

NAME: Debra L. Laskin, Ph.D.

TITLE: Distinguished Professor and Chair
Roy A. Bowers Endowed Chair of Pharmacy

ADDRESS: Department of Pharmacology and Toxicology
Rutgers University
Ernest Mario School of Pharmacy
160 Frelinghuysen Road
Piscataway, New Jersey 08854

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EDUCATION

B.A. (1975), Psychology, New York University, New York
M.A. (1977), Biopsychology, Graduate School, City University of New York at the American Museum of Natural History, New York, NY
Ph.D. (1980), Pharmacology and Toxicology, Medical College of Virginia, Virginia Commonwealth University, Richmond, VA
Post-Doctoral fellow (1980-1982), Immunology/Carcinogenesis; The Wistar Institute of Anatomy and Biology, University of Pennsylvania, Philadelphia, PA

ACADEMIC APPOINTMENTS

1975-1976: Graduate student, Graduate School, City University of New York at the American Museum of Natural History, New York, NY

1976-1980: Graduate student, Department of Pharmacology and Toxicology, Medical College of Virginia, Virginia Commonwealth University, Richmond, VA

1980-1982: NIH Post-doctoral fellow, Wistar Institute of Anatomy and Biology, University of Pennsylvania, Philadelphia, PA.

1982-1988: Assistant Professor, Department of Pharmacology and Toxicology, School of Pharmacy, Rutgers University, Piscataway, NJ.

1983-present: Faculty member, Graduate School, Rutgers University. Member of the Graduate Programs in Toxicology, Molecular Biosciences, Cell & Developmental Biology, Nutrition, Biochemistry, and Microbiology.

1988-1994: Associate Professor, Department of Pharmacology and Toxicology, Rutgers University School of Pharmacy, Piscataway, NJ.

1989-2015: Adjunct Associate Professor, Department of Environmental and Community Medicine, UMDNJ-Robert Wood Johnson Medical School, Piscataway, NJ

1994-2000: Professor, Department of Pharmacology and Toxicology, Rutgers University School of Pharmacy, Piscataway, NJ

2000-present: Distinguished Professor, Department of Pharmacology and Toxicology, Rutgers University Ernest Mario School of Pharmacy, Piscataway, NJ

2003-present: Chair, Department of Pharmacology and Toxicology, Rutgers University Ernest Mario School of Pharmacy, Piscataway, NJ

2015-present: Adjunct Professor, Department of Environmental and Occupational Health and Justice, Rutgers School of Public Health, Piscataway, NJ

HONORS AND AWARDS

- Society of Toxicology Distinguished Toxicology Scholar Award (**2025**)
- Society of Toxicology Immunotoxicology Specialty Section, Outstanding Senior Immunotoxicologist Award (**2024**)
- Society of Toxicology Immunotoxicology Specialty Section, Best Paper of the Year Award (**2024**); "Suppression of lung oxidative stress, inflammation and fibrosis following nitrogen mustard exposure by the selective farnesoid X receptor agonist obetacholic acid. *Journal of Pharmacology and Experimental Therapeutics*, 388: 586-595 (**2024**).
- Rutgers Biomedical Health Sciences Lifetime Distinguished Achievement Award (**2022**)
- Rutgers Biomedical Health Sciences Chancellor Distinguished Mentor Award (**2021**)
- Society of Toxicology Immunotoxicology Specialty Section Paper of the Year Award (**2021**); Regulation of Lung Macrophage Activation and Oxidative Stress following Ozone Exposure by Farnesoid X Receptor, *Toxicological Sciences*, 177: 441-453, 2020.
- American Society of Pharmacology and Experimental Therapeutics (ASPET), Toxicology Division Career Investigator Award (**2021**)
- Society of Toxicology, Inhalation and Respiratory Specialty Section Paper of the Year Award (**2019**); Functional Evidence of Pulmonary Extracellular Vesicles in Infectious and Noninfectious Lung Inflammation, *Journal of Immunology*, 20: 1500-1509, 2018.
- Society of Toxicology, Immunotoxicology Specialty Section Paper of the Year Award (**2019**); Functional Evidence of Pulmonary Extracellular Vesicles in Infectious and Noninfectious Lung Inflammation, *Journal of Immunology*, 20: 1500-1509, 2018.
- Society of Toxicology, Mechanisms Specialty Section Career Investigator Award (**2018**)
- New Jersey Health Foundation Excellence in Research Award (**2017**)
- Society of Toxicology Education Award (**2017**)
- Society of Toxicology, Inhalation and Respiratory Specialty Section Career Investigator Award (**2015**)
- Society of Toxicology, Women in Toxicology Mentoring Award (**2014**)
- Rutgers University Board of Trustees Award for Excellence in Research (**2009**)
- Rutgers University Faculty Recognition for Excellence in Research, Department of Athletics (**2009**)
- Society of Toxicology, Dermatology Specialty Section, Society of Toxicology, Paper of the Year Award (**2009**); UVB Light Upregulates Prostaglandin Synthases and Prostaglandin Receptors in Mouse Keratinocytes, *Toxicology and Applied Pharmacology*, 232: 14-24, 2008.
- Roy Bowers Endowed Chair, Ernest Mario School of Pharmacy (**2007**-present)
- Dolph Adams Award from the Society for Leukocyte Biology for the most cited research publication in the *Journal of Leukocyte Biology* during the previous five years entitled Production of Nitric Oxide and Peroxynitrite in the Lung During Endotoxemia (**1999**)
- Burroughs Wellcome Toxicology Scholar Award (**1993-1998**)
- Society of Toxicology Achievement Award (**1991**)
- Society for Leukocyte Biology Young Investigator Research Award (**1989**)
- Board of Publications Award (formerly Frank R. Blood Award), Society of Toxicology for the best research publication of the year in Toxicology and Applied Pharmacology entitled: Potential Role of Macrophages in Hepatotoxicity (**1988**)
- National Institutes of Health Young Investigator Award (**1983-87**)
- Virginia Academy of Sciences Research Award, Richmond, VA (**1979**)
- J. Forbes Graduate Research Award, Richmond, VA (**1978**)

CURRENT RESEARCH GRANT SUPPORT

National Institutes of Health: PHS NIH-R01 ES033698-04, "Harnessing Inflammatory Macrophages to Thwart Lung Disease Caused by Chronic Ozone Exposure"; D.L. Laskin, *Principal investigator*, project period: 2/15/22-11/30/26; \$5,000,000 total **direct** costs over the project period. This project involves studies on mechanisms controlling macrophage resolution of inflammation activity during the pathogenesis of chronic lung disease.

National Institutes of Health: PHS NIH-R01 ES004738-27, "Activated Macrophages and Ozone Toxicity"; D.L. Laskin, *Principal investigator*, project period: 09/01/22-8/30/27; \$1,900,000 total **direct** costs over the project period. This project involves studies on the role of macrophages in acute ozone induced lung injury in rodents and humans.

National Institutes of Health: PHS NIH-U54 AR055073-19, "Rutgers University CounterACT Research Center of Excellence"; J. Laskin, P.I., D.L. Laskin, *Co-investigator and PI, Research project 3-Inflammatory Mechanisms of Vesicant-induced Lung Disease; director, Training and Education Core*; project period: 9/15/21-8/31/25; \$1,600,000 total **direct** costs for D. L. Laskin over the project period. This project involves analyzing mechanisms of lung injury induced by sulfur mustard and the development of countermeasures to ameliorate toxicity.

Center for Disease Control: CDC U01OH012072, "Obstructive Sleep Apnea and WTC dust: Does Chronic Intermittent Hypoxia exacerbate WTC Dust Induced Lung Injury?" J. Sunderram/A. Gow, *Co-Principal investigators*, D.L. Laskin, *Co-investigator*, project period: 7/1/2021-6/30/2024; \$750,000 total **direct** costs over the project period. This project tests the hypothesis that chronic intermittent hypoxia exacerbates WTC dust exposure induced oxidative stress, lung injury, and alterations in lung function.

OTHER GRANT SUPPORT

National Institutes of Health: PHS NIH-R25 ES020721, "Summer Research Training in Environmental Health Sciences", D.L. Laskin, *Co-Principal investigator*, project period: 05/01/21-04/30/26; \$300,000 **direct** costs over the project period. This grant is to support summer research training for college students.

National Institutes of Health PHS NIH-P30ES005022; NIEHS Center for Environmental Exposures and Disease"; H. Zarbl, PI; D.L. Laskin, *Director, Flow Cytometry/Cell Sorting and Confocal Microscopy Facility Core*; project period: 04/01/24-03/31/29 (NCE); \$400,000 **direct** costs over the project period for D.L. Laskin.

PATENTS

Suppression of Nitric Oxide Production by Osteopontin, USA, December 1997, 5,695,761, with D. Denhardt, S.M. Hwang, D.E. Heck, C.A. Lopez and J.D. Laskin.

MAJOR RESEARCH INTERESTS

Nonspecific immunity and inflammation; role of activated macrophages and inflammatory mediators in the pathophysiology of xenobiotic-induced tissue injury. Studies on biochemical and molecular mechanisms underlying macrophage and neutrophil activation and functional activity.

PROFESSIONAL SOCIETIES

Society of Toxicology, Society of Leukocyte Biology, American Thoracic Society, American Association of Immunologists, American Association of Pharmacology and Experimental Therapeutics, American Physiological Society, American Society of Investigative Pathology

PROFESSIONAL ACTIVITIES (Rutgers University)

- 1985-present: Founder and Director Rutgers University Flow Cytometry/Cell Sorting and Confocal Microscopy Core Facility, Rutgers University.
- 1986-present: Member, Environmental and Occupational Health Sciences Institute (EOHSI), Rutgers Univ
- 1994-present: Member, Rutgers Cancer Institute of New Jersey
- 1994-2014: Member, Scientific Council, Rutgers Cancer Institute of New Jersey
- 1996-1998: Member, Internal Review Board/Animal Care and Facilities Use Committee, Rutgers Univ
- 2000-2010: Chair, Admissions Committee, Joint Graduate Program in Toxicology, Rutgers Univ
- 2004-2014: Member, Rutgers/Robert Wood Johnson Medical School Core Facilities Committee
- 2003-present: Member, Budget and Policy Committee, Ernest Mario School of Pharmacy
- 2004-present: Member, Director's Cabinet, Environmental and Occupational Health Sciences Institute
- 2004-2007: Member, Rutgers University Committee on Standards and Academic Priorities
- 2005-2014: Rutgers University/Robert Wood Johnson Medical School Shared Instrumentation Grant Joint Review committee
- 2005-present: Director, Education and Training Core, Rutgers NIAMS U54 CounterACT Center of Excellence
- 2006-2024: Deputy Director, Rutgers University NIEHS P30 Center of Excellence; Center for Environmental Exposures and Disease; Director, Career Development
- 2007: Member, Dean's Search Committee, Ernest Mario School of Pharmacy,
- 2007-present: Advisory Board Member, Rutgers Office of Women in Science, Engineering and Mathematics
- 2008-present: Organizer and Co-Director, Ernest Mario School of Pharmacy Summer Undergraduate Research Fellowship (SURF) Program
- 2009-2013: Member, Honorary Degree Committee, Rutgers University
- 2013-present: Member, Rutgers EOHSI Cabinet
- 2013-present: Organizer and Co-Director, EOHSI Toxicology, Health and Environmental Disease (THED) high school summer science program
- 2014-2015: Member, Faculty Council Rutgers Biomedical Health Sciences
- 2017-present: Member, EMSOP PharmD/MD review committee
- 2019-present: Member, Pilot Grant Committee, New Jersey Alliance for Clinical & Translational Science
- 2019-present: Member, Research Advisory Committee, New Jersey Alliance for Clinical & Translational Science
- 2020-present: Member, Research Committee, Ernest Mario School of Pharmacy
- 2023-2024: Member, Rutgers EOHSI Review Committee

PROFESSIONAL ACTIVITIES (National and International)

- August 1987: Member, PHS-NIH General Medical Sciences Pharmacological Sciences Study Section
- 1988-1992: Member Pharmacological Sciences Study Section; PHS-NIH-National Institute of General Medical Sciences
- 1988-2009: Member Research Committee, New Jersey Thoracic Society
- Oct 1988: Member, PHS-National Institutes of Health Toxicology Study Section
- June 1989: Member, PHS-National Institutes of Health Immunotoxicology Study Section
- 1989-2001: Editorial Board Member, Toxicology and Applied Pharmacology
- Oct 1989: Member, PHS-National Institutes of Health Experimental Immunology Study Section
- 1990-1993: Council member (elected), Society for Leukocyte Biology
- 1991-1992: Member, Nominations committee (elected), Society of Toxicology
- 1992-present: Editorial Board Member, Journal Toxicology and Environmental Health
- 1992-1994: Secretary/Treasurer (elected), Mechanisms Specialty Section, Society of Toxicology
- 1993-1997: Section Editor, Journal of Leukocyte Biology
- 1993-1995: Secretary (elected), Society for Leukocyte Biology
- 1994-1996: Councilor (elected), Society of Toxicology
- March 1995: Member, PHS-National Institutes of Health Lung Pathology Study Section
- 1996-2008: Chair, Research Committee, New Jersey Thoracic Society

March 1997: Member; PHS-National Institutes of Health Environmental Sciences Special Emphasis Panel
 1997-2009: Member, Governing Council, New Jersey Thoracic Society/American Lung Association of New Jersey
 1997-2000: Editorial Board Member, Inhalation Toxicology
 1998-2000: Consultant, Science Advisory Board, Clean Air Scientific Advisory Committee, Environmental Protection Agency
 Dec 1998: Reviewer, PHS-NIEHS Special Emphasis Panel
 1999-2006: Member, Eosinophilia-Myalgia Syndrome Research Advisory Council, Showa Denko America, Inc.
 Sept 1999: External review committee, Oxidant Injury Program, Health Effects Laboratory Division, National Institute for Occupational Safety and Health, Morgantown WV.
 Sept 1999: External review committee, Lovelace Respiratory Research Institute, Albuquerque, NM.
 March 2000: External grant reviewer, NIOSH, Health Effects Research Laboratory, Morgantown, WV.
 2001-present: Associate Editor, Toxicology and Applied Pharmacology
 2001- 2002: Member, Awards Committee (elected), Society of Toxicology
 March 2002: Member, NIH Respiratory Physiology Study Section
 May 2003: Member, NIH National Institute of Allergy and Infectious Diseases Study Section; Hepatotoxicity Clinical Research Network
 2003-2005: Member (elected), American Thoracic Society Environmental and Occupational Health Assembly Program Committee
 2004-2006: Council Member, Dermatotoxicology Specialty Section, Society of Toxicology
 April 2005: Member, NIH Hematology Special Emphasis Panel
 June 2007: Member; NIH National Heart Lung Blood Institute Board of Scientific Counselors Review Blue Ribbon Panel Member, National Institute of Allergy and Infectious Diseases Office of Biodefense Research Medical Countermeasures against Toxic Vesicants Workshop
 Oct 2007: Member, editorial committee, Annual Review Pharmacology and Toxicology
 2008-2012: Grant reviewer, Israel Science Foundation (ISF)
 June 2008: Member, NIH National Institute of Diabetes, Digestive and Kidney Diseases Review Panel, Drug Induced Liver Disease Clinical Network
 July 2008: Member, NIH National Institute of General Medical Sciences Review Panel, Minority Biomedical Research Program
 Aug 2008: Mentor, American Association of Immunologists- J.H. Wallace High School Teachers Program
 2008-2009: Member, NIH Systemic Injury by Environmental Exposure (SIEE) Special Emphasis Panel
 2008-2009: Chair, organizing committee; New York Academy of Sciences 4th International Conference on Oxidative/Nitrosative Stress and Disease, New York, October 28-30, 2009.
 2009-2012: Member, Continuing Education Committee, Society of Toxicology
 July 2009: Member, NIH Stage-2 Challenge Grants Distinguished Review Panel
 April 2010: Member, NIH-NIEHS Special Emphasis Panel; K application review
 April 2011: Member, NIH-NIEHS ZES1 RAM-D (LR) S, Loan Repayment Program Review Panel
 Oct 2011: Member, NIH Lung Injury and Repair Review Panel
 Jan 2012: Member, NIH Environmental Health and Toxicology Working Group
 June 2012: Member, NIH Shared Instrumentation Grant Review Panel.
 Aug 2012: Member, NIH National Institute of Diabetes, Digestive and Kidney Diseases Review Panel, Drug Induced Liver Disease Clinical Network
 Summer 2012: Mentor, American Association of Immunologists- J.H. Wallace High School Teachers Program
 Feb 2013: Member, NIH Systemic Injury by Environmental Exposure (SIEE) Special Emphasis Panel.
 April 2013: Member, NIH-NIEHS ZES1 RAM-D (LR) S, Loan Repayment Program Review Panel
 2013-2014: Chair-Elect, Toxicology Division, American Society Pharmacology and Experimental Therapeutics
 June 2013: Member, NIH Systemic Injury by Environmental Exposure (SIEE) Special Emphasis Panel
 2013-2014: Organizer and Chair, ASPET Toxicology Division Symposium, Experimental Biology Annual Meeting, San Diego, CA. April 29, 2014.

March 2014: Member, NIH/NIEHS Time Sensitive Application Review Panel
Summer 2014: American Physiological Society Undergraduate Summer Research Fellowship Host
2014-2015: Chair, Toxicology Division, American Society Pharmacology and Experimental Therapeutics
2014-2015: Member, Program Committee, American Society Pharmacology and Experimental Therapeutics
Feb 2015: Member, Stand Up to Cancer Dream Team Grant Review Committee
2014-2020: Permanent member, NIH Systemic Injury by Environmental Exposure (SIEE) Study Section
2016-2017: Vice President-elect: Inhalation and Respiratory Specialty Section, Society of Toxicology
March 2017: Member, NIH-NIEHS ZES1 RAM-S, Loan Repayment Program Special Emphasis Panel/Scientific Review Group
April 2017: External Scientific Consultant, NIH National Institute of Diabetes, Digestive and Kidney Diseases, Drug Induced Liver Injury Network
2017-2018: Vice President; Inhalation and Respiratory Specialty Section, Society of Toxicology
Jan 2018: External Reviewer, University of California Los Angeles, Molecular Toxicology Graduate Program
Summer 2018: American Physiological Society Undergraduate Summer Research Fellowship Host
Summer 2018: American Physiological Society High School Teacher Frontiers in Physiology Summer Research Mentor
2018-2019: President; Inhalation and Respiratory Specialty Section, Society of Toxicology
2019-2020: Past-president/councilor; Inhalation and Respiratory Specialty Section, Society of Toxicology
2021-pres: Deputy Director, Rutgers NIAMS U54 CounterACT Center of Excellence
Oct 2021: Member, NIH S10 Shared Instrumentation Review Panel
Feb 2022: Member, Drug-Induced Liver Injury Network (DILIN) External Expert Panel, NIH-NIDDK
2024-pres: Member, Expert Panel for Fragrance Safety, Research Institute of Fragrance Materials
2024-pres: Vice President Elect, Immunotoxicology Specialty Section, Society of Toxicology

TRAINEES/MENTEES UNDER THE DIRECTION OF DR. LASKIN (by position):

Junior Faculty

Barry Weinberger, M.D., Assistant Professor, Dept. Pediatrics, UMDNJ/Rutgers-Robert Wood Johnson Medical School; NIH Clinical Mentored Faculty Award (K08HD042036); 2002-2007; D. Laskin, primary mentor. Current Position: Faculty, Dept. Neonatal-Perinatal Medicine, Cohen Children's Medical Center, Feinstein Institutes for Medical Research, Northwell Health, NY

Nazeeh Hanna, M.D., Assistant Professor, Dept. Pediatrics, UMDNJ/Rutgers-RWJMS, NIH R21 Grant; 2005-2007; D. Laskin, co-investigator. Current position: Faculty and Chief of Neonatology, Winthrop University Hospital, New York University School of Medicine, Long Island, NY.

Robert Laumbach, M.D., Assistant Professor, Dept. Environmental and Occupational Medicine, UMDNJ-RWJMS; NIH Clinical Mentored Faculty Award (K08ES013520; 2005-2010); D. Laskin, primary mentor. Current Position: Dept. Environmental and Occupational Health and Justice, Rutgers School of Public Health

Isaac Kim, M.D./Ph.D., Assistant Professor, Dept. Surgery, UMDNJ-RWJMS; Edwin Beer Fellowship Award New York Academy of Medicine (2006-2008); D. Laskin, primary mentor. Current Position: Professor, Chair, Department of Surgery Yale University School of Medicine

Rama Malaviya, Ph.D., Research Associate, Dept. Pharmacology and Toxicology, Rutgers School of Pharmacy; NIH Mentored Faculty Award (K01HL0964); 2009- 2014; D. Laskin, primary mentor. Current Position, Research Associate Professor, Dept. Pharmacology and Toxicology, Rutgers School of Pharmacy

Jared Radbel, M.D., Assistant Professor, Dept. Medicine, Rutgers RWJMS; NIH Clinical Mentored Faculty Award (K08ES031678); 2020-2025; D. Laskin, primary mentor.

Post-Doctoral Trainees

Carol A. Gardner, Ph.D. (1985-1988)

current position: Associate Research Professor, Rutgers University School of Pharmacy

Sean M. O'Connell, Ph.D. (1985-1988)

current position: Chief Scientist, CN.USA Biotech, NJ

Natalia Lavnikova, Ph.D. (1990-1993)
current position: retired

Lesley Heylar, Ph.D. (1990-1993)
current position: Staff Scientist, Eastern Maine Medical School

Chitra Punjabi, Ph.D. (1991-1993)
current position: Staff Scientist, Staten Island University Hospital

Marina Rodriguez del Valle, Ph.D. (1992-1993)
current position: Professor, University of Monterey, Mexico

Kimberly Pendino, Ph.D. (1991-1994)
current position: Executive Director, Global Head of Preclinical Development, Merck, NJ

Kimberly Hooper, Ph.D. (1997-1999)
current position: Toxicology Consultant

Lisa Morio, Ph.D. (1999-2001)
current position: Principal Scientist, GlaxoSmithKline, PA

Anna Vetrano, Ph.D. (2002-2005)
current position: Toxicology consultant, NJ

Farah Kahn, Ph.D. (2006-2008)
current position: Research Scientist, Sydney Australia

Yinglin Liu, Ph.D. (2008-2011)
Current position: Senior Staff Scientist, Regeneron Pharmaceuticals, NY

Mili Mandal, Ph.D. (2012-2014)
current position: Senior Scientist- CAR-T, Cancer Immunotherapy, Fate Therapeutics, San Diego, CA

Ley Cody Smith, Ph.D. (2017-2022)
current position: Assistant Professor, University of Connecticut School of Pharmacy

Julia Herbert, D.V.M., Ph.D. (2020-2023)
Current position: Assistant Research Professor, Rutgers University School of Pharmacy; Staff Scientist, Comparative Medicine Resources, Rutgers Office of Research

Candace Langoria, Ph.D. (2023-present)

Stacia Nicholson, Ph.D. (2024-present)

Doctoral Students

Randolph A. Soltys (Toxicology, Ph.D. 1987)
current position: Vice President, Drug Safety and Pharmacometrics, Regeneron Pharmaceuticals, NY

Anne M. Pilaro (Toxicology, Ph.D. 1988)
Senior Scientific Advisor for Toxicology, US Food and Drug Administration, Washington, DC

Andrea A. Sirak (Toxicology, Ph.D. 1989)
current position: Toxicologist, Johnson & Johnson Pharmaceuticals, NJ

Thomas McCloskey (Microbiology, Ph.D. 1991)
current position: Director, Global Research and Development, ICON Central Laboratories, East Northport, NY

Laureen MacEachern (Toxicology, Ph.D. 1991)
current position: Scientific Medical Affairs Consultant, NY/NJ

Lisa Feder (Microbiology, Ph.D. 1993)
current position: Vice President Medical Direction, Peloton Advantage, NJ

Adrienne Garcia-Welsh (Nutrition, Ph.D. 1993)
current position: Director Clinical Studies, Medical Pracitioners Inc., Fairlawn, NJ

Theresa Wizemann (Microbiology, Ph.D. 1994)
current position: President; Wizemann Scientific Communications, PA

Svetlana Prokhorova (Cell and Developmental Biology, Ph.D. 1996)
current position: Senior Research Analyst, Russell Corp., NY

Lisa Morio (Toxicology, Ph.D. 1999)
current position: Microbiology Technical Lead, GlaxoSmithKline, Philadelphia, PA

Vasanthi Sunil (Microbiology and Molecular Genetics, Ph.D. 2000)

current position: Associate Research Professor, Rutgers University, NJ
Nosheen Ahmad (Toxicology, Ph.D. 2001)
current position: Associate Director, Toxicology, Johnson & Johnson Consumer and Personal Products, NJ
Donna Dambach (Toxicology, Ph.D., D.V.M., 2002)
current position: Senior Vice President, Toxicology, Molecular & Cellular Assays, Santa Biotechnology, Inc., San Francisco, CA
Ladan Fakhrzadeh (Toxicology, Ph.D. 2002)
current position: Manager, Global Clinical Safety Strategy Lead, Johnson & Johnson Consumer Healthcare, Worldwide
Brian Chiu (Toxicology, Ph.D. 2003)
current position: Toxicologist, Food and Drug Administration, Washington DC
Li Chen (Toxicology, Ph.D., 2007)
current position: Principal Investigator, PharmaNest, Princeton, NJ
Ana-Cristina Dragomir (Toxicology, Ph.D., 2012)
current position: Toxicologist, Intuitive Surgical, Sunnyvale, CA
Agnes Connors (Toxicology, Ph.D., 2012)
current position: Biochemist II, Siemens Health Care, NY
Angela Groves (Toxicology, Ph.D., 2013)
current position: Assistant Professor, University of Rochester School of Medicine, NY
Alessandro Venosa (Toxicology, Ph.D., 2015)
current position: Assistant Professor, University of Utah, Salt Lake City, UT
Mary Francis (Toxicology, Ph.D., 2016)
current position: Toxicologist, Church & Dwight Co., NY
Alexa Murray (Toxicology, Ph.D., 2022)
Current position: Toxicologist, Bristol Myer Squibb, San Diego, CA
Jaclyn Andres Meshanni (Toxicology, Ph.D., 2023)
Current position: Postdoctoral fellow, University of Pennsylvania
Alyssa Belloma (Toxicology, Ph.D., 2024)
Current position: Toxicologist, Colgate Palmolive, NJ
Jessica Rodriguez (Toxicology, 2022-present)
Benjamin Gelfand (Toxicology, 2023-present)
Rachel Sun (Toxicology, 2024-present)
Melissa Kudlak (Toxicology, 2024-present)

Undergraduates (Recent examples)

James Gow (Dartmouth); Rutgers Summer Undergraduate Research Fellow (SURF), 2018; 2019; Current position, MD/PhD student, Rutgers Robert Wood Johnson Medical School (2022-present)
Jordan Lee (Rutgers MBSS Honors student); 2017-2020;
Current position: Doctoral Student, Rutgers Graduate Program in Toxicology, 2021-present
Tanvi Banota (Rutgers Honors College student); 2018- 2022; Current position, MD/PhD student, Yale University (2022-present)
Talia Seymore (Penn State student); Rutgers Summer Undergraduate Research Fellow (SURF), 2019; Current position: Doctoral student, Rutgers Graduate Program in Toxicology, 2020-present
Alyssa Belloma (Kean University); Rutgers Summer Undergraduate Research Fellow (SURF), 2018; Current position: Doctoral student, Rutgers Graduate Program in Toxicology
Chenghui Jiang (Rutgers Pharmacy Honors College student); 2019-2021;
Current position: Doctoral Student, Rutgers PharmD/Ph.D. program
Rachel Sun (Rutgers School of Pharmacy Honors College student); 2022-2024; Current position: Doctoral Student, Rutgers PharmD/Ph.D. program
Melissa Kudlak (Rutgers School of Pharmacy Honors College student); 2022-2024; Current position: Doctoral Student, Rutgers PharmD/Ph.D. program

TRAINEE AWARDS (Recent Selected)

Junior Faculty

- Barry Weinberger, M.D. (Associate Professor, Dept. Pediatrics, UMDNJ (now Rutgers)-Robert Wood Johnson Medical School (RWJMS); NIH Clinical Mentored Faculty Award (K08HD042036), Altered Neutrophil Apoptosis/Bronchopulmonary Dysplasia; 2002-2007 (D. Laskin, primary mentor).
- Robert Laumbach, M.D. (Assistant Professor, Dept. Environmental and Occupational Medicine, UMDNJ-RWJMS); NIH Clinical Mentored Faculty Award (K08ES013520). Mechanisms of Responses to Diesel Exhaust and Stress, 2005-2010 (D. Laskin, primary mentor).
- Isaac Kim, M.D. (Assistant Professor, Dept. Surgery, UMDNJ-RWJMS); Edwin Beer Fellowship award, New York Academy of Medicine. Immuno-Gene Therapy for Prostate Cancer Based on Transforming Growth Factor- β Insensitive Macrophages; 2006-2008 (D. Laskin, primary mentor).
- Rama Malaviya, Ph.D. (Assistant Research Professor, Dept. Pharmacology and Toxicology, Rutgers School of Pharmacy); NIH Mentored Faculty Award (K01HL096426), Role of Nitric Oxide in Radiation-induced Lung Injury. 2009- 2014 (D. Laskin primary mentor).
- Jared Radbel, M.D. (Assistant Professor, Dept. Medicine, Rutgers RWJMS); NIH Clinical Mentored Faculty Award (K08), Ozone Exacerbation of ARDS; 2020-2025 (D. Laskin, primary mentor).

Postdoctoral Trainees

- Yinglin Liu, Ph.D., Society of Toxicology (SOT), Mechanisms Specialty Section Postdoctoral Award (2010)
- Mili Mandal, Ph.D., SOT Gabriel L. Plaa Education Award (2013); SOT HESI Immunotoxicology Young Investigator Travel Award (2013); SOT Mechanisms Specialty Section Postdoctoral Research Award, 2nd place (2013); SOT Emil A. Pfizer Drug Discovery Student Award (3rd place (2013)
- Alessandro Venosa, Ph.D., ASPET Toxicology Division best poster award; Experimental Biology (2016)
- Cody Smith, Ph.D., NIH K99/R00 Pathway to Independence Award (2021-2026); NIH F32 postdoctoral fellowship (2019-2020); SOT Donald E. Gardner Inhalation Toxicology Education Award, Inhalation and Respiratory Specialty Section (2020); SOT Toxicologic and Exploratory Pathology Specialty Section travel award (2020); Endocrine Society Outstanding Poster and Travel Award (2019); Gordon Research Conference on Cellular and Molecular Mechanisms of Toxicity, Best Postdoc Poster (2019); Blavatnik Foundation, Rutgers nominee for regional award for young scientists (2021); SOT Mechanisms G. Plaa Award (2021); ASPET Toxicology Division 1st place Postdoctoral Poster Award (2021); SOT Inhalation and Respiratory Specialty Section Postdoctoral Award (2022); SOT Immunotoxicology Specialty Section Best Presentation by a Postdoct Award (2023).
- Julia Herbert, Ph.D., D.V.M., SOT In Vivo and Alternative Methods Specialty Section Research Award for Distinction in Practical In vitro and Alternatives (2022).
- Candace Longoria, Ph.D. SOT Hispanic Organization of Toxicologists Special Interest Group Travel Award (2024).

Doctoral Students

- Li Chen (doctoral student, Toxicology); Society of Toxicology (SOT) Exploratory Pathology Specialty Section Graduate Student Research Award (2003).
- Agnes Connors (doctoral student in Toxicology); Air Pollution and Education Research Scholarship, Mid-Atlantic States Section Air and Waste Management Association (2005-2007).
- Angie Groves (doctoral student, Toxicology); SOT Graduate Student Travel Award (2010); SOT Inhalation Specialty Section Student Research Award (2010)
- Ana-Cristina Dragomir (doctoral student in Toxicology); SOT Graduate Student Travel Award (2011); Society for Leukocyte Biology Presidential Student Research Award (2011); SOT Toxicologic Pathology Specialty Section Student Research Award (2012); SOT Immunotoxicology Specialty Section Student Research Award, 1st place (2012); Society of Toxicologic Pathology Student Travel Award (2012)
- Mary Francis (doctoral student in Toxicology); SOT Mechanisms and Risk Assessment Specialty Sections Robert J. Rubin Student Travel Award (2014); SOT Inhalation

and Respiratory Specialty Section Mary Amdur Award (2015); SOT Mechanisms and Risk Assessment Specialty Sections Robert J. Rubin Student Travel Award (2015); SOT Mechanisms Specialty Section Sheldon Murphy Student Travel Award (2016)

Alessandro Venosa (doctoral student in Toxicology); SOT Toxicologic and Exploratory Pathology Specialty Section Travel Award (2014); SOT Outstanding Graduate Student Leadership Committee Award (2014); SOT Inhalation and Respiratory Specialty Section Graduate Student Research Award (2015); American Society for Pharmacology and Experimental Therapeutics, Best Abstract, 3rd place (2015).

Sheryse Taylor (doctoral student in Toxicology); SOT Inhalation and Respiratory Specialty Section Mary Amdur Award (2017); SOT Toxicologic and Exploratory Pathology Specialty Section Student Travel Award (2019).

Alexa Murray (doctoral student in Toxicology); Society of Toxicology Toxicologic and Exploratory Pathology Specialty Section Student Research Award (2019); Mid-Atlantic SOT Student Research Award (2019); 2nd place Best Oral Student Presentation, Lingnan International Drug Metabolism and Pharmacokinetics Forum (2019); Mid-Atlantic SOT Student Achievement Award (2019); CounterACT Trainee Excellence Award, 13th Annual Countermeasures Against Chemical Threats Research Symposium (2019); SOT Mechanisms Specialty Section Robert J. Rubin Student Travel Award (2020); SOT Supplemental Training for Education Program (STEP) Award (2020); Rutgers School of Graduate Studies Excellence in Leadership and Teaching Award (2021)

Alyssa Belloma (doctoral student in Toxicology); SOT RSESS Graduate Student Excellence Award (2021); ASPET Toxicology Division 2nd place Graduate Student Poster Award (2021); SOT Biotechnology Specialty Section Student Award (2022); SOT Women in Toxicology Special interest Group Celebrating Women in Toxicology Student Award (2023).

Jacklyn Andres Meshanni (doctoral student in Toxicology); SOT Biotechnology Graduate Student Achievement Award (2021); ASPET Toxicology Division 3rd place Graduate Student Poster Award (2021); SOT Comparative Toxicology, Pathology and Veterinary Specialty Section Student Award (2022); SOT Mechanisms Specialty Section Carl Smith Graduate Student Award (2022); SOT Mechanisms Specialty Section Sheldon D. Murphy Award (2023); SOT Comparative Toxicology and Veterinary Specialty Section Soc. Toxicol. Pathol. Graduate Student Award (2023); SOT Nanoscience and Advanced Materials Specialty Section Scireq NAMMS Special Award (2023); SOT Women in Toxicology Special interest Group Vera W. Hudson and Elizabeth Weisburger Scholarship Fund Student Award (2023).

Jessica Rodriguez (doctoral student in Toxicology); SOT Immunotoxicology Specialty Section Mitzi and Prakash Nagarkatti Research Excellence Award (2024)

Undergraduates

Melissa Kudlak (Rutgers Honors College student); SOT Undergraduate Research Award (2023); Toxicology Mentoring and Skills Development Training Program (2023-present); National Hispanic Health Foundation (NHHF) Professional Student Fellowship (2024-present).

Rachel Sun (Rutgers Honors College student); MidAtlantic SOT Undergraduate Research Award (2023); ASPET Undergraduate Research Award (2023); SOT Women in Toxicology Special interest Group Celebrating Women in Toxicology Student Award (2023)

Benjamin Gelfand (Rutgers EMSOP Honors student); SOT Molecular and Systems Biology Specialty Section Undergraduate Student Award (2023).

Jordan Lee (Rutgers MBSS Honors student); American Physiological Society Summer Research Fellowship (2018); Rutgers Summer Undergraduate Research Fellow (SURF) (2019); American Society for Pharmacology and Experimental Therapeutics (ASPET) Undergraduate Travel Award (2020); SOT Pfizer Undergraduate Travel Award (2020); Finalist, Trainee Poster Award, Mid-Atlantic SOT Meeting (2020);

Tanvi Banota (Rutgers Honors College student); Barry Goldwater National Scholar Award (2020); Aresty Research Center Conference Fellowship Award (2020; 2021); ASPET 1st place Undergraduate Presentation Award (2021); ASPET Travel Award (2021). American Society for Investigative Pathology Summer Undergraduate Research Fellowship (2021); Rutgers Aresty Research Center Fellowship Award (2021); SOT Celebrating Women in Toxicology National Undergraduate Award (2021); Mid-Atlantic SOT 3rd place (2021); Presentation Award (2021) ASPET Travel Award (2021); American Society for Investigative Pathology (ASIP) Research Training Award

(2021); ASIP Summer Undergraduate Presentation Award (2021); Rutgers Summer Undergraduate Research Fellow (2021); SOT National Undergraduate Research Fellowship (2021); SOT RC4 Undergraduate Travel Award, National Finalist (2021); Phi Beta Kappa Honor Society (2021); American Physician Scientists Association (APSA) Northeast Regional Conference, 2nd place Poster Award (2021); APSA Southeastern Medical Scientist Symposium Oral Presentation Award (2021) Talia Seymore (Penn State student); Rutgers Summer Undergraduate Research Fellow (SURF) (2019); SOT Perry J. Gehring Diversity Student Travel Award (2020) Melissa Kudlak (Rutgers Pharmacy student); SOT Hispanic Organization of Toxicologists Special Interest Group Undergraduate Travel Award (2024); SOT Women in Toxicology Special Interest Group Celebrating Women in Toxicology Award (2024) Rachel Sun (Rutgers Pharmacy student); SOT Risk Assessment Specialty Section Three Minute Thesis Award (2024)

PUBLICATIONS

JOURNAL PUBLICATIONS

1. Laskin, D.L., Laskin, J.D., Weinstein, I.B., Carchman, R.A. (1980). Modulation of phagocytosis by tumor promoters and epidermal growth factor in normal and transformed macrophages. *Cancer Research*, 40: 1028-1035.
 2. Kessler, F.K., Laskin, D.L., Borzelleca, J.F., Carchman, R.A. (1980). Assessment of somatogenotoxicity of povidone-iodine using two in vitro assays. *Journal of Environmental Pathology and Toxicology*, 3: 327-335.
 3. Laskin, D.L., Laskin, J.D., Weinstein, I.B., Carchman, R.A. (1981). Induction of chemotaxis in mouse peritoneal macrophages by phorbol ester tumor promoters. *Cancer Research*, 41: 1923-1928.
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 7. Laskin, D.L., Rovera, G. (1985). Stimulation of human neutrophilic granulocyte chemotaxis by monoclonal antibodies. *Journal of Immunology*, 134: 1146-1152.
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10. Pilaro, A.M., Laskin, D.L. (1986). Accumulation of mononuclear phagocytes in the liver following lipopolysaccharide treatment of rats. *Journal of Leukocyte Biology*, 40: 29-41.
 11. Laskin, J.D., Lee, E., Laskin, D.L., Gallo, M.A. (1986). Psoralens potentiate ultraviolet light-induced inhibition of epidermal growth factor binding. *Proceedings of the National Academy of Sciences (USA)* 83: 8211-8215.
 12. Laskin, D.L., Pilaro, A.M. (1986). Potential role of macrophages in acetaminophen hepatotoxicity. I. Isolation and characterization of activated macrophages from rat liver. *Toxicology and Applied Pharmacology*, 86: 204-215.
 13. Laskin, D.L., Pilaro, A.M., Ji, S. (1986). Potential role of macrophages in acetaminophen

hepatotoxicity. II. Mechanism of macrophage accumulation and activation. Toxicology and Applied Pharmacology, 86: 216-226. ****Board of Publications Award- Society of Toxicology**

14. Laskin, D.L., Gardner, C.A., Laskin, J.D. (1987). Induction of chemotaxis in mouse peritoneal macrophages by activators of protein kinase C. Journal of Leukocyte Biology, 41: 474-480.
15. Gardner, C.R. Wasserman, A.J., Laskin, D.L. (1987). Differential sensitivity of tumor targets to liver macrophage mediated cytotoxicity. Cancer Research, 47:6686-6691.
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21. Laskin, D.L., Soltys, R.A., Berg, R.A., Riley, D.J. (1990). Activation of neutrophils by factors released from alveolar macrophages stimulated with collagen-like polypeptides. American Journal of Respiratory Cell and Molecular Biology, 2: 463-470. ****Journal cover**.
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****Editors Highlight**

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- **Paper of the Year Award, Society of Toxicology Inhalation Specialty Section (2024)**
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INVITED LECTURES AND SEMINARS (SINCE 2018)

- “Mechanisms of Mustard Lung Injury: Targets for Drug Development”; 12th Annual Network Research Symposium, NIH CounterACT Program, Denver, CO., June 13-15, 2018.
- “Inflammatory Mechanisms of Lung Injury Induced by Pulmonary Toxicants”; University of Cincinnati, November 27, 2018.
- “Role of Pro- and Anti-inflammatory Macrophages in Ozone-induced Lung Injury and Resolution”. NIH-National Institute of Environmental Health Sciences (NIEHS) Inflammation Resolution Biology Workshop, Durham, NC, March 26, 2019.
- “Natural history of Inhaled Sulfur Mustard Poisoning in Rats. Mitigation of lung Injury and Fibrosis by Anti-TNF α Antibody”. 17th Medical Chemical Defense Conference; Institute for Pharmacology and Toxicology Bundeswehr, Munich, Germany, March 28, 2019.
- “Mechanisms of Mustard Lung Injury: Targets for Drug Development”; 13th Annual Network Research Symposium, NIH CounterACT Program, New York, NY, June 13-15, 2019.
- “Inflammatory Macrophages: Agents of Defense or Destruction in the Pathogenesis of Lung Disease?” 29th Annual Keck Center Research Conference. Precision Environmental Health: Integrating Environmental Sciences, Genomics, and Data Science to Advance Human Health, Houston, TX, October 11, 2019.
- “Pathologic Effects of Ozone Exposure: Role of Inflammatory Macrophages”. Ozone Research Center Symposium, Rutgers University, June 17, 2020.
- “Inflammatory Macrophages: Agents of Defense or Destruction in the Pathogenesis of Lung Disease?”. Sapienza University of Rome, Latina Italy, February 27, 2020.
- “Macrophage Phenotype and Inflammation in Lung Injury and Resolution: Role of Lipid Metabolism”. Symposium: Resolution of Inflammation; Society of Toxicology Annual Meeting- May 11, 2020 (virtual)
- “Inflammatory Macrophages and Tissue Injury: Agents of Defense or Destruction?” University of Utah College of Pharmacy, April 22, 2021 (virtual).
- “Inflammatory Macrophages and Tissue Injury: Agents of Defense or Destruction?” American Society of Pharmacology and Experimental Therapeutics Toxicology Division, April 30, 2021 (virtual).
- “Inflammatory Macrophages: Agents of Defense or Destruction?” Fairleigh Dickinson University School of Pharmacy & Health Sciences Annual Research Symposium; guest speaker, April 30, 2021 (virtual).
- “Inflammation, Tissue Injury and Disease Pathogenesis”. Rutgers Ernest Mario School of Pharmacy, Basic and Clinical Research Forum, May 5, 2021 (virtual).
- “Lung Toxicity of Ozone and Particulate Matter”. 16th Annual Symposium: Center of Excellence in Environmental Toxicology, Perelman School of Medicine University of Pennsylvania, November 19, 2021 (virtual).
- “Sulfur Mustard Lung Injury and Fibrosis: Identifying Targets and Developing Countermeasures”. NIH NIAID Workshop; “Overlapping Science in Radiation and Sulfur Mustard Exposures of Skin and Lung: Consideration of Models, Mechanisms, Organ Systems, and Medical Countermeasures, January 13, 2022 (virtual).

“Role of Lipids in Macrophage Foam Cell Formation and Pulmonary Fibrosis”. Symposium Speaker, Lung Lipids in Xenobiotic-induced Tissue Injury and Disease Pathogenesis, Society of Toxicology Annual Meeting, March 31, 2022.

“Inflammatory Mechanisms of Fibrosis following Exposure to Mustard Vesicants”. 14th Annual Network Research Symposium, NIH CounterACT Program, New Orleans, June 23-25, 2022.

“Role of Proresolution Macrophages in Chronic Ozone Exposure Pulmonary Effects” American Thoracic Society International Conference, Washington DC, May 24, 2023.

“Macrophages and Pulmonary Fibrosis: Role of Pulmonary Lipids”. Sapienza University of Rome, Latina, Italy, June 6, 2023.

“Regulation of Macrophage Activation by noncoding RNAs”. World Congress of Inflammation, Quebec, Canada, July 2024.

“Macrophages in Lung Injury and Disease Pathogenesis”. Polish Society of Toxicology, Poznan, Poland, September 2024.