

**Presented 2006–2015**

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 website). 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. The recipient list is available on the website.

## ASTRAZENECA TRAVELING LECTURESHIP AWARD

**Presented 1990–2012**

*(Recipients of Astrazeneca Traveling Lectureship Awards no longer offered may be found on the SOT website at [www.toxicology.org](http://www.toxicology.org).)*

## 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. Two or more awards, up to \$3,750 each, are available annually. Awards will defray travel, *per diem*, and training expenses.

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, use of nonmammalian 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.

### 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, Marc A. Nascarella  
2005 ..... Vishaka Bhave, Ankur Dnyanmote, Jonathan Maher

2006 ..... Mary Hassani, Prajakta Palkar  
2007 ..... Renee Gardner, Prajakta Palkar, Rohit Singhal, René Vinas  
2008 ..... Kimberly A. Hays, Haitian Lu  
2009 ..... Jennifer Cole, Katie Beth Paul, Samuel Peterson  
2010 ..... Maxwell C. K. Leung, David T. Szabo, Natalia M. VanDuyun  
2011 ..... Vijay More  
2012 ..... Agnes Forgacs, René Viñas, Aaron Lulla  
2013 ..... Aaron Lulla, Jamie Moscovitz, Alexandra Muñoz  
2014 ..... Laura E. Armstrong, Christin M. Grabinski  
2015 ..... Prajakta Shimpi

## 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 nonanimal models, reproductive and developmental toxicology, neurotoxicology, systemic toxicology, sensitization, and acute toxicity.

The maximum award is \$40,000, made as a single lump payment. Awardees can re-apply for funding in subsequent years.

### 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. Ceven, Duncan C. Ferguson, Shashi K. Ramiah  
2009 ..... Qin M. Chen, Timothy J. Shafer, Mehmet Uzumcu  
2010 ..... Patrick Allard, Duncan C. Ferguson, Mehmet Uzumcu  
2011 ..... Patrick Allard, Hao Zhu  
2012 ..... Mingzhu Fang, Jennifer Freeman  
2013 ..... Lei Li Kerr, Hao Zhu  
2014 ..... Patricia E. Ganey, Matthew Troese  
2015 ..... Alfredo Miranda de Goes, Lei Li Kerr

# SPONSORED AWARD DESCRIPTIONS AND HISTORY

## 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 annually and includes stipend and research-related costs up to \$44,000 for one year (including funding to attend the SOT Annual Meeting to present this research). 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.

### 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  
2009 ..... Ankur Dnyanmote  
2010 ..... Ankur Dnyanmote  
2011 ..... Cassandra Deering-Rice  
2012 ..... Melanie Adler  
2013 ..... Melanie Adler  
2014 ..... Jonathan H. Shannahan  
2015 ..... Fabian A. Grimm

## COLGATE-PALMOLIVE TRAVELING LECTURESHIP IN ALTERNATIVE METHODS IN TOXICOLOGY AWARD

**Presented 1996–2008**

*(Recipients of Colgate-Palmolive Traveling Lectureship In Alternative Methods in Toxicology Awards no longer offered may be found on the SOT website at [www.toxicology.org](http://www.toxicology.org).)*

## NOVARTIS GRADUATE STUDENT FELLOWSHIP AWARD

**Presented 1989–2012**

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

## SYNGENTA FELLOWSHIP AWARD IN HUMAN HEALTH APPLICATIONS OF NEW TECHNOLOGIES

The Syngenta Fellowship Award in Human Health Applications of New Technologies is presented to either a third year (or later) graduate student or a postdoctoral trainee. Funding in the amount of \$15,000 is to support mode-of-action research aimed at characterizing dose-dependent effects of xenobiotics on mammalian systems in such a way that the causal sequence of key events underlying toxicity is elucidated. The work should permit a quantitative basis for extrapolation of the results from animal bioassays or animal models (*in silico*, *in vitro*) to humans at relevant human doses. The awardee will receive funding to travel to the SOT Annual Meeting to accept the award and for travel to a Syngenta facility to present the results.

### Award Recipients

2010 ..... Haitian Lu  
2011 ..... Michelle C. DeSimone  
2012 ..... Benjamin Moeller  
2013 ..... Julia E. Rager  
2014 ..... Dilshan S. Harischandra  
2015 ..... Alok Ranjan





# 2015 HONOR AND AWARD RECIPIENTS



## HONORARY MEMBERSHIP



**Shawn Douglas Lamb**

**Shawn Douglas Lamb** served as Executive Director for the Society of Toxicology since 1993, retiring December 31, 2014. Under her vigilant eye, the Society has grown from an international membership of 3,000 to a vigorous society of over 8,000 members. As Executive Director, she has worked with 21 different SOT Presidents and Councils, contributed broadly to the Society's strategic planning, governance, growth, and outreach, and she has made personal contributions—too many to count—to the success of the Society.

In fact, as Council members rotate on and off and the presidential chain is new each year, Ms. Lamb has been the single constant factor in the Society's leadership over the past two decades. She has had a direct impact on every initiative undertaken or proposed by each SOT Council, Committee and Subcommittee, Task Force, or other *ad hoc* group. Her tireless dedication and steadfast support of these groups are paralleled only by her outstanding leadership. Ms. Lamb has demonstrated an uncanny ability to understand the complex challenges that face our Society. Her polished organizational skill has provided options toward solutions for any obstacles that have been encountered.

In addition to the role she has played within SOT, Ms. Lamb has been working with the global toxicological community for many years. She has an international reputation and stature in toxicology. She has served as the Executive Director of IUTOX, the International Union of Toxicology. As the founder of Association Innovation and Management, Inc. (AIM), an association management company focused on providing a complete and broad array of administrative services to professional scientifically-based client associations, she has shared our mission to improve human and environmental health.

Honorary membership in the Society is designed to recognize nonmembers who "embody outstanding and sustained achievements in the field of toxicology." We often honor those individuals who have made noteworthy contributions through research and education in the science. Ms. Lamb has developed international recognition as a collaborative voice for toxicologists. As an administrative leader of the Society, she has been a stalwart supporter of the growth and vitality of our Society. As with our other distinguished honorees who achieved recognition through their research, she has been extremely influential for our science. Given the breadth of her contributions in support of toxicology, it is only fitting that the SOT bestows Honorary Membership to Shawn Douglas Lamb.



## ACHIEVEMENT AWARD



**Vishal S. Vaidya**

**Vishal S. Vaidya, PhD**, is awarded the 2015 SOT Achievement Award.

Dr. Vaidya is the recipient of the Society of Toxicology 2015 Achievement Award. He has contributed to advancing regulatory science by modernizing toxicology and has set a high standard for future drug development and patient care. Dr. Vaidya has developed, evaluated, and validated highly novel tools for biomarker detection, comparing biomarkers (kidney injury molecule-1 [Kim-1], fibrinogen, extracellular microRNAs) using preclinical and clinical models of kidney injury in many collaborative studies. His work, supported by a National Institutes of Health/National Institute of Environmental Health Sciences (NIH/NIEHS) Pathway to Independence grant, in collaboration with the Predictive Safety Testing Consortium, led to the first kidney toxicity biomarker (kidney injury molecule-1) qualified by the US Food and Drug Administration (US FDA) and the European Medicines Agency in 2008. These studies are likely to have a very significant impact on the way scientists monitor kidney injury in drug development and also in the clinics. In 2011, Dr. Vaidya won the NIH/NIEHS Outstanding New Environmental Scientist (ONES) award, and in 2013 he was selected as one of six North American scientists to receive the Innovation in Regulatory Science Award from the Burroughs Wellcome Fund.

Dr. Vaidya received his PhD in toxicology from the University of Louisiana in 2003 and completed his postdoctoral fellowship in nephrology from Brigham and Women's Hospital in 2007. As an Assistant Professor at Harvard, he has faculty appointments at the Brigham and Women's Hospital, where he directs the Laboratory of Kidney Toxicology and Regeneration; at the Harvard Medical School where he heads the Systems Toxicology Program within the Harvard Program in Therapeutic Sciences; at the Harvard School of Public Health where he directs a five-credit graduate level course on principles of toxicology-molecular and translational toxicology every fall; and at the Harvard Clinical and Translational Science Center (Harvard Catalyst), where he directs the course "Understanding Biomarker Science: From Molecules to Images" every spring.

He has been a member of SOT since 1999. In 2001 he received the Novartis Graduate Student Fellowship Award that was presented at the SOT Annual Meeting. Over the years, Dr. Vaidya has received the Comparative and Veterinary Specialty Section Award (2002), Risk Assessment Specialty Section Award (2005), American Scientist of Indian Origin Young Investigator Award (2012), and SOT's Leading Edge in Basic Science Award (2014).

He also has been active within SOT committees, having served on the Career Resource and Development Committee, Continuing Education Committee, and as a councilor for the Northeast Regional Chapter of SOT. The Society is pleased to present Dr. Vaidya with the 2015 SOT Achievement Award.



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# 2015 HONOR AND AWARD RECIPIENTS



## ARNOLD J. LEHMAN AWARD



**Richard A. Becker**

**Richard A. Becker, PhD, DABT**, is awarded the 2015 SOT Arnold J. Lehman Award.

Dr. Becker is the recipient of the 2015 SOT Arnold J. Lehman Award. Dr. Becker has significantly contributed to the field of toxicology for over 30 years. During this time, he has been a major driving force for development and application of new technologies and approaches for improving the practice of human health risk assessment. He has consistently been one of the forerunners in support of efforts to move human risk assessment forward scientifically

through innovative thinking and principled risk assessment practice.

In particular, his work with colleagues on development of methods for interpretation of chemical biomonitoring data, on hypothesis-driven weight-of-evidence frameworks for evaluating data for endocrine disruptors, on extending the work of the National Academy of Science from its Science and Decisions report, "Silver Book," and on enhanced tiered toxicity testing frameworks with triggers for assessing hazards and risks of commodity chemicals, are all important contributions to the debate of scientifically based safety assessment in the US and abroad.

Moreover, Dr. Becker has engaged and educated the scientific community through collaborative symposia that evaluate and review scientific evidence and strategies that enhance communication of chemical assessment information. All of these efforts have led to major progress in the use of new methodologies in health assessments conducted by industry, US federal agencies, and agencies around the world.

He received his PhD in pharmacology and toxicology from the University of California, Irvine. After postdoctoral training at the University of Toronto and the International Agency for Research on Cancer (IARC), he spent close to a dozen years as a scientist with the state of California. In 1999, he joined the American Chemistry Council (ACC), and in 2014, was appointed to lead ACC's Science and Research Division. He now manages ACC's Long-Range Research Initiative, a program focused on catalyzing innovations in toxicity testing and exposure science in the 21st Century.

Dr. Becker has been a member of the Society of Toxicology since 1990. During this time he has served on the Regulatory Affairs and Legislative Assistance Committee, as well as the Congressional Science Fellowship Review Subcommittee.

The Society is pleased to present Dr. Becker with the SOT 2015 Arnold J. Lehman Award.



## BEST POSTDOCTORAL PUBLICATION AWARDS

The Postdoctoral Assembly congratulates these three recipients for their accomplishment. These awards are presented during the Postdoctoral Assembly Luncheon.



**John Clarke**

**John Clarke, PhD**, University of Arizona, Tucson, AZ

Synergistic Interaction Between Genetics and Disease on Pravastatin Disposition

Clarke JD, Hardwick RN, Lake AD, Lickleig AJ, Goedken MJ, Klaassen CD, Cherrington NJ.

*Journal of Hepatology*, 2014 Jul, 61(1):139-147.



**Yong Ho Kim**

**Yong Ho Kim, PhD**, US Environmental Protection Agency, Research Triangle Park, NC

Cardiopulmonary Toxicity of Peat Wildfire Particulate Matter and the Predictive Utility of Precision Cut Lung Slices

Kim YH, Tong H, Daneils M, Boykin E, Krantz QT, McGee J, Hays M, Kovalcik K, Dye JA, Gilmour MI.

*Particle and Fibre Toxicology*, 2014 June, 11:29.



**Christina Powers**

**Christina Powers, PhD**, US Environmental Protection Agency, Ann Arbor, MI

Sparkling Connections: Toward Better Linkages Between Research and Human Health Policy—An Example with Multiwalled Carbon Nanotubes

Powers CM, Gift J, Lehmann GM.

*Toxicological Sciences*, 2014 Sept, 141: 6-17.



# 2015 HONOR AND AWARD RECIPIENTS



## BOARD OF PUBLICATIONS AWARD FOR THE BEST PAPER IN TOXICOLOGICAL SCIENCES



The Society of Toxicology Board of Publications has selected the paper titled "Temporal Concordance Between Apical and Transcriptional Points of Departure for Chemical Risk Assessment" (*Toxicological Sciences* 2013, 134(1): 180–194).

Russell S. Thomas, Scott C. Wesselkamper, Nina Ching Y. Wang, Q. Jay Zhao, Dan D. Petersen, Jason C. Lambert, Ila Cote, Longlong Yang, Eric Healy, Michael B. Blank, Harvey J. Clewell III, Bruce C. Allen, and Melvin E. Andersen.

### Ignorance Is Bliss?

Chemical risk assessment relies on sound information. Specifically, for regulatory agencies it is necessary to have comprehensive reviews on which to draw values for risk assessment. There are over 100,000 industrial chemicals that exist in our environment, yet the US Environmental Protection Agency (EPA) has fewer than 600 chemicals in their Integrated Risk Information System (IRIS), and the Office of Pesticide Programs (OPP) has evaluated just over 600 chemicals. What about the other 98,000+ chemicals?

Surprisingly, the current model deems that if we have no reliable toxicity data for a given chemical then it must be assumed to be safe. While we may be blissfully ignorant of the toxicity, this could indeed be very dangerous for the health of the human race and for the planet.

Biological science has undergone an 'omic renaissance over the past several years. We can measure transcripts, proteins, lipids, and metabolites in the hundreds of thousands, if not millions. These modern-day techniques, which are commonly used by toxicologists, are being underutilized when it comes to risk assessment. While data from 'omic approaches play supportive roles in helping identify pathways of toxicity and providing weight of evidence, they are not integrated into the risk assessment models. In the paper by Thomas and coworkers, the authors attempt to show that data from transcriptomics, using gene expression microarrays, can be used in a meaningful way in risk assessment models for cancer and non-cancer endpoints.

The authors examined six thoroughly studied chemicals and performed standard necropsy and histology, along with microarrays to identify benchmark dosing. The authors then analyzed tissue samples using microarrays from five days to 14 weeks and compared results to standard two-year rodent bioassays. Their analysis revealed that transcriptomics provided highly accurate information rivaling traditional approaches.

Risk assessment must rely on strong data from well thought-out studies. Regulatory agencies are notoriously slow to adopt more innovative approaches, but this paper suggests that the time is drawing near for the integration of 'omic technology. This paper provides a strong foundation for the use of transcriptomics in risk assessment; indeed, the authors propose a framework for how this can be done. I, for one, would rather have a transcriptomic-based toxicological risk assessment for 20,000 chemicals than go with the ignorance approach we currently employ for the majority of our chemical space. Moreover, the generation of these types of data on thousands of chemicals would help populate computational models that may allow us to provide useful predictions on the other 80,000 chemicals.

In toxicology and risk assessment, ignorance is not bliss. Bliss comes from the generation of high-quality data and sophisticated and validated models of prediction on all of the chemicals that reach the marketplace. The paper by Thomas et al. represents a major step forward in spanning our gap of ignorance. Based upon this, the Board of Publications is pleased to award the Best Paper of the Year Award.



## DISTINGUISHED TOXICOLOGY SCHOLAR AWARD



Ian Kimber

**Ian Kimber, OBE, BSc, MSc, PhD, FSB, FBTS, ATS,** is awarded the 2015 SOT Distinguished Toxicology Scholar Award.

Dr. Kimber has worked in academia and industry, and he currently serves as Chair and Professor of Toxicology at the University of Manchester and Associate Dean for Business Development in the Faculty of Life Sciences.

Dr. Kimber has made many seminal contributions to immunotoxicology and the reduction of animals in research, as well as human and environmental safety. Dr. Kimber led the development of local lymph node assay (LLNA). As a validated *in vivo* test for skin sensitization, the LLNA has largely replaced the more animal-intensive previous test methods. The LLNA has been accepted by the OECD for Testing of Chemicals and the REACH Regulations as the first choice for *in vivo* testing. Dr. Kimber has pioneered changes in the approach taken by the international scientific community to the management of chemical and protein allergenicity. This has been achieved through progress in a number of areas including identification and characterization of cytokine signals that regulate epidermal Langerhans cell migration, the discovery that different classes of chemical allergens stimulate discrete adaptive immune responses, and development of a novel approach for characterization of the potential allergenicity of transgenic products in crop plants.

Dr. Kimber has made many contributions to toxicology, having authored over 500 peer-reviewed journal publications and more than 100 book chapters. He has delivered over 1,500 presentations at scientific meetings internationally. In the midst of this he has still managed to mentor over 40 PhD students.

Dr. Kimber has been a member of SOT since 1990. During this time, he has served in the leadership of the Immunotoxicology and Dermal Toxicology Specialty Sections, as well as on three ad hoc SOT Subcommittees. Dr. Kimber has distinguished himself such that he has received many honors in toxicology. He was awarded an SOT Enhancement of Animal Welfare Award in 2003, and the Immunotoxicology Specialty Section Career Achievement Award in 2005. In 2010, he received the EUROTOX Bo Holmstedt Prize for contributions to chemical and drug safety. Dr. Kimber is a past President of the British Toxicology Society (2012–2014), and a former Chairman of the Board of the UK National Centre for the Replacement, Refinement and Reduction of Animals in Research (NC3Rs) (2008–2013). He was honored in 2011 when he was awarded an OBE (Officer of the Order of the British Empire) for services to science in the Queen's Birthday Honours List.

The Society is pleased to present Dr. Kimber with the 2015 Distinguished Toxicology Scholar Award.



# 2015 HONOR AND AWARD RECIPIENTS



## EDUCATION AWARD



**Theodore A. Slotkin, PhD**, is awarded the 2015 SOT Education Award.

Dr. Slotkin has made impressive and significant contributions to education through his use of conventional and unconventional teaching techniques, including open discussions of current literature, of lay media, and of students' own research projects. Through classroom conversations, he ensures that students learn the requisite subject areas but always within a framework of critical evaluation of hypotheses and experimental outcomes. Dr. Slotkin has devoted significant

effort and time to developing new courses and new curricula, including *Essentials of Pharmacology, Toxicology and Drug Design*, and *Experimental Design and Biostatistics for Basic Biomedical Scientists*. His ability to teach mathematical concepts to biologists is the hallmark of his success. With a career that spans four decades, he has had a major impact, having taught thousands of students and personally trained 26 undergraduates, 31 PhD students, and 23 postdoctoral researchers and visiting scientific scholars in his laboratory far beyond the requirements of his teaching duties. In many cases these trainees have gone on to successful careers in industry, government, and academia due in no small part to Dr. Slotkin's influence.

He has played integral roles in curriculum development for the Pharmacology PhD Program, the Integrated Toxicology and Environmental Health PhD program, and the Undergraduate Pharmacology Curriculum for Biology and Chemistry Majors. These are in addition to the key role he has played in other training programs, including those in Cell and Molecular Biology, Neurosciences, Pharmacological Sciences, and MD/PhD.

Dr. Slotkin received his PhD from the University of Rochester in 1970. Currently, he serves as Professor in the Departments of Pharmacology and Cancer Biology, Psychiatry and Behavioral Sciences, and Neurobiology, as well as the Integrated Toxicology Program at the Duke University Medical Center. Dr. Slotkin received a Board of Publications Best Paper Award in 1996 and has been a member of SOT since 1997.

The Society is pleased to present Dr. Slotkin with the 2015 Education Award.



## ENHANCEMENT OF ANIMAL WELFARE AWARD



**Marcel Leist, PhD**, is awarded the 2015 SOT Enhancement of Animal Welfare Award.

Dr. Leist has been involved in the improvement of animal welfare through active research and application of alternative methods to replace animal experiments for more than 25 years. During this time, Dr. Leist has contributed successfully to the establishment of multiple experimental *in vitro* models that provide data on toxicity of environmental chemicals and other compound classes and that allow drug efficacy testing without the use of animals.

Dr. Leist has played an important role in transatlantic efforts in the development of new animal-free testing strategies based on new methodologies and new concepts proposed by the National Academy of Sciences Committee on Toxicity Testing or the Tox21 consortium. Dr. Leist pioneered the use of cell-based systems in combination with human histology data to validate drug targets and to drive drug discovery projects up to clinical testing. The concept of using human cell-based disease models of neurodegenerative diseases Dr. Leist put into place 15 years ago has only just become mainstream thought in major pharmaceutical companies. The generation of LUHMES cells, an easily accessible model for human neurons, is used widely in the field of Parkinson's disease. He developed the neurite outgrowth assay, which is among the very few assays that can detect human neurotoxicants and clearly distinguish them from unspecified cytotoxicants.

This will likely become part of a battery of tests that will substitute animal-based neurotoxicity and developmental neurotoxicity testing. He has promoted the scientific exchange of scientists from academia, industry, and regulatory authorities on animal replacement issues. He has worked in collaboration with over 200 scientists worldwide to issue guidance to the entire field of toxicology for the last six years. A notable example is his roadmap for the transition to animal-free toxicity testing.

Dr. Leist received his PhD in 1993 from the University of Konstanz, Germany. Currently he serves as the Doerenkamp-Zbinden Chair for *In Vitro* Toxicology and Biomedicine and is a full Professor at the Department of Biology at the University of Konstanz. He has been a member of the Society since 2010.

The Society is pleased to present Dr. Leist with the 2015 Enhancement of Animal Welfare Award.





# 2015 HONOR AND AWARD RECIPIENTS



## GLOBAL SENIOR SCHOLAR EXCHANGE PROGRAM

The Society of Toxicology Global Senior Scholar Exchange Program aims to increase the global impact of toxicology on human health and safety by working to strengthen toxicology programs and capacity in universities in developing countries. SOT sponsors specific collaborations between selected Senior Scholars from academic institutions in developing countries and SOT Member Hosts from established academic, government, and industry toxicology programs worldwide. The program enables an exchange visit of these scientists to support the developing country university's core toxicology curriculum, increase research collaborations, provide courses or symposia on toxicology topics of high priority in the developing country, and fund the senior scholar to attend the SOT Annual Meeting as an opportunity to present research and establish networking opportunities.



**Sunisa Chaiklieng, BSc, MSc, Dr Biol Hum,**  
*Khon Kaen University, Muang, Thailand*

Dr. Chaiklieng is an expert in risk assessment of occupational ergonomics and occupational exposures to benzene. She is an Assistant Professor of Occupational Health at Khon Kaen University in Thailand. She received her BSc and MSc from Mahidol University in Bangkok and her doctoral degree in biomedical science from Ulm University in Germany. She then continued her postdoctoral training at Ulm University at the Institute of Applied Physiology. Dr. Chaiklieng joined the

Faculty of Public Health at Khon Kaen University in Thailand, which is a leader in public health research and training in northeast Thailand and includes the departments of environmental health science and occupational health, biostatistics and demography, epidemiology, health education, nutrition, and public health administration. At Khon Kaen University, Dr. Chaiklieng has been involved in teaching occupational and environmental toxicology, industrial toxicology, and risk assessment. She has also recently been appointed as director of a new occupational health and safety MSc program to begin in 2015. Dr. Chaiklieng has contributed to over 30 publications, has received awards for the best oral presentation at the 4th National Toxicology Conference in Toxicology in Bangkok, and was an SOT Endowment Fund/IUTOX travel fellowship winner in 2012.

The Global Senior Scholarship Exchange Program will assist Dr. Chaiklieng in strengthening the graduate program at Khon Kaen University through increasing understanding of the international accreditation requirements in occupational safety and health. One specific program that will be explored is the establishment of cooperative research in risk assessment of benzene exposure. This is particularly important in Thailand because workers at gas stations are at increased risk of exposure to benzene; therefore, there exists a need to establish biomarkers of benzene exposure and establish effective workplace surveillance of benzene levels. Meeting these needs will minimize exposures and improve the health of workers in Thailand. Finally, collaborations can be developed between the faculty at Khon Kaen University and the host university to provide additional training opportunities, research projects and/or joint publications.



**Norbert E. Kaminski**

### Host:

**Norbert E. Kaminski, PhD,** Michigan State University, East Lansing, MI

Dr. Chaiklieng will be hosted by Dr. Kaminski at Michigan State University (MSU). Dr. Kaminski is a Professor in the Department of Pharmacology and Toxicology and is the Director of the Center for Integrative Toxicology (CIT). The CIT at MSU is an outstanding environment for training in all aspects of toxicology through its interdepartmental MS and PhD programs. The CIT has over 60 affiliated faculty from more than 16 departments across campus, providing interdisciplinary training with strengths in biomedical, occupational, environmental, food-borne, and pharmaceutical toxicology. The CIT also houses the MSU Superfund Research Program Center Grant (funded by the National Institute for Environmental Health Sciences) and the recently established Center for Research on Ingredient Safety. Dr. Chaiklieng will benefit from learning about MSU's interdisciplinary toxicology curriculum. In addition, Dr. Kaminski will travel to Khon Kaen University to engage in teaching and explore research collaborations.



**Deepak Dhakal**

**Deepak Dhakal, MS,** Tribhuvan University, Patan, Nepal

Mr. Dhakal is Assistant Professor in the Department of Chemistry, Patan Multiple Campus, Institute of Science and Technology at Tribhuvan University (TU), Patan, Nepal. Mr. Dhakal has conducted research on pesticide residues in food commodities and clinical solid waste, with expertise in analytical chemistry and environmental toxicology. He has been instrumental in the inclusion of environmental chemistry in the curriculum at TU and the recent addition of environmental toxicology to the graduate curriculum.

He was also integral in establishing the National Society of Toxicology (Nepal) in 2009, and is currently serving as president. In this role, he has worked for the collection of national data about the classification of the toxic chemicals, including obsolete pesticides (PCB, POPs) in Nepal, with the help of UN organizations (UNIDO) since 2009. These obsolete pesticides may result in many health and environmental problems around the stored areas of the different parts of Nepal.

These and other potential environmental toxicology issues have led to an increased interest in the study of toxicology for Nepal. The Global Senior Scholar Exchange Program will assist Mr. Dhakal in strengthening the toxicology curriculum at TU to train researchers to help understand and address these environmental toxicology issues.

These efforts include training on techniques for identifying, evaluating, and controlling emerging environmental contaminants such as those in drinking water, pesticide residues, and stored obsolete toxic chemicals like PCB and pesticides. Curriculum development will involve higher level of studies in toxicology, such as human health risk assessment of toxic chemicals, including obsolete toxic chemicals like PCBs that remain a source of concern in Nepal.

(continued to next page)

# 2015 HONOR AND AWARD RECIPIENTS



**Aaron  
Barchowsky**

**Host:**

**Aaron Barchowsky, PhD**, University of Pittsburgh, Pittsburgh, PA

Dr. Barchowsky will host Mr. Dhakal at the Department of Environmental and Occupational Health at the University of Pittsburgh. Dr. Barchowsky has been with the Department of Environmental and Occupational Health at the University of Pittsburgh since 2003, where he is currently a full Professor. His research interests are in investigating the cellular and molecular mechanisms underlying cardiovascular and lung diseases caused by environmental exposures to metals and chronic changes in redox status. The University of Pittsburgh has a history of research discoveries that have improved the health of populations around the globe. This tradition endures through Pitt's world-class faculty, who continue to build upon the legacy of individuals such as Jonas Salk, William Hammond, and Peter Safar, and through Pitt's outstanding student body, which continually embraces the field of global health and truly makes a difference on a worldwide scale. An example of commitment to advancing global health is the Graduate School of Public Health certificate in Global Health that is available to graduate students. Global health refers to health issues that transcend national boundaries. The field faces unprecedented challenges brought on by issues such as shifting immigration patterns, climate change, conflict, and global commerce.



## MERIT AWARD



**Günter  
Oberdörster**

**Günter Oberdörster, DVM, PhD**, is awarded the 2015 SOT Merit Award.

Dr. Oberdörster is a pioneer in the field of research on aerosol behavior in the respiratory tract. His research has encouraged many breakthroughs in our understanding of particle deposition, clearance, and effects in the respiratory tract. His research has focused on furthering our understanding of the influence of aerosol characteristics on the toxicity and underlying mechanisms of inhaled materials. His observations in intact mammals including human subjects have helped to advance

our understanding of the role of particle dose-metrics with respect to mass, number, surface area, and chemical composition in the pathogenesis of respiratory tract diseases. Ground-breaking findings of Dr. Oberdörster and his colleagues are key to understanding the toxicity of nanomaterials and ensuring safety in many beneficial applications. Because of this he is widely known as the "Father of Nanotoxicology" in many circles.

Dr. Oberdörster's early research at the Fraunhofer Institute on inhaled cadmium, nickel, and zinc compounds changed the understanding of the inhalation hazards of these elements. In the late 1970s, Dr. Oberdörster visited the University of Rochester as a Visiting Faculty member, which served only to nurture his interest in inhalation toxicology. In 1981 he was appointed Associate Professor there, promoted to Professor in 1989, and has continued making seminal contributions to the fields of aerosol sciences and respiratory toxicology through his research, teaching, and public service for four decades. During this time he has authored or co-authored over 300 publications.

Dr. Oberdörster received his Doctor of Veterinary Medicine degree in 1964 and a PhD in Pharmacology in 1966 from the University of Giessen in Germany. He has been an SOT member since 1983, with a brief interruption for ~1 year in 2000. During this time he has been very active within the Society, having presented papers regularly at the SOT Annual Meeting and has organized and chaired many scientific sessions. He has also been very active with the Inhalation and Respiratory Specialty Section, where he had served as President and was the recipient of the Career Achievement Award in 1996. He became an active member of the Nanotoxicology Specialty Section at its formation in 2009 and received a Special Recognition Award in 2014.

The Society is pleased to present Dr. Oberdörster with the 2015 Merit Award.

## SOT Thanks Our Generous Supporters!

**Award Support Received from:**

**AstraZeneca**

- SOT/AstraZeneca/ SOT Endowment Fund/IUTOX Travel Awards

**Colgate-Palmolive**

- Colgate-Palmolive Awards for Student Research Training in Alternative Methods
- Colgate-Palmolive Grants for Alternative Research
- Colgate-Palmolive Postdoctoral Fellowship Award in *In Vitro* Toxicology

**Syngenta**

- Syngenta Fellowship Award in Human Health Applications of New Technologies

**Travel Award Support Sponsors Received from:**

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- Graduate Student Travel Support

**Burroughs Wellcome Fund**

- Graduate Student Travel Support

**Pfizer**

- Pfizer SOT Undergraduate Student Travel Award

**SOT Endowment Fund**

- Education Support
- Founder's Award
- Graduate Student Travel Support
- Perry J. Gehring Student Travel Award
- SOT/AstraZeneca/SOT Endowment International Fund/IUTOX Travel Awards
- Undergraduate Educator Award



# 2015 HONOR AND AWARD RECIPIENTS



## PERRY J. GEHRING DIVERSITY STUDENT TRAVEL AWARD



**Latisha T. Pryor**

**Latisha T. Pryor**, Fort Valley State University, Oglethorpe, GA

**Abstract Title:** An Analysis of Varskin 5 Radiation Dosimetry Software

**Institution Where Research Was Conducted:** US Nuclear Regulatory Commission, Rockville, MD



## PUBLIC COMMUNICATIONS AWARD



**Andrew D. Maynard**

**Andrew D. Maynard, PhD**, is awarded the 2015 SOT Public Communications Award.

Dr. Maynard utilizes social media outlets in a novel way to communicate public health topics to broad audiences. He has been featured in nearly all media formats including television, print, web, and radio, and writes regularly for his personal blog, *2020 Science*. Dr. Maynard is most recognized for his established social media presence on a YouTube channel called Risk Bites. His work on Risk Bites is rooted in the sciences of toxicology, exposure assessment, epidemiology, and risk. With simple graphics

and concise language, Dr. Maynard provides insight into risk and safety topics that are easily understandable. Risk Bites has featured in mainstream publications ranging from *USA Today* to the technology website Gizmodo. More recently, Dr. Maynard was recognized as one of "The Top 50 Science Stars on Twitter," by *Science Magazine*.

In the classroom, Dr. Maynard consistently challenges students to reach wider audiences of scientists and the general public alike by using innovative communications formats. His course "Communicating Science through Social Media" provided a unique approach to learning how to use social media as a tool to raise and help explain complex public health issues to those with or without advanced technical backgrounds.

In the scientific community, Dr. Maynard contributes significantly to peer-reviewed literature, serves on many journal editorial boards, actively participates in national and local conferences and workshops, and is a regularly invited lecturer. He is a recognized leader in the field of nanotechnology, and has been published widely on topics such as exposure, risk, regulation, toxicological impacts, and the challenges associated with the evaluation of nanomaterials.

Dr. Maynard currently serves as the Director of the University of Michigan Risk Science Center. Based on his dedication to broadening public awareness of toxicological issues, the Society is pleased to present Dr. Maynard with the 2015 Public Communication Award.



## SOT/ ASTRAZENECA/SOT ENDOWMENT FUND/IUTOX TRAVEL AWARDS



**Khaled Abdou, PhD**, Beni Suef University, Beni Suef, Egypt



**Amos O. Abolaji, PhD**, University of Ibadan, Ibadan, Oyo State, Nigeria



**Motunrayo G. Akande, PhD**, University of Abuja, Abuja, Nigeria



**Huawei Duan, PhD**, National Institute of Occupational Health and Poison Control, Beijing, China



**Patient Guedenon, PhD**, University of Abomey-Calavi, Cotonou, Littoral, Benin



# 2015 HONOR AND AWARD RECIPIENTS



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ENDOWMENT  
**SOT/  
ASTRAZENECA/SOT  
ENDOWMENT FUND/IUTOX  
TRAVEL AWARDS CONTINUED**



**Jin Hongtao, PhD**, New Drug Safety Evaluation Center of Chinese Academy of Medical Sciences, Beijing, China



**Carine J. Marks, MSc**, Tygerberg Hospital Poison Centre, Stellenbosch University, Cape Town, South Africa



**Davaadorj Rendoo, MD**, National Institute for Public Health, Ulaanbaatar, Mongolia



**Palanisamy Sankar, PhD**, Tamil Nadu Veterinary and Animal Sciences University, Thanjavur, Tamil Nadu, India



**Tawit Suriyo, PhD**, Chulabhorn Research Institute, Laksi, Bangkok, Thailand



SOT | Society of Toxicology  
ENDOWMENT  
**SOT  
UNDERGRADUATE INTERN  
TRAVEL AWARD**



**Hillary K. Markey**, Central Michigan University, Freeland, MI

**Abstract Title:** Analysis of DNA Methyltransferase Expression in a Transplacental Mouse Model with Indole-3-Carbinol Dietary Intervention during Exposure to Dibenzo[def,p] Chrysene

**Institution Where Research Was Conducted:** Oregon State University, Corvallis, OR

**Hillary K. Markey**



**Royce Harrison Nichols**, King University, Bristol, TN

**Abstract Title:** Diglycolic Acid, the Toxic Metabolite of Diethylene Glycol, Inhibits Renal Mitochondrial Respiration

**Institution Where Research Was Conducted:** Louisiana State University Health Sciences Center, Shreveport, LA

**Royce Harrison Nichols**





# 2015 HONOR AND AWARD RECIPIENTS



## TRANSLATIONAL IMPACT AWARD



**Jefferey Burgess**

**Jefferey Burgess, MD, MS, MPH**, is awarded the 2015 SOT Translational Impact Award.

Over the past ten years, Dr. Burgess has made significant contributions to translational research studying environmental arsenic exposure, the effects of combustion product exposure in firefighters, and exposure to diesel and alternative fuel emissions in miners.

Dr. Burgess's translational research was pivotal in providing an important link in arsenic exposure on the development of pulmonary diseases, incorporating previous findings on animal and *in vitro* model systems and applying into human studies. He has been able to validate specific arsenic-induced changes in lung and blood biomarker proteins associated with levels of arsenic exposures. More recently, Dr. Burgess has determined a significant source of arsenic exposure stems from ingested food sources. His work is helping to evaluate those levels of exposure and the subsequent biological response.

In addition, Dr. Burgess became interested in combustion product exposure in firefighters early in his career. This interest, paired with his understanding of chemical-induced toxic effect, his interactions with basic researchers, and his application of basic science markers as biomarkers in a targeted population, allowed him to translate science into studies that are providing a deeper assessment of firefighter's exposure and an approach to minimize the risk and health effects for this at-risk group. A major outcome of this work has been to increase firefighter use of respiratory protection during overhaul, the final phase of fighting a fire when self-contained breathing apparatus was previously was not worn and when chemical exposures were still elevated despite no visible smoke.

Similarly, Dr. Burgess has begun to address the health status of miners. He has used his basic science and clinical skills to examine the risk that miners have in their current working conditions. His focus has been on the use of diesel engines within the mines and the effects of emissions on miners' health. He is now examining the extent of exposure and associated health effects of diesel, biodiesel, and other alternative fuels in underground mining operations, which should help guide future efforts to reduce hazardous exposures in this setting.

Dr. Burgess currently serves as the Associate Dean of Research at the Mel and Enid Zuckerman College of Public Health at the University of Arizona.

The Society is pleased to present Dr. Burgess with the 2015 SOT Translational Impact Award.



## UNDERGRADUATE EDUCATOR AWARD



**Mindy F. Reynolds**

**Mindy F. Reynolds, BS, PhD**, is awarded the SOT 2015 Undergraduate Educator Award.

Dr. Reynolds has demonstrated dedication and a commitment to undergraduate education in toxicology. When she arrived at Washington College in 2008 there were no toxicology courses offered and no toxicological research was being conducted. Within her first year she had strived to develop a course in the principles of toxicology and by spring of 2009 she had begun to teach this course to undergraduate students. This course has been offered every

spring since then. Dr. Reynolds also makes it a priority to oversee the independent research of undergraduate students each summer in an intensive 11-week research program.

In addition, Dr. Reynolds has given numerous presentations to undergraduate educators on the integration of toxicology into an undergraduate curriculum. She is very active within metals toxicology research which includes cytotoxic and genotoxic effects of multiple heavy metal exposure in human cells, but has expanded her research to include whole animal ecotoxicology in both vertebrate and invertebrate models. She actively involves students in this research and has mentored over 18 students on their senior thesis projects, several of which have dealt directly with her research.

Dr. Reynolds has been a member of the Society of Toxicology since 2004. Since that time she has been very active working toward her longtime mission of advancing the science of toxicology to undergraduates. She currently serves as Chair of the SOT Undergraduate Education Subcommittee and has served as a member of this committee since its inception in 2009. In 2010 she led the Undergraduate Subcommittee Work Group to develop an online resource for undergraduate instructors. Under her leadership the Subcommittee has developed multiple programs for faculty, including a webinar series. Dr. Reynolds was a featured speaker at the 2011 SOT Education Summit to provide perspective on undergraduate teaching to help develop SOT strategic efforts. Such is her commitment to her undergraduates that many students in her laboratory present their research annually at the SOT Annual Meeting and receive awards such as the Pfizer SOT Undergraduate Travel Award.

The Society is proud to present Dr. Reynolds with the 2015 SOT Undergraduate Educator Award.



# 2015 SPONSORED AWARD RECIPIENTS

## COLGATE-PALMOLIVE AWARDS FOR STUDENT RESEARCH TRAINING IN ALTERNATIVE METHODS



**Prajakta Shimpi, MS**, University of Rhode Island, Kingston, RI

**Project Title:** Use of Cryopreserved Human Hepatocytes to Assess Whether Direct Exposure to Bisphenol-A (BPA) Induces Fatty Liver Disease

**Host Institution:** Xenotech, LLC, Lenexa, KS

## COLGATE-PALMOLIVE GRANTS FOR ALTERNATIVE RESEARCH



**Alfredo Miranda de Goes, BSc, MSc, PhD**, Universidade Federal de Minas Gerais, Belo Horizonte, MG, Brazil

**Project Title:** Production of Organotropic Skin Models for Alternative Methods of Skin Research and Irritation/Corrosion Tests



**Lei Li Kerr, PhD**, Miami University, Oxford, OH

**Project Title:** The Application of Microfluidic Channels for the Study of Nanomaterial Deposition in Nasal Olfactory Region

## COLGATE-PALMOLIVE POSTDOCTORAL FELLOWSHIP AWARD IN IN VITRO TOXICOLOGY



**Fabian A. Grimm, PhD**, Texas A&M University, College Station, TX

**Project Title:** Advancing Predictive Safety Assessments through Biological Read across Using High-Content Screening of Induced Pluripotent Stem Cell (iPSC) Derived Cardiomyocytes and Hepatocytes

## PFIZER SOT UNDERGRADUATE STUDENT TRAVEL AWARDS



**Weelic Chong**, Oberlin College, Oberlin, OH

**Abstract Title:** A Gene-Metal Screen Reveals Enhanced Selenium and Cadmium Neurotoxicity in Dopaminergic Cells Expressing Human Alpha-Synuclein



**Zuania Ideliz Cordero Badillo**, University of Puerto Rico, Rio Piedras, San Juan, PR

**Abstract Title:** Effects of Chronic Methylmercury Exposure on Expression of Voltage Gated Calcium Channel mRNA in Rat Forebrain

Institution Where Research Was Conducted: Michigan State University, East Lansing, MI



**Emily A. Daniel**, William Jewell College, Liberty, MO

**Abstract Title:** Analysis of Acetaminophen-Induced Hepatotoxicity in Female C57BL/6J Mice Lacking the ATP-Binding Cassette Sub-Family C Member 4 (Abcc4, Mrp4)

Institution Where Research Was Conducted: University of Connecticut, Storrs, CT



**Gifty Aboagye Dominah**, Oberlin College, Oberlin, OH

**Abstract Title:** The Commonly Used Agrochemical Chlorpyrifos Enhances Huntington's Disease Neuropathology via Oxidative Stress and Mitochondrial Dysfunction



**Scott H. Freeburg**, Kenyon College, Gambier, OH

**Abstract Title:** CYP1A6 Induction by TCDD Is More Sensitive to TALEN Mutation of AHR1 $\beta$  than AHR1 $\alpha$  in the *Xenopus laevis* Cell Line XLK-WG



# 2015 SPONSORED AWARD RECIPIENTS



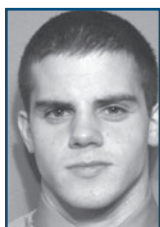
**Kathryn E. Fulda**, Washington College, Chestertown, MD

**Abstract Title:** The Effects of Fluoxetine on the Startle Response of Adult Zebrafish (*Danio rerio*)



**Samantha Hall**, Duke University, Durham, NC

**Abstract Title:** Effects of *fzo-1* and *drp-1* Mutations on Dopaminergic Neurodegeneration in *C. elegans*



**Alexander Jones**, Purdue University, West Lafayette, IN

**Abstract Title:** Intranasal Manganese (Mn) Exposure Leads to a Significant Accumulation of Mn in Bone



**Megan M. Koenecke**, Kenyon College, Gambier, OH

**Abstract Title:** Interactions between Thyroid Hormone and Dioxin Signaling in the Frog *Xenopus laevis*



**Sloane Kathryn Miller**, University of North Carolina at Chapel Hill, Chapel Hill, NC

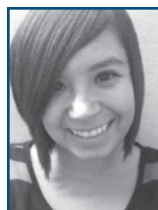
**Abstract Title:** Formaldehyde-Associated Changes in Gene and Cytokine Expression Profiles within Nonhuman Primate Nose and Circulating Blood



**Latisha T. Pryor**, Fort Valley State University, Oglethorpe, GA

**Abstract Title:** An Analysis of Varskin 5 Radiation Dosimetry Software

Institution Where Research Was Conducted: US Nuclear Regulatory Commission, Rockville, MD



**Yssa A. Rodriguez**, St. Mary's University, San Antonio, TX

**Abstract Title:** Effects of Varying Extracellular Calcium Concentration on Me Hg-Induced Dopamine Release in Undifferentiated PC12 Cells

Institution Where Research Was Conducted: Michigan State University, East Lansing, MI



**Nicole A. Sidebotham**, Oregon State University, Corvallis, OR

**Abstract Title:** Neurodevelopmental Exposure to the Mycotoxin Zearalenone Leads to Impaired Learning in Adult Zebrafish



**Anna V. Wojcicki**, University of Minnesota, Minneapolis, MN

**Abstract Title:** Acetaminophen Increases Hepatocyte Tissue Factor Procoagulant Activity *In Vitro*

Institution Where Research Was Conducted: Michigan State University, East Lansing, MI

## SYNGENTA FELLOWSHIP AWARD IN HUMAN HEALTH APPLICATIONS OF NEW TECHNOLOGIES



**Alok Ranjan, BS**, Texas Tech University Health Sciences Center, Amarillo, TX

**Project Title:** Penfluridol, an Antipsychotic Drug: A Novel Treatment Option for Breast Cancer Metastasis to Brain





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Awards in the amount of \$1,000 each were provided to graduate students in toxicology to support travel to the SOT 54th Annual Meeting in San Diego, California.

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