

CURRICULUM VITAE

NAME Yang Zhou, Ph.D.

CURRENT POSITION Assistant Professor of Molecular Microbiology & Immunology
Division of Biology and Medicine, Brown University
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ACADEMIC APPOINTMENTS

10/01/2020-present Assistant Professor (Tenure-Track)
Department of Molecular Microbiology and Immunology
Division of Biology and Medicine, Brown University
Providence, RI

04/29/2022-present Adjunct Assistant Professor
Department of Biomedical and Pharmaceutical Sciences
University of Rhode Island

07/01/2014-9/30/2021 Assistant Professor (Research)
Department of Molecular Microbiology and Immunology
Division of Biology and Medicine, Brown University
Providence, RI

09/01/2011-6/30/2014 Associate Research Scientist
Section of Pulmonary, Critical Care and Sleep Medicine
Department of Internal Medicine
Yale University School of Medicine, New Haven, CT

EDUCATION

2010-2011 Postdoctoral Associate
Section of Pulmonary and Critical Care Medicine
Department of Internal Medicine
Yale University School of Medicine, New Haven, CT
Mentor, Jack A. Elias, M.D.

2005-2010 Ph.D. in Biochemistry and Molecular Biology
The University of Texas Health Sciences Center
Houston, TX
Advisor, Michael R. Blackburn, Ph.D.

2001-2005 B.S. in Biochemistry
Nanjing University, Nanjing, China

AWARDS AND HONORS

2013-2014	American Thoracic Society Abstract Scholarship Award
2011	American Thoracic Society Hermansky-Pudlak Syndrome Network Research Award
2010	President's Research Scholarship The University of Texas Health Science Center
2010	Graduate Student Education Committee Poster Competition The University of Texas Health Sciences Center
2009	Dean's Research Award The University of Texas-Houston Medical School
2008-2009	Biochemistry and Molecular Biology Retreat Oral Presentation The University of Texas Health Sciences Center
2008-2009	GSBS Young Investigator Travel Award The University of Texas Health Sciences Center
2009	Keystone Symposia Scholarship Keystone Symposia of Asthma and Fibrosis
2008	American Thoracic Society Genentech/Novartis Award
2005	Outstanding Graduate Award, Nanjing University
2003-2005	Honors awarded, Nanjing University

RESEARCH INTERESTS

My primary research interests are directed towards understanding the immunopathogenesis of lung injury and repair. I have interrogated the roles of adenosine signaling, EGFR signaling, and chitinase-like proteins in a variety of lung diseases including asthma, chronic obstructive pulmonary disease (COPD), and pulmonary fibrosis. My future research plans are aimed at understanding 1) Role of innate immunity in the pathogenesis of fibrotic lung diseases, and nanoparticle delivery systems as therapeutics to treat related disorders; 2) Pathogenesis of abnormal pulmonary vascular remodeling and the development of pulmonary hypertension; 3) Innate Type 2 immune responses in normal pulmonary homeostasis and injury and repair; 4) Novel host genes and cellular pathways modulating respiratory viral infections. My long-range research goals are to identify the immune and cellular responses that mediate lung injury and repair responses and to identify specific molecular targets that can be targeted in the treatment of related disorders.

FUNDING

Ongoing Research Support

R01 HL146498 (Zhou)

03/22/20--02/28/25

Targeting CHI3L1 and its receptors in Hermansky-Pudlak Syndrome-associated lung disease

Experiments proposed in this project will investigate CHI3L1 biology in pale ear mouse models of pulmonary fibrosis with phenotypes similar to human HPS disease. Targeting this pathway may benefit patients with HPS and other forms of pulmonary fibrosis including Idiopathic Pulmonary Fibrosis (IPF).

Role: Principal Investigator, \$250,000 annual direct cost

P20 GM103652 (Meenach/Zhou)

06/01/21-05/31/23

Cardiopulmonary Vascular Biology COBRE Pilot Project: Development of Cell Membrane-Coated Nanoparticles for the Treatment of Pulmonary Fibrosis and Related Diseases

The objective of this proposal is to develop and validate novel particle-based therapeutics based on cell membrane-coated nanoparticle (CMCNP) for the attenuation of pulmonary fibrosis and related diseases.

Role: Co-Principal Investigator

Department of Defense PR211855 (Lee)

03/01/22-02/28/24

Bispecific targeting of CHI3L1 and PD-1/PD-L1 axis as a novel therapeutic strategy for idiopathic pulmonary fibrosis

This project aims to determine the specific role of CHI3L1 as a major driver of profibrotic microenvironment and to evaluate the therapeutic efficacy of a bispecific CHI3L1-PD-1 monoclonal antibody as an agent to block or reverse pulmonary fibrosis.

Role: Co-Investigator

P01 HL114501 (Choi)

04/01/21 – 04/30/26

Distinct and Overlapping Pathways of Fibrosis and Emphysema in Cigarette Smokers

This project will determine the differential roles of Chi3l1 and its receptors in COPD and IPF.

Role: Co-Investigator

T32 HL134625 (Harrington, Levy, Rounds, Zhou)

03/01/22-02/28/27

Brown Respiratory Research Training Program

The overall goal of this training program is to provide predoctoral candidates and postdoctoral fellows training in the pathobiology and/or outcomes, prevention, and epidemiology as it relates to pulmonary/ critical care/ sleep disorders.

Role: Multi-Principal Investigator

Completed Research Support

P20 GM 103652 (Zhou)

07/20/18-01/31/21

Cardiopulmonary Vascular Biology COBRE Project 3: CHI3L1 and its Receptors in Vascular Remodeling and Pulmonary Hypertension Associated with Pulmonary Fibrosis

These studies will determine whether CHI3L1 and its receptor systems are therapeutic targets to treat vascular remodeling and PH in pulmonary fibrosis.

Role: Principal Investigator, \$175,000 annual direct cost

U54 GM115677 (Zhou/Shea) 03/01/17 – 02/28/18

Chitinase 3-like 1 and its receptors in pulmonary fibrosis

Advance-CTR Pilot Project

Role: Principal Investigator

5P20 GM 103652-02 (Zhou) 1/1/15 – 6/30/15

NIH/NIGMS

Chitinase 3-like-1 in Pulmonary Hypertension Associated with Interstitial Lung Disease

Cardiopulmonary Vascular Biology Cobre Pilot Project

Role: Principal Investigator

American Thoracic Society (Zhou) 11/01/2011 - 10/31/2014

Chitinase-3 Like 1 as a Biomarker and Therapeutic Target in Hermansky-Pudlak Syndrome

Associated Pulmonary Fibrosis

Role: Principal Investigator

1 UH2 HL 123876-01 (Chupp/Elias) 07/01/14 – 06/30/19

Pre-Clinical Development of Novel Anti-YKL-40 Biologic to Treat Severe Asthma

In this proposal, our multidisciplinary team in translational research, genomics, drug development, and immunology will complete the pre-clinical development of humanized monoclonal antibodies against YKL-40.

Role: Co-Investigator

1U01 HL 108638-01 (Elias) 7/1/11 – 6/30/16

NIH / NHLBI

YKL-40 in Idiopathic Pulmonary Fibrosis and Kidney Transplantation

This grant is designed to evaluate circulating YKL-40 as a biomarker for disease progression in IPF and urinary YKL-40 as a predictor of delayed graft function after renal transplantation. These studies will also evaluate the utility of YKL-40 as a therapeutic target in both disorders.

Role: Co-Investigator

PROFESSIONAL SOCIETIES

2011-present Hermansky-Pudlak Syndrome Network

2008-present American Thoracic Society

PROFESSIONAL SERVICE

Peer Review Panels

'Small Business' Respiratory Sciences ZRG1 CVRS B_11 (2023)

Respiratory Sciences Special Emphasis Panel ZRG1 RCCS-B (11) B (2023)

Panelist, ATS RCMB webinar, Oct 2022

Respiratory Sciences Special Emphasis Panel [ZRG1 CVRS-B (11) B] (2022)

VA Merit BL/CS Merit Review Subcommittee for PULM (2021)

CVRS-J11 SBIR/STTR Study Section (2021)

External Ad Hoc reviewer for British Lung Foundation (2020-present)

Reviewer, Florida Department of Health Biomedical Research Program (2014-present)

External Ad Hoc reviewer for PSI Foundation (2018)

CPVB COBRE Pilot Project review panel (2018-present)

CPVB COBRE Junior Investigator Project review panel (2021)

University Committees

Graduate Council of Brown University (2022-present)

Pathobiology Graduate Program Diversity, Equity and Inclusion Committee (2022-present)

Member, the Advisory Committee on Honorary Degrees, Brown University (2017-2019)

Pathobiology Graduate Program Admission Committee (2015)

Journal Editor and Reviewer

Frontiers in Pharmacology (Associate Editor)

Pharmacological Research (Associate Editor)

Experimental and Clinical Sciences (Associate Editor)

Cells (Reviewer)

Toxics (Reviewer)

Respiratory Research (Reviewer)

Pharmacological Research (Reviewer)

Journal of Cellular Physiology (Reviewer)

Autophagy (Reviewer)

Pulmonary Circulation (Reviewer)

LUNG (Reviewer)

Archives of Toxicology (Reviewer)

Physiological Reports (Reviewer)

Disease Models & Mechanisms (Reviewer)

Current Molecular Medicine (Reviewer)

Molecular Genetics and Metabolism (Reviewer)

Molecular Immunology (Reviewer)

Neoplasia (Reviewer)

Journal of Ethnopharmacology (Reviewer)

PLoS One (Reviewer)

Journal of Biological Regulators & Homeostatic Agents (Reviewer)

Clinical and Experimental Pharmacology and Physiology (Reviewer)

Cellular and Molecular Life Sciences (Reviewer)

International Immunopharmacology (Reviewer)

Cellular & Molecular Immunology (Reviewer)

European Journal of Inflammation (Reviewer)

TEACHING

BIOL 0190R Fall 2014-present

Phage Hunters, I Instructor

Phage Hunters is a two-semester class geared towards providing first-year students with hands on laboratory experience and a general background in molecular biology. In the first semester, students isolate, cultivate, and purify a bacteriophage from the local environment. One bacteriophage will be selected among the purified isolates and its genome will be sequenced. There are a series of lectures that introduce concepts in bacteriology, virology, genetics, and molecular biology.

BIOL 0190S Spring 2015-present
Phage Hunters, II Instructor

In the second semester of Phage Hunters, students annotate the genome of a phage selected among the phages isolated during the first semester. This annotation entails identifying all the protein-coding sequences found within the bacteriophage using computational approaches. Students also gain experience reading and presenting primary scientific literature in a journal club. In the second half of the semester, there are several potential projects, some with wet-bench work and others that are strictly computational, which provide the basis for a final paper or presentation.

STUDENT/POSTDOC TRAINING

Lab Trainees

Parand Sorkhdini, PhD, Postdoctoral Research Associate	Dec 2020 - present
Alina Yang, PhD student, Pathobiology Graduate Program	Feb 2021 - present
Carmelissa Norbrun, PhD student, TSGP	March 2022-present
Kiran Klubock-shukla, Undergraduate at Brown	Sep 2022-present
Nicholas Ristic, Undergraduate at Brown	Sep 2022-present
Ashley Choi, Undergraduate at Brown	Sep 2021-May 2023
Esha Kataria, Undergraduate at Brown	Sep 2021- May 2023
Selena Sheth, Undergraduate at Brown	Sep 2021- May 2023
Adam Eberle, Undergraduate at Brown	June 2020-May 2022
Shade Rodriguez, Rotating PhD student	Feb 2022-April 2022
Erika Nakajima, Undergraduate at Brown	Sep 2018-May 2021
Ashley Hernandez-Gutierrez, Undergraduate at Brown	Sep 2018- May 2021
Pamela Velazquez-Diaz, Leadership Alliance Student	June 2020-August 2020
Miles Mundy, Rotating PhD student Pathobiology Graduate Program	Dec 2019-March 2020
Xiuna Sun, MD, Visiting Scholar	July 2018-July 2019
Claire Chung, Undergraduate at Brown	May 2018-June 2019
Sonoor Majid, Leadership Alliance Student	June 2019-August 2019
Chenxi Sun, Visiting Summer Student	June 2019-August 2019
Phillip Yang , Undergraduate at Brown	May 2018-May 2019
Tung Nguyen, Undergraduate at Brown	August 2014-May 2017
Jahnvi Rudrakshala, Undergraduate at Brown	June 2015-May 2017
Daniel Yang, Undergraduate at Brown	August 2015-May 2018
Yueming Cao , Undergraduate at Brown	June 2015-May 2018
River Williams, Leadership Alliance Student	June 2016-August 2016

Thesis Committees

Andrea Gonsalves, PhD student at URI	August 2020-present
Kalindu Perera, PhD student at URI	March 2022-present
Kayla Campbell, PhD student Pathobiology Graduate Program	Sep 2018-Sep 2020
Joyce Lee, Undergraduate at Brown	Sep 2021-May 2022
Nicolas Renton, Undergraduate at Brown	Sep 2018-May 2019
Lillian Dominguez, Undergraduate at Brown	August 2015-May 2017
Edgar Garcia-Lopez, Undergraduate at Brown	August 2015-May 2017

Alex Blum, Undergraduate at Brown

May 2015-June 2016

INVITED SEMINAR/CONFERENCE PRESENTATIONS

Chitinase and its receptors in lung fibrosis and pulmonary vascular remodeling. Changan International Forum on Vascular Biology. 05/18/2023

Chitinase and its Receptors Mediate Innate Immune-fibroblasts Crosstalk in HPS Lung Fibrosis, Hermansky-Pudlak Syndrome network conference. 4/1/2023

Chitinase and its receptors in lung fibrosis and pulmonary vascular remodeling. International Respiratory Medicine Conference 2023. 02/12/2023

Development of cell membrane-coated nanoparticles for this treatment of pulmonary fibrosis. Multi-COBRE Seminar Series, University of Nevada, Brown University and University of Mississippi Medical Center. 12/13/2022

Chitinase and its receptors in lung injury and repair, University of Colorado, Anschutz Medical Campus, 09/22/2022

CRTH2 mediates pro-fibrotic monocyte-derived alveolar macrophage differentiation and promotes lung fibrosis, Michael R. Blackburn, PhD, and the Many Faces of Adenosine, 06/24/2022

CRTH2 mediates pro-fibrotic monocyte-derived alveolar macrophage differentiation and promotes lung fibrosis, Aspen Lung Conference, 06/11/2022

Targeting CHI3L1 Receptor CRTH2 in IPF and Hermansky-Pudlak Syndrome Lung Disease, Hermansky-Pudlak Syndrome network conference 4/2/2022

Chitinase and its receptors in lung injury and repair; Multi-COBRE Seminar Series, University of Louisville, Brown University and University of Mississippi Medical Center. 8/10/2021

Targeting CHI3L1 and its receptors in Hermansky-Pudlak Syndrome Lung Disease, Hermansky-Pudlak Syndrome network conference 3/20/2021

Targeting Chi3l1 and its receptor systems in Hermansky-Pudlak Syndrome-associated Lung Disease, Leadership Alliance Summer Research in Progress, Webinar/online symposium, 6/23/2020

Chitinase and its receptors in lung injury and repair, Rhode Island IDeA Symposium, Webinar/online symposium, 6/12/2020

Chitinase and its receptors in lung injury and repair, MMI seminar, Brown University, Jan 2020

Chitinase and its receptors in lung injury and repair, CPM Seminar series, the University of Texas Health Science Center at Houston, Oct 2019

CHI3L1 and its Receptors in Vascular Remodeling and Pulmonary Hypertension Associated with Pulmonary Fibrosis, CPVB C OBRE EAC meeting Providence RI, Oct. 24, 2019

Targeting CRTH2 in Hermansky-Pudlak Syndrome Lung Disease, Hermansky-Pudlak Syndrome network conference 3/09/2019

CHI3L1 and its Receptors in Vascular Remodeling and Pulmonary Hypertension Associated with Pulmonary Fibrosis", CPVB C OBRE EAC meeting Providence RI, Nov. 2018

Define Chitinase 3-like-1 and Its Receptors in Pulmonary Fibrosis, Advance CTR Seminar; Providence RI March 2018

Galectin-3 interacts with the CHI3L1 axis and contributes to Hermansky-Pudlak Syndrome Lung Disease" Hermansky-Pudlak Syndrome network conference March 2018

Bench to Bedside Series: Idiopathic Pulmonary Fibrosis", Brown Pulmonary Research Conference, Rhode Island Hospital, 11/13/2017

Define CHI3L1-CRTH2 pathway in pulmonary fibrosis. March 2017. Rhode Island Hospital Pulmonary Conference, Providence RI

Chitinase 3-like-1 and Its Receptor Systems in the Pulmonary Fibrosis. Nov 2016. Jinan University, Guangzhou, China

Chitinase 3-like-1 and Its Receptor Systems in the Pulmonary Fibrosis. July 2016. COBRE Conference, Providence RI

Chitinase 3-like-1 and Its Receptors in the Pulmonary Injury and Repair Processes of Hermansky-Pudlak Syndrome. Oct 2015. COBRE Conference, Providence RI

Chitinase 3-like 1 as a Biomarker and Therapeutic Target in the Pulmonary Fibrosis of Hermansky-Pudlak Syndrome. March 2012, 2013, 2014, 2015, 2016. Hermansky-Pudlak Syndrome Network Conference. Long Island, NY

Chitinase 3-like-1 and Its Receptors in the Pulmonary Injury and Repair Processes of Hermansky-Pudlak Syndrome. Nov 2014. Molecular Microbiology and Immunology Seminar Series, Providence, RI

Chitinase 3-like-1 in the injury and repair process of pulmonary fibrosis. Yale monthly fibrosis meeting. May 2014. New Haven, CT

Chitinase 3-like-1 and Its Receptors in the Injury and Repair Processes of Pulmonary Fibrosis. March 2014. Brown Pulmonary Research Seminar Series. Providence, RI

Elevated Chitinase 3-Like-1 and Impaired Trafficking of IL-13 α 2 Contribute to Pulmonary Injury and Fibroproliferative Repair In Hermansky-Pudlak Syndrome. November 2013. 7th Yale Fibrosis Symposium. New Haven, CT

Chitinase 3-Like 1 (Chi3L1) as a Biomarker and Therapeutic Target in the Pulmonary Fibrosis of Hermansky-Pudlak Syndrome. November 2012. 6th Yale Fibrosis Symposium. New Haven, CT

Chitinase 3-like 1 as a Biomarker and Therapeutic Target in the Pulmonary Fibrosis of Hermansky-Pudlak Syndrome. March 2012. Department of Immunobiology, Yale University School of Medicine, New Haven, CT

Role of A2B Adenosine Receptor Signaling in Adenosine Dependent Lung Disease. Dec 2009. NIAID, National Institute of Health. Bethesda, MD

Role of A2B Adenosine Receptor Signaling in Adenosine Dependent Lung Disease. October 2009. Center for Infectious & Inflammatory Diseases, Institute of Biosciences and Technology, Texas A&M Health Science Center, Houston, TX

Role of A2B Adenosine Receptor Signaling in Adenosine Dependent Lung Disease. May 2009. Department of Pulmonary Medicine, the University of Texas M.D. Anderson Cancer Center, Houston, TX

Genetic Removal of the A2B Adenosine Receptor from Adenosine Deaminase-Deficient Mice leads to Exacerbation of Pulmonary Inflammation and Damage. 2008 American Thoracic Society International Conference. Toronto, Ontario, Canada.

PATENTS

Jack A. Elias, Yang Zhou, Suchitra Kamle, Chun Geun Lee, METHODS AND COMPOSITIONS RELATING TO ANTI-CHI3L1 ANTIBODY REAGENTS FOR THE TREATMENT OF FIBROSIS, PCT/US2019/060288

Jack A Elias, Yang Zhou, Chun Geun Lee, METHODS FOR THE DIAGNOSIS AND TREATMENT OF PULMONARY FIBROSIS IN SUBJECTS WITH HPS US61/984,253

BOOK CHAPTER

Yang Zhou, Katherine E. Cox-Flaherty, and James R. Klinger, Pulmonary Vascular Disorders, NOVA Science Publishers, ISBN: 978-1-53619-458-6, Chapter 9 Pulmonary Hypertension in Obstructive Sleep Apnea and Interstitial Lung Disease

PUBLICATIONS

Ashley Hernandez-Gutierrez, Sonoor Majid, Adam Eberle, Ashley Choi, Parand Sorkhdini, Dongqin Yang, Alina Xiaoyu Yang, Carmelissa Norbrun, Chuan Hua He, Chang-min Lee, Chun Geun Lee, Jack A. Elias, **Yang Zhou**, Phospholipid Scramblase-1 Regulates Innate Type 2 Inflammation in Mouse Lung via CRTH2-dependent Mechanisms. *Journal of Clinical Investigation*, In press, 2023.

Andrea Gonsalves, Parand Sorkhdini, Jasmine Bazinet, Moez Ghumman, Dinesh Dhamecha, **Yang Zhou**, Jyothi U. Menon, Development and characterization of lung surfactant – coated nanoparticles to improve lung retention for sustained pulmonary drug delivery, *Biomaterials Advances*, 2023 Jul;150:213430.

Xiuna Sun, Erika Nakajima, Carmelissa Norbrun, Parand Sorkhdini, Alina Xiaoyu Yang, Dongqin Yang, Corey E. Ventetuolo, Julie Braza, Alexander Vang, Jason Aliotta, Debasree Banerjee, Mandy Pereira, Grayson Baird, Qing Lu, Elizabeth O. Harrington, Sharon Rounds, Chun Geun Lee, Hongwei Yao, Gaurav Choudhary, James R. Klinger, **Yang Zhou**, Chitinase 3-Like-1 Contributes to the Development of Pulmonary Vascular Remodeling in Pulmonary Hypertension, *JCI Insight*, 2022 Aug 11;e159578

A.A. Howell, C.J. Versoza, G. Cerna, T. Johnston, S. Kakde, K. Karuku, M. Kowal, J. Monahan, J. Murray, T. Nguyen, A. Sanchez Carreon, E. Song, A. Streiff, B. Su, F. Youkhana, S. Munig, Z. Patel, M. So, M. Sy, S. Weiss, **Y. Zhou**, and S.P. Pfeifer. Complete Genome Sequence of the Cluster P Mycobacteriophage Phegasus. *Microbiol. Resour. Announc.* 4 August 2022.

Yueming Cao, Jahnavi Rudrakshala, River Williams, Shade Rodriguez, Parand Sorkhdini, Alina X. Yang, Miles Mundy, Dongqin Yang, Amy Palmisciano, Thomas Walsh, Cesar Delcompare, Tanis Caine, Luca Tomasi, Barry S. Shea, **Yang Zhou**. CRTH2 Mediates Pro-fibrotic Macrophage Differentiation and Promotes Lung Fibrosis, *American Journal of Respiratory Cell and Molecular Biology*, 2022 Aug;67(2):201-214.

Suchitra Kamle, Bing Ma, Chang Min Lee, Gail Schor, **Yang Zhou**, Chun Geun Lee, Jack A Elias, Host chitinase 3-like-1 is a universal therapeutic target for SARS-CoV-2 viral variants in COVID-19, *Elife*, 2022 Jun 23;11:e78273

Suh-Young Lee, Chang-Min Lee, Bing Ma, Suchitra Kamle, Jack A Elias, **Yang Zhou***, Chun Geun Lee, Targeting Chitinase 1 and Chitinase 3-Like 1 as Novel Therapeutic Strategy of Pulmonary Fibrosis. *Front Pharmacol.* 2022 Mar 17;13:826471. *co-corresponding author.

Md Golam Jakaria, Parand Sorkhdini, Dongqin Yang, **Yang Zhou**, Samantha A. Meenach, Lung Cell Membrane-Coated Nanoparticles Capable of Enhanced Internalization and Translocation in Pulmonary Epithelial Cells, *International Journal of Pharmaceutics*, Volume 613, 5 February 2022

Suchitra Kamle, Bing Ma, Chuan Hua He, Bedia Akosman, **Yang Zhou**, Chang-Min Lee, Wafik S El-Deiry, Kelsey Huntington, Olin Liang, Jason T Machan, Min-Jong Kang, Hyeon Jun

Shin, Emiko Mizoguchi, Chun Geun Lee, Jack A Elias. Chitinase 3-like-1 is a therapeutic target that mediates the effects of aging in COVID-19. *JCI Insight*. 2021 Nov 8;6(21):e148749.

Moez Ghumman, Dinesh Dhamecha, Andrea Gonsalves, Lauren Fortier, Parand Sorkhdini, **Yang Zhou***, Jyothi U. Menon. Emerging Drug Delivery Strategies for Idiopathic Pulmonary Fibrosis Treatment. *European Journal of Pharmaceutics and Biopharmaceutics*, 2021 Jul;164:1-12. *co-corresponding author.

Pamela Velazquez-Diaz, Erika Nakajima, Parand Sorkhdini, Ashley Hernandez-Gutierrez, Adam Eberle, Dongqin Yang, **Yang Zhou**. Hermansky-Pudlak Syndrome and Lung Disease: Pathogenesis and Therapeutics. *Frontiers in Pharmacology*, 2021 Mar 18;12:644671.

Christine A. Byrum, Christopher A. Korey, Zachary Jordan, **Yang Zhou**, Sarah Taylor, Joas Alfajardo, and Veronique Delesalle, Complete Genome Sequence of the Cluster F1 Mycobacteriophage KingMidas. *Microbiology Resource Announcements*. 10.1128/MRA.01557-19, 2020.

Keshava Rajagopal, Andrew J Bryant, Sandeep Sahay, Nancy Wareing, **Yang Zhou**, Lavannya M Pandit, and Harry Karmouty-Quintana. Idiopathic Pulmonary Fibrosis (IPF) and pulmonary hypertension: Heracles meets the Hydra. *British Journal of Pharmacology*. bph.15036, March, 2020.

Junsuk Ko, Tingting Mills, Jingjing Huang, Ning-Yuan Chen, Tinne C J Mertens, Scott D Collum, Garam Lee, Yu Xiang, Leng Han, **Yang Zhou**, Chun Geun Lee, Jack A Elias, Soma S K Jyothula, Keshava Rajagopal, Harry Karmouty-Quintana, Michael R Blackburn. Transforming Growth Factor β 1 Alters the 3'-UTR of mRNA to Promote Lung Fibrosis. *J Biol Chem*, 294 (43), 15781-15794 2019 Oct 25. PMID 31488543

Lee CM, He CH, Park JW, Lee JH, Kamle S, Ma B, Akosman B, Cotez R, Chen E, **Zhou Y**, Herzog EL, Ryu C, Peng X, Rosas IO, Poli S, Bostwick CF, Choi AM, Elias JA, Lee CG. Chitinase 1 regulates pulmonary fibrosis by modulating TGF- β /SMAD7 pathway via TGFBRAP1 and FOXO3. *Life Sci Alliance*. 2019 Jun;2(3). doi: 10.26508/lsa.201900350. Print 2019 Jun. PubMed PMID: 31085559; PubMed Central PMCID: PMC6516052.

Zhou Y*, He CH, Yang DS, Nguyen T, Cao Y, Kamle S, Lee CM, Gochuico BR, Gahl WA, Shea BS, Lee CG, Elias JA. Galectin-3 Interacts with the CHI3L1 Axis and Contributes to Hermansky-Pudlak Syndrome Lung Disease. *Journal of immunology (Baltimore, Md. : 1950)*. 2018; 200(6):2140-2153. NIHMSID: NIHMS933354. *corresponding author

Murray LA, Habel DM, Hohmann M, Camelo A, Shang H, **Zhou Y**, Coelho AL, Peng X, Gulati M, Crestani B, Sleeman MA, Mustelin T, Moore MW, Ryu C, Osafo-Addo AD, Elias JA, Lee CG, Hu B, Herazo-Maya JD, Knight DA, Hogaboam CM, Herzog EL. Antifibrotic role of vascular endothelial growth factor in pulmonary fibrosis. *JCI insight*. 2017; 2(16).

Lee CM, He CH, Nour AM, **Zhou Y**, Ma B, Park JW, Kim KH, Dela Cruz C, Sharma L, Nasr ML, Modis Y, Lee CG, Elias JA. IL-13R α 2 uses TMEM219 in chitinase 3-like-1-induced signalling and effector responses. *Nat Commun*. 2016 Sep 15;7:12752. doi: 10.1038/ncomms12752.

Peng X, Moore M, Mathur A, **Zhou Y**, Sun H, Gan Y, Herazo-Maya JD, Kaminski N, Hu X, Pan H, Ryu C, Osafo-Addo A, Homer RJ, Feghali-Bostwick C, Fares W, Gulati M, Hu B, Lee CG, Elias JA, Herzog EL. Plexin C1 deficiency permits synaptotagmin 7-mediated macrophage migration and enhances mammalian lung fibrosis. *FASEB J*. 2016 Sep 8. pii: fj.201600373R

Zhou Y, Herzog EL, He CH, Peng X, Lee CM, Nguyen TH, Gulati M, Gochuico BR, Gahl WA, Lee CG, and Elias JA. Chitinase 3-like-1 and its receptors in Hermansky-Pudlak syndrome-associated lung disease. *J Clin Invest*. 2015 Aug 3;125(8):3178-92

Kang MJ, Yoon CM, Kim BH, Lee CM, **Zhou Y**, Dhamija A, Boffa D, West AP, Shadel G, Ting J, Kaminski N, Kim WJ, Lee CG, Oh YM, Elias JA. Suppression of NLRX1 in Chronic Obstructive Pulmonary Disease. *Journal of Clinical Investigation*, 2015; 125(6):2458-62

Le TT, Karmouty-Quintana H, Melicoff E, Le TT, Weng T, Chen NY, Pedroza M, **Zhou Y**, Davies J, Philip K, Molina J, Luo F, George AT, Garcia-Morales LJ, Bunge RR, Bruckner BA8, Loebe M, Seethamraju H, Agarwal SK, Blackburn MR. Blockade of IL-6 Trans signaling attenuates pulmonary fibrosis. *J Immunol*. 2014 Oct 1;193(7):3755-68.

Zhou Y*, Peng H*, Sun H*, Tang C, Gan Y, Peng X, Chen X, Mathur A, Hu B, Montgomery RR, Shaw AC, Homer RJ, Lee CM, Lee CG, Elias JA and Herzog EL. Chitinase 3-like 1 Suppresses Injury and Promotes Fibroproliferative Responses in Mammalian Lung Fibrosis. *co-first author. *Science Translational Medicine*, 2014 Jun 11;6(240):240ra76.

Lee CM, Park JW, Cho WK, **Zhou Y**, Han B, Yoon PO, Chae JW, Elias JA, and Lee CG. Modifiers of TGF- β 1 effector function as novel therapeutic targets of pulmonary fibrosis. *Korean J Intern Med*. 2014;29(3):281-290.

He CH, Lee CG, Dela Cruz CS, Lee CM, **Zhou Y**, Ahangari F, Ma B, Herzog EL, Rosenberg SA, Li Y, Nour AM, Parikh CR, Schmidt I, Modis Y, Cantley L, Elias JA. Chitinase 3-like 1 Regulates Cellular and Tissue Responses via IL-13 Receptor α 2. *Cell Reports*. 2013 Aug 29;4(4):830-41. doi: 10.1016/j.celrep.2013.07.032. Epub 2013 Aug 22.

Zhou Y, Kang MJ, Jha BK, Silverman RH, Lee CH, and Elias JA. Role of RNase L in Viral PAMP/Influenza Virus and Cigarette Smoke-induced Inflammation and Remodeling. *Journal of Immunology*. 2013 Sep 1;191(5):2637-46.

Zhou Y*, Lee JY*, Lee CM, Cho WK, Kang MJ, Koff JL, Elias JA, Lee CG. Amphiregulin, an EGFR Ligand, Plays an Essential Role in the Pathogenesis of TGF- β -induced Pulmonary Fibrosis. *Journal of Biological Chemistry*. *co-first author. 2012 Dec 7;287(50):41991-2000.

Lee CG, Herzog E, Ahangari F, **Zhou Y**, Gulati M, Lee CM, Peng X, Feghali-Bostwick C, Jimenez SA, Varga J, Elias JA. Chitinase1 is a Biomarker for and Therapeutic Target in

Scleroderma- Interstitial Lung Disease that Augments TGF- β 1 Signaling. *Journal of Immunology*. 2012 Sep 1;189(5):2635-44.

Carbonaro DA, Jin X, Wang X, Yu XJ, Rozengurt N, Kaufman ML, Wang X, Gjertson D, **Zhou Y**, Blackburn MR, Kohn DB. Gene Therapy/Bone Marrow Transplant in ADA-deficient Mice: Roles of Enzyme Replacement Therapy and Cytoreduction. *Blood*. 2012 Nov 1;120(18):3677-87.

Lee CG, Dela Cruz CS, Ma B, Ahangari F, **Zhou Y**, Haliban R, Sznol M, Elias JA. Chitinase-like Proteins in Lung Injury, Repair and Metastasis. *Proceedings of the American Thoracic Society*. 2012 May;9(2):57-61.

Ma W, Ortiz-Quintero B, Rangel R, Mckeller MR, Herrera-Rodriguez S, Suh WK, Mak TW, **Zhou Y**, Blackburn MR, Martinez-Valdez H. Coordinate Activation of Inflammatory Gene Networks, Alveolar Destruction and Neonatal Death in AKNA Deficient Mice. *Cell Research*. 2011 Nov;21(11):1564-77.

Zhou Y, Schneider DJ, Morschl E, Song L, Pedroza M, Karmouty-Quintana H, Le T, Sun CX, Blackburn MR. Distinct Roles for the A2B Adenosine Receptor in Acute and Chronic Stages of Bleomycin-induced Lung Injury. *Journal of Immunology*. 2011 Jan 15;186(2):1097-106.

Matsuura H, Hartl D, Kang MJ, Dela Cruz CS, Koller B, Chupp GL, Homer RJ, **Zhou Y**, Cho WK, Elias JA, Lee CG. Role of Breast Regression Protein (BRP)-39 in the Pathogenesis of Cigarette Smoke-Induced Inflammation and Emphysema. *Am J Respir Cell Mol Biol*. 2010 Jul 23.

Lu Q, Harrington EO, Newton J, Radin G, Casserly B, Warburton R, **Zhou Y**, Blackburn MR, Rounds S. Adenosine Protection of Pulmonary Edema Acts Through Both Transporter- and Receptor 2-mediated Endothelial Barrier Enhancement. *American Journal of Physiology - Lung Cellular and Molecular Physiology*. 2010 Jun;298(6):L755-67.

Zhou Y, Murthy JN, Zeng D, Belardinelli L, Blackburn MR. Alterations in Adenosine Metabolism and Signaling in Patients with Chronic Obstructive Pulmonary Disease and Idiopathic Pulmonary Fibrosis. *PLoS One*. 2010 Feb 16;5(2):e9224

Schneider DJ, Lindsay JC, **Zhou Y**, Molina JG, Blackburn MR. Adenosine and Osteopontin Contribute to the Development of Chronic Obstructive Pulmonary Disease. *FASEB J*. 2010 Jan;24(1):70-80

Zhou Y, Mohsenin A, Morschl E, Young HWJ, Molina JG, Ma W, Sun CX, Martinez-Valdez H, Blackburn MR. Enhanced Airway Inflammation and Remodeling in Adenosine Deaminase Deficient Mice Lacking the A2B Adenosine Receptor. *Journal of Immunology*. 2009. 182(12):8037-8046.

Zhou Y, Schneider DJ, Blackburn MR. Adenosine Signaling and the Regulation of Chronic Lung Disease. *Pharmacology & Therapeutics*. 2009. 123(1):105-116.

Zaynagetdinov R, Ryzhov S, Goldstein AE , Yin H, Novitskiy SV , Goleniewska K, Polosukhin VV, Newcomb DC, Mitchell D, Morschl E, **Zhou Y**, Blackburn MR, Peebles RS , Biaggioni I, Feoktistov I. Attenuation of Chronic Pulmonary Inflammation in A2B Adenosine Receptor Knockout Mice. *American Journal of Respiratory Cell Molecular Biology*. 2009 Jun 25.

Liang Y, **Zhou Y**, Shen PP. NF-kappaB and Its Regulation on the Immune System. *Cell Mol Immunol*. 2004 Oct;1(5):343-50.