

CURRICULUM VITAE

JANET S. LEE, MD



DATE: March 17, 2023

CITIZENSHIP: USA

ADDRESS AND TELEPHONE NUMBERS:

Division of Pulmonary and Critical Care Medicine
MSC 8052-43-14
John T. Milliken Department of Medicine
Washington University School of Medicine
660 South Euclid Avenue
St. Louis, MO 63110

Business Phone: (314) 273-7040

E-Mail: ljanet@wustl.edu

PRESENT POSITION:

Professor of Medicine
Division Chief, Pulmonary and Critical Care Medicine

EDUCATION:

Undergraduate:

1987-1991 B.A. Natural Sciences, The Johns Hopkins University, Baltimore, Maryland

Graduate:

1991-1995 M.D., *cum laude*, Georgetown University, Washington, District of Columbia

Postgraduate:

1995-1996 Internship, Department of Medicine, University of Alabama at Birmingham, Birmingham, Alabama

1996-1998 Residency, Department of Medicine, University of Alabama at Birmingham, Birmingham, Alabama

1998-2001 Fellowship, Pulmonary and Critical Care Medicine, University of Washington, Seattle, Washington

1999-2004 Postdoctoral Fellowship, VA Pulmonary Research Laboratories, University of Washington, Seattle, Washington

ACADEMIC POSITIONS / EMPLOYMENT:

2002 Acting Instructor, Division of Pulmonary and Critical Care Medicine, University of Washington, Seattle, WA

2004-2005 Visiting Assistant Professor, Division of Pulmonary, Allergy and Critical Care Medicine, Department of Medicine, University of Pittsburgh, Pittsburgh, PA

2005-2011 Assistant Professor of Medicine, Division of Pulmonary, Allergy, and Critical Care Medicine, Department of Medicine, University of Pittsburgh, Pittsburgh, PA

2011	Associate Professor of Medicine, Division of Pulmonary, Allergy and Critical Care Medicine, Department of Medicine, University of Pittsburgh, Pittsburgh, PA (Tenure granted 6/1/14)
2011	Member, Pittsburgh Heart, Lung, Blood and Vascular Medicine Institute, University of Pittsburgh, Pittsburgh, PA
2013	Associate Professor (Secondary Appointment), Department of Environmental Occupational Health, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA
2014-2020	Director, Translational Research Track, Master of Science in Clinical Research program, Institute for Clinical Research Education, University of Pittsburgh
2016-2022	Director, Pulmonary Translational Research Core, Division of Pulmonary, Allergy, Critical Care Medicine, Department of Medicine, University of Pittsburgh
2016	Professor of Medicine (tenured), Division of Pulmonary, Allergy, and Critical Care Medicine, Department of Medicine, School of Medicine, University of Pittsburgh, Pittsburgh, PA
2017	Professor (Secondary Appointment), Department of Environmental Occupational Health, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA
2018	Director, Acute Lung Injury Center of Excellence, Division of Pulmonary, Allergy, and Critical Care Medicine, Department of Medicine, University of Pittsburgh, Pittsburgh, PA
2019	UPMC Endowed Chair in Acute Lung Injury, The University of Pittsburgh Medical Center, Pittsburgh, PA
2023	Professor and Division Chief, Division of Pulmonary and Critical Care Medicine, Washington University in St. Louis

UNIVERSITY AND HOSPITAL APPOINTMENTS AND COMMITTEES:

1. **Above & Beyond, University Pittsburgh Medical Center**, recognized by Samuel Laciak RN CNSN OPC for stabilizing organ donor patient in the ICU, June 21, 2005.
2. **Panelist**, “Being Successful and Striving for Sanity: Balancing Your Career and Your Life”, Health Sciences 2008 Course in Scientific Management and Leadership, University of Pittsburgh, April 2008.
3. **Moderator**, “Recharging Your Personal Battery Pack”, Health Sciences 2009 Course in Scientific Management and Leadership, University of Pittsburgh, April 2009.
4. **Member, Fellowship Committee**, Division of Pulmonary, Allergy and Critical Care Medicine, University of Pittsburgh, 2005-2022.
5. **Interviewer**, Medical School Applicants, University of Pittsburgh School of Medicine, 2009-2013.
6. **Member, Grant Review Committee**, Department of Medicine Junior Scholar Award, 2011-2013. VMI Research Award, 2018.
7. **Member, School of Medicine Admissions Committee**, University of Pittsburgh School of Medicine, 2012-2015.
8. **Member and Career Advisor, Steering Committee for PSTP/MSTP**, University of Pittsburgh School of Medicine 2014-2022.
9. **Faculty Member**, Cellular and Molecular Pathology Graduate Training Program, University of Pittsburgh, 2014-2022.
10. **Faculty Judge and Facilitator**, Department of Medicine Research Day, University of Pittsburgh School of Medicine, 2014-2019.
11. **Senior Advisor, Career Mentoring Program (CaMP) for Junior Faculty**, Office of the Dean, School of Medicine 2014-2017.
12. **Mentor, Department of Medicine Mentoring Program**, Mentor to Dr. Kathleen Dorritie, Assistant Professor of Medicine, Division of Hematology/Oncology, 2015-2016.

13. **Faculty Facilitator**, “Mentoring Matters” Workshop, Institute for Clinical Research Education, University of Pittsburgh, August 28, 2014.
14. **Ad Hoc Grant Reviewer**, CTSI, University of Pittsburgh, 2014-2015, 2019.
15. **Co-Director**, Division of Pulmonary, Allergy, and Critical Care Medicine Awards Committee, 2017-2019.
16. **Faculty Interviewer**, Physician Scientist Training Program applicants, University of Pittsburgh School of Medicine 2015-2022.
17. **Faculty Interviewer**, Medical Scientist Training Program applicants, University of Pittsburgh School of Medicine 2017-2018.
18. **Member, Curriculum and Career Development Committee, Burroughs Wellcome Fund Incubator Program**, UPMC and University of Pittsburgh, 2018-2020.
19. **Member, Search Committee for Division Chief of Pulmonary, Allergy, Critical Care Medicine**, UPMC and University of Pittsburgh, 2019.
20. **Faculty Member**, Program in Microbiology and Immunology Graduate Training Program, University of Pittsburgh, 2020-2022.
21. **Co-Chair, MSTP and Burroughs Wellcome Fund Strategic Planning Committee**, University of Pittsburgh School of Medicine, 2021.
22. **Member, Pediatric Scientist Development Program (PedSDP) Steering Committee**, University of Pittsburgh Children’s Hospital, 2022.

MEDICAL LICENSURE AND BOARD CERTIFICATION:

1998-2008	Diplomat, Internal Medicine
2000-present	Diplomat, Pulmonary Diseases – recertified 2010, 2020 (until 2030)
2001-present	Diplomat, Critical Care Medicine – recertified 2011, 2021 (until 2031)
1996-1998	Alabama Medical License, #20164
1998-2004	Washington Medical License, #36059
2004-2024	Pennsylvania Medical License, #424312
2023	Missouri Medical License, #2022050122

HONORS AND AWARDS:

1994	Alpha Omega Alpha, Georgetown University
1995	Janet M. Glasgow Memorial Achievement Citation for Scholastic Achievement, AMWA
1998	Outstanding Senior Resident, William E. Dismukes, Award of Excellence, University of Alabama at Birmingham
2004	Awardee, American Lung Association Research Grant (declined upon receipt of AHA grant)
2004	Recipient, NIH Loan Repayment Program
2013	Vascular Medicine Institute Scholar Award, University of Pittsburgh
2013	Elected Member, American Society for Clinical Investigation (ASCI)
2015	PACCM Outstanding Mentor Award, University of Pittsburgh
2017	Inspirational Physicians Honoree, American Medical Association Women Physicians Section
2020	Elected Member, Association of American Physicians (AAP)
2020	American Thoracic Society Recognition Award for Scientific Accomplishment

EDITORIAL RESPONSIBILITIES:

Journal Reviewer (Ad Hoc)

Allergy

Am Journal of Respiratory Critical Care Medicine

Am Journal of Respiratory Cell and Molecular Biology
American Journal of Physiology: Lung Cellular and Molecular Physiology
Critical Care Medicine
Blood
Immunobiology
J Leukocyte Biology
J Immunology
J Clinical Investigation
JCI Insight
mBio
Mucosal Immunology
Nature Reviews Immunology
Science Translational Medicine
PLOS One
Proceedings of the National Academy of Sciences
Experimental Lung Research
Frontiers Physiol
Hematology
Scientific Reports
British Journal of Hematology
European Respiratory Journal
Virulence

2002-2005 **Website Journal Club Associate Editor**, Pulmonary Circulation Leukocyte Adhesion/Migration, Pulmonary Circulation Assembly Website Journal Club, Reviews Online, <http://www.thoracic.org/assemblies/pc/pcjclub.asp>, American Thoracic Society

September 2018-2023 **Associate Editor**, Microbes and Innate Immunity section, *Frontiers in Cellular and Infection Microbiology*

2021-2025 **Editorial Board Member**, Immunobiology

NATIONAL SCIENTIFIC PANELS:

1. American Heart Association, Mid-Atlantic Region, Study Section 5, Molecular signaling, 2007.
2. American Heart Association, Mid-Atlantic Region, Study Section 5, Molecular signaling, 2008.
3. American Heart Association, R1 & 2, Immunology and Virology Committee, 2009.
4. American Heart Association, Immunology BSc1 Committee, 2010.
5. Kentucky Science and Engineering Foundation R&D Excellence Awards, April 2010
6. Grant Reviewer, Special Emphasis Panel, NHLBI initiatives ZRG1 VH-F 50 (S): Selected Topics in Transfusion Medicine, June 17, 2010
7. Flight Attendant Medical Research Institute, Study Section 2, COPD and Emphysema, 2010
8. Grant Reviewer, Special Emphasis Panel, NHLBI initiatives ZRG1 VH-F 50 (S): Selected Topics in Transfusion Medicine, Feb 7-8, 2011
9. Grant Reviewer, Special Emphasis Panel, NHLBI initiatives ZRG1 VH-F 50 (S): Selected Topics in Transfusion Medicine, June 20-21, 2011
10. Ad hoc Grant Reviewer, Medical Research Council, United Kingdom, Populations and Systems Medicine Board Partnership June 2011

11. **Co-Chair**, Special Emphasis Panel, NHLBI initiatives ZRG1 VH-F 50 (S): Selected Topics in Transfusion Medicine, September 26-27, 2011
12. **Co-Chair**, Special Emphasis Panel, NHLBI initiatives ZRG1 VH-F 50 (S): Selected Topics in Transfusion Medicine, Feb 1-2, 2012
13. Grant Reviewer, National Blood Foundation, March 26, 2012
14. Grant Reviewer, Israel Science Foundation. March 27, 2012
15. Ad hoc Grant Reviewer, ZRG1 BCMB-A (51) R RFA RM11-006: Transformative R01 Roadmap Review, May 31, 2012
16. **Co-Chair**, Special Emphasis Panel, NHLBI initiatives ZRG1 VH-F 50 (S): Selected Topics in Transfusion Medicine, June 12-13, 2012 and **Chair**, Special Emphasis Panel, NHLBI initiatives ZRG1 VH-A 50 (S): Selected Topics in Transfusion Medicine, June 13, 2012
17. Ad hoc Grant Reviewer, ZRG1 VH-F (50) S meeting, 06/24/2013
18. Ad hoc Grant Reviewer, 2014/01 ZHL1 CSR-P (F1) 1 Mentored Transition to Independence, NHLBI K99/R00 and Career Transition (K22) Awards: November 21-22, 2013.
19. Ad hoc Grant Reviewer, Medical Research Council, United Kingdom, Populations and Systems Medicine Board, December 2013
20. Ad hoc Grant Reviewer, 2014/05 ZHL1 CSR-P (M1) 1 Mentored Transition to Independence: NHLBI K99/R00 and Career Transition (K22) Awards, March 5-6, 2014
21. Ad hoc External Grant Reviewer, Scientific Advisory Council of the Dutch Landsteiner Foundation for Blood Transfusion Research, June 2014
22. Mail-in Ad hoc Reviewer, NIH ZRG1 SBIB-V (82) SBIB Clinical Pediatric and Fetal Applications, September 23, 2014
23. Ad hoc Reviewer, Innate Immunity and Inflammation NIH Standing Study Section, Salt Lake City, Utah, October 21-22, 2014
24. Ad hoc Reviewer, Innate Immunity and Inflammation NIH Standing Study Section, Pentagon City, Arlington, VA, February 12-13, 2015
25. **Chartered Member**, Innate Immunity and Inflammation NIH Standing Study Section, October 1, 2015- June 30, 2019.
26. Ad hoc Reviewer, 2019/10 ZAI1 JHM-1(SI) 1, NIAID SBIR Phase II clinical Trial Implementation Cooperative Agreement (U44), May 7, 2019.
27. Ad-hoc reviewer, NHLBI Program Project (P01) Review, 2020/01 HLBP 1, Work Group #10, September 27, 2019.
28. Member, Scientific Advisory Committee, Grant Applications Review for the American Thoracic Society Foundation, Chicago, IL, November 14-15, 2019.
29. Ad-hoc reviewer, NHLBI Program Project (P01) Review, HLBP 12, April 15, 2020.
30. Ad-hoc reviewer, Lung Injury Repair and Resolution (LIRR) NIH Standing Study Section, IAR, June 17-18, 2020.
31. Member, Scientific Advisory Committee, Grant Applications Review for the American Thoracic Society Foundation GSK grants on COVID-19, August 12, 2020.
32. Ad-hoc reviewer, NIH/NHLBI Program Project (P01) Review, HLBP 7, October 15, 2020.
33. Member, Scientific Advisory Committee, Letter of Intent reviews for the American Thoracic Society Foundation grants, October 21, 2020.
34. Ad-hoc reviewer, NIH 2021/05 ZRG1 PSE-H (70) R RFA-RM-20-014 and RFA-RM-20-021: NIH Director's Early Independence Award, December 12, 2020.
35. Member, Scientific Advisory Committee, grant reviews for the American Thoracic Society Foundation, January 28-29, 2021.

36. Ad-hoc reviewer, 2021/05 HLBP (6) 1 Heart, Lung, and Blood Program Project Review Committee, February 17, 2021
37. Ad-hoc reviewer, NIH Lung Injury, Repair and Remodeling Study Section, February 22-23, 2021.
38. Ad-hoc reviewer, NIH 2021/10 ZHL1 CSR-I (O1) 1 NHLBI Outstanding Investigator Award (OIA) – R35, August 4-5, 2021
39. Member, Scientific Grant Review Committee, grant reviews for the American Thoracic Society Foundation, March 3, 2022
40. **Chartered Member**, NIH/NHLBI Heart, Lung, Blood Program Project Review Committee (HLBP), July 1, 2022-June 30, 2026
41. Member, Scientific Grant Review Committee, grant reviews for the American Thoracic Society Foundation, February 23-24, 2023
42. **Member**, Food and Drug Administration Pulmonary-Allergy Drugs Advisory Committee, 2022-2026

PROFESSIONAL SOCIETIES AND ORGANIZATIONS:

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|-----------------|--|
| 2000-present | Member, American Thoracic Society |
| 2000 | Member, Respiratory Cell and Molecular Biology Assembly, American Thoracic Society |
| 2005-2008 | Member, ATS Program Committee, Allergy, Immunology, and Inflammation Assembly |
| 2011 | Member, American Association for Blood Banks |
| 2011-present | Member, AAI |
| 2011-2016 | Member, American Thoracic Society Research Advocacy Committee |
| 2012-2016 | Member, Advisory Board of the ATS Research Quarterly Newsletter |
| 2013-2015 | Member, American Thoracic Society Membership Committee |
| 2015-2017 | Vice Chair, American Thoracic Society Membership Committee |
| 2016 | Member, American Thoracic Society Finance Committee |
| 2017-2019 | Chair, American Thoracic Society Membership Committee |
| 2017-2019, 2022 | Member, ATS Allergy, Immunology, and Inflammation (All) Assembly Executive Committee |
| 2019 | Member, ATS All Assembly Nomination Committee |
| 2019-2022 | Member, ATS All Assembly Planning Committee |
| 2019-2021 | Member, ATS Scientific Grant Review Committee |
| 2019-2020 | Member, ATS International Task Force Committee |
| 2022 | Chair-Elect, ATS All Assembly Program Committee |
| 2022 | Member, ATS Pulmonary Infection-TB Assembly Pneumonia Advisory Group |
| 2023 | Incoming Chair, ATS All Assembly Program Committee |
| 2024 | Co-Vice Chair, Biology of Acute Respiratory Infection, Gordon Research Conference |

MAJOR INVITED PROFESSORSHIPS AND LECTURESHIPS:

Local:

1. Invited Speaker, Advanced Lung Diseases Conference, “Sepsis and MODS: State of the Art,” Center for Continuing Education In the Health Sciences, University of Pittsburgh School of Medicine, Pittsburgh, PA, March 24, 2007.
2. Invited Speaker, “Red Cell Transfusion in the Critically Ill,” Medicine Grand Rounds. Department of Medicine, University of Pittsburgh, February 11, 2011.
3. Invited Speaker, “Transfusion and Lung Injury: Dissecting the Association,” University of Pittsburgh Division of Pulmonary and Critical Care Medicine Grand Rounds, Pittsburgh, PA, November 10, 2012.
4. Invited Speaker, “Regulatory Mechanisms Employed by Mononuclear Phagocytes Following Lung Injury”, Basic and Translational Research in Lung Disease Conference, University of Pittsburgh, Pittsburgh, PA, February 26, 2013.

5. Invited Speaker, "Resolution versus Immunosuppression: The Double-Edged Sword in Lung Injury," University of Pittsburgh, Graduate School of Public Health, Department of Occupational and Environmental Health, Pittsburgh, PA, April 4, 2013.
6. Invited Speaker, Children's Hospital of Pittsburgh Pulmonary, Allergy and Immunology Conference, "Neutrophils and Macrophages: Bridging Phagocytes to Resolve Inflammation in the Lungs", Pittsburgh, PA, September 16, 2014.
7. Keynote speaker, Sixth Annual University of Pittsburgh School of Medicine Physician Scientist Training Program Symposium, "Neutrophils and Macrophages: Bridging Phagocytes to Resolve Inflammation in the Lungs", Pittsburgh, PA, September 19th, 2014.
8. Invited Speaker, "Probing Host-Pathogen Interactions in Lung Injury: Revisiting Protease-Antiprotease Interplay", Department of Microbiology and Molecular Genetics Spring Seminar Series, University of Pittsburgh, Pittsburgh, PA, May 25, 2016.
9. Speaker, "A Biometrics Core to Facilitate Translational Research in *P. aeruginosa* Lower Respiratory Tract Infections", Cystic Fibrosis Seminar, Pittsburgh, PA, October 11th, 2016.
10. Invited Speaker, "A Targeting Strategy to Combat Infection-Induced Injury", Cystic Fibrosis 2nd Annual Research Retreat, Rangos Research Center, Pittsburgh, PA, November 11, 2016.
11. Invited Speaker, Bench to Bedside series topic "The Red Cell Storage Lesion: From Bench to Bedside" with talk on "*Red Cell Transfusion: How Old is Too Old? From Biology to Controversy*", Medicine Grand Rounds, University of Pittsburgh, Pittsburgh, PA, November 22, 2016.
12. Invited Speaker, "Host Impairments in MDR *K. pneumoniae* Killing", Molecular Medicine Research Seminar Series, Children's Hospital of Pittsburgh, Pittsburgh, PA, January 17, 2017.
13. Invited Speaker, "Host Defense Against Multi-Drug Resistant *K. pneumoniae*", Pulmonary Grand Rounds, Division of Pulmonary, Allergy, and Critical Care Medicine, Pittsburgh, PA January 27, 2017.
14. Invited Speaker, "Host Defense Against Multi-Drug Resistant *K. pneumoniae*", Department of Microbiology and Molecular Genetics and Immunology Research Retreat, Pittsburgh, PA, March 1, 2017.
15. Invited Speaker, "Deconstructing Lung Injury Using Animal Models", Department of Critical Care Medicine Grand Rounds, University of Pittsburgh, Pittsburgh, PA, August 2, 2017.
16. Invited Speaker, "Host Defense and ARDS in the ICU: Two Sides of the Same Coin", Medicine Grand Rounds Sachs Lectureship, University of Pittsburgh Medical Center Shadyside Hospital, April 4, 2019.
17. Invited Speaker, "Translational Science Research Track Pathway", Division of Pediatric Hematology Oncology Seminar, Children's Hospital of Pittsburgh, Pittsburgh, PA, January 14, 2020.
18. Invited Speaker, "Heme-mediated STAT1 dysregulation during *K. pneumoniae* infection", Simmons Surgical Research Conference, Department of Surgery, University of Pittsburgh, March 25, 2021.
19. Invited Speaker, "Bridging a clinical and scientific career (or what I learned along the way)", Pediatric Scientist Development Program (PedSDP) Noon Seminar, Children's Hospital of Pittsburgh, virtual seminar, March 23, 2022.
20. Keynote Speaker, "Physician scientist training: a bridge to everywhere". Pediatric Scientist Development Program, 6th Annual Retreat, University of Pittsburgh Department of Pediatrics, Children's Hospital of Pittsburgh, June 7, 2022.
21. Keynote Address Speaker, "Bridging a clinical and scientific career (or what I learned along the way)", University of Pittsburgh/Carnegie Mellon University Medical Scientist Training Program Annual Scientific Retreat, The University Club, July 29, 2022. Keynote address shared with Dr. Matthew Rosengart.
22. Speaker, "Big Ideas in Lung Injury", Pulmonary Research Day, Division of Pulmonary and Critical Care Medicine, Washington University in St. Louis, March 16, 2023.

National and International:

1. Invited Speaker, Western Society for Clinical Investigation Regional Meetings 2003: "Duffy Antigen Participates in Chemokine Movement across an Endothelial Monolayer and Enhances Neutrophil Transmigration," Carmel, CA, January 2003.
2. Invited Speaker, VanSeaPort Conference 2003: "Duffy Antigen Facilitates Movement of Chemokine Across the Endothelium *In Vitro* and Promotes Neutrophil Transmigration *In Vitro* and *In Vivo*," Timberline, Oregon, April 2003.
3. Invited Speaker, Institute for Environmental Medicine, University of Pennsylvania. "The Storage Lesion and Augmentation of Lung Inflammatory Responses Following Red Cell Transfusion," Philadelphia, PA, October 3, 2008.
4. Invited Speaker, University of Washington, Division of Pulmonary/Critical Care Medicine, "The Storage Lesion and Augmentation of Lung Inflammatory Responses Following Red Cell Transfusion," Seattle, WA, March 16, 2009.
5. Invited Guest, NHLBI Meeting on RBC Storage Lesion, RFA HL08-005 "Stored RBC Lesion" Grantees Meeting, NIH/NHLBI, Bethesda, MD, September 14, 2010.
6. Invited Speaker, "Red Cell Transfusion in Lung Inflammatory Injury" at the 8th Annual International Symposium on Transfusion Immunology and Related topics: Red Blood Cell Storage Lesions and Related Transfusion Issues. Presented by Canadian Blood Services, University of Toronto, September 25, 2010.
7. Invited Speaker, "RBC Transfusion in Lung and Systemic Inflammatory Responses," American Association for Blood Banks Annual Meeting, Boston, MA, October 24, 2011.
8. Invited Speaker, "Resolution versus Immunosuppression: The Double-Edged Sword in Lung Injury," University of North Carolina, Division of Pulmonary and Critical Care Medicine, Chapel Hill, NC, August 6, 2012.
9. Invited Guest, NHLBI Working Group on Strategies to Optimize Blood Products 2012, NIH/NHLBI, Bethesda, MD, August 28-29, 2012.
10. Invited Speaker, "Clinical Implications of the Blood Storage Defect," Society for the Advancement of Blood Management Annual Meeting, Pittsburgh, PA, September 22, 2012.
11. Invited Speaker, "Transfusion and Lung Injury: Dissecting the Association," University of Alabama Division of Pulmonary and Critical Care Medicine Grand Rounds, Birmingham, AL, November 8, 2012.
12. Invited Speaker, "Regulatory Mechanisms Employed by Mononuclear Phagocytes Following Lung Injury", Pulmonary Conference, Medical College of Wisconsin, Milwaukee, Wisconsin, March 11, 2013.
13. Invited Speaker, "Resolution versus Immunosuppression: The Double-Edged Sword in Lung Injury," Ohio State University, Wexner Medical Center, Division of Pulmonary and Critical Care Medicine, Columbus, OH, October 26, 2013.
14. Invited Speaker, The Robert E. Forster Lecture, University of Pennsylvania 20th Annual Respiration Research Retreat, "Neutrophils and Macrophages: Bridging Phagocytes to Resolve Inflammation in the Lungs", Philadelphia, PA, June 13, 2014.
15. Invited Speaker, "Neutrophils and Macrophages: Bridging Phagocytes to Resolve Inflammation in the Lungs", Division of Pulmonary and Critical Care Medicine, Medical University of South Carolina, Charleston, South Carolina, November 13, 2014.
16. Invited Speaker, "Host Resilience Mechanisms in Lung Injury: Revisiting Protease-AntiProtease Interplay", Division of Pulmonary and Critical Care Medicine, University of North Carolina, Chapel Hill, North Carolina, July 17, 2015.
17. Invited Speaker, "Host Resilience Mechanisms in Lung Injury: Revisiting Protease-AntiProtease Interplay", Division of Pulmonary and Critical Care Medicine and CardioPulmonary Vascular Biology Center for Research Excellence COBRE, Warren Alpert Medical School of Brown University, Providence, Rhode Island, October 26, 2015.

18. Invited Speaker, "Probing Host-Pathogen Interactions in Lung Injury: Revisiting Protease-Antiprotease Interplay", Division of Pulmonary and Critical Care Medicine, University of Michigan School of Medicine, Ann Arbor, Michigan, November 17, 2015.
19. Invited Speaker, "Probing Host-Pathogen Interactions in Lung Injury: Revisiting Protease-Antiprotease Interplay", Department of Microbiology and Immunology Seminar Speaker Series, Rosalind Franklin University of Medicine and Science, Waukegan, Illinois, March 8, 2016.
20. Invited Speaker, "Enhancing Host Defenses to counter MDR Gram-negative Bacterial Pneumonias", on Lung Immune Responses and Inflammation in Health and Disease, Pittsburgh-Munich International Lung Conference, Pittsburgh, PA, October 6-7, 2016.
21. Invited Speaker, "Mechanisms of Host Control: the Macrophage Response during Infection-Triggered Lung Injury", Comparative Biomedical Sciences Seminar, LSU School of Veterinary Medicine, Baton Rouge, LA, April 13, 2017.
22. Invited Speaker, "Mechanisms of Host Protection Against Pathogen-Triggered Proteolytic Injury in the Lungs", ARDS 4th International Conference, Amphibuffon, Batiment Buffon University de Paris Diderot, 15 rue Helene Brion, Paris, France, June 28-29, 2017.
23. Invited Speaker, "Modeling Host-Pathogen Interplay in the Critically Ill", Department of Molecular Microbiology and Immunology Seminar, Brown University, Providence, RI, November 16, 2017.
24. Invited Co-Leader and Speaker, Career Development Session, Howard Hughes Medical Institute Medical Fellows Kick-Off Meeting, Joseph B. Martin Conference Center, Harvard Medical School, Boston, MA, September 15, 2018.
25. Invited Speaker, "Host-pathogen interplay in ARDS: a tale of cleavage and cell death", Department of Medicine, University of California at San Francisco VA HealthCare System Research Seminar, San Francisco, CA, September 25, 2018.
26. Invited Speaker, "Host-pathogen interplay in lung injury: a tale of cleavage and cell death", University of Toledo College of Medicine and Life Sciences, Medical Microbiology & Immunology Research Seminar, Toledo, OH, December 12, 2018.
27. Invited Speaker, "Host Defense and ARDS in the ICU: Two Sides of the Same Coin", SUNY Downstate Medical Center, Medicine Grand Rounds, March 21, 2019.
28. Invited Speaker, "Host Defense and ARDS: Two Sides of the Same Coin", Ohio State University Pulmonary Research Seminar, September 6, 2019.
29. Invited Speaker, "Pathogen-Triggered Proteolytic Lung Injury in ARDS", Cedars-Sinai Medical Center Pulmonary Research Seminar, September 17, 2019.
30. Invited Speaker, The John Butler Endowed Lectureship on "Host Defense and ARDS: Two Sides of the Same Coin", University of Washington Medicine Grand Rounds, October 31, 2019.
31. Invited Speaker, "Host Defense and ARDS in the ICU: Targeting Pathogen-Triggered Proteolytic Lung Injury", International Workshop on Translational Research for Precision Respiratory Medicine, Hospital Clinic, Barcelona, Spain, November 12, 2019.
32. Invited Speaker, "Heme-metabolism and host defense: cross-signals during macrophage activation", Microbial Infection and Immunity Research Seminar Series, Department of Microbial Infection and Immunity, Ohio State University, Columbus, Ohio, February 26, 2020.
33. Invited Speaker, "Host-pathogen interplay in ARDS: A Tale of Cleavage and Cell Death", Robert Wood Johnson Medical School Research Seminar (virtual), New Brunswick, NJ, March 24, 2020.
34. Invited speaker, "ARDS Pathogenesis through the Prism of Host-Pathogen Interactions", Pulmonary, Allergy and Critical Care Grand Rounds series (virtual), Division of Pulmonary, Allergy and Critical Care, Department of Medicine, Stanford University, December 4, 2020.
35. Invited speaker, "Alternative complement pathway function and host resilience during critical illness", International Complement Society virtual symposium on "Complement and Inflammation" June 30, 2021.

36. Invited speaker, “Acute injury across the spectrum of lung diseases”, Korean American Medical Association 46th Annual Scientific Convention in collaboration with the Korean Medical Association “2021 Vision for Diversity, Innovation, Cure”, The Shilla Seoul, Seoul, South Korea, December 8-10, 2021 (virtual presentation December 8, 11:30 AM KST).
37. Invited Speaker, “Thrombospondin-1 and protection against pathogen-triggered proteolytic lung injury” at FASEB Catalyst on Matricellular Proteins in Respiratory Tract Immunomodulation and Infection. virtual zoom conference, January 19, 2022 (virtual presentation January 19, 1:00-1:35 PM EST).
38. Invited Speaker, “ARDS Pathogenesis through the prism of host-pathogen interactions”, Penn-CHOP Lung Biology Seminar, Penn Lung Biology Institute, University of Pennsylvania, February 10, 2022 (virtual presentation February 10, 4:00 PM EST).
39. Invited Speaker, “Platelet-regulated neutrophil responses during pulmonary infection”, Basic Mechanisms and Translational Science Contributing to the Global Impact of Pneumonia, Gordon Research Conference Biology of Acute Respiratory Infection, Ventura, California, September 11-16, 2022 (Presentation on September 14, 2022).

National or International Conference Participation:

1. Facilitator, Fibroblasts and Extracellular Matrix, Thematic Poster Session, American Thoracic Society International Conference, Atlanta, GA, May 2002.
2. Facilitator, COPD: Pathogenesis II, Thematic Poster Session, American Thoracic Society International Conference, San Diego, CA, May 2006.
3. Facilitator, Neutrophil in Inflammatory Processes, Thematic Poster Session, American Thoracic Society International Conference, San Francisco, CA, May 2007.
4. Facilitator, Airway and Alveolar Epithelium: General, Thematic Poster Session, American Thoracic Society International Conference, San Francisco, CA, May 2007.
5. Facilitator, Inflammation and Lung Injury: Acute Injury, Immune Function, and Infection. American Thoracic Society International Conference, Toronto, CA, May 18, 2008.
6. Facilitator, COPD Pathogenesis I: Oxidative Stress, Cellular and Structural Adaptation, Polymorphisms and Clinical Presentation, American Thoracic Society International Conference, Toronto, CA, May 20, 2008.
7. Contributor, “Starting a Lab,” featured in Career Talk: The Book on CD-ROM, American Thoracic Society Respiratory Cell and Molecular Biology Assembly Project 2008-2009, <http://www.thoracic.org/assemblies/rcmb/career-talk-book/index.php>
8. Invited Chair, Mini-Symposium on Acute Lung Injury, “The Yin and Yang of Lung Injury: New Insights into the Mechanisms of Progression and Resolution,” ATS International Conference, San Diego CA. May 18, 2009.
9. Featured in ATS Work-Life Balance Initiative, “How Do They Do It?,” ATS News vol. 36 (3):5 March 2010; <http://www.thoracic.org/newsroom/ats-news/resources/march-2010.pdf>
10. Featured in PITTMED, University of Pittsburgh School of Medicine Magazine. In Attending “Married, With Science.” Summer 2010. Vol. 12. Issue 2. http://pittmed.health.pitt.edu/Summer_2010/index.htm
11. Co-chair, Symposium on “Microparticles: Small Wonders or a Big Deal in Pulmonary Injury and Disease?” ATS International Conference, San Francisco, CA, May 20, 2012.
12. Organizing Committee Member and Speaker at Pittsburgh International Lung Conference, ACUTE LUNG INJURY: New Mechanisms, Future Therapies, and the Translation to Clinical Care, Pittsburgh, PA, October 5, 2012.
13. Program Session Organizer and Speaker, Session on “Microparticles: Implications in Thrombosis and Inflammation,” American Association for Blood Banks and Cellular Therapeutics Annual Meeting, Boston, Massachusetts, October 7, 2012.
14. Speaker, Topic on “Physician Scientists Careers”, Center for Career Development, American Thoracic International Conference, Philadelphia, PA, May 20, 2013.

15. Session Chair, Poster Discussion Session C22-NEW INSIGHTS INTO ACUTE LUNG INJURY, American Thoracic International Conference, Philadelphia, PA, May 21, 2013
16. Speaker and Session Co-Chair, B90-Symposium Session on “Red, White, and blood: the Heme-Pulmonary Circulation Axis of Inflammation, Injury, and Hemolysis”, American Thoracic International Conference, Philadelphia, PA, May 19, 2014.
17. Invited Ad Hoc Member, Research Program Oversight Committee, Lovelace Respiratory Research Institute, Albuquerque, New Mexico, October 9-10th, 2014. Research Program Oversight Committee External Review for Lovelace Respiratory Research Institute Environmental Toxicology, Acute Lung Injury, and Pulmonary Hypertension Programs.
18. Session Moderator and Speaker, Mini-Symposium 9101-S-CT, “Endogenous Membranes and Microparticles as Platforms for Novel Cell-Inspired Therapeutics and Diagnostics”, American Association for Blood Banks and Cellular Therapeutics Annual Meeting, Philadelphia, PA, October 25, 2014.
19. Speaker, A85-Scientific Symposium, “Dr. Jekyll or Mr. Hyde? Bridging the chasm between mouse and human macrophages in health and disease” in symposium entitled “Dr. Jekyll or Mr. Hyde? Macrophage Contributions in Pulmonary Disease”, American Thoracic International Conference, Denver, CO, May 17, 2015.
20. Session Co-Chair, A93-Mini-Scientific Symposium, “New Insights into Pulmonary Host Defense”, American Thoracic International Conference, Denver, CO, May 17, 2015.
21. Session Co-Chair, C12-Scientific Symposium, “Defining the Academic Scholar in the 21st Century: Multiple Pathways to Success”, American Thoracic International Conference, Denver, CO, May 19, 2015.
22. Co-Chair and Course Director, “Lung Immune Responses and Inflammation in Health and Disease”, Pittsburgh-Munich International Lung Conference, Pittsburgh, PA, October 6-7, 2016.
23. Chair, ATS Membership Committee, sponsoring the Women’s Forum, Diversity Forum and inaugural year of the ATS Fellows Program, ATS International Conference, San Diego, CA, May 18-23, 2018.
24. Chair, ATS Membership Committee, sponsoring the Women’s Forum, Diversity Forum and the ATS Fellows Program, ATS International Conference, Dallas, TX, May 18-22, 2019.
25. Invited Speaker, C6-Scientific Symposium, “The Forgotten Cell: Red Blood Cells as Modulators of Immunity”, ATS International Conference, Dallas, TX, May 21, 2019.
26. Invited Speaker, C88-Scientific Symposium, “Complement as a Novel Target to Mitigate Lung Disease”, ATS International Conference, Dallas, TX, May 21, 2019.
27. Co-Chair, 15th Annual Respiratory Disease Young Investigators’ Forum, Warwick-Allerton Chicago, Chicago, IL, October 10-13, 2019. njhealth.org/YIF2019.
28. Co-Chair, 16th Annual Respiratory Disease Young Investigators’ Forum, Virtual conference, October 8-10, 2020. <https://www.nationaljewish.org/yif2020>
29. Invited Speaker, “ARDS Pathogenesis Through the Prism of Host-Pathogen Interactions”, ATS Recognition Award for Scientific Accomplishment, ATS 2020 Virtual available through November 10, 2020.
30. Co-Moderator, Workshop Webinar on supporting the pipeline of women and underrepresented physician-scientists, sponsored by the Assembly on Allergy, Immunology, and Inflammation and Respiratory Cell and Molecular Biology, April 12, 2021.
31. Invited Panelist, KAMA Career Development Symposium, sponsored by the Korean American Medical Association, virtual zoom meeting, September 29, 2021.
32. Invited Panelist, ATS Critical Care Assembly Journal Club webinar on “Identification of persistent and resolving sub-phenotypes of acute hypoxemic respiratory failure in two independent cohorts”, virtual zoom meeting, December 10, 2021.
33. Invited Panelist, 2022 ATS Core Training Webinar & Podcast Series on “Re-defining failure”, virtual webinar, January 26, 2022.

Immunosuppression in Acute Lung Injury

Project 4: Mechanisms of Impaired Macrophage Function in Lung Injury

Annual Direct: \$250,000

The focus of Project 4 is to examine the major hypothesis that macrophage dysfunction characterized by defects in interferon signaling marks the host for an immunosuppressive fate during infection due to impaired cytokine response, microbial killing, and complement activity.

Role: Project 4 PI (awarded as subaccount through Ohio State University)

In process of being transferred to Washington University

5K24 HL143285-04

Lee, Janet S. (PI)

04/01/2019-04/30/2024

NIH/NHLBI

Patient-Oriented Research in Acute Lung Injury and Host Defense in the ICU

Annual Direct: \$109,487

The overall goal of this application is to build and expand research and mentoring programs in patient-oriented research in acute lung injury and host defense focused on translational studies in acute lower respiratory tract infections.

Role: PI

In process of being transferred to Washington University

1R01AI165519-01A1

Van Tyne, Daria (PI)

06/03/22-05/31/2027

NIH/NIAID

Adaptation of vancomycin-resistant enterococci during bloodstream infection

Annual direct: \$366,141

Role: Co-investigator (0.6 calendar months, for 2022 and 2023 only)

5R01 HL142084-04

Chen, Kong (PI)

04/01/18-03/31/24 (NCE)

Host control mechanisms against *K. pneumoniae* infection

Annual direct: \$250,000

Role: Co-investigator (0.6 calendar months, for 2023-2024)

Relinquished PI status 1/1/23 due to transfer of institution. Sub-agreement as co-investigator in process to Washington University.

PENDING

East ASIA (e-ASIA) Joint Research Program Doi Y (Lead PI: Japan), Francisco C (PI: Phillipines), Lee, JS (PI: USA)

01/01/23-12/31/25

Civilian Research and Development Foundation Proposal (CRDF) Global

Deciphering the AMR and hypervirulence in Klebsiella pneumoniae infections

Role: Research Leader (USA)

Pending NOA

R01GM14567-01A1

Rosengart, Matthew R. (PI)

09/01/22-08/31/2026

NIH/NIGMS

The role of circadian clock proteins in innate and adaptive immunity

Annual direct: \$241,007

Role: Co-investigator (1.2 calendar months)

In process of being transferred to Washington University

SUBMITTED

R01 AI178982 Chen, Kong/Lee, Janet S (MPI) 07/01/23-06/31/2028

NIH/NIAID

Regulation of host inflammation in *Klebsiella pneumoniae* lung infection

Total Award Amount (including Indirect Costs): \$3,917,579 (Overall); \$2,049,294 (Sub to WU)

Role: MPI

PAST

5 R38 HL150207-04 Lee, Janet S. and Field, Jessica (MPI) 02/15/20-01/31/24

NIH/NHLBI

Pittsburgh Innovation in Collaborative Training of Residents Alliance

Annual Direct: \$220,408

This application is in response to RFA HL18-023 Stimulating Access to Research in Residency (StARR) (R38). The purpose is to train resident investigators interested in pursuing research that is broadly aligned with NHLBI strategic vision and match them with research preceptors within the Departments of Medicine, Pediatrics, Pathology and Surgery and the University of Pittsburgh.

Role: Contact PI

Relinquished 1/1/23 due to transfer of institution.

5R01 HL142084-04 Lee, Janet S. (PI) 04/01/2018-03/31/2024 (NCE)

NIH/NHLBI

Host Control Mechanisms of K. pneumoniae in the Lungs

Annual direct: \$250,000

The broad, long term objective is to define distinct host determinants that control *K. pneumoniae* (KP) infection. The major hypothesis is that the scavenger receptor CD36 is pivotal in the proximal control of macrophage effector cytokine responses and phagocytosis to amplify host defense against *K. pneumoniae* in the lungs.

Role: PI

Relinquished PI status 1/1/23 due to transfer of institution

5R21HL148088-02 Lee, Janet S. and Nourai, Seyed (MPI) 08/09/2020-07/31/2023 (NCE)

NIH/NHLBI

Evaluation of alternative complement activity within an ARDS cohort

Annual Direct: \$79,403

The goal is to evaluate complement components and activity in biosamples from ARDSNet studies and correlating with patient outcomes.

Role: Contact PI

Relinquished 1/1/23 due to transfer of institution.

5R01 HL142084-03S1 Lee, JS (PI) 07/15/20-03/31/23 (NCE as part of parent R01)

NIH/NHLBI

Infection as a Risk Factor for Dementia: Role of CD36

Annual direct: \$250,000

This is an administrative supplemental to existing R01 *Mechanisms of Host control mechanisms against K. pneumoniae infection in the lungs*

Role: PI

3R01HL140963-03S1 Morris A, Benos T, Chan SY (MPI) 09/01/2020-05/01/2023 (NCE)

NIH/NHLBI

Systems Biology in Vaping Project Exposure

Role: co-investigator (0.48 calendar months)

1R13HL156271-01 **Lee, Janet S and Morris Alison (MPI)** **01/01/21-12/31/22**

NIH/NHLBI

2020 Pittsburgh International Lung Conference: Metabolism and the Lung: Homeostasis, Immunity and Disease

Annual direct: \$30,000 for conference

Role: Contact PI

5R01HL098032-13 **Gladwin MT, Kanias T, Kim-Shapiro D (MPI)** **08/05/18-06/30/22**

NIH/NHLBI

Omics, Mice and Men: Development of Precision Transfusion Medicine

The focus of this proposal centers on the hypothesis that variability in donor RBC stability and function during cold storage and post-transfusion recovery is more dependent on the donor, than to the actual time the unit is in storage.

Role: Co-I (% effort only)

5R01 HL136143-03S1 **Lee, JS (PI)** **05/18/20 - 06/30/21**

NIH/NHLBI

Understanding mechanisms of vaping-associated lung injury

Annual Direct: \$275,000

This is an administrative supplemental to the existing R01 *Mechanisms of Host Protection Against Pathogen-Secreted Proteases in Acute Lung Injury*

Role: PI

3R01 HL142084-02S1 **Lee, Janet S. (PI)** **04/01/2018-05/31/2021**

NIH/NHLBI

The Role of Acod1 in Immunomodulation in intrapulmonary Klebsiella pneumoniae infection

Annual direct: \$135,900

This is a diversity supplemental grant for a junior faculty member and trainee, Dr. Tomeka Suber, who is studying pulmonary host defense and lung injury using gram-negative bacteria pneumonia as a model system.

Role: Mentor Effort: 0%

P01HL114453 **Mallampalli, R (PI)** **01/03/2014 – 04/31/2019**

(Project 3: 1.2 calendar; Core A: 0.36 calendar)

NIH/NHLBI

Cardiolipin as a Novel Mediator of Acute Lung Injury

\$1,321,749

Project 3: Dysregulation of innate immune response in bacterial pneumonia by cardiolipin.

The focus of Project 3 is to examine the mechanism by which the novel DAMP cardiolipin compromises host immunity in the lungs by suppressing production of the anti-inflammatory cytokine IL-10.

Role: Co-I on Project 3 (PI on Proj. 3: Ray, P); Administrative Core

5R01HL086884-10 **Lee, JS (PI)** **04/05/13-03/31/19**

NIH/NHLBI

Curriculum Vitae

Janet S. Lee, MD

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Red cell transfusion: Modifier of Systemic and Lung Inflammatory Responses

Annual Direct: \$ 260,168

Utilizing red cell transfusion as a relevant model to study injury in the lungs, this project aims to better understand regulatory mechanisms employed by mononuclear phagocytes to curtail innate immune activation following exposure to injurious stimuli.

Role: PI

5R21AI119042-02 **Lee, JS (PI)**

06/15/2015- 05/31/2018

NIH/NIAID

Enhancing Neutrophil Responses to Counter MDR Gram Negative Bacterial Pneumonia

Annual Direct: \$150,632

The focus of this proposal examines whether blocking interaction of the extracellular protease inhibitor thrombospondin-1 can enhance neutrophil granule serine protease activity and microbial killing of multi-drug resistant Gram-negative pathogen *K. pneumoniae*.

Role: PI

1R13HL134193-01 **Ray, A and Lee, JS (co-PI)**

08/01/16-07/31/17

NIH/NHLBI

Conference

LUNG IMMUNE RESPONSES AND INFLAMMATION IN HEALTH AND DISEASE

Annual Direct: \$25,000

This application requested partial funding for the 2016 Pittsburgh-Munich Lung Conference entitled "Lung Immune Responses and Inflammation in Health and Disease." The conference was held on October 5-7, 2016, at the University Club in Pittsburgh, PA.

Vascular Medicine Institute Scholar **Lee, JS (PI)**

07/01/13-6/30/18

Institute for Transfusion Medicine

Hemostasis and Vascular Biology Research Institute

Total Direct: \$250,000

The project aims to determine the molecular mechanisms underlying clinically important biomedical problems of hemostasis, thrombosis, transfusion medicine and vascular biology.

Role: PI

Cystic Fibrosis RDP **Frizzell, R (PI)**

07/01/15-06/30/17

0.6 calendar

Translational Pilot Project

Regulation of neutrophilic inflammation in Cystic Fibrosis

Annual Direct: \$80,000 for Translational Project component of RDP

The main goal of this proposal is to examine a novel endogenous inhibitor of neutrophil serine proteases (NSPs) such as neutrophil elastase called thrombospondin-1 (TSP-1) in its ability to alter neutrophil microbial killing of *Pseudomonas aeruginosa*.

Role: Janet S. Lee, MD (PI for the Translational Project)

8 UL1 RR024153-09 **(Kapoor)**

07/01/11 - 06/30/16

1.2 calendar

NCRR

University of Pittsburgh Clinical and Translational Science Institute (Research Education Core)

Curriculum Vitae

Janet S. Lee, MD

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Clinical Innovator Award (Flight Attendant Medical Research Institute)

Lung Activation of CX3CL1 During Second Hand Smoke

Janet Lee, MD, PI

7/1/09-6/31/12

Annual Direct: \$100,000

R01HL086884-03S1 (NIH/NHLBI)

Duffy Antigen: Modifier of Systemic and Lung Chemokine Responses in Inflammation

Janet S. Lee, M.D., PI

07/01/09-05/31/12

Annual Direct: \$85,123

P50 HL084948-03 (NIH/NHLBI)

Molecular and Cellular Determinants of Disease Heterogeneity in COPD - Project 1

Frank C. Sciruba, M.D., PI.

Janet Lee, M.D., Co-Investigator

1/12/07 - 1/31/11

Annual Direct: \$4,053 (salary support only)

R01HL085547-01A2 (NIH/NHLBI subcontract through Brigham and Women's Hospital)

Egr-1: Regulator of Apoptosis and Inflammation in COPD

Augustine M.K. Choi, M.D., PI

Janet S. Lee, M.D., Co-investigator

07/01/09-6/30/11

Annual Direct: \$36,742

Junior Scholar Award (University of Pittsburgh, Department of Medicine)

This project focuses upon determining the mechanism underlying neutrophil recruitment to the lungs following transfusion of erythrocyte concentrates in a murine model of sepsis.

Janet Lee, M.D., PI

9/1/07-8/31/09

Annual Direct: \$35,000

NIH K08 HL070178 (NIH/NHLBI)

Role of endothelial Duffy antigen in lung inflammation.

Janet Lee, M.D., PI

07/01/02-6/30/07

Annual Direct: \$118,975

American Thoracic Society Research Grant Innovative Research in COPD

Fractalkine/CX₃CL1: A Novel Pathway Related to the Pathogenesis of COPD

Janet Lee, M.D., PI

1/01/05-12/31/06.

Annual Direct: \$50,000

American Heart Association Beginning Grant-in-Aid, Pacific Mountain Affiliate

Function of Duffy Antigen in Leukocyte Recruitment and Organ Inflammation.

Janet Lee, M.D., PI

01/01/04-12/31/05

Annual Direct: \$60,000

NIH Individual NRSA (F32 HL10470)

Functional Role of Duffy Antigen in Endothelial Cells

Janet Lee, M.D., PI/trainee.

07/01/01-06/30/03

Relinquished 6/30/02 upon receipt of KO8.

Annual Direct: \$40,560

Poncin Scholarship Award

Functional Role of DARC in Endothelial Cells

Janet Lee, MD, PI/trainee.

07/01/01-06/30/02

Annual Direct: \$17,933

PATENTS:

United States Patent No. US 10,004,764 B2. Red Blood Cell Membrane-Derived Microparticles and Their Use for the Treatment of Lung Disease. Application no. 15/034,700. PCT filed November 6, 2014. PCT no. PCT/US2014/064352; Date; May 5, 2016; Inventors: Janet S. Lee, Timothy Corcoran, Valerian Kagan. Application No. 15/995,513, filed June 1, 2018; Country: U.S.; Patent Number: 10,596,197; Patent Issue Date: March 24, 2020

CLINICAL TITLE AND RESPONSIBILITIES:

- 2002-2003: **Attending Physician**, Harborview Chest Clinic, Harborview Medical Center, Seattle, WA, providing supervision and training of clinical pulmonary fellows rotating through the Chest Clinic, ½ day out of each week
- 2002 **Consultant and Attending Physician**, Pulmonary/Critical Care Medicine, Fred Hutchinson Cancer Research Center Inpatient and Outpatient Consultation Service, 2002, providing supervision and training of clinical pulmonary fellows rotating through service, 6 weeks out of the year
- 2004-2022 **Attending Physician**, Medical Intensive Care Unit, Presbyterian Hospital, University of Pittsburgh Medical Center, Pittsburgh, PA, providing supervision, training, and teaching of house staff physicians and clinical fellows rotating through the MICU, 2-4 weeks out of the year
- 2010-2021 **Attending Physician**, Pulmonary, Allergy, and Critical Care Medicine. Inpatient Service, Select Specialty Hospital, Pittsburgh, PA, 2 weeks out of the year
- 2010-2011,
2014-2022 **Attending Physician**, Pulmonary, Allergy, and Critical Care Medicine. Inpatient Respiratory Stepdown/Advanced Lung Diseases/Pulmonary Consult Service, providing supervising and training of clinical pulmonary fellows rotating through service, 2-3 weeks out of the year

TEACHING TITLE AND RESPONSIBILITIES:

2008-2009 **Lecturer**, Pulmonary Fellows Research Retreat, "Transition to Independence." Number of students: 6. Lecture time and preparation: 2 h

2009 **Lecturer**, Fundamentals in Bench Research Summer Course, Department of Medicine, University of Pittsburgh. Number of students: ~15. Lecture time and preparation: 2 h

Translational Research Track Director, Master of Science in Clinical Research program, Institute for Clinical Research Education, University of Pittsburgh appointment July 1, 2014- August 7, 2020. My responsibilities included advising and mentoring junior faculty, clinical fellows, and residents across the School of Medicine who are enrolled in the Translational Research track pathway. I met one-on-one with each MS candidate within the track a minimum of three times per year for 1 to 1.5 hours for course selection and provide guidance for the development of their thesis project. I also provided formal evaluation during their mid-review of core competency requirements and during their Master of Science Thesis Defense as Chair of the thesis committee. I provided guidance for their grant writing and served as a sounding board for their overall scientific and career development outside of their primary mentors.

I co-directed and taught CLRES 2700 Fundamentals of Bench Research:

Course dates: July 20-31, 2015, student number 18

Course dates: July 18-29, 2016, student number 20

Course dates: July 17-28, 2017, student number 15

Course dates: July 16-27, 2018, student number 24

Course dates: July 22-August 2, 2019, student number 17

Course dates: July 20-30, 2020, student number 24

I served as the course director for the following courses:

CLRES 2725 Translational Research Practicum within the Translational Research track

Course dates: offered through Spring, Fall, Summer semesters and is a requirement within the Translational Research track. The course typically spans two consecutive semesters for up to 3 credits; one-on-one individualized practicum focused on learning a methodology or technique in mentored laboratory setting, average number of students taught: 1-2 per semester

CLRES 2085 Directed Research/Independent Study within the Translational Research track

Course dates: offered through Spring, Fall, Summer semesters and is a requirement within the Translational Research track. The course typically spans two consecutive semesters for up to 3 credits; one-on-one independent study focused on a project that builds upon basic laboratory skills that translates to clinical cohort or clinical setting, average number of students taught: 1-2 per semester.

Teaching of Medical School Students:

1. **Small group leader**, Respiratory System classroom teaching for ~6-8 2nd year medical students, University of Pittsburgh School of Medicine, Pittsburgh, PA, total contact hours=~6-8, October 2004.
2. **Small group leader**, Respiratory System classroom teaching for ~6-8 2nd year medical students, University of Pittsburgh School of Medicine, Pittsburgh, PA, total contact hours=~6-8, October 2005. Evaluation 4.0 on a scale of 1-5.
3. **Small group leader**, Respiratory System classroom teaching, for ~6-8 2nd year medical students, University of Pittsburgh School of Medicine, Pittsburgh, PA, total contact hours=~6, October 2007. Evaluation 4.7 on a scale of 1-5.

4. **Small group leader**, Respiratory System classroom teaching, for ~8 2nd year medical students, University of Pittsburgh School of Medicine, Pittsburgh, PA, total contact hours= 10, October 2008. Evaluation 4.7 on a scale of 1-5.
5. **Lecturer**, “Respiratory Failure”, Pulmonary Section of Body Fluid Homeostasis Course, University of Pittsburgh School of Medicine, Pittsburgh, PA, October 2008. Number of students: 2nd year medical student class; total contact hours: 1. Evaluation 3.7 on a scale of 1-5.
6. **Small group leader**, Respiratory System classroom teaching, for ~6-8 2nd year medical students, University of Pittsburgh School of Medicine, Pittsburgh, PA, total contact hours= 10, October 2009. Evaluation 4.7 on a scale of 1-5.
7. **Lecturer**, “Respiratory Failure”, Pulmonary Section of Body Fluid Homeostasis Course for 2nd year medical students, University of Pittsburgh School of Medicine, Pittsburgh, PA, October 2009. Number of students: 2nd year medical student class; total contact hours:1. Evaluation 5 on a scale of 1-5.
8. **Lecturer**, “Respiratory Failure”, Pulmonary Section of Body Fluid Homeostasis Course for 2nd year medical students, University of Pittsburgh School of Medicine, Pittsburgh, PA, October 2010. Number of students: 2nd year medical student class; total contact hours:1. Evaluation = 3.8 on a scale of 1-5.
9. **Small group leader**, Respiratory System classroom teaching, for eight 2nd year medical students, University of Pittsburgh School of Medicine, Pittsburgh, PA, total contact hours= 10, October 2010. Evaluation= 4.1 on a scale of 1-5.
10. **Small group leader**, Body Fluid Homeostasis Respiratory System small classroom teaching for ~8 2nd year medical students, University of Pittsburgh School of Medicine, Pittsburgh, PA, total contact hours =3, October 29th and 30, 2012.
11. **Guest expert** "Research Basis of Medical Knowledge" MSTP/PSTP Journal Club, Presenter MSTP candidate: Neil Jeremiah, University of Pittsburgh School of Medicine, 2010 on article “Extracellular superoxide dismutase protects against pulmonary emphysema by attenuating oxidative fragmentation of ECM” Proc Natl Acad Sci U S A. 2010 Aug 31;107(35):15571-6.
12. **Guest expert** "Research Basis of Medical Knowledge" MSTP/PSTP Journal Club, Presenter PSTP candidate: Erin Cummings, University of Pittsburgh School of Medicine, October 31, 2012 on article “Early infection with respiratory syncytial virus impairs regulatory T cell function and increases susceptibility to allergic asthma” PMID: 22961107
13. **Guest expert** "Research Basis of Medical Knowledge" MSTP/PSTP Journal Club, Presenter PSTP candidate: Ahmed Basim Al-Khafaji, University of Pittsburgh School of Medicine, October 16, 2013 on article “Suppression of inflammation and acute lung injury by Miz1 by repression of C/EBP-d” PMID:23525087
14. **Faculty grant reviewer** for Medical Student Ahmed Basim Al-Khafaji, Physician Scientist Training Program, University of Pittsburgh School of Medicine, Fall-Winter 2013.
15. **Guest faculty member**, MSTP class reviewing “Thrombospondin-1 triggers macrophage IL-10 production and promotes resolution of experimental lung injury”. Mucosal Immunol. 2014 Mar;7(2):440-8. PMID 24045574. June 30, 2014.
16. **Guest faculty member**, PSTP Professional Development I: Molecular Medicine lecture series, University of Pittsburgh School of Medicine, July 12, 2016. Contact hours: 1 total
17. **Small group leader**, Body Fluid Homeostasis Respiratory System small classroom teaching for nine 2nd year medical students, University of Pittsburgh School of Medicine, Pittsburgh, PA, total contact hours =1, November 1, 2016.
18. **Small group leader**, Body Fluid Homeostasis Respiratory System small classroom teaching for nine 2nd year medical students, University of Pittsburgh School of Medicine, Pittsburgh, PA, total contact hours =1, November 1, 2016.
19. **Guest faculty member**, PSTP Professional Development I: Molecular Medicine lecture series, University of Pittsburgh School of Medicine, June 20, 2017. Contact hours: 1 total

20. **Guest expert**, "Research Basis of Medical Knowledge" MSTP/PSTP Journal Club, Presenter PSTP candidate: Jake Jerome and Aneta Kowalski, University of Pittsburgh School of Medicine, October 24, 2017 on article "Brown-adipose-tissue macrophages control tissue innervation and homeostatic energy expenditure" PMID:28459435. Contact hours: 3 total.
21. **Guest faculty member**, PSTP Professional Development I: Molecular Medicine lecture series, University of Pittsburgh School of Medicine, July 10, 2018. Contact hours: 1 total.
22. **Guest faculty member**, PSTP Professional Development I lecture series, University of Pittsburgh School of Medicine, July 16, 2019. Contact hours: 1.5 total.

TRAINING / MENTEE RECORD:

Translational Research Track Pathway students:

1. Shahab Shaffiey, MD, Resident in General Surgery, Division of Trauma and General Surgery, Department of Surgery, Matriculation to ICRE MS Program Summer 2013, MS Thesis Defense "*Regulation of the Adaptive Intestinal Response through Wnt and Notch Signaling in Short Bowel Syndrome*" completed April 2015. Graduation December 2015- pursued clinical fellowship in Pediatric Surgery at the University of Pittsburgh. Pediatric Surgeon, Nicklaus Children's Hospital, Miami, FL.
2. Ruchira Jha, MD, T32 Scholar and Fellow in Critical Care Medicine, Department of Critical Care Medicine, Matriculation to ICRE MS Program Summer 2014. Thesis Defense "*Translational assessment of sulfonylurea receptor-1 as a biomarker and therapeutic target for cerebral edema in traumatic brain injury*" completed Aug 2016. Graduation December 2016. Dr. Jha is Associate Professor of Neurocritical Care, Barrow Neurological Institute, Phoenix, AZ.
3. Paschalis Vergidis, MD, K12 Scholar and Assistant Professor, Division of Infectious Diseases, Department of Medicine, Matriculation to ICRE MS program Summer 2014. Submission of two first-author manuscripts for Thesis Defense "*Histoplasmosis complicating tumor necrosis factor-alpha blocker therapy: a retrospective analysis of 98 cases*" and "*Intra-abdominal candidiasis: the importance of early source control and antifungal treatment*", completed October 2016. Graduation December 2016. Dr. Vergidis pursued a position as clinical faculty member in Infectious Diseases, Mayo Clinic, Rochester, MN.
4. Britanni Seynnaeve, MD, Fellow in Pediatric Hematology Oncology, Department of Pediatrics, Matriculation to ICRE MS Program Summer 2015. MS Thesis Defense "*Pediatric Spitzoid and Atypical Melanocytic Neoplasm Outcome Study*" March 2017- passed. Dr. Seynnaeve is Director, Pediatric Melanoma Program and Assistant Professor of Pediatrics in the Division of Pediatric Hematology Oncology, Children's Hospital of Pittsburgh, PA.
5. Nahmah Kim-Campbell, MD, T32 Scholar and Clinical Instructor, Division of Pediatric Critical Care Medicine, Department of Critical Care Medicine, Matriculation to ICRE MS Program Summer 2014. Submission of two first author manuscripts for Thesis Defense "*Cell-Free Plasma Hemoglobin and Male Gender are Risk Factors for Acute Kidney Injury in Low Risk Children Undergoing Cardiopulmonary Bypass*" and "*Bioactive Oxylipins in Infants and Children with Congenital Heart Disease Undergoing Pediatric Cardiopulmonary Bypass*" October 2017- passed. Dr. Kim-Campbell is Assistant Professor of Pediatrics and Critical Care Medicine, Children's Hospital of Pittsburgh, PA.
6. Kaitlin Stanley, MD, Fellow in Pediatric Hematology Oncology, Department of Pediatrics, Matriculation to ICRE MS Program Summer 2016. Submission of ASCO grant for Thesis Defense "*Defining the Clinical Course and Genomic Landscape of Posttransplant Lymphoproliferative Disorder (PTLD) in Pediatric Intestinal Transplant Recipients*". Dr. Kaitlin Stanley is staff physician in the Department of Pediatrics at NYU Lagone Medical Center, New York, NY.
7. Konstantinos Lontos, MD, Fellow in Hematology/Oncology, Department of Medicine, who is pursuing a PhD in Clinical Translational Science. Although not formally within the T1 track pathway, he enrolled and

completed CLRES 2725 Translational Research Practicum Fall semester 2018 with project focusing on development of an acute myelogenous leukemia model to study immune response.

8. Carl Koch, MD, Fellow in Pulmonary, Allergy, Critical Care Medicine, Department of Medicine, Matriculation to ICRE MS Program Spring 2015. His project focused on pulmonary hypertension and reduced oral microbial nitrate metabolism capacity. He is Clinical Instructor in the Division of Pulmonary, Allergy, and Critical Care Medicine.
9. Brian Orr, MD, Assistant Professor of Gynecologic Oncology, University of Pittsburgh, Magee-Women's Hospital, Matriculation to ICRE MS Program Summer 2017. MS Thesis defense "Ovarian Cancer Developmental Therapeutics Platform" completed April 2020. He is Assistant Professor of Gynecologic Oncology, Medical University of South Carolina, Hollings Cancer Center.
10. Amanda Artsen, MD, Fellow in Female Pelvic Medicine & Reconstructive Surgery, Department of Gynecology, Matriculation to ICRE MS Program Summer 2018. MS Thesis Defense (2 manuscript option): "Mesh-induced fibrosis: the protective role of T regulatory cells" and "T regulatory cells and TGF- β : predictors of the host response in mesh complications" completed March 2020. Dr. Artsen is Assistant Professor of Obstetrics and Gynecology, University of Pittsburgh.
11. Marc Gauthier, MD, Instructor in Pulmonary, Allergy, and Critical Care Medicine, Department of Medicine, Matriculation to ICRE MS Program Summer 2018. Marc enrolled in CLRES 2725 during Fall semester 2018-Spring semester 2019 with project focusing on utilization of spirometry and intracellular cytokine signaling in a murine severe asthma model. Dr. Gauthier is Assistant Professor of Medicine, Division of Pulmonary, Allergy, and Critical Care Medicine, University of Pittsburgh.
12. Lauren Huckaby, MD, Resident in General Surgery, Department of Surgery, Matriculation to ICRE MS Program Summer 2018. MS These Defense (2 manuscript option): "Sex-Based Aortic Dissection Outcomes from the International Registry of Acute Aortic Dissection" and "Modeling Aortic Wall Stress from CT- and Echo-Derived Biomechanical Parameters for Clinical Risk Prediction" completed April 2020, graduation May 2020.

Mentorship of Undergraduate Students and High School Students, Summer Research Fellowships:

1. **Research supervisor to Heather Metz, University of Pittsburgh Undergraduate, 2005-2006.** (1st author on abstract, "Differential Expression of Chemokine Fractalkine/CX3CL1 and Angiogenic Factor CYR61 in In Vivo and In Vitro Models of Cigarette Smoke Exposure" presented at American Thoracic Society International Conference, San Diego, CA 2006). Heather received her PhD from the University of Pittsburgh Cellular Molecular Pathology Program in 2015.
2. **Research Supervisor to Maura Lewandowski, 11th grade high school student,** Callomon Internship, The Ellis School, Pittsburgh, PA. To provide initial exposure to high school students interested in a combined career in basic research and clinical medicine, June 15-July 15 2009, Total contact hours 3 h/week.
3. **Research Supervisor to Min Ting Yu, University of Pittsburgh Undergraduate.** Min Ting was a first-generation college student interested in basic research and clinical medicine in my laboratory during Summer 2013, Summer 2014, Fall 2014-Spring 2015. Total contact hours: 1 h/week. Min Ting Yu was co-author on *Mucosal Immunol* 2015, *J Infectious Dis* 2016 papers. She was awarded the Summer Undergraduate Research Program (SURP) Fellowship award 2015 through the Interdisciplinary Biomedical Graduate Program at the University of Pittsburgh School of Medicine. Min Ting Yu was awarded the University of Pittsburgh Honors College Breckenridge Fellowship for Summer 2015 but declined due to acceptance into the SURP SOM program. She received the Klionsky Summer Research Fellowship in 2016 and matriculated as a medical student Fall 2016 at the University of Pittsburgh School of Medicine. Her abstract to the Dean's Summer Research Program (DSRP) 2017 received the Stephen Phillips Award for basic science and selected for oral presentation. Min Ting pursued her medical school scholarly project focused studies of epithelial cell death through the *P. aeruginosa* type II secretion exoproducts. She is co-author on

Blood Adv 2019 for her work on live cell imaging of MLEC and in vitro cell death assays and was co-mentored by Dr. William Bain. She graduated from the SOM April 2020, and pursued Internal Medicine Residency at the University of Pittsburgh Medical Center.

4. **Research Supervisor to Jason Darell, Amherst College Undergraduate.** Summer Undergraduate Research Program (SURP) Fellowship student for Summer 2016 through the Interdisciplinary Biomedical Graduate Program at the University of Pittsburgh School of Medicine.
5. **Research Supervisor to Yasmeen Mahady, Virginia Commonwealth University Undergraduate.** Pittsburgh Undergraduate Research Diversity Program (PURDiP) student for Summer 2017 through the Center for Translational and International Hematology, Vascular Medicine Institute, University of Pittsburgh School of Medicine.
6. **Research Supervisor Breyanah Graham, Xavier University of Louisiana Undergraduate.** Pittsburgh Undergraduate Research Diversity Program (PURDiP) student for Summer 2018 through the Center for Translational and International Hematology, Vascular Medicine Institute, University of Pittsburgh School of Medicine.
7. **Research Supervisor to Lauren Rank, Des Moines University School of Osteopathic Medicine, OMS-1.** Kliensky Summer Research Fellowship, Pathology Graduate Program and Summer Undergraduate Research Program 2018.
8. **Research Supervisor to Sarah Gimbel, High School student, Summer 2021 and 2022.**

Mentorship of Medical Students:

1. **Career Advisor for Medical Student Bhavana Vangara, Physician Scientist Training Program (PSTP),** University of Pittsburgh School of Medicine, October 2011 to present, bi-annual face to face meetings. Graduated May 2016, Preliminary- Dept. of Medicine, Baylor College of Medicine; Residency- Radiation Oncology, MD Anderson Medical Center, Houston, TX.
2. **Research Mentor for Medical Student Tolani Olonisakin, Medical Scientist Training Program (MSTP), University of Pittsburgh School of Medicine,** PSTP program, 2014-2017; entered MSTP 2017-2022. Tolani received a HHMI Medical Research Fellows Award 2015-2017 for a project on blocking platelet thrombospondin-1 and neutrophil serine protease interaction to enhance bacterial killing of *Klebsiella pneumoniae*. Tolani Olonisakin received an ATS Minority Trainee Travel award in 2015, the ATS Allergy, Immunology, and Inflammation Assembly Travel Award and the TYLENOL Future Care Scholarship award in 2016. Tolani received an ATS Minority Trainee Travel award and was awarded the AAAS/Program for Excellence in Science in 2017. Tolani matriculated into the MSTP program at University of Pittsburgh SOM 2017. Tolani was selected as one of 600 young scientists around the world to attend the 68th Lindau Nobel Laureate Meeting (#LINO18) in Lindau, Germany June 2018 dedicated to physiology and medicine and meet 41 laureates. Tolani was awarded a pre-doctoral award from the American Heart Association #18PRE3396033, July 2018-June 2020. Her PhD through the Cellular Molecular Pathology graduate program focused on on the mechanism of impaired host immunity in *K. pneumoniae* sepsis during heightened RBC disposal by macrophages (conferral of PhD in April 2020). Her manuscript which is the basis of her dissertation defense was accepted in JCI September 2020. She published 3 first-authored, and 6 co-authored publications. She pursued her clinical residency training in Otolaryngology at the Johns Hopkins University School of Medicine.
3. **Career Advisor for Medical Student Brian Rosborough, Medical Scientist Training Program (MSTP),** January 2014- May 2016, face to face meetings each semester. Graduated program May 2016, accepted to Internal Medicine Residency Program, Massachusetts General Hospital July 2016. Fast tracked into the Medicine Residency Program in Pulmonary, Allergy, Critical Care Medicine Fellowship, UPMC, July 2017.
4. **Career Advisor for Medical Student Elizabeth Megan Kenny, Physician Scientist Training Program (PSTP),** University of Pittsburgh School of Medicine, August 2014-2017, bi-annual face to face meetings.

5. **Career Advisor for Medical Student Matthew Amdahl, Medical Scientist Training Program (MSTP)**, November 2014-2018, bi-annual face to face meetings. Contact hours: 3/yr. Graduated SOM 2020. Clinician Investigator Program at the Mayo Clinic (Internal Medicine Residency, with fellowship in Cardiology).
6. **Career Advisor for Medical student George Gabriel, Medical Scientist Training Program (MSTP)**, May 2015-current, face to face meetings each semester. Contact hours: 3/yr
7. **Career Advisor for Medical student Alison Butler, Medical Scientist Training Program (MSTP)**, May 2016-2018, bi-annual face to face meetings. Contact hours: 2/yr
8. **Research Supervisor for Medical student Jacob Jerome, Physician Scientist Training Program (PSTP)**, University of Pittsburgh School of Medicine, summer rotation 2016. Jake's project was examining human bronchial airway epithelial cell responses to *P. aeruginosa* type II exoproduct-mediated injury.
9. **Research Supervisor for Medical student Rebecca Brown, Physician Scientist Training Program (PSTP)**, University of Pittsburgh School of Medicine, summer rotation 2017. Rebecca Brown was involved in a project evaluating the cellular source of early IL17-A production in *P. aeruginosa* lung injury focusing on innate lymphocyte populations. She is co-author on JCI Insight manuscript 2018; PMID: 29415890.
10. **Career Advisor for Medical student Julia Knight, Physician Scientist Training Program (PSTP)**, May 2020. Contact hours: 1

Graduate Students:

1. **Graduate Student Project Supervisor to Morgan DiLeo, Independent Study in Bioengineering**, Neutrophil – Chemokine Interactions During Sepsis. University of Pittsburgh School of Bioengineering, Pittsburgh, PA. Total contact hours 1 h/week, Spring semester 2009. Course= 3 credits. Dr. DiLeo Fedorchak is Assistant Professor of Ophthalmology, Chemical Engineering, and Clinical and Translational Science and the Louis J. Fox Center for Vision Restoration at the University of Pittsburgh School of Medicine.
2. **Co-mentor for PhD Candidate in Pharmacology/Chemical Biology, David Osei-Hwedieh**, 2013-2016. PhD thesis defense on “The effect of sickle hemoglobin mutation on red blood cell storage integrity and post transfusion viability”, December 15, 2015. David was awarded an ATS Minority Travel award in 2016 for his abstract on storage effects of sickle cell trait blood which was subsequently published with him as 1st author in *eBioMedicine* 2016. David matriculated into the University of Pittsburgh School of Medicine in Fall 2016.
3. **Thesis Committee Member, PhD Candidate in Immunology, Abigail Overacre-Delgoffe**, 2015-current. Mentor: Dario Vignali, PhD. Department of Immunology, University of Pittsburgh. PhD Thesis Defense, “Intrinsic and extrinsic drivers of T_{reg} fragility in the tumor microenvironment”, February 20, 2018.
4. **Thesis Committee Member, PhD Candidate in Environmental and Occupational Health, Rahel Birru**, 2015. Mentor: George Leikauf, PhD. Department of Environmental and Occupational Health, School of Public Health, University of Pittsburgh. PhD Thesis Defense, “Phloretin, an apple polyphenol, modulates the pathogenicity of chronic obstructive pulmonary disease associated bacteria”, July 15, 2019.
5. **Thesis Committee Member, PhD Candidate in Bioengineering, Catalina Pineda Molina**, Fullbright Scholar-CLAS Scholar. Fall 2017. Mentor: Steve Badylak, PhD. McGowan Institute for Regenerative Medicine, University of Pittsburgh. PhD Thesis Defense, “Characterization of the host tissue response induced by a biosynthetic material composed of Poly (4-hydroxybutyrate)”, June 28, 2018.
6. **Research supervisor/primary mentor for Rick van der Geest**, graduate student researcher, Molecular and Cellular Pathology Graduate School Program, University of Pittsburgh, laboratory rotation March 26 – May 26, 2018. Rick entered the laboratory June 2018 focusing on the role of CD36 in heterotypic receptor signaling during *K. pneumoniae* infection. Recipient of ATS Allergy, Immunology, and Inflammation Assembly Travel Award to ATS International Conference 2019. PhD Comprehensive Exam, “Role of BATF2 in *Klebsiella pneumoniae* infection”, August 28, 2019: passed. Anticipated oral thesis defense date: April 13, 2023.
7. **Thesis Committee Member, PhD Candidate in Program in Microbiology and Immunology, Ellyse Cipolla**. Spring 2019. Mentor: John Alcorn, PhD. Rangos Research Institute, University of Pittsburgh. PhD

- Comprehensive Exam, "Influence of checkpoint receptors on changes in effector molecule production during acute influenza-associated super-infection.", April 12, 2019: Passed. Degree conferred: August 2022.
8. **Research supervisor/primary mentor for Shekina Gonzalez-Ferrer (co-mentor: Dr. Daria Van Tyne)**, graduate student researcher, Program in Microbiology and Immunology, University of Pittsburgh, May 2019. She entered the lab in May 2020. PhD Comprehensive Exam, "Heme-mediated STAT1 dysregulation during *K. pneumoniae* infection.", January 2021: Passed. Shekina received an F31 HL165732 in August 2022 on "Heme-mediated STAT1 dysfunction in macrophages during *K. pneumoniae* lung infection.
 9. **Co-mentor for Phillip Mannes, MSTP student and graduate student researcher, Molecular Cellular Pathology Program (primary mentor: Dr. Sina Tavakoli, Department of Radiology)**, May 2020. His project is Molecular Imaging of the ChemR23-Chemerin Axis in Acute Lung Injury. Phillip Mannes was awarded an F30 in April 2021.
 10. **Thesis Committee Member, PhD Candidate in Program in Microbiology and Immunology, Dani Antos**. Spring 2021. Mentor: John Alcorn, PhD. Rangos Research Institute, University of Pittsburgh.
 11. **Research supervisor for Delmaliz Barreto Vasquez**, graduate student researcher, Program in Environmental Occupational Health, Graduate School of Public Health, University of Pittsburgh, Spring Rotation 2021.
 12. **Thesis Committee Member, Benjamin Zuchelkowski**, CSTP student and MS Candidate in Clinical and Translational Science, Institute for Clinical Research Education, University of Pittsburgh, April 29, 2021. Degree conferred May 2021.
 13. **Thesis Committee Member, Benjamin E. Zusman**, CSTP student and MS Candidate in MS Candidate in Clinical and Translational Science, Institute for Clinical Research Education, University of Pittsburgh, April 19, 2021. Degree conferred May 2021.
 14. **Research supervisor for Nathalie Dai Chen**, MSTP Student, University of Pittsburgh School of Medicine, Summer Rotation 2021.
 15. **Co-mentor for Justin Sui, MSTP student and graduate student researcher, Molecular Cellular Pathology Program (primary mentor: Dr. Corrine Kliment, Department of Medicine)**, July 2021. His project is on Mitochondrial ANT proteins in cigarette-smoke induced inflammation. Justin received a priority score of 13 on a F30 reviewed April 2022.
 16. **Research supervisor for Alexis McCollum**, Graduate Student, Program in Microbiology and Immunology, University of Pittsburgh, Fall Rotation 2021.
 17. **Thesis Committee Member PhD Candidate in Program in Microbiology and Immunology, Jorna Sojati**. Fall 2021. Mentor: John Williams, MD. Rangos Research Institute, University of Pittsburgh.

Mentorship of Postdoctoral Fellows:

1. **Research Supervisor/ Mentor to Nilam Patel Mangalmurti, MD, Pulmonary Research Fellow**, Division of PACCM, meeting approximately 4 h per week, August 2006-2008. 1st authored publication *Blood* 2009 and *Transfusion* 2010, Individual NRSA, Post-doctoral fellowship at U Pennsylvania School of Medicine, and Co-mentor on KO8. Dr. Mangalmurti is Assistant Professor of Medicine in the Division of Pulmonary and Critical Care Medicine, Department of Medicine, University of Pennsylvania. Dr. Mangalmurti was Principal Investigator on a Department of Defense PI-initiated grant (2015-2018) on HMGB1 in transfusion-associated acute lung injury. She was Principal Investigator on a R01 examining the role of RAGE and necroptosis in transfusion-mediated lung inflammation.
2. **Research Supervisor/ Mentor to Jennifer Gonzalez McComb, MD, Pulmonary Research Fellow**, Division of PACCM, meeting approximately 2 h per week, August 2006-June 2008. 1st authored publication *Am J Pathol* 2008. Dr. McComb is Section Chief and Clinical Associate Professor of Medicine at UPMC Shadyside Campus Hospital.
3. **Research Supervisor/Mentor to Brian Hamburg, MD, Pulmonary Research Fellow**, Division of PACCM, meeting approximately 2 h per week, August 2009-June 2011. 1st author of 2011 American Thoracic Society

International Conference Abstract, “A Lack of Thrombospondin-1 Predisposes the Lungs to Inflammation following Exposure to Endotoxin.” Selected for Poster Discussion session; co-author on *Mucosal Immunol* 2014 manuscript. Dr. Hamburg is in private practice in Ohio following graduation.

4. **Research Supervisor/Mentor to Yani Zhao, MD PhD, Post-doctoral Research Fellow**, Division of PACCM, meeting approximately 3 h per week, January 2010-2014. 1st authored publication *PLoS One* 2011, *Mucosal Immunol* 2013, *Mucosal Immunol* 2014. Promoted to Research Associate 2011. Dr. Zhao entered Pathology Residency Program at NYU, Department of Pathology, 2015. Dr. Zhao pursued Pathology Fellowship Program at NYU Langone Medical Center in 2019.
5. **Research Supervisor/Mentor to Elizabeth Lechner, MD, Pulmonary Research Fellow**, Division of PACCM, meeting approximately 3 h per week, 2012-2014. Dr. Lechner (now Dr. Kochman) was awarded an Individual F32 through the NHLBI for a proposal examining the role of scavenger receptor CD36 in lung inflammation following intra-pulmonary infection with *Klebsiella pneumoniae*. Dr. Lechner declined the F32 and is currently a practicing pulmonary and critical medicine specialist and Member of The Lung Center, Mercy Medical Center/University of Maryland Affiliate Hospitals. She was co-author on *Mucosal Immunol* 2014 and *J Infectious Dis* 2016 papers.
6. **Research Supervisor/Mentor to Zeyu Xiong, MD, Research Associate**, Division of PACCM, meeting approximately 1 h per week, December 2008-current. Promoted to Research Assistant Professor, July 2013. Dr. Xiong has continued to collaborate with Dr. Lee, the author of numerous publications, and is co-investigator on projects focusing on creating cells reporter constructs and mouse genetic tools in the laboratory.
7. **Research Supervisor/Mentor to Yan Yan Qu, PhD, Research Associate**, Division of PACCM, meeting approximately 3 h per week, November 2014- May 2018. Project involves examining the role of matricellular protein thrombospondin-1 in *P. aeruginosa* lung infection. She is first author on *JCI Insight* manuscript 2018 and co-author on several manuscripts. Yanyan accepted a position as Research Scientist in the R&D autoimmunity program at Sanofi in May 2018.
8. **Research Supervisor/Mentor to Hui-Hua Li, MD PhD, Research Associate**, Division of PACCM, meeting approximately 3 h per week, July 2016-2018. Project involves examining the mechanism of CD36-mediated bacterial phagocytosis and LPS responsiveness. He co-authored 3 manuscripts while in the lab. Huihua matriculated into University of Madison/Wisconsin Pathology Residency program in June 2018 and Thoracic/Pulmonary Pathology Fellowship at the University of Chicago in July 2022.
9. **Research Supervisor/Mentor to William Bain, MD, Pulmonary Research Fellow, Division of PACCM**. meeting approximately 1 h per week, March 2017-current. Dr. William Bain pursued research training during his fellowship in the lab. His project involves examining the mechanisms of platelet-mediated protection of the alveolar barrier during pathogen-induced lung injury. He was awarded 1 F32 HL142172 (May 1, 2018), Vascular Medicine Institute institutional award (July 2018, 2019), NIH Loan Repayment Program recipient (August 2018). William Bain is Assistant Professor of Medicine at the University of Pittsburgh and is the recipient of a VA Career Development Award, April 2020.
10. **Research Supervisor/Mentor to Jill Zupetic, MD, Pulmonary Research Fellow, Division of PACCM**. Dr. Zupetic trained as UPMC Resident in Internal Medicine and worked on a project in the lab during her residency from 2015-2016. She was first author on two manuscripts (*Chest, Sci Rep*) and co-authored two manuscripts (*PLOS ONE, JCI Insight, mBio*) during her research time in the laboratory. She entered fellowship program in Pulmonary, Allergy, Critical Care Medicine at University of Pittsburgh in July 2017. Dr. Zupetic was selected as one of the Burroughs Wellcome Fund scholars to develop MD-only physicians interested in basic science research pathway through the University of Pittsburgh Physician Scientist Incubator Program Burroughs Wellcome Fund in March 2019. Jill Zupetic was the recipient of an F32 NRSA award and promoted to Instructor in July 2020. She is an attending pulmonary physician at UPMC Passavant since September 2021.

11. **Research Supervisor/Mentor to Hernan Peñaloza Cerda, PhD, Post-doctoral Fellow**, August 2018- April 2022. His project focused on mechanisms of amplified neutrophilic inflammation during proteolytic injury induced by *P. aeruginosa* and the role of platelet-specific thrombospondin-1. He received the University of Pittsburgh Vascular Medicine Institute Pilot Project Program in Hemostasis and Vascular Biology grant in August 2020. He published 3 first-authored and 5 co-authored manuscripts while in the lab. Dr. Penaloza is pursuing a second post-doctoral fellowship at Departamento de Genética Molecular y Microbiología, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile, Santiago, Chile since May 2022. He was awarded a Fondecyt Iniciación grant which is a 3-year K-level funding mechanism (March 2023-March 2026) for “Role of Thrombospondin-1 in the function of myeloid-derived suppressor cells (MDSCs) during lung bacterial infection”.
12. **Research Supervisor/Mentor to Tomeka Suber, MD PhD, Assistant Professor of Medicine, Division of PACCM**. Dr. Suber was previously working in the laboratory of Dr. Rama Mallampalli, recipient of an F32 and Burroughs Wellcome Fund Enrichment Program. Her research examined FBXO17 as a novel F-box protein targeting Glycogen Synthase Kinase-3b. Dr. Suber is currently examining the role of Acod1 in host defense against *K. pneumoniae* infection. She was a recipient of a Diversity Supplemental on 2R01 HL142084-02 in May 2019-June 2020, and Winters Foundation grant in 2019. She is a recipient of institutional KL2 in June 2020, and the Harold Amos Medical Faculty Development Program, funded by the Robert Wood Johnson Foundation in August 2020. Dr. Suber received a K08 on intrapulmonary itaconate as a host protective metabolite in ER stress and *K. pneumoniae* infection in April 2022.
13. **Research Supervisor/Mentor to Mohammedreza Tabary, MD, Post-doctoral associate, December 2021**. His project is focused on IL-36 γ and the role of protease-mediated lung injury in amplifying neutrophilic inflammation. He has published 3 first-authored publications since he has started in the lab (1 co-first authored original manuscript, 2 first-authored reviews).
14. **Research Supervisor/Mentor to Atish Gheware, PhD, Post-doctoral associate, May 2022**. Dr. Gheware’s project is focused on the role of monocytes in hemorrhagic alveolar injury and matrix remodeling. He has published 1 co-authored review since starting in the laboratory in May 2022.

Resident Physicians:

1. **Research Supervisor/ Mentor to Meghan Fitzpatrick, MD, Medicine Resident UPMC**, October 2008, Total contact hours 5 h/ week (Culminated in accepted co-authored publication *Blood* 2009, accepted to Pulmonary/ Critical Care Medicine fellowship at University of Pittsburgh 2009). Dr. Fitzpatrick is Assistant Professor of Medicine at the University of Pittsburgh and Division Chief, UPMC East Critical Care Medicine.
2. **Research Supervisor/ Mentor to Bharat Ved Prakash, MD, Medicine Resident UPMC Mercy**, June-July 2009. Total contact hours 4 h/week (co-author on 2010 American Thoracic Society International Conference Abstract “Chemokine endocytosis by Duffy antigen is mediated preferentially through cholesterol dependent pathway in endothelial cells.” Accepted to Pulmonary/Critical Care Medicine fellowship at Wake Forest University 2011. Co-author on *PLOS ONE* 2011 publication. Dr. Prakash was Assistant Professor in the Department of Internal Medicine – Transmountain, Texas Tech University Health Sciences Center, El Paso, Texas. He is in private practice in Salem, Oregon.
3. **Research Supervisor/Mentor to Miguel Pinilla-Vera, MD, Medicine Resident UPMC International Scholar**, 2013-2016. During his 2nd year of his Medicine Residency, Miguel entered the laboratory Summer 2014. His project focused on identification and validation of novel ubiquitin specific peptidase-41 gene upregulation by whole transcriptomic profiling of human bronchoalveolar lavage cells from healthy volunteers following LPS stimulation. He was 1st author on a manuscript in *PLOS ONE* 2016. He pursued a Cardiology fellowship at the Johns Hopkins University in July 2016.
4. **Research Supervisor/Mentor to Peng Zhang, MD, UPMC International Scholar**, 2014. During her intern year Medicine Residency, she co-authored a chapter on the Lung Blood Interface, part of a textbook

Hematologic Abnormalities and Acute Lung Syndromes (now published), Summer 2015. Dr. Zhang pursued Pulmonary fellowship July 2017 at the Cleveland Clinic, Cleveland, OH.

5. **Research Supervisor/Mentor to Brian Ahn, MD, UPMC Medicine Resident**, July 2017. Dr. Ahn's project is examining virulence properties of multi-drug resistant *K. pneumoniae* clinical isolates using an in vitro serum killing assay. He is first author on ATS abstract 8811- Development of Human Serum resistance in carbapenemase-producing *Klebsiella pneumoniae* and persistent bacteremia. C61 Thematic Poster Session, Pulmonary Infections: Clinical Investigations. ATS International Conference, May 22, 2018, San Diego, CA. He pursued Pulmonary and Critical Care fellowship at the University of Colorado in Denver, CO in July 2019.

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