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

PHONE/FAX: 848-445-5862
EMAIL: laskin@eohsi.rutgers.edu

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 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; Regulation of Lung Macrophage Activation and Oxidative Stress following Ozone Exposure by Farnesoid X Receptor, *Toxicological Sciences, 177: 441-453, 2020*. (**2021**)
- 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 ES033698-03, “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 AR055073-17, “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, *Deputy Director of Center*, and Director, Flow Cytometry/Cell Sorting and Confocal Microscopy Facility Core; project period: 05/01/19-03/31/24 (NCE); pending new award; $125,000 **direct** costs per year 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-present: 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-present: 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
Oct 2007: Blue Ribbon Panel Member, National Institute of Allergy and Infectious Diseases Office of Biodefense Research Medical Countermeasures against Toxic Vesicants Workshop
2008-2012: Member, editorial committee, Annual Review Pharmacology and Toxicology
June 2008: Grant reviewer, Israel Science Foundation (ISF)
July 2008: Member, NIH National Institute of Diabetes, Digestive and Kidney Diseases Review Panel, Drug Induced Liver Disease Clinical Network
Aug 2008: Member, NIH-National Institute of General Medical Sciences Review Panel, Minority Biomedical Research Program
2008-2009: Mentor, American Association of Immunologists- J.H. Wallace High School Teachers Program
Feb 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)

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, 2019-present)
Jessica Rodriguez (Toxicology, 2022-present)
Benjamin Gelfand (Toxicology, 2023-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 positon: Doctoral student, Rutgers Graduate Program in Toxicology, 2020-present
Alyssa Belloma (Kean University); Rutgers Summer Undergraduate Research Fellow (SURF), 2018; Current positon: Doctoral student, Rutgers Graduate Program in Toxicology, 2019-present
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-present
Melissa Kudlak (Rutgers School of Pharmacy Honors College student); 2022-present

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.

4. Laskin, D.L., Laskin, J.D., Kessler, F.K., Weinstein, I.B., Carchman, R.A. (1981). Enhancement of macrophage mediated cytotoxicity by phorbol ester tumor promoters. Cancer Research, 41: 4523-4528.

5. Sturm, R.S., Smith, B., Laskin, D.L., Harris, L., Carchman, R.A. (1983). Antagonist of phorbol-ester receptor mediated chemotaxis in mouse peritoneal macrophages. Cancer Research, 43: 4552-4556.

6. Riley, D.J., Kerr, J.S., Guss, H.N., Curran, S.F., Laskin, D.L., Berg, R.A. (1984). Intratracheal instillation of collagen peptides induces a neutrophil influx into rat lungs. Transactions of the American Association of Physicians, XCVII: 290-295.

7. Laskin, D.L., Rovera, G. (1985). Stimulation of human neutrophilic granulocyte chemotaxis by monoclonal antibodies. Journal of Immunology, 134: 1146-1152.

8. Laskin, J.D., Yurkow, E., Lee, E., Laskin, D.L., Gallo, M.A. (1985). A possible mechanism of psoralen phototoxicity not involving direct interaction with DNA. Proceedings of National Academy of Sciences (USA), 82: 6152-6158.

9. Laskin, D.L., Kimura, T., Sakakibara, S., Riley, D., Berg, R.A. (1986). Chemotactic activity of collagen-like polypeptides for human peripheral blood neutrophils. Journal of Leukocyte Biology, 39: 255-266. ****Journal Cover**

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.

16. Riley, D.J., Berg, R.A., Kerr, J.S., Guss, H.N., Curran, S.F. Soltys, R.A., Laskin, D.L. (1988). Neutrophil response following intratracheal instillation of collagen peptides into rat lungs. Experimental Lung Research, 14: 549-563.

17. Laskin, D.L., Robertson, F.M., Pilaro, A.M., Laskin, J.D. (1988). Activation of liver macrophages by phenobarbital. Hepatology, 8:1051-1055.

18. Laskin, D.L., Sirak, A.A., Pilaro, A.M., Laskin, J.D. (1988). Functional and biochemical properties of rat Kupffer cells and peritoneal macrophages. Journal of Leukocyte Biology, 44: 71-78.

19. Laskin, D.L., MacEachern, L., Snyder, R.S. (1989). Activation of bone marrow phagocytes following benzene treatment of mice. Environmental Health Perspectives, 82: 75-79.

20. Laskin, D.L., Beavis, A.J., Sirak, A.A., O'Connell, S.M., Laskin, J.D. (1990). Differentiation of U-937 histiocytic lymphoma cells toward mature neutrophilic granulocytes by dibutyryl cyclic adenosine-3',5'-monophosphate. Cancer Research 50: 20-25.

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**.

22. Reiners, J.J., Cantu A.R., Pavone A., Smith, S.C., Gardner, C.R., Laskin, D.L. (1990). Fluorescence assay for per cell estimation of cytochrome P-450 dependent monooxygenase activities in keratinocyte suspensions and cultures. Analytical Biochemistry, 188: 317-324.

23. Sirak, A.A., Laskin, J.D., Robertson, F.M., Laskin, D.L. (1990). Failure of f-met-leu-phe to induce chemotaxis in differentiated HL-60 promyelocytic leukemia cells. Journal of Leukocyte Biology, 48: 333-342.

24. Robertson, F.M., Beavis, A., Laskin, J.D., Laskin, D.L., Reiners, J.J. (1990). Production of reactive oxygen intermediates in epidermal cells following topical application of phorbol ester tumor promoters. Cancer Research, 50: 6062-6067.

25. Laskin, D.L., Sirak, A.A., Robertson, F.M., Laskin, J.D. (1991). Distinct patterns of calcium mobilization in human neutrophils and differentiated myeloid leukemia cells. Journal of Leukocyte Biology, 49: 369-379.

26. Laskin, J.D., Gardner, C.R., Dokidis, A., Laskin, D.L. (1991). Changes in sulfated proteoglycan production following activation of rat liver macrophages. Hepatology, 14: 306-312.

27. Laskin, J.D., Dokidis, A., Sirak, A.A., Laskin, D.L. (1991). Distinct patterns of sulfated proteoglycan biosynthesis in human monocytes, granulocytes and myeloid leukemia cells. Leukemia Research, 15: 515-523.

28. Laskin, D.L., Sirak, A.A., Laskin, J.D. (1991). Differentiation of HL-60 myeloid leukemia cells is associated with a transient block in the G_2 phase of the cell cycle. Cell Proliferation, 24: 341-353.

29. Gardner, C.R., Wasserman, A.J., Laskin, D.L. (1991). Liver macrophage mediated cytotoxicity involves phagocytosis of tumor targets. Hepatology, 14: 318-324.

30. Laskin, J.D., Dokidis, A., Laskin, D.L. (1991). Alterations in epidermal sulfated proteoglycan production following topical application of the tumor promoter 12-O- tetradecanoyl phorbol-13-acetate to mouse skin. Cancer Biochemistry and Biophysics, 12: 69-79.

31. MacEachern, L., Laskin, D.L. (1992). Increased production of tumor necrosis factor by bone marrow leukocytes following benzene treatment of mice. Toxicology and Applied Pharmacology, 113: 260-266.

32. McCloskey, T.W., Todaro, J.A., Laskin, D.L. (1992). Effects of lipopolysaccharide treatment of rats on hepatic macrophage and endothelial cell antigen expression and oxidative metabolism. Hepatology, 16: 191-203.

33. Punjabi, C., Laskin, D.L., Heck, D., Laskin, J.D. (1992). Production of nitric oxide by bone marrow cells: Inverse correlation with cellular proliferation. Journal of Immunology, 149: 2179-2184.

34. Heck, D., Laskin, D.L., Gardner, C.R., Laskin, J.D. (1992). Epidermal growth factor suppresses nitric oxide and hydrogen peroxide production by keratinocytes. Potential role of nitric oxide in the regulation of wound healing. Journal of Biological Chemistry, 267: 21277-21280.

35. MacEachern, L., Snyder, R., Laskin, D.L. (1992). Alterations in the morphology and functional activity of bone marrow phagocytes following benzene treatment of mice. Toxicology and Applied Pharmacology, 117: 147-154.

36. Feder, L.S., Todaro, J.A., Laskin, D.L. (1993). Characterization of interleukin-1 and interleukin-6 production by hepatic endothelial cells and macrophages. Journal of Leukocyte Biology, 53: 126-132.

37. Gardner, C.R., Laskin, J.D., Laskin, D.L. (1993). Platelet activating factor-induced calcium mobilization and oxidative metabolism in hepatic macrophages and endothelial cells. Journal of Leukocyte Biology, 53: 190-196. ****Journal Cover**

38. Lavnikova, N., Prokhorova, S., Helyar, L., Laskin, D.L. (1993). Isolation and partial characterization of subpopulations of alveolar macrophages, granulocytes and highly enriched interstitial macrophages from rat lung. American Journal of Respiratory Cell and Molecular Biology, 8: 384-392.

39. Wartenberg, D., Laskin, D.L., Kipen, H.M. (1993). Human immunotoxicologic markers of chemical exposures: Preliminary validation studies. Journal of Exposure Analysis and Environmental Epidemiology, 3: 51-61.

40. Pendino, K.J., Gardner, C.R., Laskin, J.D., Laskin, D.L. (1993). Induction of functionally active platelet activating factor receptors in rat alveolar macrophages. Journal of Biological Chemistry, 268: 19165-19168.

41. Lavnikova, N., Drapier, J.C., Laskin, D.L. (1993). A single exogenous stimulus activates rat macrophages for nitric oxide production and cytotoxicity. Journal of Leukocyte Biology, 54: 322-328.

42. Pendino, K.J., Laskin, J.D., Shuler, R.L., Punjabi, P., Laskin, D.L. (1993). Enhanced production of nitric oxide by rat alveolar macrophages following inhalation of a pulmonary irritant is associated with increased expression of nitric oxide synthase. Journal of Immunology, 151: 7196-7205.

43. Hwang, S.M., Lopez, C.A., Heck, D.E., Gardner, C.R., Laskin, D.L., Laskin, J.D., Denhardt, D.T. (1994). Osteopontin inhibits induction of nitric oxide synthase gene expression by inflammatory mediators in mouse kidney epithelial cells. Journal of Biological Chemistry, 269: 711-715.

44. Laskin, D.L., Soltys, R.A., Berg, R.A., Riley, D.J. (1994). Activation of alveolar macrophages by native and synthetic collagen-like polypeptides. American Journal of Respiratory Cell and Molecular Biology, 10: 58-64.

45. Prokhorova, S., Lavnikova, N., Laskin, D.L. (1994). Functional characterization of interstitial macrophages and subpopulations of alveolar macrophages from rat lung. Journal of Leukocyte Biology, 55: 141-146.

46. Feder, L.S., Laskin, D.L. (1994). Regulation of hepatic endothelial cell and macrophage proliferation and nitric oxide production by GM-CSF, M-CSF and IL-1∃ following acute endotoxemia. Journal of Leukocyte Biology, 55: 507-513.

47. Punjabi, C., Laskin, J.D., Hwang, S.M., MacEachern, L., Laskin, D.L. (1994). Enhanced production of reactive nitrogen intermediates by mouse bone marrow cells and increased sensitivity to M-CSF is associated with induction of nitric oxide synthase gene expression. Blood, 83: 3255-3263.

48. Punjabi, C.J., Pendino, K.J., Laskin, J.D., Laskin, D.L. (1994). Production of nitric oxide by rat type II pneumocytes. Increased expression of inducible nitric oxide synthase following exposure to a pulmonary irritant. American Journal of Respiratory Cell and Molecular Biology, 11: 165-172.

49. Pendino, K.J., Schuler, R., Laskin, J.D., Laskin, D.L. (1994). Enhanced production of interleukin-1, tumor necrosis factor-α and fibronectin by rat lung phagocytes following inhalation of a pulmonary irritant. American Journal of Respiratory Cell and Molecular Biology, 11: 279-286. ****Journal Cover**

50. Wizemann, T., Laskin, D.L. (1994). Enhanced phagocytosis and production of reactive oxygen

intermediates by pulmonary interstitial macrophages following acute endotoxemia. American Journal of Respiratory Cell and Molecular Biology, 11: 358-365.

51. Garcia-Welsch, A., Laskin, D.L, Hwang S.M., Denhardt, D.T., Laskin, J.D. (1994). Production of nitric oxide by differentiated LSTRA cells is associated with expression of macrophage inducible nitric oxide synthase. Journal of Leukocyte Biology, 56: 488-494.

52. Garcia-Welsh, A., Laskin, D.L., Shuler, R.L., Laskin, J.D. (1994). Cellular depletion of $p56^{lck}$ during thymocyte apoptosis. Journal of Leukocyte Biology, 56: 528-532.

53. Garcia-Welsch, A., Laskin, D.L., Molloy, C.J., Laskin, J.D. (1994). Alterations in expression of $p56^{lck}$ during myeloid differentiation of LSTRA cells. Cell Growth and Differentiation, 5: 1215-1223.

54. Helyar, L., Bundschuh, D.S., Laskin, J.D., Laskin, D.L. (1994). Induction of hepatic Ito cell nitric oxide production by acute endotoxemia. Hepatology, 12: 1509-1515.

55. Laskin, D.L., Heck, D.E., Gardner, C.R., Feder, L.S., Laskin, J.D. (1994). Distinct patterns of nitric oxide production in hepatic macrophages and endothelial cells following acute endotoxemia. Journal of Leukocyte Biology, 56: 751-758.

56. Wizemann, T.M., Gardner, C.R., Laskin, J.D., Quinones, S., Durham, S.K., Goller, N.L., Ohnishi, S.T., Laskin, D.L. (1994). Production of nitric oxide and peroxynitrite in the lung following acute exposure of rats to endotoxin. Journal of Leukocyte Biology, 56: 759-768.

57. Laskin, D.L., Pendino, K.J., Punjabi, C.J., Rodriguez del Valle, and Laskin, J.D. (1994). Pulmonary and hepatic effects of inhaled ozone in rats. Environmental Health Perspectives, 102(Suppl 10): 61-64.

58. Shuler, R.L., Laskin, D.L., Gardner, C.R., Feder, L.S., and Laskin, J.D. (1995). Lymphocyte-mediated nitric oxide production by rat endothelial cells. Journal of Leukocyte Biology, 57: 116-121.

59. Gardner, C.R., Laskin, J.D., Laskin, D.L. (1995). Distinct biochemical responses of hepatic macrophages and endothelial cells to platelet-activating factor during endotoxemia. Journal of Leukocyte Biology, 57: 269-274.

60. Laskin, J.D., Rao, N.R., Punjabi, C.J., Laskin, D.L., Snyder, R. (1995). Distinct actions of benzene and its metabolites on nitric oxide production by bone marrow leukocytes. Journal of Leukocyte Biology, 57: 422-426.

61. Laskin, D.L., Gardner, C.R., Price, V., Jollow, D.J. (1995). Modulation of macrophage functioning abrogates the acute hepatotoxicity of acetaminophen. Hepatology, 21: 1045-1050.

62. Laskin, D.L., Rodriguez del Valle, M., Heck, D.E., Hwang, S., Ohnishi, S.T., Durham, S.K., and Laskin, J.D. (1995). Hepatic nitric oxide production following acute endotoxemia in rats is mediated by increased inducible nitric oxide synthase gene expression. Hepatology, 22: 223-234.

63. Pendino, K.J., Meidoff, T.M., Heck, D.E., Laskin, J.D., Laskin, D.L. (1995). Inhibition of macrophages with gadolinium chloride abrogates ozone-induced pulmonary injury and inflammatory mediator production. American Journal of Respiratory Cell and Molecular Biology, 13: 125-132.

64. Stauber, K.L., Laskin, J.D., Yurkow, E.J., Thomas, P.E., Laskin, D.L., Conney, A.H. (1995). Flow cytometry reveals subpopulations of murine epidermal cells that are refractory to induction of cytochrome P-4501A1 by ∃-napthoflavone. Journal of Pharmacology and Experimental Therapeutics, 273: 967-976.

65. Shuller-Levis, G.B., Gordon, R.E., Park, E., Pendino, K.J., Laskin, D.L. (1995). Taurine protects rat bronchioles from acute ozone-induced lung inflammation and hyperplasia. Experimental Lung Research, 21: 877-888.

66. Laskin, D.L., Heck, D.E., Punjabi, C.J., Laskin, J.D. (1996). Role of nitric oxide in hematosuppression and benzene-induced toxicity. Environmental Health Perspectives, 104 Suppl 6: 1283-1287.

67. Pendino, K.J., Gardner, C.R., Quinones, S., Laskin, D.L. (1996). Stimulation of nitric oxide production in rat lung lavage cells by anti-Mac-1β antibody: effects of ozone inhalation. American Journal of Respiratory Cell and Molecular Biology, 14: 327-333.

68. Lavnikova, N., Laskin, D.L. (1996). Unique patterns of regulation of nitric oxide production in mouse and rat fibroblasts. Journal of Leukocyte Biology, 58: 451-458.

69. Pendino, K.J., Gardner, C.R., Shuler, R.L., Laskin, J.D., Durham, S.K., Goller, N.L., Ohnishi, S.T., Ohnishi, T., Laskin, D.L. (1996). Inhibition of ozone-induced nitric oxide synthase expression in the lung by endotoxin. American Journal of Respiratory Cell and Molecular Biology, 14: 516-525.

70. Rollo, E.E., Laskin, D.L., Denhardt, D.T. (1996). Osteopontin inhibits nitric oxide production and cytotoxicity by activated RAW264.7 macrophages. Journal of Leukocyte Biology, 60: 397-404.

71. Lavnikova, N., Prokhorova, S., Burdelia, L., Lakhotia, A., Laskin, D.L. (1996). Mechanisms regulating macrophage-induced nitric oxide production by spontaneously transformed hamster fibroblasts. Journal of Leukocyte Biology, 60: 473-479.

72. Lavnikova, N., Lakhotia, A., Patel, N., Prokhorova, S., Laskin, D.L. (1996). Cytostasis is required for IL-1 induced nitric oxide production in transformed hamster fibroblasts. Journal of Cellular Physiology, 169: 532-537.

73. Lavnikova, N., Burdelya, L., Lakhotia, A., Patel, N., Prokhorova, S., Laskin, D.L. (1997). Macrophage and interleukin-1 induced nitric oxide production and cytostasis in hamster tumor cells. Journal of Leukocyte Biology, 61: 452-458.

74. Gardner, C.R., Heck, D.E., Yang, C.S., Thomas, P., Laskin, J.D., Laskin, D.L. (1998). Role of nitric oxide in acetaminophen induced hepatotoxicity in the rat. Hepatology, 26: 748-754.

75. Lavnikova, N., Prokhorova, S., Lakhotia, A., Gordon, R. Laskin, D.L. (1998). Distinct inflammatory responses of adherent rat lung vascular neutrophils to pulmonary irritants. Journal of Inflammation, 48: 56-66.

76. Weinberger, B., Fakhrzadeh, L., Heck, D.E., Laskin, J.D., Gardner, C.R., Laskin, D.L. (1998). Inhaled nitric oxide primes lung macrophages to produce reactive oxygen and reactive nitrogen intermediates. American Review of Respiratory and Critical Care Medicine, 158: 931-938.

77. Gordon, R.E., Park, E., Laskin, D., Schuller-Levis, G.B. (1998). Taurine protects rat bronchioles from acute ozone exposure: a freeze fracture and electron microscopic study. Experimental Lung Research, 24: 659-674.

78. Laskin, D.L., Sunil, V., Guo, Y., Heck, D.E., Laskin, J.D. (1998). Increased nitric oxide synthase in the lung after ozone inhalation is associated with activation of NF-(kappa)B. Environmental Health Perspectives, 106 Suppl 5: 1175-1178.

79. Prokhorova, S., Patel, N., Laskin, D.L. (1998). Regulation of alveolar macrophage and Type II cell proliferation. Effects of ozone inhalation. American Journal of Physiology: Lung Cell Molecular Physiology, 19: L1200-L1207.

80. Ahmad, N., Gardner, C.R., Laskin, D.L. (1999). Inhibition of macrophages with gadolinium chloride modulates I-CAM-1 expression in the liver during endotoxemia. Hepatology, 29: 728-736.

81. Hooper, K.A., Nickolas, T.L., Yurkow, E.J., Kohn, J., Laskin, D.L. (2000). Characterization of the inflammatory response to biomaterials using a rodent air pouch model. Journal of Biomaterials Research, 50: 365-374.

82. Li, T.-H., Hooper, K.A., Fischer, E., Laskin, D.L., Buckley, B., Turpin, B.J. (2000). An exposure system to study the effects of water soluble gases on PM-induced toxicity. Inhalation Toxicology, 12: 563-576.

83. Laskin D.L., Heck, D.E., Punjabi, C.J., Laskin J.D. (2000). Nitric oxide as a mediator of benzene induced hematosuppression and toxicity. Journal of Toxicology and Environmental Health, Part A, 61: 101-105.

84. Morio, L.A., Chiu, H., Sprowles, K.A., Laskin, D.L. (2000). Functional heterogeneity of rat hepatic and alveolar macrophages: effects of ethanol administration. Journal of Leukocyte Biology, 68: 614-620.

85. Morio, L.A., Chiu, H., Sprowles, K.A., Zhou, P., Heck, D.E., Gordon, M.K., Laskin, D.L. (2001). Distinct roles of tumor necrosis factor alpha and nitric oxide in carbon tetrachloride induced hepatotoxicity. Toxicology and Applied Pharmacology, 172: 44-51.

86. Bissell, M.D., Gores, G.J., Laskin, D.L., Hoofnagle, J.H. (2001). Drug-induced liver injury: mechanisms and test systems. Hepatology, 33: 1009-1013.

87. Billack, B., Heck, D.E., Porterfield, M., Malchow, R.P., Smith, P., Gardner, C.R., Laskin, D.L., Laskin, J.D. (2001). Minimal amidine structure for inhibition of nitric oxide biosynthesis. Biochemical Pharmacology, 61: 1581-1586.

88. Weinberger, B., Laskin, D.L., Mariano, T.M., Sunil, V.R., Heck, D.E., Gardner, C.R., Laskin, J.D. (2001). Mechanisms underlying reduced responsiveness of neonatal neutrophils to distinct chemoattractants. Journal of Leukocyte Biology, 70: 969-976.

89. Morio, L., Hooper, K., Brittingham, J., Li, T.-H., Gordon, R.E., Turpin, B.J., Laskin, D.L. (2001). Tissue injury following inhalation of fine particulate matter and hydrogen peroxide is associated with altered production of inflammatory mediators and antioxidants by alveolar macrophages. Toxicology and Applied Pharmacology, 177: 188-199.

90. Sunil, V., Connor, A., Laskin, J.D., Laskin, D.L. (2002). Activation of type II alveolar epithelial cells during acute endotoxemia. American Journal of Physiology: Lung Cellular and Molecular Physiology, 282: L872-L880.

91. Sunil, V., Connor, A.J., Lavnikova, N., Gardner, C.R., Laskin, J.D., Laskin, D.L. (2002). Acute endotoxemia prolongs the survival of rat lung neutrophils in response to 12-O-tetradecanoylphorbol 13-acetate. Journal of Cellular Physiology, 190: 382-389.

92. Fakhrzadeh, L., Laskin, J.D., Laskin, D.L. (2002). Deficiency in inducible nitric oxide synthase (NOSII) protects mice from ozone induced lung injury. American Journal of Respiratory Cell and Molecular Biology, 26: 413-419.

93. Dambach, D.M., Watson, L.M., Gray, K.R., Durham, S.K., Laskin, D.L. (2002). Role of CCR2 in macrophage recruitment and cytokine expression in the liver during acetaminophen induced hepatotoxicity. Hepatology, 35: 1093-1103.

94. Ahmad, N., Laskin, J.D., Laskin, D.L. (2002). Regulation of cyclooxygenase-2 expression in hepatic macrophages by nitric oxide during acute endotoxemia. Journal of Leukocyte Biology, 71: 1005-1011.

95. Chiu, H., Brittingham, J., Laskin D.L. (2002). Induction of heme oxygenase (HO-1) in the liver following acetaminophen administration to rats: protection by hemin and biliverdin. Toxicology and Applied Pharmacology, 181: 106-115.

96. Laskin, D.L., Fakhrzadeh, L., Heck, D.E., Gerecke, D., and Laskin, J.D. (2002). Upregulation of phosphoinositide 3-kinase and protein kinase B in alveolar macrophages following ozone inhalation. Role of NF-κB and STAT-1 in ozone-induced nitric oxide production and toxicity. Molecular and Cellular Biochemistry, 234/235: 91-98.

97. Martey, C.A., Vetrano, A.M., Whittemore, M.S., Mariano, T.M., Gentile, S.L., Heck, D.E., Laskin, D.L., Heindel, N.D., and Laskin, J.D. (2002). Mechanisms of growth inhibition in keratinocytes by mercurio-substituted 4',5'-dihydropsoralens. Biochemical Pharmacology, 63: 2001-2009.

98. Billack, B., Heck, D.E., Mariano, T.M., Gardner, C.R., Sur, R., Laskin, D.L., Laskin, J.D. (2002). Induction of cyclooxygenase-2 by heat shock protein 60 in macrophages and endothelial cells. American Journal Physiology. Cell Physiology 283: C1267-1277.

99. Sunil, V., Connor, A., Laskin, J.D., Laskin, D.L. (2002). Activation of adherent vascular neutrophils in the lung during acute endotoxemia. Respiratory Research 3: 21-31.

100. Gardner, C.R., Laskin, J.D., Dambach, D., Sacco, M., Durham, S.K., Bruno, M.K., Cohen, S., Gordon, M.K., Gerecke, D.R., Zhou, P., Laskin, D.L. (2002). Reduced hepatotoxicity of acetaminophen in mice lacking inducible nitric oxide synthase. Role of TNFα and IL-10. Toxicology and Applied Pharmacology, 184: 27-36.

101. Gardner, C.R., Laskin, J.D., Dambach, D., Chiu, H., Durham, S.K., Zhou, P., Bruno, M.K., Gerecke, D.R., Gordon, M.K.., Laskin, D.L. (2003). Exaggerated hepatotoxicity of acetaminophen in mice lacking tumor necrosis factor-1 receptor. Potential role of inflammatory mediators. Toxicology and Applied Pharmacology, 192:119-130.

102. Chiu, H., Gardner, C.R., Dambach, D.M., Brittingham, J.A., Durham, S.K., Laskin, J.D., Laskin, D.L. (2003). Role of p55 tumor necrosis factor receptor 1 in acetaminophen induced antioxidant defense. American Journal of Physiology, Gastrointestinal and Liver, 285: G959-G966.

103. Chiu, H., Gardner, C.R., Dambach, D.M., Durham, S.K., Brittingham, J.A., Laskin, J.D., Laskin, D.L. (2003). Role of tumor necrosis factor receptor 1 (p55) in hepatocyte proliferation during acetaminophen-induced toxicity in mice. Toxicology and Applied Pharmacology, 193: 218-227.

104. Laskin, D.L., Morio, L., Hooper, K., Li, T.H., Buckley, B., Turpin, B. (2003). Peroxides and macrophages in the toxicity of fine particulate matter in rats. Research Report Health Effects Institute. 117: 1-51.

105. Fakhrzadeh, L., Laskin, J.D., Gardner, C.R., Laskin, D.L. (2004). Superoxide dismutase overexpressing mice are resistant to ozone-induced tissue injury and increases in nitric oxide and tumor necrosis factor-α. American Journal of Respiratory Cell and Molecular Biology, 30: 280-287.

106. Hanna, N., Bonifacio, L., Reddy, P., Hanna, I., Weinberger, B., Murphy, S., Laskin, D., Sharma, S. (2004). IFN-γ-mediated inhibition of COX-2 expression in the placenta from term and preterm labor pregnancies. American Journal Reproductive Immunology, 51: 311-318.

107. Fakhrzadeh, L., Laskin, J.D., Laskin, D.L. (2004). Ozone-induced production of nitric oxide and TNFα and tissue injury are dependent on NF-κB. American Journal of Physiology. Lung Cell Physiology, 287: L279-285.

108. Hanna, N., Graboski, S., Laskin, D.L., Weinberger, B. (2004). Effects of ibuprofen and hypoxia on neutrophil apoptosis in neonates. Biology of the Neonate, 86: 235-239.

109. Hanna, N., Vasquez, P., Pham, P., Heck, D.E., Laskin, J.D., Laskin, D.L, Weinberger, B. (2005). Mechanisms underlying reduced apoptosis in neonatal neutrophils. Pediatric Research, 57: 56-62.

110. Weinberger, B., Hanna, N., Laskin, J.D., Heck, D.E., Gardner, C.R., Gerecke, D.R., Laskin, D.L. (2005). Mechanisms mediating the biologic activity of synthetic proline, glycine and hydroxyproline polypeptides in human neutrophils. Mediators of Inflammation, 1: 31-38.

111. Laumbach, R.J., Fiedler, N., Gardner, C.R., Laskin, D.L., Fan, Z.H., Zhang, J., Weschler, C.J., Lioy, P.J., Devlin, R.B., Ohman-Strickland, P., Kelly-McNeil, K., and Kipen, H.M. (2005). Nasal effects of a mixture of volatile organic compounds and their ozone oxidation products. Journal of Occupational and Environmental Medicine, 47: 1182-1189.

112. Martey, C.A., Vetrano, A.M., Whittemore, M.S., Mariano,T.M., Heck, D.E., Laskin, D.L., Heindel, N.D., and Laskin, J.D. (2005). Inhibition of interferon-gamma signaling by a mercurio-substituted dihydropsoralen in murine keratinocytes. Biochemical Pharmacology, 70: 1726-1734.

113. Kipen, H.M., and Laskin, D.L. (2005). Smaller is not always better: nanotechnology yields nanotoxicology. American Journal Physiology Lung Cell Molecular Physiology, 289: L696-L697.

114. Vetrano, A.M., Heck, D.E., Mariano, T.M., Mishin, V.M., Laskin, D.L., Laskin, J.D. (2005). Characterization of the oxidase activity in mammalian catalase, Journal of Biological Chemistry, 280: 35372-35381.

115. Dambach, D., Durham, S., Laskin, J.D., Laskin, DL. (2006). Distinct roles of NF-κB p50 in the regulation of acetaminophen-induced inflammatory mediator production and hepatotoxicity. Toxicology and Applied Pharmacology, 211: 157-165.

116. Weinberger, B., Vetrano, A., Murthy, S., Syed, K., Hanna, N., Laskin, J.D., Laskin, D.L. (2007). Influence of labor on neonatal neutrophil apoptosis and inflammatory activity. Pediatric Research, 61: 572-577.

117. Gray, J.P., Heck, D.E., Mishin, V., Smith, P.J., Hong, J.Y., Thiruchelvam, M., Cory-Slechta, D.A., Laskin, D.L., Laskin, J.D. (2007). Paraquat increases cyanide-insensitive respiration in murine lung epithelial cells by activating an NAD(P)H: Paraquat oxidoreductase: identification of the enzyme as thioredoxin reductase. Journal of Biological Chemistry, 282: 7939-7949.

118. Sunil, V.R., Patel, K.J., Nielson-Hamilton, M., Laskin, J.D., Laskin, D.L. (2007). Induction of lipocalin 24p3 in lung and liver during acute endotoxemia. Experimental and Molecular Pathology, 83: 177-187.

119. Sunil, V.R., Patel, K.J., Laumbach, R., Turpin, B.J., Lim, H.-J., Laskin, Laskin, D.L. (2007). Pulmonary effects of inhaled limonene oxidation products in elderly rats. Toxicology and Applied Pharmacology, 222: 211-220.

120. Chen, L.C., Gordon, R.E., Laskin, J.D., Laskin, D.L. (2007). Role of TLR-4 in liver macrophage and endothelial cell responsiveness during acute endotoxemia. Experimental and Molecular Pathology, 83: 311-326.

121. Black, A., Gray, J.P., Shakarjian, M.P., Laskin, D.L., Heck, D.E., Laskin, J.D. (2008). Distinct effects of ultraviolet B light on antioxidant expression in undifferentiated and differentiated mouse keratinocytes. Carcinogenesis, 29: 219-225.

122. Fakhrzadeh, L., Laskin, J.D., Laskin, D.L. (2008). Regulation of caveolin-1 expression, nitric oxide production and oxidant-induced tissue injury by tumor necrosis factor-alpha following ozone inhalation. Toxicology and Applied Pharmacology, 227: 380-389.

123. Chen, L.C., Gordon, M., Laskin, J.D., Laskin, D.L. (2008). Regulation of TREM expression in hepatic macrophages and endothelial cells during acute endotoxemia. Experimental and Molecular Pathology, 84: 145-155.

124. Wang, Y., Gray, J.P., Mishin, V., Heck, D.E., Laskin, D.L., Laskin, J.D. (2008). Role of cytochrome P450 reductase in nitrofurantoin-induced redox cycling and cytotoxicity. Free Radical Biology and Medicine, 44: 1169-1179.

125. Black, A.T., Gray, J.P., Shakarjian, M.P., Laskin, D.L., Heck, D.E., Laskin, J.D. (2008). Increased oxidative stress and antioxidant expression in mouse keratinocytes following exposure to paraquat. Toxicology and Applied Pharmacology, 231: 384-392.

126. Black, A.T., Gray, J.P. Sharkajian, M.P., Mishin, V., Laskin, D.L., Heck, D.E., and Laskin J.D. (2008). UVB upregulates prostaglandin synthases and prostaglandin receptors in mouse keratinocytes. Toxicology and Applied Pharmacology, 232: 14-24.

127. Weinberger, B., Vetrano, A., Laskin, J.D., and Laskin, D.L. (2008). Mechanisms mediating reduced responsiveness of neonatal neutrophils to lipoxin A4. Pediatric Research, 64: 393-398.

128. Sunil, V.R., Patel, K.J., Mainelis, G., Turpin, B.J., Ridgely, S., Laumbach, R.J., Kipen, H.M., Nazarenko, Y., Veleeparambil, M., Gow, A.J., Laskin, J.D., and Laskin DL. (2009). Pulmonary effects of inhaled diesel exhaust in aged mice. Toxicology and Applied Pharmacology, 241: 283-293.

129. Chao, P., Deshmukh, M., Kutscher, H.L., Gao, D., Rajan, S.S., Hu, P., Laskin, D.L., Stein, S., and Sinko, P.J. (2010). Pulmonary targeting microparticulate camptothecin delivery system: anticancer evaluation in a rat orthotopic lung cancer model. Anti-Cancer Drugs, 21: 65-76.

130. Kutscher, H.L., Chao, P., Deshmukh, M., Singh, Y., Hu, P., Joseph, L.B., Reimer, D.C., Stein, S., Laskin, D.L., and Sinko, P.J. (2010). Threshold size for optimal passive pulmonary targeting and retention of rigid microparticles in rats. Journal of Control Release, 143: 31-37.

131. Gardner, C.R., Gray, J.P., Joseph, L.B., Cervelli, J., Bremer, N., Kim, Y., Mishin, V., Laskin, J.D., and Laskin, D.L. (2010). Potential role of caveolin-1 in acetaminophen-induced hepatotoxicity. Toxicology and Applied Pharmacology, 245: 36-46.

132. Mishin V., Gray J.P., Heck D.E., Laskin D.L., and Laskin J.D. (2010). Application of the Amplex red/horseradish peroxidase assay to measure hydrogen peroxide generation by recombinant microsomal enzymes. Free Radical Biology and Medicine, 48: 1485-1491.

133. Jan Y.-H., Heck D.E., Gray J.P., Zheng H., Casillas R.P., Laskin D.L., and Laskin J.D. (2010). Selective targeting of selenocysteine in thioredoxin reductase by the half mustard 2-chloroethyl ethyl sulfide in lung epithelial cells, Chemical Research in Toxicology, 23: 1045-1053.

134. Wang, Y., Gray, J.P, Mishin, V., Heck, D.E., Laskin, D.L., and Laskin, J.D. (2010). Distinct roles of cytochrome P450 reductase in mitomycin c redox cycling and cytotoxicity. Molecular Cancer Therapeutics, 9: 1852-1863.

135. Vetrano, A.M., Laskin, D.L., Archer, F., Syed K., Gray, J.P., Laskin, J.D., Nwebube, N., and Weinberger, B. (2010). Inflammatory effects of phthalates in neonatal neutrophils. Pediatric Research, 68: 134-139.

136. Black, A.T., Joseph, L.B., Casillas, R.P., Heck, D.E., Sinko, P.J., Gerecke, D.R., Laskin, D.L., and Laskin, J.D. (2010). Role of MAP kinases in regulating expression of antioxidants and inflammatory mediators in mouse keratinocytes following exposure to the half mustard vesicant, 2-chloroethyl ethyl sulfide. Toxicology and Applied Pharmacology, 245: 352-360.

137. Laskin, D.L., Chen, L., Hankey, P.A., and Laskin, J.D. (2010). Role of STK in mouse liver macrophage and endothelial cell responsiveness during acute endotoxemia. Journal of Leukocyte Biology. 88: 373-382.

138. Gray J.P., Mishin V., Heck, D.E., Laskin, D.L., and Laskin, J.D. (2010). Inhibition of NADPH cytochrome P450 reductase by the model sulfur mustard vesicant 2-chloroethyl ethyl sulfide is associated with increased production of reactive oxygen species. Toxicology and Applied Pharmacology, 247: 76-82.

139. Malaviya, R., Sunil, V.R., Cervelli, J., Anderson, D.R., Holmes, W.W., Conti, M.L., Gordon, R.E., Laskin, J.D., Laskin, D.L. (2010). Inflammatory effects of inhaled sulfur mustard in rat lung. Toxicology and Applied Pharmacology, 248: 89-99.

140. Laskin, D.L., Mainelis, G., Turpin, B.J., Patel, K.J., and Sunil, V.R. (2010). Pulmonary effects of inhaled diesel exhaust in young and old mice: a pilot project. Research Report Health Effects Institute 151: 3-31.

141. Black, A.T., Hayden, P.J. Casillas, R.P., Heck, D.E., Gerecke, D.R., Sinko, P.J., Laskin, D.L., Laskin, J.D. (2010). Expression of proliferative and inflammatory markers in a full thickness human skin equivalent following exposure to the model sulfur mustard vesicant, 2-chloroethy ethyl sulfide. Toxicology and Applied Pharmacology 249: 178-187.

142. Kutscher, H.L., Chao, P., Deshmukh, M., Rajan, S.S., Singh, Y., Hu, P., Joseph, L.B., Stein, S., Laskin, D.L., Sinko, P.J. (2010). Enhanced passive pulmonary targeting and retention of PEGylated rigid microparticles in rats. International Journal of Pharmaceutics, 402: 64-71.

143. Liu, Y., Wei, L., Laskin, D.L., Fanburg, B.L. (2011). Role of protein transamidation in serotonin-induced proliferation and migration of pulmonary artery smooth muscle cells. American Journal of Respiratory Cell and Molecular Biology, 44: 548-555.

144. Sunil, V.R., Patel, K., Shen, J., Reimer, D., Gow, A., Laskin, J.D., Laskin, D.L. (2011) Functional and inflammatory alterations in the lung following exposure of rats to nitrogen mustard. Toxicology and Applied Pharmacology 250: 10-18.

145. Sunil, V.R., Patel-Vayas, K., Shen, J., Gow, A.J., Laskin, J.D., Laskin, D.L. (2011). Role of TNFR1 in lung injury and altered lung function induced by the model sulfur mustard vesicant, 2-chloroethyl ethyl sulfide. Toxicology and Applied Pharmacology, 250: 245-255.

146. Black, A.T., Gordon, M.K., Heck, D.E., Gallo, M.A., Laskin, D.L., Laskin, J.D. (2011). UVB light regulates expression of antioxidants and inflammatory mediators in human corneal epithelial cells. Biochemical Pharmacology, 81: 873-880.

147. Dragomir A.C., Laskin, J.D., Laskin, D.L. (2011). Macrophage activation by factors released from acetaminophen-injured hepatocytes: Potential role of HMGB1. Toxicology and Applied Pharmacology, 253: 170-177.

148. Black, A.T., Hayden, P.J. Casillas, R.P., Heck, D.E., Gerecke, D.R., Sinko, P.J., Laskin, D.L., Laskin, J.D. (2011). Regulation of Hsp27 and Hsp70 expression in human and mouse skin construct models by caveolae following exposure to the model sulfur mustard vesicant, 2-chloroethyl ethyl sulfide. Toxicology and Applied Pharmacology, 253: 112-120.

149. Kipen, H.M., Gandhi, S., Rich, D.Q., Ohman-Strickland, P., Laumbach, R., Fan, Z., Chen, L., Laskin, D.L., Zhang, J., Madura, K. (2011). Acute decreases in proteasome pathway activity following inhalation of fresh diesel exhaust or secondary organic aerosol. Environmental Health Perspectives, 119: 658-663.

150. Joseph, L.B., Gerecke, D.R., Heck, D.E., Black, A.T., Sinko, P.J., Cervelli, J.A., Casillas, R.P., Babin, M.C., Laskin, D.L., Laskin, J.D. (2011). Structural changes in the skin of hairless mice following exposure to sulfur mustard correlate with inflammation and DNA damage. Experimental and Molecular Pathology, 91: 515-527.

151. Gardner, C.R., Mishin, V., Laskin, J.D., Laskin, D.L. (2012). Exacerbation of acetaminophen hepatotoxicity by the antihelmenthic drug fenbendazole. Toxicological Sciences, 125: 607-612.

152. Connors, A., Laskin, J.D., Laskin, D.L. (2012). Ozone-induced lung Injury and sterile inflammation. Role of toll-like receptor 4. Experimental and Molecular Pathology, 92: 229-235.

153. Dragomir, A., Laskin, J.D., Laskin, D.L. (2012). Role of galectin-3 in acetaminophen-induced hepatotoxicity and inflammatory mediator production. Toxicological Sciences, 127: 609-619.

154. Gardner, C.R., Mishin, V., Hankey, P., Laskin, J.D., Laskin, D.L. (2012). Regulation of alternative macrophage activation in the liver following acetaminophen intoxication by stem cell-derived tyrosine kinase. Toxicology and Applied Pharmacology, 262: 139-148.

155. Sunil, V.R., Shen, J., Patel-Vayas, K., Gow, A.J., Laskin, J.D., Laskin, D.L. (2012). Role of reactive nitrogen species generated via inducible nitric oxide synthase in vesicant-induced lung injury, inflammation and altered lung functioning. Toxicology and Applied Pharmacology, 26: 22-30.

156. Sunil, V.R., Patel-Vayas, K., Shen, J., Laskin, J.D., Laskin, D.L. (2012). Classical and alternative macrophage activation in the lung following ozone-induced oxidative stress. Toxicology and Applied Pharmacology, 263: 195-202.

157. Groves, A.M., Gow, A.J., Massa, C.B., Laskin, J.D., Laskin, D.L. (2012). Prolonged injury and altered lung function after ozone inhalation in mice with chronic lung inflammation. American Journal of Respiratory Cell and Molecular Biology, 47: 776-783.

158. Malaviya, R., Venosa, A., Hall, L., Gow, A.J., Sinko, P.J., Laskin, J.D., Laskin, D.L. (2012). Attenuation of acute nitrogen mustard induced lung injury, inflammation and fibrogenesis by a nitric oxide synthase inhibitor. Toxicology and Applied Pharmacology, 265: 279-291.

159. Deshmukh, M., Kutscher, H.L., Gao, D., Sunil, V.R., Malaviya, R., Vayas, K., Stein, S., Laskin, J.D., Laskin, D.L., Sinko, P.J. (2012). Biodistribution and renal clearance of biocompatible lung targeted poly(ethylene glycol) nanogel aggregates. Journal of Control Release, 164: 65-73.

160. Dragomir, A., Sun, R., Choi, H., Laskin, J.D., Laskin, D.L. (2012). Role of galectin-3 in classical and alternative macrophage activation in the liver following acetaminophen intoxication. Journal of Immunology, 189: 5934-5941.

161. Connor, A.J., Chen, L.C., Joseph, L.B., Laskin, J.D., Laskin, D.L. (2012). Distinct responses of lung and liver macrophages to acute endotoxemia: role of toll-like receptor 4. Experimental and Molecular Pathology, 94: 216-227.

162. Liu, Y., Gardner, C.R., Laskin, J.D., Laskin, D.L. (2012). Classical and alternative activation of rat hepatic sinusoidal endothelial cells in response to inflammatory stimuli. Experimental and Molecular Pathology, 94: 160-167.

163. Kutscher, H.L., Gao, D., Li, S., Massa, C.B., Cervelli, J., Deshmukh, M., Joseph, L.B., Laskin, D.L., Sinko, P.J. (2013). Toxicodynamics of rigid polystyrene microparticles on pulmonary gas exchange in mice: implications on the feasibility of microembolic drug delivery. Toxicology and Applied Pharmacology, 266: 214-223.

164. D'Addio, S.M., Baldassano, S., Shi, L., Cheung, L., Adamson, D.H., Bruzek, M., Anthony, J.E., Laskin, D.L., Sinko, P.J., Prud'homme, R.K., (2013). Optimization of cell receptor-specific targeting through multivalent surface decoration of polymeric nanocarriers. Journal of Controlled Release, 168: 41-49.

165. Sunil, V.R., Vayas, K.J., Massa, C., Gow, A.J., Laskin, J.D., Laskin, D.L. (2013). Ozone-induced injury and oxidative stress in bronchiolar epithelium is associated with altered pulmonary mechanics. Toxicological Sciences, 133: 309-319.

166. Yang, S., Jan, Y.H., Gray, J.P., Mishin, V., Heck, D.E., Laskin, D.L., Laskin, J.D. (2013). Sepiapterin reductase mediates chemical redox cycling in lung epithelial cells. Journal of Biological Chemistry, 88: 19221-19237.

167. Groves, A.M., Gow, A.J., Massa, C.B., Hall, L., Laskin, J.D., Laskin, D.L. (2013). Age-related increases in ozone-induced injury and altered pulmonary mechanics in mice with progressive lung inflammation. American Journal of Physiology Lung Cell Molecular Physiology, 305: L555-568.
****Editors Highlight**

168. Zheng, R., Po, I., Mishin, V., Black, A.T., Heck, D.E., Laskin, D.L., Sinko, P.J., Gerecke, D., Gordon, M.K., Laskin, J.D. (2013). The generation of 4-hydroxynonenal, an electrophilic lipid peroxidation end product, in rabbit cornea organ cultures treated with UVB light and nitrogen mustard. Toxicology and Applied Pharmacology, 272: 345-355.

169. Zheng, R. Heck, D.E., Black, A.T., Gow, A., Laskin, D.L., Laskin, J.D. (2013). Regulation of keratinocyte expression of stress proteins and antioxidants by the electrophilic nitrofatty acids 9- and 10-nitrooleic acid. Free Radical Biology and Medicine, 67: 1-9.

170. Jan, Y.-H., Heck, D., Malaviya, R., Casillas, R., Laskin, D., Laskin, J. (2014). Cross-linking of thioredoxin reductase by the sulfur mustard analog mechlorethamine (methyl bis(2-chloroethyl) amine) in lung epithelial cells: selective inhibition of disulfide reduction but not redox cycling. Chemical Research in Toxicology, 27: 61-75.

171. Zheng, R., Heck, D.E., Mishin, V., Laskin, D.L., Laskin, J.D. (2014). Modulation of keratinocyte expression of antioxidants by 4-hydroxynonenal, a lipid peroxidation end product. Toxicology and Applied Pharmacology, 275: 113-121.

172. Massa, C., Scott, P., Abramova, E., Gardner, C., Laskin, D., Gow, A. (2014). Acute chlorine gas exposure produces transient inflammation and a progressive alteration in surfactant composition with accompanying mechanical dysfunction. Toxicology and Applied Pharmacology, 278: 53-64.

173. Lasfar, A., Cook, J., Cohen-Solal, K., Reuhl, K., Kotenko, S., Langer, J., Laskin, D.L. (2014). Critical role of the endogenous interferon ligand-receptors in Type I and Type II interferons response. Immunology, 142: 442-452. PMC4080960

174. Jan, Y.H., Heck, D.E., Dragomir, A., Gardner, C.R., Laskin, D.L., Laskin, J.D. (2014). Acetaminophen reactive intermediates target hepatic thioredoxin reductase. Chemical Research in Toxicology, 27: 882-894.

175. Zheng, R., Dragomir, A.C., Mishin, V., Richardson, J.R., Heck, D.E., Laskin, D.L., Laskin, J.D. (2014). Differential metabolism of 4-hydroxynonenal in liver, lung and brain of mice and rats. Toxicology and Applied Pharmacology, 278: 43-52. PMC4167069.

176. Joseph, L.B, Heck, D.E., Cervelli, J.A., Composto, G.M., Babin, M.C., Casillas, R.P., Sinko, P.J., Gerecke, D.R., Laskin, D.L., Laskin, J.D. (2014). Structural changes in hair follicles and sebaceous glands of hairless mice following exposure to sulfur mustard. Experimental and Molecular Pathology, 96: 316-327.

177. Sunil, V.R., Vayas, K.N., Cervelli, J.A., Malaviya, R., Hall, L., Massa, C.B., Gow, A.J., Laskin, J.D., and Laskin, D.L. (2014). Pentoxifylline attenuates nitrogen mustard-induced acute lung injury, oxidative stress and inflammation. Experimental and Molecular Pathology, 97: 89-98.

178. Chang, Y.C., Wang, J.D., Hahn, R.A., Gordon, M.K., Joseph, L.B., Heck, D.E., Heindel, N.D., Young, S.C., SInko, P.J., Casillas, R.P., Laskin, J.D., Laskin, D.L., and Gerecke, D.R. (2014). Therapeutic potential of a non-steroidal bifunctional anti-inflammatory and anti-cholinergic agent against skin injury induced by sulfur mustard. Toxicology and Applied Pharmacology, 280: 236-244.

179. Mishin, V., Heck, D.E., Laskin, D.L., and Laskin, J.D. (2014). Human recombinant cytochrome P450 enzymes display distinct hydrogen peroxide generating activities during substrate independent NADPH oxidase reactions. Toxicological Sciences, 141: 344-352.

180. Yang, S., Jan, Y.H., Mishin, V., Richardson, J.R., Hossain, M.M., Heindel, N.D., Heck, D.E., Laskin, D.L., and Laskin, J.D. (2015). Sulfa drugs inhibit sepiapterin reduction and chemical redox cycling by sepiapterin reductase. Journal of Pharmacology and Experimental Therapeutics, 352: 529-540.

181. Malaviya, R., Gow, A.J., Francis, M., Abramova, E.V., Laskin, J.D., and Laskin, D.L. (2015). Radiation-induced lung injury and inflammation in mice: role of inducible nitric oxide synthase and surfactant protein D. Toxicological Sciences,144: 27-38.

182. Sunil, V.R., Francis, M., Vayas, K.N., Cervelli, J.A., Choi, H., Laskin, J.D., and Laskin, D.L. (2015). Regulation of ozone-induced lung inflammation and injury by the β-galactoside-binding lectin galectin-3. Toxicology and Applied Pharmacology, 284: 236-245.

183. Jan, Y.-H., Richardson, J.R., Baker, A.B., Mishin, V., Heck, D.E., Laskin, D.L., and Laskin, J.D. (2015). Vitamin K3 (menadione) redox cycling inhibits cytochrome P450-mediated metabolism and inhibits parathion intoxication. Toxicology and Applied Pharmacology, 288: 114-120.

184. Malaviya, R., Sunil, V.R., Venosa, A., Verissimo, V.L., Cervelli, J.A., Vayas, K.N., Hall, L., Laskin, J.D., and Laskin, D.L. (2015). Attenuation of nitrogen mustard-induced pulmonary injury and fibrosis by anti-tumor necrosis-α antibody. Toxicological Sciences, 148: 71-88.

185. Jan, Y-H., Heck, D., Casillas, R., Laskin, D.L., and Laskin, J.D. (2015). Thioredoxin cross-linking by nitrogen mustard in lung epithelial cells: formation of multimeric thioredoxin/thioredoxin reductase complexes and inhibition of disulfide reduction. Chemical Research in Toxicology, 28: 2091-2103.

186. Venosa, A., Malaviya, R., Gow, A.J., Hall, L., Laskin, D.L. (2015). Protective role of spleen-derived macrophages in lung inflammation, injury and fibrosis induced by nitrogen mustard. American Journal of Physiology-Lung Cellular and Molecular Physiology, 309: L1487-1498.

187. Venosa, A., Malaviya, R., Choi, H., Gow, A.J., Laskin, J.D., Laskin, D.L. (2016) Characterization of distinct macrophage subpopulations in the lung during nitrogen mustard induced injury and fibrosis. American Journal Respiratory Cell Molecular Biology, 45: 436-446.

188. Udasin, R., Aleksunes, L., Heck, D., Laskin, D.L., Laskin, J.D. (2016). Nrf2 regulates the sensitivity of mouse keratinocytes to nitrogen mustard via multidrug resistance-associated protein 1 (Mrp1). Toxicological Sciences, 149: 202-212.

189. Szilagyi, J.T., Mishin, V., Heck, D.E., Jan, Y.H., Aleksunes, L.M., Richardson, J.R., Heindel, N.D., Laskin, D.L., Laskin, J.D. (2016). Selective targeting of heme protein in cytochrome P450 and nitric oxide synthase by diphenyleneiodonium. Toxicological Sciences, 15: 150-159.

190. Wohlman I.M., Composto, G.M., Heck, D.E., Heindel, N.D., Lacey, C.J., Guillon, C.D., Casillas, R.P., Croutch, C.R., Gerecke, D.R., Laskin, D.L., Joseph, L.B., Laskin, J.D. (2016). Mustard vesicants alter expression of the endocannabinoid system in mouse skin. Toxicology and Applied Pharmacology, 303: 30-44.

191. Mandal, M., Gardner, C.R., Sun, R., Choi, H., Lad, S., Mishin, V., Laskin, J.D., Laskin, D.L. (2016). The spleen as an extramedullary source of inflammatory cells responding to acetaminophen-induced liver Injury. Toxicology and Applied Pharmacology, 304: 110-120.

192. Composto, G.M., Laskin, J.D., Laskin, D.L., Gerecke, D.R., Casillas, R.P., Heindel, N.D., Joseph, L.B., Heck, D.E. (2016). Mitigation of nitrogen mustard mediated skin injury induced by a novel indomethacin bifunctional prodrug. Experimental and Molecular Pathology, 100: 1522-1531.

193. Lasfar, A., de la Torre, A., Abushahba, W., Cohen-Solal, K.A., Castaneda, I., Yuan, Y., Reuhl, K., Zioza, A., Raveche, E., Laskin, D.L., and Kotenko, S.V. (2016). Concerted action of IFN-a and INF-l induces local NK cell immunity and halts cancer growth. Oncotarget, 7: 49259-49267.

194. Sunil, V.R., Vayas, K.N., Fang, M., Zarbl, H., Massa, C., Gow, A.J., Cerveilli, J.A., Kipen, H., Laumbach, R., Lioy, P.J., Laskin, J.D., Laskin, D.L. (2017). World Trade Center (WTC) dust exposure in mice is associated with inflammation, oxidative stress and epigenetic changes in the lung. Experimental and Molecular Pathology, 102: 50-58.

195. Francis, M., Sun, R., Cervelli, J.A., Choi, H., Mandal, M., Abramova, E.V., Gow, A.J., Laskin, J.D., Laskin, D.L. (2017). Role of spleen derived macrophages in ozone induced lung inflammation and injury. Toxicological Sciences, 155: 182-195. ****Editor's Highlight**

196. Francis, M., Groves, A., Sun, R., Cervelli, J., Choi, H., Laskin, J.D., and Laskin, D.L. (2017). CCR2 regulates inflammatory cell accumulation in the lung and tissue injury following ozone exposure. Toxicological Sciences, 155: 474-484. ****Editor's Highlight**

197. Venosa, A., Gow, J.G., Hall, L., Malaviya, R., Gow, A.J., Laskin, J.D., Laskin, D.L. (2017). Regulation of nitrogen mustard-induced lung macrophage activation by valproic acid, a histone deacetylase inhibitor. Toxicological Sciences, 157: 222-234.

198. Yang, S., Jan, Y.H., Mishin, V., Heck, D.E., Laskin, D.L., Laskin, J.D. (2017). Diacetyl/L-xylulose reductase mediates chemical redox cycling in lung epithelial cells. Chemical Research in Toxicology, 30: 1406-1418. PMC5708134

199. Massa, C.B., Groves, A.M., Jaggernauth, S.U., Laskin, D.L., Gow, A.J. (2017). Histologic and biochemical alterations predict pulmonary mechanical dysfunction in aging mice with chronic lung inflammation. Plos Computational Biology, 13(8): e1005570. PMC5570219

200. Schumacher, J.D., Kong, B., Pan, Y., Zhan, L., Sun, R., Aa, J., Rizzolo, D., Richardson, J.R., Chen, A., Goedken, M., Aleksunes, L.M., Laskin, D.L., Guo, G.L. (2017). The effect of fibroblast growth factor 15 deficiency on the development of high fat diet induced non-alcoholic steatohepatitis. Toxicology and Applied Pharmacology, 330: 1-8.

201. Lee, H., Zhang, D., Laskin, D.L., Jin, Y. (2018). Functional evidence of pulmonary extracellular vesicles in infectious and noninfectious lung inflammation. Journal of Immunology, 201: 1500-1509. ****Paper of the Year Award, Society of Toxicology Inhalation and Respiratory Specialty Section and the Immunotoxicology Specialty Section**

202. Szlagyi, J.T., Fussell, K.C., Wang, Y., Jan, Y.H., Mishin, V., Richardson, J.R., Heck, D.E., Yang, S., Aleksunes, L.M., Laskin, D.L., Laskin, J.D. (2018). Quinone and nitrofurantoin redox cycling by recombinant cytochrome b5 reductase. Toxicology and Applied Pharmacology, 359: 102-107.

203. Sunil, V., Vayas, K. N., Cervelli, J.A., Ebramova, E., Gow, A.J., Goedken, M., Laskin, J.D., Laskin, D.L. (2018). Protective role of surfactant protein-D against lung injury and oxidative stress induced by nitrogen mustard. Toxicological Sciences, 166: 108-122. PMCID: PMC6204765.

204. Sunil, V.R., Radbel, J., Hussain, S., Vayas, K.N., Cervelli, J., Deen, M., Udasin, I., Laumbach, R., Sunderram, J., Laskin, J.D., Laskin, D.L. (2019). Sarcoid-like granulomatous disease: Pathologic case series in World Trade Center dust-exposed rescue and recovery workers. International Journal of Environmental Research and Public Health, 16(5). pii: E815. PMCID: PMC6427752.

205. Jan, Y.H., Heck, D.E., Laskin, D.L., Laskin, J.D. (2019). The sulfur mustard analog mechlorethamine (bis(2-chloroethyl)methylamine) modulates cell cycle progression via the DNA damage response in human lung epithelial A549 cells. Chemical Research in Toxicology, 32: 1123-1133. PMCID: PMC6626495.

206. Venosa, A., Smith, C.L., Gow, A.J., Laskin, J.D., Laskin, D.L. (2019). Regulation of macrophage foam cell formation during nitrogen mustard-induced pulmonary fibrosis by lung lipids. Toxicological Sciences, 172: 344-358.

207. Sunil, C.R., Vayas, K.N., Abramova, E.V., Rancourt, R., Cervelli, J.A., Malaviya, R., Goedken, M., Venosa, A., Gow, A.J., Laskin, J.D., Laskin, D.L. (2020). Lung injury, oxidative stress and fibrosis in mice following exposure to nitrogen mustard. Toxicology and Applied Pharmacology, 387: 114798.

208. Chen, P., Zhang, X., Venosa, A., Lee, I., Myers, D., Holloway, J., Prud'homme, R., Gao, D., Szekely, Z., Laskin, J., Laskin, D., Sinko, P. (2020). Selective uptake of nanoparticles displaying a novel bivalent mannosylated targeting ligand by alternatively activated M2 macrophages. Pharmaceutics, 12: 243. PMCID: PMC7150811.

209. Kipen, H.M., Laskin, D.L. (2020). NETs: a new biomarker of traffic-related air pollution exposure: are they ready to catch fish? European Respiratory Journal, 55(4): 2000305. PMID: 32245775.

210. Joseph, L., Laskin, J.D., Wahler, G., Croutch, C., Sinko, P., Laskin, D.L., Heck, D. (2020). Skin remodeling and wound healing in the Gottingen minipig following exposure to sulfur mustard. Experimental Molecular Pathology, 115:104470.

211. Francis, M., Guo, G., Kong, B., Abramova, E.V., Cervelli, J.A., Gow, A.J., Laskin, J.D., Laskin, D.L. (2020). Regulation of lung macrophage activation and oxidative stress following ozone exposure by farnesoid X receptor. Toxicological Sciences, 177: 441-453. ****Paper of the Year Award, Society of Toxicology Inhalation and Respiratory Specialty Section**

212. Malaviya, R., Abramova, E.V., Rancourt, R., Sunil, V.R., Weinstock, D., Croutch, C.R., Roseman, J., Tuttle, R., Peters, E., Casillas, R.P., Laskin, J.D., Laskin, D.L. (2020). Progressive lung injury and fibrosis in rats following exposure to inhaled sulfur mustard. Toxicological Sciences, 178: 358-374.

213. Mishin. V., Heck, D.E., Laskin, D.L., Laskin, J.D. (2020). The amplex red/horseradish peroxidase assay requires superoxide dismutase to measure hydrogen peroxide in the presence of NAD(P)H. Free Radical Research, 54: 620-628.

214. Joseph, L.B., Gordon, M.K., Kang, J., Croutch, C.R., Zhou, P., Heck, D.E., Laskin, D.L., Laskin, J.D. (2021). Characterization of the rabbit conjunctiva: effects of sulfur mustard. Experimental Molecular Pathology, 121:104656.

215. Venosa, A., Gow, J.G., Taylor, S., Golden, T.N., Murray, A., Abramova, E., Malaviya, R., Laskin, D.L., Gow, A.J. (2021). Myeloid cell dynamics in bleomycin-induced pulmonary injury in mice: effects of anti-TNFα antibody. Toxicology and Applied Pharmacology, 417: 115470.

215. Venosa, A., Smith, L.C., Gow, A.J., Zarbl, H., Laskin, J.D., Laskin, D.L. (2021). Macrophage activation in the lung during the progression of nitrogen mustard induced injury is associated with histone modifications and altered miRNA expression. Toxicology and Applied Pharmacology, 423: 115569.

216. Malaviya, R., Abramova, E.V., Bellomo, A., Croutch, C.R., Roseman, J., Tuttle, R., Peters, E., Casillas, R.P., Sunil, V.R., Laskin, J.D., Laskin, D.L. (2021). Pulmonary injury and oxidative stress in rats induced by inhaled sulfur mustard is ameliorated by anti-tumor necrosis factor-alpha antibody. Toxicology and Applied Pharmacology, 428: 115677.

217. Jan, Y.H., Heck, D.E., An, Y., Laskin, D.L., Laskin, J.D. (2022). Nitrogen mustard alkylates and cross-links p53 in human keratinocytes. Chemical Research in Toxicology 35: 636-650.

218. Carnino, J.M., Lee, H., Smith, L.C., Sunil, V.R., Rancourt, R.C., Vayas, K., Cervelli, J., Kwok, Z.H., Ni, K., Laskin, J.D., Laskin, D.L. (2022). Microvesicle-derived miRNAs regulate proinflammatory macrophage activation in the lung following ozone exposure. Toxicological Sciences 187: 162-174.

219. Murray, A., Banota, T., Guo, G.L., Smith, LC, Meshanni, J.A., Lee, J., Kong, B., Abramova, E.V., Goedken, M., Gow, A.J., Laskin, J.D., Laskin, D.L. (2022). Farnesoid X receptor regulates lung macrophage activation and injury following nitrogen mustard exposure. Toxicology Applied Pharmacology 454:116208.

220. Joseph, L.B., Gordon, M.K., Zhou, P., Hahn, R.A., Lababidi, H., Croutch, C.R., Sinko, P.J., Heck, D.E., Laskin, D.L., Laskin, J.D. (2022). Sulfur mustard corneal injury is associated with alterations in the epithelial basement membrane and stromal extracellular matrix. Experimental Molecular Pathology 128:104807.

221. Sunil, V.R., Vayas, K.N., Radbel, J., Abramova, E., Gow, A.J., Laskin, J.D., Laskin, D.L. (2022). Impaired energy metabolism and altered functional activity of alveolar type II epithelial cells following exposure of rats to nitrogen mustard. Toxicology and Applied Pharmacology, 456: 116257.

222. Taylor, S., Murray, A., Francis, M., Abramova, E., Guo, C. Laskin, D.L., Gow, A.J. (2022). Regulation of macrophage activation by S-nitrosothiols following ozone-induced lung injury. Toxicology and Applied Pharmacology, 457: 116281.

223. Radbel, J., Meshanni, J.A., Gardner, C.R., Le-Hoang, T., Cervelli, J., Laskin, J.D., Gow, A.J., Laskin, D.L. (2022). Novel method to assess resident alveolar macrophage efferocytosis of apoptotic neutrophils by flow cytometry. Toxicology and Applied Pharmacology, 460:116359.

224. Malaviya, R., Gardner, C.R., Rancourt, R.C., Smith, L.C., Abramova, E.V., Vayas, K.N., Gow, A.J., Laskin, J.D., Laskin, D.L. (2023). Lung injury and oxidative stress induced by inhaled chlorine in mice is associated with proinflammatory activation of macrophages and altered bioenergetics. Toxicology and Applied Pharmacology, 461: 116359.

225. Herbert, J., Kelty, J., Laskin, J.D., Laskin, D.L., Gow, A.J. (2023). Menthol flavoring in e-cigarette condensate causes pulmonary dysfunction and cytotoxicity in precision cut lung slices. American Journal Physiology Lung Cell Molecular Physiology, 324: L345-357.

226. Cary, C.M., Seymore, T.N., Sing, D., Vayas, K.N., Goedken, M., Adams, S., Polunas, M., Sunil, V.R., Laskin, D.L., Demokritou, P., Stapleton, P.A. (2023). Single inhalation exposure to polyamide micro and nanoplastic particles impairs vascular dilation without generating pulmonary inflammation in virgin female Sprague Dawley rats. Particle and Fibre Toxicology, 20: 16.

227. Smith, L.C., Meshanni, J.A., Lee, J.M., Vayas, K.N., Sun, R., Jiang, C., Guo, G.L., Gow, G.L., Gow, A.J., Laskin, J.D., Laskin, D.L. (2023). Role of PPARγ in dyslipidemia and altered pulmonary functioning in mice following ozone exposure. Toxicological Sciences, 194: 109-119.

229. Gutierrez, B., Aggarwal, T., Erguven, H., Stone, M.R.L, Guo, C., Bellomo, A., Abramova, E., Stevenson, E.R., Laskin, D.L., Gow, A.J., Izgu, E.C. (2023). Direct assessment of nitrative stress in lipid environments: Applications of a designer lipid-based biosensor for peroxynitrite. iScience, 26: 108567.

230. Meshanni, J.A., Gow, A.J., Laskin, J.D., Laskin, D.L. (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.
****Paper of the Year Award, Society of Toxicology Inhalation Specialty Section (2024)**

231. Malaviya, R., Meshanni, J.A., Sunil, V.R., Venosa, A., Guo, C., Abramova, E.V., Vayas, K.N., Jiang, C., Cervelli, J.A., Gow, A.J., Laskin, J.D., Laskin, D.L. (2024). Role of macrophage bioenergetics in N-acetylcysteine-mediated mitigation of lung injury and oxidative stress induced by nitrogen mustard. Toxicology and Applied Pharmacology, 485:116908.

232. Bellomo, A., Herbert, J., Kudlak, M.J., Laskin, J.D., Gow, A.J., Laskin, D.L. (2024). Identifying early events in nitrogen mustard toxicity that are independent of inflammatory cells using precision cut lung slices. Toxicology and Applied Pharmacology, in press.

233. Radbel, J., Meshanni, J.A., Vayas, K.N., Le-Hoang, O., Abramova, E., Zhou, P., Joseph, L.B., Laskin, J.D., Gow, A.J., Laskin, D.L. (2024). Effects of ozone exposure on lung injury, inflammation, and oxidative stress in a murine model of non-pneumonic endotoxemia, Toxicological Sciences, in press.

224. Aleksunes, L.A., Gray, J.P., Meshanni, J., Laskin, J.D., Laskin, D.L. (2024). Repurposing FDA-approved drugs to treat chemical weapon toxicities: interactive case studies for trainees. Pharmacology Research and Perspectives, in press.

BOOKS (edited)

Schook, L. and Laskin, D.L. (eds.). Xenobiotics and Inflammation. Academic Press, San Diego, 1994.

Laskin, J.D. and Laskin, D.L. (eds.). Cellular and Molecular Biology of Nitric Oxide. Marcel Dekker, Inc., NY, 1999.

Laskin, D.L. (ed.). Oxidative/Nitrosative Stress and Disease: 4th International Conference. Annals of the New York Academy of Sciences, Volume 1203, New York, 2010.

Laskin, D.L. and Gow, A. (Associate eds.). Section III – Comparative Biochemistry of the Normal Lung. In Comparative Biology of the Normal Lung, 2nd edition. R. Parent, ed., UK, Elsevier, 2015.

INVITED REVIEWS / BOOK CHAPTERS

1. Diamond, L., Cioe, L., Laskin, D., O'Brien, T. (1982). Effects of interferon and tumor promoters on terminal cell differentiation. In: Expression of Differentiated Function in Cancer Cells, R.F. Revoltella, ed., New York: Raven Press, pp. 153-167.

2. Laskin, D.L., Berg, R.A. (1986). Chemotactic properties of synthetic collagen-like polypeptides for human neutrophils. In: Leukocytes and Host Defense, J.J. Oppenheim and D. Jacobs, eds., New York: Alan Liss, Inc., pp. 379-384.

3. Riley, D.J., Kerr, J.S., Amoruso, M.A., Curran, S.F., Laskin,D.L., Berg, R.A. (1987). Oxidant mediated degradation of lung connective tissue: Mechanism of emphysema. In: Pulmonary Emphysema and Proteolysis, J.C. Taylor and C. Mittman, eds., New York: Academic Press, Inc., pp. 399-406.

4. Laskin, J.D., Laskin, D.L. (1988). Role of receptors in psoralen phototoxicity. In: Psoralen DNA Photobiology. F.P. Gasparro, ed., Florida: CRC Press, pp. 135-158.

5. Laskin, D.L. Nonparenchymal cells and hepatotoxicity (1990). Seminars in Liver Disease, 10: 293-304.

6. Laskin, D.L. (1992). Role of macrophages and endothelial cells in hepatotoxicity. In: Kupffer Hepatocyte Interactions. T. Billiar and R. Curran, eds., Florida, CRC Press, pp. 147-168.

7. Gardner, C.R., Heck, D.E., Feder, L.S., Mc Closkey, T.W., Laskin, J.D., Laskin, D.L. (1992). Differential regulation of reactive nitrogen and reactive oxygen intermediate production by hepatic macrophages and endothelial cells. In: The Molecular Basis of Oxidative Damage by Leukocytes. A. Jesaitis and E. Dratz, Eds., Florida, CRC Press, pp. 267-272.

8. MacEachern, L., Laskin, D.L. (1994). Bone marrow phagocytes, inflammatory mediators and benzene toxicity. In: Xenobiotics and Inflammation. D.L. Laskin and L.S. Schook, eds. Academic Press, San Diego, pp. 149-171.

9. Laskin, D.L. (1994). Nonparenchymal cells, inflammatory mediators and hepatotoxicity. In: Xenobiotics and Inflammation. D.L. Laskin and L.S. Schook, eds. Academic Press, San Diego, pp. 301-320.

10. Helyar, L, Laskin, D.L. (1994). Immune-mediated hepatotoxicity. In: Immunotoxicology and Immunopharmacology, Second Edition. J.H. Dean, M.I. Luster, A.E. Munson, and I. Kimber, eds. Raven Press, N.Y., pp. 487-499.

11. Laskin, J.D., Heck, D.E., Laskin, D.L. (1994). Multifunctional role of nitric oxide in inflammation. Trends in Endocrinology and Metabolism 5: 377-382.

12. Laskin, D.L., Pendino, K.J., Punjabi, C.J., Rodriguez del Valle, M., Laskin, J.D. (1994). Pulmonary and hepatic effects of inhaled ozone in rats. Environmental Health Perspectives 102: 61-64.

13. Laskin, D.L. (1994). Measurement of macrophage and neutrophil chemotaxis. In: In Vitro Toxicity Indicators. C.A. Tyson and J.M. Frazier, eds., Academic Press, San Diego, pp. 456-462.

14. Laskin, J.D., Laskin, D.L. (1994). Flow cytometry. In: In Vitro Toxicity Indicators. C.A. Tyson and J.M. Frazier, eds., Academic Press, San Diego, pp. 431-437.

15. Laskin, D.L., Pendino, K.J. (1995). Macrophages and inflammatory mediators in tissue injury. In: Annual Review of Pharmacology & Toxicology, Vol. 35. A. Cho, T. Blaschke, H. Loh and J.L. Way, eds., Annual Rev. Inc., Palo Alto, pg. 655-677.

16. Laskin, D.L. (1996). Sinusoidal lining cells and hepatotoxicity. Toxicologic Pathology 24: 112-118.

17. Laskin, D.L., Laskin, J.D. (1996). Macrophages, nitric oxide and lung injury. Methods: A Companion to Methods in Enzymology 10:61-70.

18. Laskin, D.L., Heck, D.E., Punjabi, C.J., an Laskin, J.D. (1996). Role of nitric oxide in hematosuppression and benzene-induced toxicity. Environmental Health Perspectives 10: 1283-1287.

19. Laskin, D.L. (1997). Role of hepatic macrophages in inflammation and tissue injury. In: Functional Heterogeneity of Liver Tissue: From Cell Lineage Diversity to Sublobular Compartment-Specific Pathogenesis. F. Vidal-Vanaclocha, ed., R.G. Landes Co., Austin, pp. 161-176.

20. Laskin, D.L., Laskin, J.D. (1997). Phagocytes. In: Comprehensive Toxicology, Vol. 5, Toxicology of the Immune System. D.A. Lawrence, ed., Pergamon, N.Y., pp. 97-112.

21. Laskin, D.L. Xenobiotic-induced inflammation and injury in the liver. (1997). In: Comprehensive Toxicology, Vol. 9, Hepatic and Gastrointestinal Toxicology. R.S. McCuskey and D.L. Earnest, eds., Pergamon, N.Y., pp. 151-164.

22. Laskin, D.L., Gardner, C.R. (1997). Role of nonparenchymal cells and inflammatory macrophages in hepatotoxicity. In: Toxicology of the Liver, second edition. G.L. Plaa and W.R. Hewitt, eds., Taylor & Francis, Washington, D.C., pp. 297-320.

23. Laskin, D.L., Heck, D.E., Laskin, J.D. (1998). Role of inflammatory cytokines and nitric oxide in hepatic and pulmonary toxicity. Toxicol. Lett., 102-103: 289-293.

24. Gardner, C.R., Laskin, D.L. (1999). Protective and pathologic roles of nitric oxide in tissue injury. In: Cellular and Molecular Biology of Nitric Oxide. J.D. Laskin, D.L. Laskin eds., Marcel Dekker, NY, 225-246.

25. Weinberger, B., Heck, D.E., Laskin, D.L., Laskin, J.D. (1999). Nitric oxide in the lung: therapeutic and cellular mechanisms of action. Pharmacology and Therapeutics, 84: 401-411.

26. Weinberger, B., Laskin, D.L., Heck, D.E., Laskin, J.D. (2001). The toxicology of inhaled nitric oxide. Toxicological Sciences, 59: 5-16.

27. Laskin, D.L., Laskin, J.D. (2001). Role of macrophages and inflammatory mediators in tissue injury. Toxicology, 160: 111-118.

28. Weinberger, B., Weiss, K., Heck, D.E., Laskin, D.L., Laskin, J.D. (2001). Pharmacologic therapy of persistent pulmonary hypertension of the newborn. Pharmacology and Therapeutics, 89: 67-79.

29. Laskin, J.D., Heck, D.E., Gardner, C.R., Laskin, D.L. (2001). Pro-oxidant and antioxidant functions of nitric oxide in liver toxicity. Antioxidants and Redox Signaling, 3:261-271.

30. Laskin, D.L., Weinberger, B., Laskin, J.D. (2001). Heterogeneity in liver and lung macrophages. Journal of Leukocyte Biology, 70: 163-170.

31. Laskin, D.L., Fakhrzadeh, L., Laskin, J.D. (2001). Nitric oxide and peroxynitrite in ozone-induced lung injury, In: Biological Reactive Intermediates VI, Chemical and Biological Mechanisms of Susceptibility to and Prevention of Environmental Diseases, P. Dansette, R. Snyder, M. Delaforge, G. Gibson, H. Greim, D. Jollow, T. Monks, and I. Sipes, eds., New York: Plenum Press, 183-190.

32. Weinberger, B., Laskin, D.L., Heck, D.E., Laskin, J.D. (2002). Oxygen toxicity in neonates. Toxicology and Applied Pharmacology, 181: 60-67.

33. Laskin, D.L., Gardner, C.R. (2002). Role of sinusoidal cells and inflammatory macrophages in hepatotoxicity. In: Drug induced Liver Disease. N. Kaplowitz and L. DeLeve, eds., New York: Marcel Dekker, pp. 183-211.

34. Laskin, J.D., Heck, D.E., Laskin D.L. (2002). The ribotoxic stress response as a potential mechanism for MAP kinase activation in xenobiotic toxicity. Toxicological Sciences 69: 289-291.

35. Weinberger, B., Hanna, N., Gropper, C.A., Heck, D.E., Laskin, D.L. and Laskin, J.D. (2003). Transdermal xenobiotics in newborn skin. Journal of Toxicology. Cutaneous and Ocular Toxicology 22: 51-67.

36. Laskin, D.L., Fakhrzadeh, L., Gerecke, D., Heck, D.E., and Laskin, J.D. (2003). Macrophages and inflammatory mediators in chemically-induced toxicity. Journal UOEH 25: 191-195.

37. Laskin, D.L., Gardner, C.R., Gerecke, D.R., and Laskin, J.D. (2003). Ozone-induced lung injury: role of macrophages and inflammatory mediators. In: Reactive Oxygen/Nitrogen Species: Lung Injury and Disease. V. Vallyathan, X. Shi, and V. Castranova, eds., New York: Marcel Dekker, pp. 289-316.

38. Laskin, D.L., Sunil, V., Laumbach, R., Kipen, H. (2007). Inflammatory cytokines and lung toxicity. In: Cytokines in Human Health: Immunotoxicology, Pathology and Therapeutic Applications. R. V. House and J. Descotes, eds., The Humana Press, Inc., pp. 83-112.

39. Laskin, D.L., Gardner, C.R. (2007). Nonparenchymal cells, inflammatory macrophages, and hepatotoxicity. In: Drug-induced Liver Disease, second edition. N. Kaplowitz and L. D. DeLeve, eds., New York: Marcel Dekker, pp. 159-184.

40. Burchiel, S.W., Kerkvliet, N.I., Laskin, D.L., Bortner, C.D., Burns-Naas, L.A. (2007). The use of multiparameter flow cytometry in immunotoxicology and immunopharmacology. immunopharmacology

and Immunotoxicology, 3rd edition, R. Luebke, R. House, I. Kimber, eds., New York, Taylor and Francis, pp. 97-122.

41. Gardner, C.R., Laskin, D.L. (2008). Immunotoxicology. In: Introduction to Toxicology and Risk Assessment. H. Greim, and R. Snyder, eds., London, John Wiley & Sons, Ltd., pp. 316-327.

42. Gardner, C.R., Laskin, D.L. (2008). The role of sinusoidal cells in liver injury and repair. In: Hepatotoxicity: From Genomics to In Vitro and In Vivo Models. S.C. Sahu, ed., New York: John Wiley & Sons, pp. 341-370.

43. Laskin, D.L. (2009). Macrophages and inflammatory mediators in chemical toxicity: A battle of forces? Chemical Research in Toxicology, 22: 1376-1385. ****Journal Cover**

44. Roberts, R.A., Laskin, D.L., Smith, C.V., Robertson, F.M., Allen, E.M., Doorn, J.A., Slikker, W. (2009). Nitrative and oxidative stress in toxicology and disease. Toxicological Sciences, 112: 4-16.

45. Laskin, J.D., Heck, D.E. and Laskin, D.L. (2010). Nitric oxide pathways in toxic responses. In: General and Applied Toxicology, Third edition. B. Ballantyne, T. Marrs, T. Syversen, eds. UK: Wiley-Blackwell, pp. 425-438.

46. Shakarjian, M.P., Heck, D.E., Gray, J.P., Sinko, P.J., Gordon, M.K., Casillas, R.P., Heindel, N.D., Gerecke, D.R., Laskin, D.L., Laskin, J.D. (2010). Mechanisms mediating the vesicant actions of sulfur mustard after cutaneous exposure. Toxicological Sciences, 114: 5-19.

47. Laskin, D.L., Laskin, J.D. (2010). Inflammation and Cancer. In: Cancer Medicine, 8th edition. W.K. Hong, R.C. Bast, W.N. Hait, D.W. Kufe, R.E. Pollock, R.R. Weichselbaum, J.F. Holland, E. Frei, eds., New York: PMPH Publishing House, pp. 270-278.

48. Laskin, D.L., Gardner C.R., Laskin JD, (2010). Phagocytes. In Comprehensive Toxicology, 2nd edition, Volume 5 Immune System Toxicology. D. Lawrence, ed., UK: Elsevier, pp. 133-153.

49. Malaviya, R., Laskin, D.L., Malaviya, R. (2010). Janus kinase-3 dependent inflammatory responses in allergic asthma. International Immunology 10: 829-836.

50. Laskin, D.L., Sunil, V.R., Laskin, J.D. (2011). Macrophages and Tissue Injury: Agents of Defense or Destruction? Annual Review of Pharmacology and Toxicology, 51, 267-288.

51. Weinberger, B., Laskin, J.D., Sunil, V., Sinko, P.J., Heck, D.E., Laskin, D.L. (2011). Sulfur mustard-induced pulmonary injury: therapeutic approaches to mitigating toxicity. Pulmonary Pharmacology and Therapeutics, 24: 92-99.

52. Malaviya, R., Laskin, J.D., Laskin D.L. (2014). Oxidative stress-induced autophagy: role in pulmonary toxicity. Toxicology and Applied Pharmacology, 275: 145-151.

53. Weinberger, B., Sinko, P., Laskin, J.D., Laskin, D.L. (2014). Interaction of nanoparticles with lung macrophages. In Nanoparticles in the Lung: Environmental Exposure and Drug Delivery. A. Tsuda, P. Gehr, eds., Boca Raton, FL, CRC Press, Taylor and Francis Group, pp. 85-106.

54. Laskin, D.L., Malaviya, R., Laskin, J.D. (2015). Pulmonary macrophages. In Comparative Biology of the Normal Lung, 2nd edition. Academic Press, NY, R. Parent, ed., Academic Press, NY. Chapter 32, pp 629-649.

55. Malaviya, R., Sunil, V.R., Venosa, A., Vayas, K.N., Heck, D.E., Laskin, J.D., Laskin, D.L. (2016). Inflammatory mechanisms of pulmonary injury induced by mustards. Toxicology Letters, 26: 2-7.

56. Weinberger, B., Malaviya, R., Sunil, V., Venosa, A., Heck, D.E., Laskin, J.D., Laskin, D.L. (2016). Mustard vesicant induced lung injury: advances in therapy. Toxicology and Applied Pharmacology, 305: 1-11.

57. Malaviya, R., Laskin, J.D., Laskin, D.L. (2017). Anti-TNFα therapy in inflammatory lung diseases. Pharmacology and Therapeutics,180: 90-98.

58. Malaviya, R., Laskin, J.D., Laskin, D.L. (2018). Monocytes. In: Comprehensive Toxicology, 3rd edition, Hematopoietic Systems Toxicology, Vol 12. C. McQueen, L. Burns, eds., UK: Elsevier, pp. 183-191.

59. Gardner, C.R., Laskin, J.D., Laskin, D.L. (2018). Hepatic sinusoidal cells and liver associated lymphocytes. In: Comprehensive Toxicology, 3rd edition, Hepatic and Gastrointestinal Toxicology. J. Luyendyk, R. Roth, eds., UK: Elsevier, pp 29-40.

60. Laskin, D.L., Malaviya, R., Laskin, J.D. (2019). Role of macrophages in acute lung injury and chronic fibrosis induced by pulmonary toxicants. Toxicological Sciences, 168: 287-301. ***highlighted by journal as "Impactful Research in Toxicology" based in citations; September, 2021.**

61. Malaviya, R., Heck, D.E., Casillas, R.P., Laskin, J.D., Laskin, D.L. (2019). Mustard vesicants. In: Chemical Warfare Agents, Biomedical and Pyschological Effects, Medical Countermeasures, and Emergency Response, 3rd edition. B.J. Lukey, J.A. Romano, H. Salem, eds., Boca Raton: CRC Press, pp 131-143.

62. Malaviya, R., Laskin, J.D., Laskin, D.L. (2020). Long-term respiratory effects of mustard vesicants. Toxicology Letters, 319: 168-174.

63. Jan, Y.H., Heck, D.E., Laskin, D.L., Laskin, J.D. (2020). DNA damage signaling in the cellular responses to mustard vesicants. Toxicology Letters, 326: 78-82.

64. Andres, J., Smith, L.C., Murray, A., Jin, Y., Businaro, R., Laskin, J.D., Laskin, D.L. (2020). Role of extracellular vesicles in cell-cell communication and inflammation following exposure to pulmonary toxicants. Cytokine Growth Factor Reviews, 51: 12-18.

65. Malaviya, R., Kipen, H.M., Businaro, R., Laskin, J.D., Laskin, D.L. (2020). Pulmonary toxicants and fibrosis: innate and adaptive immune mechanisms. Toxicology and Applied Pharmacology, 409: 115272.

66. Laskin, J.D., Ozkuyumcu, K., Zhou, P., Croutch, C.R., Heck, D.E., Laskin, D.L., Joseph, L.B. (2023). Skin models used to define mechanisms of action of sulfur mustard. Disaster Medicine and Public Health Preparedness, 18:1-31.

67. Malaviya, R., Laskin, J.D., Laskin, D.L. (2023). Targeting tumor necrosis factor-alpha to mitigate lung injury induced by mustard vesicants and radiation. Disaster Medicine and Public Health Preparedness, 17: e553.

68. Laskin, J.D., Ozkuyumcu, K., Zhou, P., Croutch, C.R., Heck, D.E., Laskin, D.L., Joseph, L.B. (2023). Skin models used to define mechanisms of action of sulfur mustard. Disaster Medicine and Public Health Preparedness, 17: e551.

PUBLISHED CONFERENCE PROCEEDINGS (*Peer Reviewed*)

1. Laskin, D.L., Pilaro, A.M. (1986). Characterization of resident and inflammatory Kupffer cells using functional assays and monoclonal antibodies. In: Cells of the Hepatic Sinusoid, A. Kirn, D. Knook and E. Wisse, eds., Netherlands: Kupffer Cell Foundation, pp. 27-34.

2. Diluzio, N.R., Knook, D.L., Laskin, D.L., Nolan, J.P., Pereira, C.A., Wake K., Decker, K. (1986). What is Kupffer cell activation? In: Cells of the Hepatic Sinusoid. A. Kirn, D. Knook and E. Wisse, eds., Netherlands: Kupffer Cell Foundation, pp. 269-275.

3. Laskin, D.L. (1989). Potential role of activated macrophages in chemical and drug induced liver injury. In: Cells of the Hepatic Sinusoid Vol. 2, D. Knook and E. Wisse, eds., Netherlands: Kupffer Cell Foundation, pp. 284-287.

4. Robertson, F.M., McCloskey, T.W., Oberyszyn, T.M., Gardner, C.R., Laskin, D.L. (1989). Lymphokines differentially modulate accessory and inflammatory responses of Kupffer cells. In: Cells of the Hepatic Sinusoid Vol. 2, D. Knook and E. Wisse, eds., Netherlands: Kupffer Cell Foundation, pp. 176-181.

5. Gardner, C.R., Wasserman, A.J., Laskin, D.L. (1989). Phagocytosis of tumor cells by activated liver mcrophages. In: Cells of the Hepatic Sinusoid Vol. 2, D. Knook and E. Wisse, eds., Netherlands: Kupffer Cell Foundation, pp. 243-244.

6. Laskin, J.D., Dokidas, A., Gardner, C.R., Robertson, F.M., Laskin, D.L. (1989). Role of sulfated proteoglycans in Kupffer cell function. In: Cells of the Hepatic Sinusoid Vol. 2, D.Knook and E. Wisse, eds., Netherlands: Kupffer Cell Foundation, pp. 83-84.

7. Laskin, D.L. (1991). Parenchymal and nonparenchymal cell interactions in hepatotoxicity. In: Biological Reactive Intermediates IV, Molecular and Cellular Effects and their Impact on Human Health, C. Witmer, R. Snyder, D. Jollow, G. Kalf, J. Kocsis and I. Sipes, eds., New York: Plenum Press, pp. 499-506.

8. Feder, L.S., Mc Closkey, T.W., Laskin, D.L. (1991). Characterization of interleukin-1 and interleukin-6 production by resident and lipopolysaccharide activated hepatic macrophages and endothelial cells. In: Cells of the Hepatic Sinusoid, Vol. 3, E. Wisse, D.L. Knook, R.S. McCuskey, eds., Netherlands: Kupffer Cell Foundation, pp. 37-39.

9. McCloskey, T.W., Todaro, J.A., Feder, L.S., Gardner, C.R., Laskin, D.L. (1991). Activation of liver macrophages and endothelial cells following lipopolysaccharide treatment of rats. In: Cells of the Hepatic Sinusoid, Vol. 3, E. Wisse, D.L. Knook, R.S. McCuskey, eds., Netherlands: Kupffer Cell Foundation, pp. 112-114.

10. Gardner, C.R., Laskin, J.D., Faaland, C.A., Laskin, D.L. (1991). Role of protein kinases in liver macrophage function. In: Cells of the Hepatic Sinusoid, Vol. 3, E. Wisse, D.L. Knook, R.S. McCuskey, eds., Netherlands: Kupffer Cell Foundation, pp. 115-117.

11. Laskin, D.L., Feder, L.S., McCloskey, T.W., Gardner, C.R. (1991). Role of nonparenchymal cells in hepatotoxicity. In: Cells of the Hepatic Sinusoid, Vol. 3, E. Wisse, D.L. Knook, R.S. McCuskey, ed., Netherlands: Kupffer Cell Foundation, pp. 81-83.

12. Laskin, D.L., Heck, D.E., Feder, L.S., Gardner, C.R., Laskin, J.D. (1993). Regulation of nitric oxide production by hepatic macrophages and endothelial cells. In: Cells of the Hepatic Sinusoid, Vol. 4, D.L. Knook and E. Wisse, eds., Netherlands: Kupffer Cell Foundation, pp. 26-28.

13. Helyar, L., Laskin, J.D., Thomas, P.E., Bundschuh, D.S., Laskin, D.L. (1993). Modulation of cytochrome P450 expression in liver macrophages and endothelial cells. In: Cells of the Hepatic Sinusoid, Vol. 4, D.L. Knook and E. Wisse, eds., Netherlands: Kupffer Cell Foundation, 67-69.

14. Helyar, L., Bundschuh, D.S., Laskin, J.D., Laskin, D.L. (1993). Hepatic fat storing cells produce nitric oxide and hydrogen peroxide in response to bacterially derived lipopolysaccharide. In: Cells of the Hepatic Sinusoid, Vol. 4, D.L. Knook and E. Wisse, eds., Netherlands: Kupffer Cell Foundation, 394-396.

15. Gardner, C.R., Laskin, J.D., Laskin, D.L. (1993). Platelet activating factor induced activation of hepatic macrophages and endothelial cells: role of intracellular calcium. In: Cells of the Hepatic Sinusoid, Vol. 4, D.L. Knook and E. Wisse, eds., Netherlands: Kupffer Cell Foundation, pp. 60-62.

16. Feder, L.S., Laskin, D.L. (1993). Regulation of hepatic endothelial cell proliferation by Kupffer cell derived factors and inflammatory mediators. In: Cells of the Hepatic Sinusoid, Vol. 4, D.L. Knook and E. Wisse, eds., Netherlands: Kupffer Cell Foundation, pp. 33-35.

17. Rodriguez-del Valle, M., Hwang, S.M., Heck, D.E., Laskin, J.D., Laskin, D.L. (1994). Role of nitric oxide in hepatic injury following acute endotoxemia. In: Molecular Pathogenesis and Immune Response. Annals New York Academy of Sciences, 730:329-331.

18. Wizemann, R.M., Laskin, D.L. (1994). Effects of acute endotoxemia on production of cytokines and nitric oxide by pulmonary alveolar and interstitial macrophages. In: Molecular Pathogenesis and Immune Response. Annals New York Academy of Sciences, 730:336-337.

19. Laskin, D.L., Heck, D.E., Gardner, C.R., Helyar, L., Durham, S.K., Goller, N.L., Ohnishi, S. T., Laskin, J. D. (1995). Enhanced production of nitric oxide by hepatic macrophages, endothelial cells and fat storing cells following acute endotoxemia. In: Cells of the Hepatic Sinusoid, Vol. 5, E. Wisse, D. L. Knook, and K. Wake, eds., Leiden: Kupffer Cell Foundation, pp. 53-55.

20. Durham, S.K., Goller, N.L., Barton, D.S., Monticello, T.M., Rose, P.M., Laskin, D.L. (1995). Utilization of nonisotopic probes to localize endothelin receptors A and B mRNA in sinusoidal cells of the rat liver. In: Cells of the Hepatic Sinusoid, Vol. 5, E. Wisse, D. L. Knook, and K. Wake, eds., Leiden: Kupffer Cell Foundation, pp. 212-214.

21. Laskin, J.D., Heck, D.E., ad Laskin, D.L. (1996). Nitric oxide production in the lung and liver following inhalation of the pulmonary irritant ozone. Advances in Experimental Medicine and Biology, 387:141-146.

22. Gardner, C.R., Laskin, J.D., Heck, D.E., Barton, D., Durham, S.K., Laskin, D.L. (1997). Role of nitric oxide in hepatotoxicity. In: Cells of the Hepatic Sinusoid, Vol. 6, E. Wisse, and D. L. Knook, eds., Leiden: Kupffer Cell Foundation, pp. 268-271.

23. Gardner, C.R., Heck, D.E., H. Chiu, Laskin, J.D., Durham, S.K., Laskin, D.L. (1999). Decreased hepatotoxicity of acetaminophen in mice lacking inducible nitric oxide synthase. In: Cells of the Hepatic Sinusoid, Vol. 7, E. Wisse, and D. L. Knook, R. DeZanger, and R. Fraser, eds., Leiden: Kupffer Cell Foundation, pp. 104-105.

24. Laskin, D.L., Sunil, V.R., Fakhrzadeh, L., Groves, A., Gow, A.J., Laskin, J.D. (2010). Macrophages, reactive nitrogen species and lung injury. Annals of the New York Academy of Sciences, 1203: 60-65.

25. Laskin, J.D., Black, A.T., Jan, Y.H., Sinko, P.J., Heindel, N.D., Sunil, V., Heck, D.E., Laskin, D.L. (2010). Oxidants and antioxidants in sulfur mustard-induced injury. Annals of the New York Academy of Sciences, 1203: 92-100.

26. Malaviya, R., Sunil, V.R., Venosa, A., Vayas, K.N., Businaro, R., Heck, D.E., Laskin, J.D., Laskin, D.L. (2016). Macrophages and inflammatory mediators in pulmonary injury induced by mustard vesicants. Annals of the New York Academy of Sciences, 1374: 168-175.

27. Businaro, R., Corsi, M., DiRaimo, T., Marasco, S., Laskin, D.L., Salvati, B., Capoano, R., Ricci, S., Sicillano, C., Frati, G., DeFalco, E. (2016). Multidisciplinary approaches to stimulate wound healing. Annals of the New York Academy of Sciences, 1378: 137-142.

28. Jan, Y.H., Richardson, J.R., Baker, A.A., Mishin, V., Heck, D.E., Laskin, D.L., Laskin, J.D. (2016). Novel approaches to mitigating parathion toxicity: targeting cytochrome P450-mediated metabolism with menadione. Annals of the New York Academy of Sciences, 1378: 80-86.

29. Herbert, J., Laskin, J.D., Gow, A.J., Laskin, D.L. (2020). Chemical warfare agent research in precision cut tissue slices – a useful alternative. Annals of the New York Academy of Sciences, 1480(1): 44-53.

30. Smith, L.C., Venosa, A., Gow, A.J., Laskin, J.D., Laskin, D.L. (2020). Transcriptional profiling of lung macrophages during pulmonary injury induced by nitrogen mustard. Annals of the New York Academy of Sciences, 1480(1): 146-154.

31. Radbel, J., Laskin, D.L., Laskin, J.D., Kipen, H.M. (2020). Disease modifying treatment of chemical threat agent induced acute respiratory distress syndrome. Annals of the New York Academy of Sciences, 1480(1): 14-29.

32. Businaro, R., Maggi, E., Armeli, F., Murray, A., Laskin, D.L. (2020). Nutraceuticals as potential therapeutics for vesicant-induced pulmonary fibrosis. Annals of the New York Academy of Sciences, 1480(1): 5-13.

33. Murray, A., Gow, A.J., Venosa, A., Andres, J., Malaviya, R., Adler, D., Yurkow, W., Laskin, J.D., Laskin, D.L. (2020). Assessment of mustard vesicant lung injury and anti-TNFα efficacy in rodents using molecular imaging methodology. Annals of the New York Academy of Sciences, 1480(1): 246-256.

PUBLISHED ABSTRACTS (since 2018)

391. Smith, L.C., Taylor, S., Murray, A., Guo, C., Vayas, K., Abramova, E., Laskin, D.L., Gow, A. (2018). Intranasal administration of amiodarone causes pulmonary fibrosis and triggers recruitment of immature macrophages to the lung in C57BL/6 mice. The Toxicologist, 162: 42 (A1180).

392. Murray, A., Venosa, A., Malaviya, R., Adler, D., Yurkow, E., Gow, A.J., Laskin, J.D., Laskin, D.L. (2018). Live animal molecular imaging techniques demonstrate that anti-tumor necrosis factor-a antibody mitigates lung injury induced by nitrogen mustard. The Toxicologist, 162: 174 (A1713).

393. Gardner, C.R., Malaviya, R., Abramova, E., Vayas, K., Laskin, J.D., Laskin, D.L. (2018). Histopathologic and inflammatory changes in the respiratory tract of mice following chlorine gas inhalation. The Toxicologist, 162: 310 (A2274).

394. Rancourt, R.C., Jan, Y., Heck, D.E., Laskin, D.L., Laskin, J.D. (2018). Heat shock protein 90 is a molecular target for sulfur mustard and nitrogen mustard in human lung epithelial cells. The Toxicologist, 162: 310 (A2276).

395. Bellomo, A., Abramova, E., Malaviya, R., Laskin, J.D., Laskin, D.L. (2018). Receptor for advanced glycation end products (RAGE) expression in nitrogen mustard induced acute lung injury in rats. The Toxicologist, 162: 310 (A2277).

396. Malaviya, R., Abramova, E., Bellomo, A., Croutch, C., Roseman, J., Peters, E., Casillas, R., Laskin, J.D., Laskin, D.L. (2018). Attenuation of sulfur mustard induced pulmonary injury and inflammatory by anti-tumor necrosis factor antibody. The Toxicologist, 162: 311 (A2278).

397. Jan, Y., Heck, D.E., Laskin, D.L., Laskin, J.D. (2018). Nitrogen mustard modulates cell cycle progression via the DNA damage response in human lung epithelial A549 cells. The Toxicologist, 162: 311 (A2279).

398. Navarro, R., Jan, Y., Heck, D.E., Laskin, D.L., Laskin, J.D. (2018). Induction of DNA damage and stress responses by the sulfur mustard analog mechlorethamine in human HaCaT keratinocytes. The Toxicologist, 162: 312 (A2284).

399. Composto, G.M., Arunachalam, T., Laskin, D.L., Heck, D.E., Laskin, J.D., Joseph, L.B. (2018). Oxidative stress and DNA damage in mouse epidermis following exposure to nitrogen mustard. The Toxicologist, 162: 312 (A2283).

400. Joseph, L.B., Composto, G.M., Croutch, C.R., Gordon, M.K., Casillas, R.P., Laskin, D.L., Heck, D.E., Laskin, J.D. (2018). Structural changes in rabbit eyelids following exposure to sulfur mustard. The Toxicologist, 162: 313 (A2286).

401. Taylor, S., Murray, A., Abramova, E., Francis, M., Gow, A., Laskin, J., Laskin, D. (2018). Suppression of ozone-induced inflammation and oxidative stress by ethyl nitrite. The Toxicologist, 162: 58 (A1242).

402. Taylor, S., Voronin, G., Fett, D., Golden, T., Botelho, D. Gow, A., Laskin, D.L. Inhibition of S-nitrosoglutathione metabolism improves inflammatory resolution in acute lung injury. (2018). The Toxicologist, 162: 399 (A2652).

403. Laskin, D.L., Aleksunes, L.M. (2018). Mentor perceptions and motivations in a ten-week summer undergraduate research fellowship in toxicology. The Toxicologist, 162: 470 (A2947).

404. Aleksunes, L.M., Laskin, D.L. (2018). Creating scientific and graphical abstracts as an interactive session in a summer research fellowship. The Toxicologist, 162: 470 (A2948).

405. Schumacher, J.D., Murray, A., Szilagyi, J., Gow, A., Guo, G., Laskin, D., Aleksunes, L. (2018). Exploring careers in toxicology through and interactive summer program for high school students: a five-year perspective. The Toxicologist, 162: 470 (A2945).

406. Kerkhof, L., Sunil, V., Vayas, K., McGuinness, L., Laskin, D., Gow, A.J. (2018). Ozone exposure results inaltered lung microbiome diversity and growth pattern. The Toxicologist, 162: 58 (A1243).

407. Sunil, V., Vayas, K., Murray, A., Venosa, A., Gow, A., Laskin, J., Laskin, D. (2018). Suppression of ozone-induced macrophage activation and oxidative stress by valproic acid. The Toxicologist, 162: 57 (A1240).

408. Taylor, S., Abramova, E., Black, K., Murray, A., Francis, M., Gow, A., Kipen, H., Laskin, J., Laskin, D. (2019). Role of NO in mediating macrophage activation post-ozone exposure in human and animal models. The Toxicologist, 168: 27 (A1115).

409. Laskin, D.L., Rancourt, R.C., Black, K., Cervelli, J., Cepeda, C., Black, T., Chang, H., Laskin, J.D., Kipen, H.M. (2019). Elevated CCR2 and CD11b expression identifies activated proinflammatory macrophages accumulating in induced sputum after human ozone exposure. The Toxicologist, 168: 27 (A1116).

410. Radbel, J., Vayas, K., Le-Hoang, O., Sunil, V., Gow, A., Laskin, D.L. (2019). Ozone exposure predisposes mice to sepsis-induced lung injury. The Toxicologist, 168: 28 (A1119).

411. Gardner, C.R., Radbel, J., Vayas, K., Taylor, S., Cervelli, J.A., Chang, H., Koo, S., Lee, J.M., Laskin, J.D., Laskin, D.L. (2019). Pathologic effects of depletion of CD11b+ monocytic cells in mouse lung following ozone inhalation. The Toxicologist, 168: 28 (A1118).

412. Camino, J., Lee, H., Zhang, D., Sunil, V., Vayas, K., Laskin, J.D., Laskin, D.L., Jin, Y. (2019). Ozone-associated ROS induces microvesicle containing miRNAs which regulate epithelial cell death. The Toxicologist, 168: 30 (A1127).

413. Malaviya, R., Rancourt, R., Abramova, E., Bellomo, A., Henry, Z., Croutch, C., Roseman, J., Peters, E., Casillas, R.P., Amuzie, C., Sunil, V., Laskin, J.D., Laskin, D.L. (2019). Natural history of inhaled sulfur mustard poisoning in rats. The Toxicologist, 168: 242 (A2025).

413. Cody, L.C., Abramova, E., Vayas, K., Murray, A., Andres, J., Laskin, D.L., Gow, A.J. (2019). Amiodarone-induced lung injury is associated with alterations in alveolar macrophages and mesesnchymal stem cell populations in mice. The Toxicologist, 168: 248 (A2048).

414. Guo, G.L., Murray, A., Wilkinson, M.L., Armstrong, L.E., Gow, A.J., Laskin, D.L., Aleksunes. L.M. (2019). Hands-on genetics instruction during a toxicology high school summer program. The Toxicologist, 168: 266 (A2125).

415. Doherty, C., Guerier, R., Smith, L.C., Laskin, D.L., Pivnick, E., Aleksunes, L.M., Buckley, B. (2019). Engagement of undergraduate students in community-based environmental health science. The Toxicologist, 168: 266 (A2126).

416. Rancourt, R., Wahba, N., Zhang, M., Malaviya, R., Cervelli, J., Chang, H., Laskin, J.D., Laskin, D.L. (2019). Detection of galectin-3 and its interaction with microparticles in airway surface liquid following exposure of rats to nitrogen mustard. The Toxicologist, 168: 271 (A2142).

417. Composto Wahler, G., Collier, H., Kim, H., Laskin, D., Heck, D., Laskin, J., Joseph, L. (2019). Skin injury by nitrogen mustard alters mouse epidermal cell cycle regulatory proteins. The Toxicologist, 168: 272 (A2147).

418. Sunil, V., Ali, g., Cervelli, J., Vayas, K., Goedken, M., Malaviya, R., Laskin, J., Laskin, D.L. (2019). Protective role of spleen-derived myeloid cells in a mouse model of vesicant induced lung injury and oxidative stress. The Toxicologist, 168: 270 (A2140).

419. Joseph, L.B., Composto Wahler, G.M., Croutch. C.R., Kang, J., Casillas, R., Laskin, D.L., Heck, D.E., Laskin, J.D. (2019). Wound healing in pig skin following exposure to sulfur mustard vapors. The Toxicologist, 168: 272 (A2148).

420. Jan, Y., Heck, D., Laskin, D., Laskin, J. (2019). Nitrogen mustard modifies and cross links wild type and mutant p53 in human epithelial cells. The Toxicologist, 168: 272 (A2150).

421. L. Chao, Kipen, H.M., Laskin, D.L., Georgopoulos, P.G. (2019). A computational biology framework for modeling multisystem adverse outcome pathways initiated by exposures to ozone and associated air pollutants. The Toxicologist, 168: 297 (A2249).

422. Nguyen, R., Chao, L., Laskin, D.L., Georgopoulos, G. (2019). Simulation of macrophage activation dynamics under various microenvironment signals using an agent-based modeling approach. The Toxicologist, 168: 299 (A2258).

423. Mishin, V., Tryon, N., Heck, D., Laskin, D., Laskin, J. (2019). Comparison of cytochrome P450-related NADPH oxidase activity in rat liver microsomes expressing CYP2E1, CYP1A1/2, and CYP3A1/2. The Toxicologist, 168: 470 (A3096).

424. Venosa, A., Tomer, Y., Kopp, M. Gow, A.J., Laskin, D.L., Beers, M.F. (2019). Myeloid cell recruitment and activation following ozone exposure in a murine model of surfactant protein-C pulmonary dysfunction. The FASEB Journal, 33, supplement 1 (A542.19).

425. Guerrier, R., Doherty, C., Smith, L.C., Pivnick, E., Aleksunes, L., Buckley, B., Laskin, D. (2019). From the community to the laboratory: field research to advance student learning. The FASEB Journal, 33, supplement 1 (A598.22).

426. Lee, J.M., Sunil, V.R., Vayas, K., Murray, A., Venosa, A., Cervelli, J., Laskin, J.D., Laskin, D.L. (2019). Valproic acid decreases ozone-induced lung injury and oxidative stress in mice. The FASEB Journal, 33, supplement 1. (A542.20).

427. Murray, A., Banota, T., Smith, L.C., Abramova, E., Rizzolo, D., Venosa, A., Kong, B., Andres, J., Guo, G.L., Gow, A.J., Laskin, J.D., Laskin, D.L. (2019). Farnesoid x receptor regulates nitrogen mustard-induced lung injury and inflammation. Mid-Atlantic Society of Toxicology Annual Meeting, Edison, NJ, October 2019.

428. Murray, A., Banota, T., Smith, L.C., Abramova, E., Rizzolo, D., Venosa, A., Kong, B., Andres, J., Guo, G.L., Gow, A.J., Laskin, J.D., Laskin, D.L. (2019). Regulation of macrophage phenotype by farnesoid x receptor during nitrogen mustard-induced lung injury. Society of Toxicologic Pathology Annual Symposium, Raleigh, NC, June 2019.

429. Malaviya, R., Rancourt, R., Abramova, E., Bellomo, A., Henry, Z., Croutch, C.R., Roseman, J., Peters. E., Casillas, R.P., Amuzie, C., Sunil, V., Laskin, J.D., Laskin, D.L. (2019). Natural history of inhaled sulfur mustard injury. 13th Annual NIH CounterACT Research Symposium, New York, NY, June 2019.

430. Aleksunes, L.M., Smith, L.C., Wahler, G., Laskin, D.L. (2019). Graphical abstracts to communicate CounterACT undergraduate student research. 13th Annual NIH CounterACT Research Symposium, New York, NY, June 2019.

431. Banota, T., Murray, A., Laskin, D.L. (2019). Farnesoid X receptor regulates macrophage phenotype during mustard gas-induced lung injury. Annual Biomedical Research Conference for Minority Students, Anaheim, CA, November 2019.

432. Seymore T., Jiang C. Abramova E, Malaviya R., Laskin D. (2020). Effects of anti-TNFα antibody on sulfur mustard-induced lung injury in rats. Toxicologist 174: A1165, 40.

433. Malaviya, R., Rancourt, R., Abramova, E., Napierala, M., Sunil, V., Croutch, C.R., Roseman, J., Peters, E., Tuttle, R., Laskin, J.D., Laskin, D.L. (2020). Pulmonary effects of inhaled sulfur mustard in rats. Toxicologist 174: A2680, 398.

434. Murray, A., Banota, T., Abramova, E., Andres, J., Smith, L.C., Rizzolo, D., Kong, B., Guo, G.L., Gow, A.J., Laskin, J.D., Laskin, D.L. (2020). Farnesoid x receptor regulates macrophage activation in nitrogen mustard-induced lung injury in a sex-dependent manner. Toxicologist 174: A2682, 398.

435. Rancourt, R.C., Malaviya, R., Cervelli, J., Sowinski, A., Laskin, J.D., Laskin, D.L. (2020). Microparticle detection and phospatidlyserine exposure in airway surface liquid in response to nitrogen mustard inhalation in rats. Toxicologist 174: A2681, 398.

436. Sunil, V.R., Vayas, K.P., Abramova, E., Rancourt, R., Malaviya, R., Laskin, J.D., Laskin, D.L. (2020). Differential activation of alveolar Type II epithelial cells and alveolar macrophages after nitrogen mustard exposure in rats. Toxicologist 174: A2679, 397.

437. Andres, J., Murray, A., Chao, L., Georgopoulos, P., Laskin, J.D., Gow, A.J., Laskin, D.L. (2020). The use of molecular imaging methodology to develop a feed forward model to assess lung function in mustard-induced lung injury Toxicologist 174: A2684, 398.

438. D'Errico, J.N., Murray, A., Wilkinson, M.L., Aleksunes, M., Laskin, D.L., Guo, G.L. (2020). Integrating new technologies into high school toxicology education. Toxicologist 174: A2823, 432.

439. Gardner, C.R., Murray, A., Smith, L.C., Vayas, K., Abramova, E., Cervelli, J. A., Sowinski, A., Koo, S., Banota, T., Napierala, M., Laskin, J.D., Laskin, D.L. (2020). Depletion of CD11b+ alveolar macrophages exacerbates lung injury and oxidative stress following ozone inhalation. Toxicologist 174: A1106, 26.

440. Lee, J., Sunil, V.R. Vayas, K., Abramova, E., Murray, A., Venosa, A., Cervelli, J., Laskin, J.D., Laskin, D.L. (2020). Valproic acid blunts lung injury, oxidative stress, inflammation, and altered pulmonary mechanics induced by inhaled ozone. Toxicologist 174: A1109, 26.

441. Banota, T. Murray, A., Armstrong, L.E., Kong, B. Guo, G.L. Gow, A.J., Laskin, D.L. (2020). The development of pulmonary inflammation and injury in a mouse model of non-alcoholic xteatohepatitis. Toxicologist 174: A1850, 202.

442. Radbel, J. Vayas, K. Le-Hoang, O. Abramova, E., Guo, C.J., Gow, A., Laskin, J.D., Laskin, D.L. (2020). Exacerbation of sepsis-induced acute lung injury (ALI) by ozone Is regulated by macrophage phenotypic switching. Toxicologist 174: A1099, 24.

444. Han, M., Rancourt, R., Laskin, D.L., Andres, J. (2020). Involvement of galectin-3 in maintaining barrier Integrity of lung vasculature Toxicologist 174: A1854, 202.

443. Doherty, C., Smith, C., Laskin, D.L., Buckley, B., Aleksunes, L. (2020). Team science in a summer undergraduate fellowship: field sampling for metal contamination in the Raritan River. Toxicologist 174: A2828, 433.

444. Yang, S., Jan, Y., Mishnikoff, V., Heck, D.E., Laskin, D.L., Laskin, J.D. (2020). Nitrogen mustard targets pathways for tetrahydrobiopterin biosynthesis in human deratinocytes. Toxicologist 174: A2666, 394.

445. Laskin, D.L. (2020). Macrophage phenotype and inflammation in lung injury and resolution: role of lipid metabolism. Laskin, D. Toxicologist 174: A2459, 346.

446. Tomer, Y., Kopp, M., Vayas, K., Gardner, C., Beers, M., Gow, A., Laskin, D., Venosa A. (2020). Lung epithelial cell susceptibility driven by surfactant protein-C mutation enhances ozone-induced toxicity. Toxicologist 174: A1111, 27.

447. Parchuke, E.R., Abramova, Kerkhof, L.J., Laskin, D.L., Gow, A.J. (2020). Effects of chronic pulmonary inflammation on ozone-induced alterations in the lung microbiome. Toxicologist 174: A1112, 27.

448. Smith, L.C., Malcolm, L., Abramova, E., Ge, M., Vayas, K., Gow, A.J., Laskin, D.L. (2020). Role of PPARγ in the resolution of ozone induced lung injury. Toxicologist 174: A1113, 27.

449. Carnino, J.M., Lee, H., Vayas, K., Sunil, V.R., Laskin, D.L., Jin, Y. (2020). Effects of ozone-generated microvesicles and MV-MiR-199a-3p on inflammatory lung responses in alveolar macrophages. Toxicologist 174: A1115, 28.

450. An, Y., Jan, Y., Heck, D.E., Laskin, D.L., Laskin, J.D. (2020). Potential role of ferroptosis in toxicity induced by 9,10-phenanthrenequinone in human lung epithelial Calu-1 cells Y. Toxicologist 174: A1070, 17.

451. Lee, J., Sunil, V.R., Vayas, K., Abramova, E., Cervelli, J., Laskin, J.D., Laskin, D.L. (2020). Abrogation of ozone-induced oxidative stress, inflammation, and aberrant pulmonary mechanics by valproic acid. The FASEB J, Supplement 2020.

451. Radbel, J., Vayas, K., Le-Hoang, O., Abramova, E., Guo, C., Laskin, J.D., Gow, A.J., Laskin, D.L. (2020). Inhibition of inducible nitric oxide synthase (iNOS) attenuates exacerbation of sepsis-induced acute lung injury (ALI) by ozone. Amer J Respir Crit Care Med, 201.

452. Radbel, J., Vayas, K., Le-Hoang, O., Abramova, E., Guo, C., Gow, A.J., Laskin, D.L. (2020). Ozone exposure exacerbated sepsis-induced ARDS in mice. Aspen Lung Conference, Aspen, CO.

453. Murray, A., Andres, J.A., Gow, A.J., Chao, L, Georgopoulos, P., Laskin, J.D., Laskin, D.L. (2021). Predicting alterations in lung function based on structural changes identified in live-animal imaging following exposure of rats to nitrogen mustard. Toxicologist, A2255.

454. Sunil, V., Vayas, K., Lee, J., Abramova, E., Malaviya, R., Guo, C., Laskin, J., Laskin, D.L. (2021). Oxidative stress, metabolic dysfunction, and apoptosis in alveolar epithelial Type II cells following exposure of rats to nitrogen mustard. Toxicologist, A2256.

455. Banota, T., Murray, A., Sowinski, A., Kong, B., Guo, G.L., Laskin, J.D., Laskin, D.L. (2021). Farnesoid X receptor regulates immune cell activation and recruitment to the lung following exposure of mice to nitrogen mustard. Toxicologist, A2257.

456. Andres, J., Murray, A., Chao, L., Georgopoulos, P., Laskin, J.D., Gow, A.J., Laskin, D.L. (2021). Development of feed forward and conditional models based on live-animal imaging to predict effects of nitrogen mustard on pulmonary function in rodents. Toxicologist, A2258.

457. Jan, Y., An, Y., Heck, D.E., Gardner, C.R., Laskin, D.L., Laskin, J.D. (2021). Modulation of the DNA damage response by amifostine protects against nitrogen mustard-induced toxicity in human keratinocytes. Toxicologist, A2259.

458. Malaviya, R., Abramova, E., Bellomo, A., Sunil, V., Croutch, C., Roseman, J., Peters, E., Tuttle R., Amuzie, C., Casillas, R, Laskin, J.D., Laskin, D.L. (2021). Anti-tumor necrosis factor alpha attenuates sulfur mustard induced lung injury and inflammation in rats. Toxicologist, A2261.

459. Bellomo, A., Herbert, J., Basaly, V., Gow, A.J., Laskin, J.D., Laskin, D.L. (2021). Analysis of acute lung injury following nitrogen mustard exposure in mouse precision-cut lung slices. Toxicologist, A2282.

460. Laskin, D.L., Andres, J., Gray, J.P., Murray, A., Li, M., Henry, Z., Walker, L., Laskin, J.D., Aleksunes, L. (2021). Repurposing drugs as countermeasures for chemical weapons: interactive training for undergraduate students. Toxicologist, A 2265.

462. An, Y., Jan, Y., Heck, D.E., Laskin, D.L., Laskin, J.D. (2021). Toxicity induced by 9,10-phenanthrenequinone in human lung epithelial Calu-1 cells via mitochondrial dysfunction and oxidative/ER stress pathways. Toxicologist, A2295.

463. Radbel, J., Le-Hoang, O., Abramova, E., Vayas, K., Laskin, J., Panettieri, R., Gow, A., Laskin, D.L. (2021). Aberrant pulmonary mechanics during ozone induced exacerbation of acute lung injury in a rodent model of sepsis. Toxicologist, A2301.

464. Smith, L.C., Abramova, E., Vayas, K., Guo, C., Laskin, J.D., Gow, A.J., Laskin, D.L. (2021). Regulation of pulmonary surfactant and lipid homeostasis by PPARgamma in a mouse model of ozone induced lung injury. Toxicologist, A2305.

465. Stevenson, E.R., Rancourt, R.C., Kipen, H.M., Black, K., Weisel, C.P., Cervelli, J., Laskin, J.D., Gow, A.J., Laskin, D.L. (2021). Phenotypic analysis of macrophages in human sputum after ozone exposure. Toxicologist, A2309.

466. Doherty, C., Smith, L.C., Buckley, B., Li, M., Henry, Z., Walker, L., Laskin, D.L., Aleksunes, L. (2021). Environmental health sciences training at home during a pandemic. Toxicologist, A3063.

467. Walker, L.M., Bellomo, A., Andres, J., Li, M., Henry, Z., Laskin, D.L., Aleksunes, L., (2021). Breaking through the noise: virtual training to effectively communicate science. Toxicologist, A3064.

468. Aleksunes, L.M., Stevenson, E., Wilkinson, M.L., Gow, A.J., Laskin, D.L., Guo, G.L. (2021). Interactive pharmacogenetics activity to teach genotype based drug dosing. Toxicologist, A3065.

469. Gow, A.J., Wilkinson, M.L., Stevenson, E.R., Laskin, D.L., Guo, G.L., Aleksunes, L.M. (2021). Engaging high school students in group learning in a virtual environment. Toxicologist, A3068.

470. Kelty, J., Herbert, J., McGann, J., Panettieri, R., Laskin, J., Laskin, D., Gow, A. (2021). Pulmonary tissue dysfunction and cytotoxicity in precision cut lung slices exposed to e-cigarette condensate. Toxicologist, A2619.

471. Lee, J., Sunil, V., Vayas, K., Mishin, V., Cervelli, J., Guo, C., Laskin, J., Laskin, D. (2021). Suppression of ozone induced alveolar macrophage activation and increased mitochondrial respiratory function in mice by valproic acid. Toxicologist, A3044.

472. Smith, L., Abramova, E., Vayas, K., Guo, C., Laskin, J.D., Gow, A., Laskin, D.L. (2021). Rosiglitazone restores pulmonary surfactant and lipid homeostasis in mice exposed to ozone. FASEB J., 35(S1).

473. Banota, T., Murray, A., Sowinski, A., Kong, B., Guo, G., Laskin, J., Laskin, D. (2021). Farnesoid X receptor regulates immune cell activation and recruitment to the lung following exposure of mice to nitrogen mustard. FASEB J., 35(S1).

474. Bellomo, A., Herbert, J., Basaly, V., Gow, A., Laskin, J., Laskin, D. (2021). The evaluation of acute lung injury induced by nitrogen mustard in mouse precision cut lung slices. FASEB J., 35(S1).

475. Joseph, L., Gordon, M., Heck, D., Croutch, C., Kang, J., Zhou, P., Laskin, D., Laskin, J. (2021). Changes in rabbit conjunctival mucins following exposure to sulfur mustard. FASEB J., 35(S1).

476. Ji, N., Kipen, H.M., Gong, J., Ohman-Strickland, P., Zhang, J., Laskin, D.L., Fiedler, N., Laumbach, R.J. (2021). Amer J Respir Crit Care Med, 203 (A3181).

477. Radbel, J.M., Goedken, M., Abramova, E., Le-Hoang, O., Vayas, K., Laskin, J., Panettieri, R., Laskin, D.L., (2021). Inhaled ozone exacerbates structural alterations and inflammation in the lung in a rodent model of sepsis. Amer J Respir Crit Care Med, 203 (A3180).

476. Laskin, D.L. (2022). Role of lung lipids in macrophage foam cell formation and pulmonary fibrosis. Toxicologist, A1272:55.

477. Radbel, J., Le-Hoang, O., Gardner, C., Andres, J., Gow, A., Laskin, J.D., Laskin, D.L. (2022). Efferocytosis of apoptotic neutrophils by resident alveolar macrophages in ozone exacerbation of sepsis-induced acute lung injury. Toxicologist, 3492:182.

478. Sunil, V., Vayas, K., Lee, J., Smith, L.C., Abramova, E., Andres, J., Laskin, J.D., Laskin, D.L. (2022). Impaired lung functioning following chronic ozone exposure is associated with inflammatory macrophage activation and altered energy metabolism. Toxicologist, 186:182 (A3489).

477. Lee, J., Vayas, K., Cervelli, J., Gow, A., Sunil, V.R., Laskin, J.D., Laskin, D.L. (2022). Valproic acid suppresses ozone-induced macrophage activation in mice by inhibiting glycolysis and reducing the demand for mitochondria oxidative phosphorylation. Toxicologist, 186:183 (A3498).

478. Rojas, C.M., Andres, J., Francis, M., Joseph, L.B., Zhou, P., Guo, G., Laskin, J.D., Laskin, D.L. (2022). Dysregulation of FXR following ozone-induced oxidative stress leads to persistent NFκB activation in lung macrophages. Toxicologist, 186:184 (A3502).

479. Gardner, C.R., Smith, L.C., Andres, J., Abramova, E., Cervelli, J., Laskin, J.D., Laskin, D.L. (2022). Depletion of CD11b+ blood monocytes and interstitial macrophages exacerbates pulmonary injury in mice following ozone exposure. Toxicologist, 186:185 (A3503).

480. Smith, L.C., Abramova, E., Guo, C., Vayas, K., Laskin, J., Gow, A.J., Laskin, D.L. (2022). Targeting lung lipid homeostasis to mitigate ozone-induced decrements in lung function. Toxicologist, 186:185 (A3504).

481. An, Y., Jan, Y., Heck, D.E., Laskin, D.L., Laskin, J.D. (2022). N-acetylcysteine protects against 9,10-phenanthrenequinone induced toxicity via mitigation of oxidative stress and DNA damage responses in human lung epithelial cells. Toxicologist, 186:189 (A3522).

482. Walker, L.M., Gardner, C.R., Bodenlos, K., Sachdev, D., Wang, S., Laskin, D.L., Aleksunes, L.M. (2022). Human placental macrophage responses to cadmium exposure. Toxicologist, 186:212 (A3634).

483. Andres, J., Jiang, C., Vayas, K., Guo, G., Gow, A., Laskin, J.D., Laskin, D.L. (2022). Role of farnesoid X receptor in nitrogen mustard-induced pulmonary inflammation and injury. Toxicologist, 186:308 (A4072).

484. Malaviya, R., Jiang, C., Abramova, E., Vayas, K., Smith, L.C., Rancourt, R., Gardner, C.R., Gow, A., Laskin, J.D., Laskin, D.L. (2022). Chlorine inhalation is associated with alterations in lung macrophage activation, phenotype, and bioenergetics. Toxicologist, 186:309 (A4079).

485. Bellomo, A., Herbert, J., Gow, A.J., Laskin, J.D., Laskin, D.L. (2022). Nitrogen mustard induces DNA damage and cytotoxicity in mouse precision cut lung slices. Toxicologist, 186:310 (A4082).

486. Jiang, C., Andres, J., Abramova, E., Malaviya, R., Laskin, J.D., Laskin, D.L. (2022). Mitigation of nitrogen mustard-induced lung injury, oxidative stress, and inflammation by N-acetylcysteine. Toxicologist, 186:312 (A4091).

487. Banota, T., Murray, A., Armstrong, L.E., Kong, B., Guo, G.L., Gow, A.J., Laskin, D.L. (2022). Characterization of liver and lung injury and inflammation in a high-fat diet mouse model of nonalcoholic steatohepatitis. Toxicologist, 186:326 (A4154).

488, Kelty, J., Herbert, J., Laskin, J.D., Laskin, D.L., Gow, A. (2022). Rapid impairment of cellular metabolism and ciliary function in precision-cut lung slices by e-cigarette condensates. Toxicologist, 186:346 (A4249).

489. Herbert, J., Kelty, S., Laskin, J.D., Laskin, D.L., Gow, A.J. (2022). Toxicity of e-cigarette menthol flavoring in a precision-cut lung slice model of chronic pulmonary disease. Toxicologist, 186:347 (A4255).

490. Aleksunes, L.M., Doherty, C., Smith, L.C., Abustan, M., Andres, J., Walker, L., Bellomo, A., Laskin, D.L. (2022). Hybrid summer internships facilitate nationwide collaboration in toxicology training. Toxicologist, 186:289 (A3984).

491. Gow, A.J., Stevenson, E.R., Wilkinson, M.L., Guo, G., Laskin, D.L., Aleksunes, L.M. (2022). The value of small group learning in a virtual educational environment. Toxicologist, 186:290 (A3987).

492. Guo, C., Herbert, J., Kelty, S., Laskin, D., Gow, A.J. (2022). A novel method for measuring lung metabolism of precision cut lung slices. FASEB J., 36 Suppl 1.

493. Aleksunes, L.M., Gray, J.P., Andres, J., Laskin, J.D., Laskin, D.L. (2022). Re-purposing drugs as countermeasures for chemical weapon toxicities: interactive pharmacology training. FASEB J., 36 Suppl 1.

494. Pappas, G., Vujic, E., Gardner, C., Guo, C., Black, K., Therkorn, J., Laskin, D., Kipen, H., Falvo, M., Gow, A. (2022). Inflammatory activation and nitric oxide oxidation in exertional dyspnea in Southwest Asia deployed military veterans. FASEB J., 36 Suppl 1.

495. Sunil, V.R., Vayas, K., Lee, J., Abramova, H., Malaviya, R., Laskin, J.D., Laskin, D.L. (2022). Nitrogen mustard exposure is associated with impaired bioenergetics and cell death pathways in alveolar epithelial type II cells. Amer J Respir Crit Care Med, 205 (A3259).

496. Malaviya, R., Sunil, V., Venosa, V., Andres, J., Jiang, C., Abramova, H., Vayas, K., Laskin, J.D., Laskin, D.L. (2022). Role of oxidative stress in pulmonary injury induced by nitrogen mustard. Amer J Respir Crit Care Med, 205 (A3202).

497. Radbel, J., Le-Hoang, O., Abramova, H., Pappas, G., Zhou, P., Joseph, L., Gow, A., Laskin, D.L. (2022). Ozone exacerbation of ALI following sepsis is associated with oxidative and nitrosative stress. Amer J Respir Crit Care Med, 205 (A5678).

498. Gelfand, B., Smith, L.C., Laskin, D.L. (2023). PGC-1β promotes macrophage metabolic activation toward a proresolution phenotype after ozone exposure. Toxicologist (A4630).

499. Smith, L.C., Abramova, E., Vayas, K., Gelfand, B., Gow, A., Laskin, J.D., Laskin, D.L. (2023). Ozone inhalation enhances the accumulation of regulatory T lymphocytes in the lung. Toxicologist 192 (A4648)

500. Laskin, D.L., Stevenson, E.R., Rancourt, R.C., Cervelli, J., Black, K., Kipen, H.K., Laskin, J.D., Gow, A.J. (2023). Inflammatory macrophage accumulation in the lung following ozone exposure in humans is associated with increases in MCP-1 and CXCL10. Toxicologist 192 (A2047).

501. Rodriguez, R.J., Smith, L.C., Laskin, J.D., Laskin, D.L. (2023). Activation of the integrated stress response in lung macrophages after exposure of mice to ozone. Toxicologist 192 (A4652).

502. Gow, A.J., Lee, J.M., Meshanni, J.A., Vayas, K., Sunil, V., Laskin, J.D., Laskin, D.L. (2023). Distinct effects of acute and chronic ozone exposure on pulmonary function in mice. Toxicologist 192 (A4636).

503. Radbel, J., Meshanni, J., Lehoang, O., Vayas, K., Abramova, E., Cervelli, J., Laskin, J.D., Gow, A.J., Laskin, D.L. (2023). Differential effects of acute and chronic ozone exposure on resident lung macrophage efferocytosis of apoptotic neutrophils. Toxicologist 192 (A4644).

504. Heck, DE, Su, O, Meshanni, J.A., Parzecki, I.M., Dolon, A.M., Zhou, P., Campbell, S.C., Laskin, J.D., Laskin, D.L., Joseph, L.B. (2023). Lung exposure to aerosolized nitrogen mustard causes damage to the small and large intestines of Wistar rats. Toxicologist 192 (A3302).

505. Meshanni, J.A., Sun, R., Vayas, K., Guo, G., Gow, A.J., Laskin, J.D., Laskin, D.L. (2023). Role of the farnesoid X receptor (FXR) in regulating macrophage cholesterol homeostasis following pulmonary exposure of rats to nitrogen mustard injury. Toxicologist 192 (A3304).

506. A. Bellomo, J. Herbert, M. J. Kudlak, A. J. Gow, J. D. Laskin, D. L. Laskin. (2023). Nitrogen mustard impairs bioenergetics and airway function in precision-cut lung slices. Toxicologist 192 (3305).

507. Malaviya, R., Rancourt, R.C., Abramova, E., Vayas, K., Gow, A.J., Laskin, J.D., Laskin, D.L. (2023). Role of surfactant protein D in chlorine-induced lung injury and inflammation. Toxicologist 192 (A3307).

508. Kudlak, M.J., Herbert, J., Bellomo, A., Gow, A.J., Laskin, J.D., Laskin, D.L. (2023). Elucidating the role of Inducible nitric oxide synthase in e-cigarette toxicity using precision-cut lung slices. Toxicologist (A3410).

509. Wang, S., Walker, C. Doherty, C., Buckley, B., Gardner, C., Laskin, D., Aleksunes, L. (2023). Macrophage heterogeneity and cadmium exposure in human placentas. Toxicologist 192 (A3552).

510. Yang, S., Jan, Y., Aleksunes, L.M., Heck, D.E., Laskin, D.L., Laskin, J.D. (2023). Cadmium modulates biopterin metabolism in human placenta trophoblasts. Toxicologist 192 (4219).

511. Guo, G., Woo, J., Stevenson, E.R., Gow, A.J., Laskin, D.L., Aleksunes, L. (2023). All hands-on deck! Interactive learning increases student engagement and knowledge retention in high school toxicology education. Toxicologist 192 (A3890).

512. Doherty, C., Butch, K., Crespo, L., Phillips, J., Buckley, B., Laskin, D.L., Aleksunes, L.M. (2023). Environmental health science in action: field sampling with community partners. Toxicologist 192 (A3898).

513. Sun, R., Meshanni, J.A., Lee, J.M., Vayas, K., Guo, C., Gow, A.J., Laskin, D.L. (2023). Evaluating the role of rodent macrophage immunometabolism in response to endotoxin. Toxicologist 192 (A4087).

514. Radbel, J., Meshanni, J., Le-Hoang, O., Abramova, E., Vayas, K., Cervelli, J., Laskin, J., Gow, A., J., Laskin, D.L. (2023). Prolonged inflammation following ozone exposure in endotoxemic mice is associated with reduced resident lung macrophage efferocytosis of apoptotic neutrophils. Amer J Respir Crit Care Med, 207 (A3599).

515. Sunil, V., Vayas, K., Lee, J. Smith, C., Abramova, E., Meshanni, J., Radbel, J., Laskin, J., Laskin, D. (2023). Impaired lung functioning following chronic ozone exposure is associated with inflammatory macrophage activation and altered bioenergetics. Amer J Respir Crit Care Med, 207 (A3995).

516. Malaviya, R., Jiang, C., Abramova, E., Vayas, K.N., Smith, L.C., Rancourt, R.C., Gardner, C., Gow, A.J., Laskin, J.D., Laskin, D.L. (2023). Proinflammatory activation of lung macrophages and altered bioenergetics following chlorine inhalation in mice. Amer J Respir Crit Care Med, 207 (A1325).

517. Meshanni, J., Sun, R., Vayas, K., Guo, G., Gow, A.J., Laskin, J.D., Laskin, D.L. (2023). Suppression of lung nitrogen mustard-induced pulmonary fibrosis, oxidative stress and inflammatory macrophage activation by the farnesoid X receptor agonist, obetacholic acid. Amer J Respir Crit Care Med, 207 (A825).

518. Malaviya, R., Rancourt, R.C., Abramova, E.V., Vaas, K.N., Longoria, C.R., Gow, A.J., Laskin, J.D., Laskin, D.L. (2024). Surfactant protein D protects against lung injury following chlorine gas exposure by reducing oxidative stress and inflammation. Toxicologist (A3592), 286.

519. Bellomo, A., Herbert, J., Kudlak, M.J., Aggarwal, T., Izug, E., Gow, A.J, Laskin, J.D., Laskin, D.L. (2024). Oxidative stress promotes functional and metabolic impairments after nitrogen mustard exposure in precision cut lung slices. Toxicologist (A3594), 286.

520. Gelfand-Titiyevsky, B., Abramova, E., Laskin, J.D., Gow, A.J., Laskin, D.L., Smith, L.C. (2024). Role of PGC-1b in macrophage metabolism and CX3CR1+ phenotypic switching after ozone exposure in mice. Toxicologist (A3970), 395.

521. Smith, L.C., E. Aramova, E., Vayas, K., Ramar, M., Gow, A.J., Laskin, J.D., Laskin, D.L. (2024). Role of Era in macrophage immunometabolic activation and lung injury after ozone exposure in mice. Toxicologist (3980), 398.

522. Rodriguez, J.R., Laskin, J.D., Laskin, D.L. (2024). Use of an air-liquid interface model to assess the effects of ozone on activation of the integrated stress response in macrophages. Toxicologist (A3982), 399.

523. Longoria, C.R., Zhou, P., Sunil, K., Vayas, K., Su, O., Rojas, C.M., Radel, J.M., Laskin, J.D., Joseph, L., Campell, Laskin, D.L. (2024). Distinct effects of acute and chronic ozone exposure on the gut microbiome and ileal structure in mice. Toxicologist (A3983), 399.

524. Sun, R., Meshanni, J., Guo, C., Gardner, C., Hahn, R., Black, K., Rancourt, R., Laskin, J.D., Kipen, H.M., Gow, A.J., Laskin, D.L. (2024). Human sputum macrophage and peripheral blood neutrophil immunometabolism follow controlled exposure to inhaled ozone. Toxicologist (A3985), 400.

535. Kudlak, M.J., Herbert, J., Bellomo, A., Gow, A.J., Laskin, J.D., Laskin, D.L. (2024). Evaluating flavored e-cigarette-induced pulmonary toxicity using precision cut lung slices (PCLS). Toxicologist (A4107), 437.

INVITED LECTURES AND SEMINARS (SINCE 2010)

"Pulmonary Effects of Inhaled Air Pollutants in Elderly Mice: Role of Oxidative Stress and Inflammatory Cytokines", Society of Toxicology 49th Annual Meeting Symposium, Aging as a Determinant of Xenobiotic Toxicity, Salt Lake City, UT, March 10, 2010.

"Macrophages, Inflammatory Mediators and Hepatotoxicity", Charles L. Davis Foundation for the International Advancement of Veterinary and Comparative Pathology Symposium, 'Integrated Novel Approaches to Understanding Drug-induced Liver Injury', Sanofi-Aventis, Bridgewater, NJ, May 7, 2010.

"Macrophages and Hepatotoxicity", Johnson & Johnson, Raritan, NJ, May 12, 2010.

"UMDNJ/Rutgers University CounterACT Research Center of Excellence", Rutgers University Sponsored Research Showcase, October 15, 2010.

"Macrophages and Inflammatory Mediators in Hepatotoxicity: A Battle of Forces", Society of Toxicology Symposium, Macrophages in Toxicity and Disease Pathogenesis, Washington DC, March 8, 2011.

"Macrophages and Hepatotoxicity", Pennsylvania State University, College Station, PA, May 5, 2011.

"Macrophages and Tissue Injury", Grand Rounds, Department of Pediatrics, UMDNJ-Robert Wood Johnson Medical School, NJ, May 31, 2012.

"Inflammatory Mechanisms of Vesicant-induced Lung Injury", 6th Annual Network Research Symposium, NIH CounterACT Program, San Francisco, CA, June 2012.

"Macrophages and Hepatotoxicity: Agents of Defense or Destruction?" Department of Medicine, Mt. Sinai School of Medicine, NY, October 3, 2012.

"Macrophages and Tissue Injury: Agents of Defense or Destruction?" Featured speaker, Workshop: Cellular Injury: Cell Death and Survival, American Society for Investigative Pathology, Experimental Biology, Boston, April 21, 2013.

"Macrophages and Tissue Injury: Agents of Defense or Destruction?" University of Ponce School of Medicine, Ponce, Puerto Rico, February 5, 2014.

"Pathologic and Protective Role of Macrophages in Drug-induced Hepatotoxicity". ASPET Toxicology Division Symposium, Experimental Biology annual meeting, San Diego, April 29, 2014.

"Macrophages and Hepatotoxicity: Agents of Defense or Destruction?" Sapienza University, Rome, Italy, May 28, 2014.

"Macrophages and Ozone-induced Lung Injury: A Battle of Forces". Toxicology Program, University of North Carolina, Chapel Hill, NC, October 5, 2015.

"Macrophages and Ozone-induced Lung Injury: Agents of Defense or Destruction?" EOHSI Symposium: A Tribute to Dr. Paul Lioy, Pioneer in Exposure Science, Rutgers University, November 12, 2015.

"Macrophages and Ozone Toxicity: Agents of Defense or Destruction?" School of Pharmacy, University of New Mexico, Albuquerque, NM, February 1, 2016.

"Sulfur Mustard-induced Pulmonary Injury: Current Therapeutic Approaches to Mitigating Toxicity"; Symposium Session: Sulfur Mustard Poisoning: Mechanisms of Dermal and Pulmonary Toxicity and New Treatment Approaches, Society of Toxicology 55th Annual Meeting, New Orleans, LA, March 16, 2016.

"Inflammatory Mechanisms of Mustard-induced Lung Injury"; 10th Annual Network Research Symposium, NIH CounterACT Program, UC Davis, Davis, CA, June 15-17, 2016.

"Inflammatory Mechanisms of Lung Injury Induced by Mustard Vesicants"; Gordon Research Conference, Chemical and Biological Terrorism Defense, Ventura, CA, March 5-9, 2017.

"The Biology of Ozone Inhalation"; Ozone Research Center Science Workshop 2017, Ozone 2017- From Basic Science to Public Health, Environmental and Occupational Health Sciences Institute, Rutgers University, Piscataway, NJ, March 24, 2017.

"Role of Macrophages in Irritant-induced Lung Injury"; Department of Occupational and Environmental Health, University of Iowa, Iowa City, IA, April 21, 2017.

"Inflammatory Mechanisms of Mustard-induced Lung Injury"; 11th Annual Network Research Symposium, NIH CounterACT Program, Harvard University, Boston, MA, June 12-14, 2017.

"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-TNFa 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.