



“Fall picture”
photo by R.F. Lockey

UNIVERSITY OF SOUTH FLORIDA MORSANI COLLEGE OF MEDICINE

Division of Allergy and Immunology
Department of Internal Medicine
Joy McCann Culverhouse Airway Disease Research Center
and The James A. Haley V.A. Medical Center
Tampa, Florida

2019 Annual Report



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<http://health.usf.edu/medicine/internalmedicine/allergy/index.htm>



Dedication:

Dedicated to the administrative staff members, Division of Allergy/Immunology, Department of Internal Medicine, University of South Florida Morsani College of Medicine, Tampa, Florida. These include:

Ms. Peggy Hales (works part-time)

37 years

Ms. Geeta Gehi (works part-time)

25 years

Ms. Rebecca Muncey (retired)

15 years

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MORSANI COLLEGE OF MEDICINE

UNIVERSITY OF SOUTH FLORIDA

DIVISION OF ALLERGY AND CLINICAL IMMUNOLOGY (A/I)
DEPARTMENT OF INTERNAL MEDICINE
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FACULTY

RICHARD F. LOCKEY, M.D.
Professor; Medicine, Pediatrics & Public Health
Division Director, Internal Medicine A/I
Joy McCann Culverhouse Chair

JOHN W. SLEASMAN, M.D.
Professor; Pediatrics & Medicine
Chief, Pediatric A/I & Rheumatology

NOORBIBI K. DAY-GOOD, Ph.D.
Professor Emer; Pediatrics, Medicine & Public Health

ROGER W. FOX, M.D.
Professor; Medicine, Pediatrics & Public Health

DENNIS K. LEDFORD, M.D.
Professor; Medicine & Pediatrics
Mabel & Ellsworth Simmons Professor

GARY LITMAN, Ph.D.
Professor; Pediatrics & Medicine

MARK C. GLAUM, M.D., Ph.D.
Associate Professor; Medicine & Pediatrics

MITCHEL J. SELEZNICK, M.D.
Associate Professor; Medicine

SANDRA G. GOMPF, M.D.
Associate Professor; Medicine

NARASIAH KOLLIPUTI, Ph.D.
Associate Professor; Medicine & Pediatrics

MICHAEL TENG, Ph.D.
Associate Professor; Medicine & Pediatrics

MARK BALLOW, M.D.
Professor; Pediatrics & Medicine

PANIDA SRIARON, M.D.
Assistant Professor; Pediatrics & Medicine

JENNIFER LEIDING, M.D.
Assistant Professor; Pediatrics & Medicine

JIA-WANG WANG, Ph.D.
Assistant Professor; Medicine & Pediatrics

GLENN WHELAN, Pharm.D.
Clinical Assistant Professor; Medicine

ENRIQUE FERNANDEZ-CALDAS, Ph.D.
Clinical Professor; Medicine

MANDEL SHER, M.D.
Professor; Pediatrics & Medicine

NATHAN TANG, M.D.
Associate Professor; Pediatrics & Medicine

MONROE J. KING, D.O.
Adjunct Clinical Associate Professor; Medicine

BRETT E. STANALAND, M.D.
Clinical Associate Professor; Medicine

G. EDWARD STEWART II, M.D.
Clinical Associate Professor; Medicine

HUGH H. WINDOM, M.D.
Clinical Associate Professor; Medicine

BLANCA CAMARETTI-MERCADO, Ph.D.
Ass't Professor; Personalized Med & Medicine

ROSA CODINA, Ph.D.
Clinical Assistant Professor; Medicine

MARY L. JELKS, M.D.
Clinical Assistant Professor; Medicine

RONALD T. PURCELL, M.D.
Clinical Assistant Professor; Medicine

January 2, 2019

I. GREETINGS!

The late Samuel C. Bukantz, M.D., founded the Division of Allergy and Immunology, Department of Internal Medicine, at the University of South Florida Morsani College of Medicine, in 1972. Richard F. Lockey, M.D. succeeded Dr. Bukantz in 1983 and is the current Director of the Division. Mrs. Joy McCann Culverhouse endowed the Division in 1997 and The Joy McCann Culverhouse Airway Disease Research Center was dedicated in February 1998. In 1998, Mabel and Ellsworth Simmons endowed the Division with a grant for education and research. The Division was selected as a World Allergy Organization (WAO) Center of Excellence for the 2016-2019 term, one of ten throughout the world.

The goals of the Division are: first, to provide care to patients with allergic and immunologic diseases at the University of South Florida Morsani College of Medicine, Tampa General Hospital, James A. Haley V.A. Medical Center, and H. Lee Moffitt Cancer Center; second, to train students, residents, and fellows in the subspecialty of allergy and immunology; and third, to conduct basic and clinical research in allergy, asthma, and immunology.

Individuals interested in collaborating with members of the Division may contact Richard F. Lockey, M.D. or any faculty member at (813) 972-7631 (email: rlockey@health.usf.edu).

Jolan Walter, M.D., Ph.D., Associate Professor of Pediatrics, Division Chief, Pediatric Allergy & Immunology, can be contacted at (813) 259-8705 (email: jolanwalter@health.usf.edu).

Richard F. Lockey, MD
Distinguished University Health Professor
Professor of Medicine, Pediatrics & Public Health
Joy McCann Culverhouse Chair of Allergy and Immunology
Director, Division of Allergy and Immunology
University of South Florida Morsani College of Medicine
Department of Internal Medicine



Division Faculty, Fellows, and Staff

First row: Catherine Renee Smith, Michael Teng, PhD, Seong Cho, MD, Farnaz Tabatabaian, MD, Tara Saco, MD, Peggy Hales, Claudia Gaefke, MD, Blanca Camoretti-Mercado, PhD, Amber Pepper, MD, Mark Glaum, MD, PhD.

Second row: Dennis K. Ledford, MD, Jutaro Fukumoto, MD, PhD, Raul Villearreal, MD, Shiven Patel, MD, Narasiah Kolliputi, PhD, Juan Carlos Cardet, MD, Michelle Twitmyer, Thomas Casale, MD, Kirk Shepard, MD., Richard F. Lockey, MD, MS

I. FACULTY

Core Faculty

Richard F. Lockey, M.D., M.S., University Distinguished Health Professor; Professor of Medicine, Pediatrics, and Public Health; Division Director, Department of Internal Medicine; Joy McCann Culverhouse Chair of Allergy and Immunology

Thomas B. Casale, M.D., Professor of Medicine and Pediatrics; Director, Joy McCann Culverhouse Clinical Research Center

Roger W. Fox, M.D., Professor of Medicine, Pediatrics and Public Health

Dennis K. Ledford, M.D., Professor of Medicine and Pediatrics; Mabel & Ellsworth Simmons Professor of Allergy and Immunology

Seong H. Cho, M.D., Associate Professor of Medicine and Pediatrics

Mark C. Glaum, M.D., Ph.D., Associate Professor of Medicine and Pediatrics, Training Program Director

Narasaiah Kolliputi, Ph.D., Associate Professor of Medicine and Pediatrics

Michael N. Teng, Ph.D., Associate Professor of Medicine and Pediatrics, Associate Dean, PhD and Postdoctoral Programs

Blanca Camoretti-Mercado, Ph.D., Assistant Professor of Medicine and Pediatrics

Juan Carlos Cardet-Guisasola, M.D., Assistant Professor of Medicine and Pediatrics

Lakshmi Galam, Ph.D., Assistant Professor of Medicine

Amber N. Pepper, M.D., Assistant Professor of Medicine and Pediatrics; Associate Director, Clinical Research Center

Farnaz Tabatabaian, M.D., Assistant Professor of Medicine and Pediatrics; Assistant Program Director, Allergy/Immunology, Internal Medicine

Clinical Faculty

Enrique Fernandez-Caldas, Ph.D., Clinical Professor of Medicine

Donald C. Lanza, M.D., Clinical Professor of Medicine

Hugh H. Windom, M.D., Clinical Professor of Medicine

Rosa Codina, Ph.D., Clinical Associate Professor of Medicine

Jennifer E. Fergeson, D.O., Clinical Assistant Professor of Medicine

Thomas L. Johnson, II, M.D., Clinical Assistant Professor of Medicine

Andrea N. McCray, Ph.D., Clinical Assistant Professor of Medicine

Alla Solyar, M.D., Clinical Assistant Professor of Medicine

Jia-Wang Wang, Ph.D., Clinical Assistant Professor of Medicine

Joint Faculty

Jolan Walter, M.D., Ph.D., Robert A. Good Endowed Chair in Immunology; Associate Professor of Pediatrics & Medicine; Director, Pediatrics Division of Allergy & Immunology

Mark Ballow, M.D., Professor of Pediatrics and Medicine

Mandel R. Sher, M.D., Professor of Pediatrics and Medicine

Panida Sriaroon, M.D., Associate Professor of Pediatrics and Medicine, Training Program Director

Nathan Tang, M.D., Associate Professor of Pediatrics and Medicine

Jennifer Leiding, M.D., Associate Professor of Pediatrics and Medicine

Richard F. Lockey, M.D., M.S.

Dr. Richard F. Lockey received his B.S. degree from Haverford College, Haverford, Pennsylvania; M.D. from Temple University, Philadelphia, Pennsylvania (Alpha Omega Alpha); M.S. from the University of Michigan in Ann Arbor, Michigan where he trained in Internal Medicine and Allergy/Immunology (A/I) and was a Major and Chief of A/I at Carswell Air Force Base, Fort Worth, Texas, from 1970-1972. He received a medal in 2000 from the Florida Academy of Sciences, Tallahassee, Florida, for his dedication and work to improve the health and well-being of the community and citizens of Florida. He was also the recipient of the Southern Medical Society, Dr. Robert D. and Alma W. Moreton Original Research Award in 2012. The American Academy of Allergy Asthma and Immunology presented him with a Special Recognition Award in 1993, Distinguished Service Award in 1999, and Distinguished Clinician Award in 2008. He received the World Allergy Organization Gold Medal Award in 2018 and the Boy Scouts of America Distinguished Eagle Scout Award, 2018. He has the honor of authoring, co-authoring or editing over 800 publications and 35 books or monographs with colleagues and has lectured on numerous occasions nationally and internationally. He is the co-editor of two books and an encyclopedia of allergy/immunology, with Dennis K. Ledford, MD, published in 2014: *Asthma, Comorbidities, Co-Existing Conditions, and Differential Diagnoses*, Oxford University Press; *Allergens and Allergen Immunotherapy: Subcutaneous, Sublingual and Oral*, 5th edition, CRC Press/Taylor & Francis Group; and *Encyclopedia of Infection and Immunity*, Springer, Inc. The 6th edition of *Allergens and Allergen Immunotherapy: Subcutaneous, Sublingual and Oral* is in press and will be available globally early 2020.



Professional honors include President of the American Academy of Allergy Asthma and Immunology (1992), past Director of the American Board of Allergy and Immunology (1993-1998) and President of the World Allergy Organization (2010-2012). He has served as co-editor or participant of two WHO reports and served on many journal editorial boards. He received the World Allergy Organization Gold Medal Award in 2015. In addition, in 2019 the American Academy of Allergy Asthma and Immunology Foundation established the Richard F. Lockey, MD MS FAAAAI & University of South Florida Lectureship and Faculty Development Award with a goal of \$250,000 which was 100% funded and completed.

Over 100 physician specialists and 55 international post-graduate PhDs or MDs in basic and clinical research and medicine, many of whom have assumed leadership positions in medicine throughout the world, have been trained in the Division. The Division's staff consists of 8 clinicians, 4 basic scientists, and approximately 60 other healthcare professionals including physicians and support and laboratory personnel.

Areas of expertise and research: insect allergy; allergen immunotherapy; asthma; inflammatory lung diseases; pulmonary fibrosis; co-morbid conditions of asthma; and sleep apnea.

Thomas B. Casale, M.D.

Before joining USF in October 2013, as Professor of Medicine and Chief of Clinical and Translational Research, Dr. Thomas Casale was Professor of Medicine and Medical Microbiology and Immunology and Chief of Allergy/Immunology at Creighton University, Omaha, Nebraska. He did an allergy/immunology fellowship at the National Institutes of Health, Bethesda, MD, where he was chief medical staff fellow. From 1984 to 1996 he was at the University of Iowa where he attained the rank of Professor of Medicine and Director of Allergy/Immunology.



Dr. Casale is a member of the American Thoracic Society and served on their Board of Directors; American Society for Clinical Investigation; and a Fellow of the American College of Physicians and both the American College and American Academy of Allergy Asthma and Immunology. He is a Past President of the American Academy of Allergy Asthma and Immunology and was the Executive Vice President for ten years until 2018. He is a past member of the Board of Directors of the World Allergy Organization. He also served on the American Board of Allergy and Immunology and was Chair from 2005-2006. He is currently the Chief Medical Advisor for Food Allergy Research and Education (FARE)

Dr. Casale is Director, Division of Allergy and Immunology, Department of Internal Medicine, Joy McCann Culverhouse Clinical Research Center. His clinical and basic research interests are directed toward the determination and treatment of the pathophysiologic mechanisms involved in respiratory and allergic diseases. He has published over 400 scientific papers, reviews and chapters on these topics. He is the principal investigator of USF's American Lung Association Airways Clinical Research Center. His research is funded by the National Institutes of Health, the American Lung Association, the Patient Centered Outcomes Research Institute, and various industry sources.

Roger W. Fox, M.D.

Dr. Roger Fox completed his three years of internal medicine and two years of allergy/immunology at the University of South Florida Morsani College of Medicine in Tampa, Florida. He received his medical degree from St. Louis University School of Medicine.

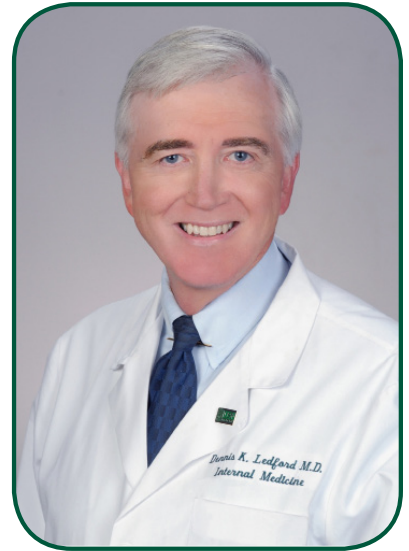
He has been elected to “The Best Doctors in America” for the past several decades and has helped train over 100 physicians in the specialty. He has published extensively and lectured locally, nationally and internationally and served on various boards, including the Hillsborough County Medical Association, the Florida Allergy Asthma and Immunology Society, of which he is a past-president, and numerous committees of the American Academy of Allergy Asthma and Immunology.

Dr. Fox has practiced medicine in the Allergy Clinics and has served as a USF and VA Hospital attending physician for 40 years. He was the director of the James A. Haley Veteran’s Administration Hospital Allergy Clinics for 30 years. He enjoys being a clinician and mentor. He has staff privileges for consults at Tampa General, Moffitt Cancer, and James A. Haley Veteran’s. His clinical interests include vocal cord dysfunction, chronic cough, acute and chronic urticaria and angioedema, allergic drug reactions, food allergy eosinophilic GI disorders, atopic eczema, pruritus, allergic respiratory allergies and sinusitis.



Dennis K. Ledford, M.D.

Dr. Dennis Ledford received his medical degree from the University of Tennessee Center for Health Sciences, Nashville, Tennessee. He completed his internal medicine residency there and served as chief medical resident for Dr. Gene Stollerman, M.D., Chairman of Internal Medicine at this same university. A fellowship in rheumatology and immunology followed at New York University and Bellevue Hospital in New York as well as a fellowship in allergy and immunology at the University of South Florida. He joined the faculty at USF Morsani College of Medicine and achieved the rank of professor of medicine in 2000.



Local and regional activities include past service as President of the USF Medical Faculty of the Morsani College of Medicine and President of the Florida Allergy Asthma and Immunology Society. He is current Head of the Allergy/Immunology Section, Florida Hospital and the James A. Haley VA Hospital, Tampa, FL. National contributions include prior service as President of the American Academy of Allergy Asthma and Immunology, an associate editor of the *Journal of Allergy and Clinical Immunology*, and chair of the Steering Committee for the American Academy of Allergy Asthma and Immunology Education and Research Trust Fund (AAAAI Foundation). He also served as Co-Chair of the American Council of Graduate Medical Education (ACGME), Allergy/Immunology Residency Review Committee and Director of the American Board of Allergy and Immunology. He currently serves on the editorial board of the *Annals of Allergy Asthma and Immunology*. Dr. Ledford received the Distinguished Service Award from the University of South Florida, 2018, and Distinguished Clinician Award from the American Academy of Allergy Asthma and Immunology and the World Allergy Organization, 2014-2015.

Clinical responsibilities and student and resident teaching are combined with research interests in severe glucocorticoid-dependent asthma and biologic therapy of allergic disease.

Seong Cho, M.D.

Dr. Seong Cho received his medical degree from Kyung-Hee University of Seoul, Korea, in February 1989. He pursued post-doctoral research in the Division of Pediatric Allergy/Immunology, University of California Los Angeles (UCLA) California, 1997, after completing his ear, nose, and throat residency at the University Medical Center, Seoul Korea. After he completed his residency training in internal medicine in Tennessee and fellowship in the specialty of Allergy/Immunology, Department of Medicine, Northwestern University, Chicago, Illinois to further enhance his goal of becoming a physician/scientist in this specialty in the USA, he became an assistant professor at Northwestern University.



He joined the Division of Allergy/Immunology, Department of Internal Medicine, University of South Florida College of Medicine in February 2015, where he was promoted to associate professor, August 2016.

Dr. Cho is board certified in internal medicine, allergy/immunology in the USA and otolaryngology in Korea. He received the American College of Allergy Asthma and Immunology (ACAAI) First Place Clemens von Pirquet Award, 2008, and the American Academy of Allergy Asthma and Immunology (AAAAI) GSK Fellow Career Development Award in 2009 during his fellowship in allergy/immunology. Other research awards include awards from the American Heart Association and the National Institute of Health (NIH). His research interest includes the pathogenesis of asthma and chronic rhinosinusitis/nasal polyps and the role of mast cells in airway remodeling and other mast cell-related disorders.

He has published more than 50 original papers. He and his colleagues discovered that human mast cells are a novel and major source of plasminogen activator and inhibitor-1 (PAI-1), and that mast cell-derived PAI-1 plays an essential role in asthma and viral-induced asthma exacerbation. Furthermore, his research team found that PAI-1 inhibition by a specific inhibitor or soy isoflavones reduces airway inflammation and remodeling. It is hoped that this research on PAI-1 will lead to the discovery of a novel biomarker of airway remodeling and cell- or gene-specific personalized therapeutic invention for severe asthma.

Another area of investigation is the age-related differences in the pathogenesis of chronic sinusitis and nasal polyps for which he has an NIH K23 grant. His laboratory discovered that the mitochondrial oxidative stress is related to nasal polyp formation, especially in the elderly, and blocking this pathway would be a novel and innovative treatment options for chronic sinusitis and nasal polyposis.

Mark C. Glaum, M.D., Ph.D.

Dr. Mark Glaum received a B.A. in psychology from Fordham University in New York, NY and a Master of Science in Physiology from the School of Graduate Studies at Hahnemann University. Dr. Glaum continued on at Hahnemann, where he was awarded an MD degree and a PhD in immunology. He completed internship and residency in internal medicine at Hahnemann Hospital and then pursued fellowship training in allergy and immunology at the University of Pennsylvania, where he received the Stanley E. Bradley Award for Bench Research in Internal Medicine. Dr. Glaum holds the rank of associate professor of medicine and pediatrics at the Morsani College of Medicine.



Dr. Glaum is board certified in internal medicine, and allergy and immunology. He became the Division's Fellowship Program Director in 2018. He is a fellow of the American Academy of Allergy Asthma and Immunology (AAAAI). He has been elected to "Top Doctors in America" for the last twelve years and enjoys teaching medical students, internal medicine residents and allergy/immunology fellows. He became a staff member of the James A. Haley Veterans' Hospital in 2016 where he sees patients. He also has staff privileges at Tampa General Hospital and Moffitt Cancer Center. He has served on the boards of the Allergy and Asthma Foundation of America and Hillsborough County Medical Society and is a past Chair of Rhinosinusitis and Ocular Allergy Interest Section of the American Academy of Allergy Asthma and Immunology. Dr. Glaum is the Director and Co-PI of the USF Food Allergy Research and Education Foundation Clinical Center of Excellence.

Dr. Glaum's research interests include food allergy, chronic rhinosinusitis, nasal polyps, mast cell biology, and pollen identification.

Narasaiah Kolliputi, Ph.D.

Dr. Narasaiah Kolliputi is an Associate Professor and Division Director of Research Education for the Division of Allergy and Immunology, Department of Internal Medicine, at the USF Morsani College of Medicine, Tampa, FL. He received his postdoctoral training at Massachusetts General Hospital, Harvard Medical School, Boston, MA. Prior to that time, he received his BS in biology and chemistry in 1997 followed by an MS in biochemistry in 1999 at Sri Venkateswara University, Tirupati, India. He then completed his PhD in 2004 in biochemistry at Osmania University, Hyderabad, India.



Dr. Kolliputi has published 70 papers, including a paper in *Circulation Research*, *Immunology*, and *Thorax*. He serves as a grant reviewer for the National Institutes of Health, VA Merit Grants, USA Department of Defense and the American Heart Association. He is an associate editor for *Frontiers in Pharmacology*, *Frontiers in Physiology*, *Frontiers in Genetics*, and *Frontiers in Mitochondrial Physiology* and is a guest associate editor for *Frontiers in Mitochondrial Physiology*. He is an editorial board member for *Translational Medicine*, and *Journal of Biocatalysis & Biotransformation*. Dr. Kolliputi's past and present research has been funded through several National Institutes of Health and American Heart Association grants as well as through local USF grants.

Dr. Kolliputi's research is focused on exploring the molecular mechanisms that drive pulmonary diseases. Specifically, his research explores the role of RNA-editing in Acute Respiratory Diseases (ARDS) as well as developing a mouse model that will recapitulate age-associated Idiopathic Pulmonary Fibrosis (IPF) in humans. Obtaining a greater understanding of these two subjects will inevitably lead to more and better therapeutic options for those suffering with these critical diseases.

He is working on translational strategies to attenuate oxidative stress mediated acute lung injury (ALI), pulmonary fibrosis and pulmonary arterial hypertension.

Michael N. Teng, Ph.D.

Dr. Michael Teng received his Ph.D. in immunology from the University of Chicago in 1993. He trained as a postdoctoral fellow studying viral pathogenesis at The Scripps Research Institute in La Jolla, CA. Subsequently, he became a research fellow at the National Institute of Allergy and Infectious Diseases, investigating the molecular biology of respiratory syncytial virus (RSV) and RSV vaccine development. In 2002, he accepted a faculty appointment in the Department of Biochemistry and Molecular Biology at the Pennsylvania State University, University Park, PA, where his laboratory continued studies on RSV pathogenesis.



Dr. Teng joined the faculty of the Division of Allergy and Immunology at USF Morsani College of Medicine (MCOM) in 2010 and is director of basic research in the Division. He holds joint appointments in the Departments of Pediatrics, Molecular Medicine, and Pharmaceutical Sciences (College of Pharmacy). Dr. Teng is currently Associate Dean of Ph.D. and Postdoctoral Programs in MCOM. He serves as a grant reviewer for the National Institutes of Health and the American Heart Association. His past and present research funding includes grants from the National Institutes of Health, the American Heart Association, Florida Department of Health, and contracts with pharmaceutical companies.

Dr. Teng's research focuses on the host-virus interactions important for RSV pathogenesis. In particular, he is interested in the mechanisms by which RSV inhibits innate immune responses to enhance viral replication. Understanding the interplay between RSV proteins and innate immunity may lead to the development of more immunogenic RSV vaccine candidates. Additionally, Dr. Teng studies the interactions between cellular signal transduction machinery and viral proteins, with a view to discovering potential targets for antiviral therapy.

Blanca Camoretti-Mercado, Ph.D.

Dr. Blanca Camoretti-Mercado received her B.S. and Ph.D. degrees from the University of Buenos Aires, Argentina and her M.S. degree in Business Analytics and Information Systems from the University of South Florida in 2019. She trained as post-doctoral fellow at the University of Chicago where she later joined the faculty of the Section of Cardiology and ultimately the Section of Pulmonary and Critical Care in the Department of Medicine. In November 2012 she was recruited to the University of South Florida. A recipient of diversity, mentor, and teacher awards, she is an active member of the American Thoracic Society (ATS), and recent past-chair of the Assembly on Respiratory Structure and Function (RSF). Dr. Camoretti-Mercado has served



on the ATS Board of Directors and the Finance Committee and is the current chair of the ATS PhD and Basic and Translational Scientists Working Group as well as member of the Task on Governance, the Planning and Evaluation Committee, and the Program Review Subcommittee. She has served as chair of the Program and Nominating committees, as a member of both the International Lung Health and the Members in Training and Transition Committees and was the founding member of the ATS Science and Innovation Center. She organized and chaired numerous ATS symposia and Poster Discussions and has presented her studies in academic and non-academic institutions worldwide. Dr. Camoretti-Mercado chaired the Women's Lung Conference of the American Lung Association (ALA-Chicago, ATS Chapter) and serves as reviewer for the National Institute of Health (NIH) and American Heart Association (AHA) Study Sections. She is on the editorial board of several journals.

Dr. Camoretti-Mercado has published over 50 scientific, reviews, and editorials and book chapters. Her research has been funded by NIH, AHA, ALA, the LAM Foundations and Blowitz-Bridgeway Foundation. She also received the inaugural award from the ATS Research Foundation. Her translational investigations focus on the molecular bases, cellular signaling, and genetic determinants of lung dysfunction, applying state-of-the-art methodologies, bioinformatics and machine learning approaches. Dr. Camoretti-Mercado focuses on the airway smooth muscle (ASM), the key effector of contraction and relaxation and the source of inflammatory mediators that contribute to asthma, COPD and LAM diseases and the target for drug discovery. She has cloned several genes involved in contractile responses of the skeletal and ASM, established the role and pathways of TGF action on gene expression and growth in ASM, created pre-clinical models of airway remodeling and hyperresponsiveness, and discovered an efficient inhibitory mechanism of bitter taste receptor action in ASM.

Juan Carlos Cardet-Guisasola, M.D.

Juan Carlos Cardet, MD, MPH received his BS degree from Harvard University, Cambridge, Massachusetts in 2004; medical degree from the University of Puerto Rico, San Juan, Puerto Rico in 2008; and masters in public health degree from Harvard University, Boston, Massachusetts in 2017. He completed his internal medicine training at the University of Connecticut in 2011, where he was given the Maxwell O. Phelps, M.D. award for scholarship, and the Hartford Hospital Outpatient Clinic Resident of the Year Award. He completed his Allergy and Immunology (A/I) training at Brigham and Women's Hospital/Harvard University in 2014. He served as an instructor in medicine at Harvard Medical School, and as the assistant director of the Asthma Research Center at Brigham and Women's Hospital from July 2014 until June 2017.



Dr. Cardet is an assistant professor in the USF Department of Internal Medicine. He specializes in the treatment of patients with asthma, chronic urticaria, chronic rhinitis, and other allergic and immunologic diseases. He is board certified in internal medicine and in A/I, and he is a fellow of the American Academy of Allergy Asthma and Immunology (AAAAI). He enjoys working with medical students, residents, and A/I fellows. His translational research focuses on understanding the pathophysiology of severe asthma with the aim of identifying novel therapies. He was awarded in 2017 a K23 grant by the National Institute of Allergy and Infectious Diseases (NIAID) so that he can pursue this endeavor. He is an investigator with the AsthmaNet, Severe Asthma Research Program (SARP), and PRECISE NHLBI research networks, and with the Airways Clinical Research Centers of the American Lung Association. He is the co-chair of the executive committee of the Patient Centered Outcomes Research Institute (PCORI)-funded PRECISE trial. He is a member of the European Respiratory Society/American Thoracic Society taskforce on severe asthma.

Lakshmi Galam, Ph.D.

Dr. Lakshmi Galam is an assistant professor in the Division of Allergy and Immunology, Department of Internal Medicine, at the USF Morsani College of Medicine, Tampa, FL. She completed her postdoctoral training at Oklahoma State University, Stillwater, OK. Prior to that, she received her BS in biology and chemistry in 1996 followed by an MS in biotechnology in 1998 at Andhra University, Vishakapatnam, India. She then completed her PhD in genetics at Osmania University, Hyderabad, India, in 2004.



Dr. Galam's research work is published in various prestigious scientific journals. She is highly experienced in the development and use of automated liquid handling systems integrated with high throughput analytical platforms. She also has extensive experience in high throughput screening and hit validation studies to identify small molecule inhibitors in drug discovery. She serves as course director for the Applied Bioinformatics Course.

Amber N. Pepper, M.D.

Dr. Amber N. Pepper received her BS degree in Integrative Biology from the University of Florida, Gainesville, FL and MD degree from the University of South Florida Morsani College of Medicine, Tampa, FL. She was inducted into the Alpha Omega Alpha Honor Medical Society during her third year of medical school. She completed her residency in internal medicine (chief resident), and fellowship in allergy and immunology (chief fellow), at the University of South Florida Morsani College of Medicine. She joined the University of South Florida, Division of Allergy and Immunology, Department of Internal Medicine as an Assistant Professor in August 2018.



Dr. Pepper is Associate Director of the Division of Allergy and Immunology, Department of Internal Medicine, Joy McCann Culverhouse Clinical Research Center. She was Co-Director of the USF Health Divisions of Allergy and Immunology 2020 Symposium Updates in Allergy and Immunology, January 17-18, 2020, Tampa, Florida. She is board certified in internal medicine and allergy and immunology. She is also a member of the American Academy of Allergy, Asthma and Immunology and the American College of Allergy, Asthma and Immunology. She has authored abstracts and scientific review articles and enjoys teaching medical students, residents, and fellows.

Dr. Pepper's research interests include food allergy and oral immunotherapy, allergic rhinitis, asthma, and urticaria.

Farnaz Tabatabaian, M.D.

Dr. Farnaz Tabatabaian received a B.S. in chemistry from Wright State University in Dayton, OH. Following graduation, she earned her Master of Science in Anatomy and Physiology at Wright State University where she had direct exposure to research in innate immunology and inflammation. She pursued an M.D. degree at Northeast Ohio University of Medicine, Akron, OH. She completed her internship and residency in internal medicine at the Wexner Medical Center, Ohio State University, and then did her fellowship training in allergy and immunology at the University of South Florida, Pediatric Division of Allergy and Immunology, Johns Hopkins All Children's Hospital, St. Petersburg, FL.



Dr. Tabatabaian is board certified in internal medicine and allergy and immunology. She directed the 2019 and 2020 Symposium Updates in Allergy and Immunology, January 18-19, 2019 and January 17-18, 2020, at the Center for Advanced Medical Learning and Simulation (CAMLs), University of South Florida, Tampa, Florida. She enjoys teaching medical students, internal medicine residents and allergy/immunology fellows. She sees patients in internal medicine and allergy/immunology at the University of South Florida Morsani College of Medicine. Dr. Tabatabaian is involved in implementing and creating a curriculum in high value education for residents to help devise a way to decrease healthcare costs while providing excellence in care.

Dr. Tabatabaian's research interests include adult immunology with a focus on common variable immunodeficiency, inflammation and asthma, and the impact of nicotine on the bronchi and epithelial cells.

USF Division of Allergy and Immunology, Department of Pediatrics
All Children's Hospital/Johns Hopkins Medicine



Front row - left to right: Panida Sriaroon, MD, Mark Ballow, MD, Jennifer Leiding, MD, Jolan Walter, MD, PhD, Mandel Sher, MD, Emma Westermann-Clark, MD.

Back row - left to right: Nathan Tang, MD, Daimé Nieves, APRN, Irina Dawson, MD, Jacqueline Squire, MD, María Chitty López, MD, Carla Duff, APRN.

DIVISION OF ALLERGY AND IMMUNOLOGY

FELLOWS-IN-TRAINING

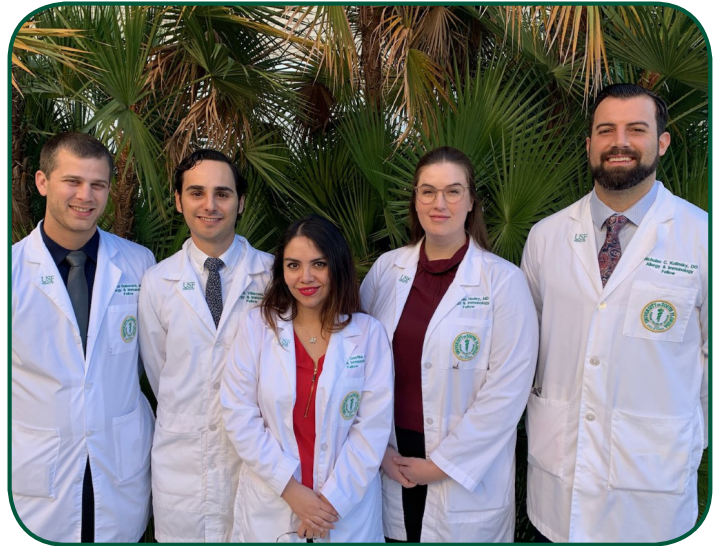
Claudia Gaefke, MD - Second year fellow will graduate in June 2020. Dr. Gaefke received her medical degree from the University of Arizona. She completed her residency in internal medicine at the University of Arizona. Her interests include primary immunodeficiency, atopic dermatitis, asthma, allergen immunotherapy, anaphylaxis, and health policy.

Raul Sergio Villarreal, MD - Second year fellow will graduate in June 2020. Dr. Villarreal received his medical degree from the University of Texas Southwestern Medical Center in Dallas, Texas. He completed residency in internal medicine at the McGaw Medical Center of Northwestern University, Chicago. His primary interests include asthma, angioedema, food allergy, and clinical research.

David Gubernick, MD - First year fellow will graduate in June 2021. Dr. Gubernick received his medical degree from the University of Florida College of Medicine in Gainesville, FL. He completed his residency in Internal Medicine and Pediatrics from the University of Missouri in Columbia, Missouri. His interests include asthma, anaphylaxis, food allergy, and primary immunodeficiencies.

Stephanie Hudey, MD - First year fellow will graduate in June 2021. Dr. Hudey received her medical degree from the University of South Florida Morsani College of Medicine. She completed her residency in Internal Medicine at the University of South Florida Morsani College of Medicine. Her primary interests include asthma, food and drug allergy, and angioedema.

Nicholas Cohen Kolinsky DO - First year fellow will graduate in June 2021. Dr. Kolinsky received his medical degree from Lincoln Memorial University – Debusk College of Osteopathic Medicine in Harrogate, TN. He completed his residency in Internal Medicine where he served as Chief Resident at Regional Medical Center Bayonet Point in Hudson, FL. His primary interests include asthma, immunotherapy, sinusitis, atopic dermatitis, urticaria, food allergy and providing excellent patient-centered care.



L to R: David Gubernick, MD, Raul Villarreal, MD, Claudia Gaefke, MD, Stephanie Hudey, MD, Nicholas Kolinsky, DO



Kirk Shepard, MD and Shiven Patel, MD, fellows-in training, with Richard F. Lockey, Division Chief.



First row: Warit Jithpratuck, MD, Irina Dawson, MD, Claudia Gaefke, MD, Tara Saco, MD, Kirk Shepard, MD

Second row: Fatima Kahn, MD, and Shiven Patel, MD

RESEARCH STAFF MEMBERS

Matthew D. Alleyn, BS, Laboratory Technician

M. Helena Hernandez Cuervo, MD,

Jutaro Fukumoto, M.D., Ph.D., Research Associate

Ara Jo, Ph.D., Postdoc/Biological Scientist

Hannah Lee, BS, Laboratory Technician

Ramani Soundararajan, Ph.D., Scientific Researcher

Kim Teng, Senior Biological Scientist

STUDENTS

Emily Chan, Undergraduate Student

Kevin Duan, Undergraduate Student

Sandy Hornung, Graduate Student

Muling Lin, Medical Student

Smita Saji, Volunteer Student

Sahebgowda Sidramagowda Patil, Graduate Student

ADMINISTRATIVE PERSONNEL

* **Earle Trott**, Office Manager

* **Peggy Hales**, Program Assistant

* **Rebecca Carter**, Administrative Secretary

* **Geeta Gehi**, Administrative Secretary

* Also James A. Haley Veterans' Hospital, Tampa, FL

DIVISION'S CLINICAL RESEARCH UNIT

Catherine Renee Smith, CMA, CCRC, Head Coordinator, Clinical Research Unit

Michelle Twitmyer, BS, CCRC, Clinical Research Coordinator

Tiffani Kaage, BS, CRC, Clinical Research Coordinator

**Joy McCann Culverhouse Airway Disease
Clinical Research Center**



Catherine Renee Smith, CMA, CCRC



Michelle Twitmyer, BS, CCRC



Tiffani Kaage, BS, CRC

I. JOY MCCANN CULVERHOUSE **AIRWAY DISEASE CLINICAL RESEARCH CENTER**

Clinical Research Unit (CRU)

The University of South Florida, Asthma, Allergy and Immunology CRU was established in 1977 to improve the treatment of patients who suffer from asthma, allergic and immunologic diseases.

The CRU provides quality research in a variety of clinical areas which include the following: allergic conjunctivitis; allergen immunotherapy; allergen skin testing; allergic rhinitis; asthma; atopic eczema; bronchitis, acute and chronic; contact dermatitis; chronic obstructive pulmonary disease; exercise induced asthma; headache (migraine and tension); hereditary angioedema; immunodeficiency diseases; insect allergy; intravenous immunoglobulin; nasal polyps; sinusitis, acute and chronic; temporomandibular joint disease; urticaria and vasomotor rhinitis.

Studies funded by pharmaceutical companies are conducted at the Division's CRU. The CRU is also a member of the American Lung Association's Asthma Clinical Research Center network, one of 19 centers throughout the United States.

Clinical Research Unit (CRU) Studies

A PHASE 2/3 STUDY INVESTIGATING THE PHARMACOKINETICS, SAFETY, AND EFFICACY OF DUPILUMAB IN PATIENTS AGED ≥ 6 MONTHS TO < 6 YEARS WITH SEVERE ATOPIC DERMATITIS R668-AD-1539

AN OPEN-LABEL EXTENSION STUDY TO ASSESS THE LONG-TERM SAFETY AND EFFICACY OF DUPILUMAB IN PATIENTS ≥ 6 MONTHS TO < 18 YEARS OF AGE WITH ATOPIC DERMATITIS R668-AD-1434

A RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED STUDY TO INVESTIGATE THE EFFICACY AND SAFETY OF DUPILUMAB ADMINISTERED CONCOMITANTLY WITH TOPICAL CORTICOSTEROIDS IN PATIENTS, ≥ 6 YEARS TO < 12 YEARS OF AGE, WITH SEVERE ATOPIC DERMATITIS R668-AD-1652

PATIENT EMPOWERED STRATEGY TO REDUCE ASTHMA MORBIDITY IN HIGHLY IMPACTED POPULATIONS (PREPARE)

A PHASE 3 RANDOMIZED WITHDRAWAL, DOUBLE-BLIND, PLACEBO- CONTROLLED, MULTI-CENTER STUDY INVESTIGATING THE EFFICACY AND SAFETY OF PF-04965842 IN SUBJECTS AGED 12 YEARS AND OVER, WITH MODERATE TO SEVERE ATOPIC DERMATITIS WITH THE OPTION OF RESCUE TREATMENT IN FLARING SUBJECTS B7451014

EMPHYSEMA PROGRESSION (LEEP)

A MULTI-CENTER, RANDOMIZED, DOUBLE-BLIND, ACTIVE AND PLACEBO- CONTROLLED STUDY TO INVESTIGATE THE EFFICACY AND SAFETY OF LIGELIZUMAB (QGE031) IN THE TREATMENT OF CHRONIC SPONTANEOUS URTICARIA (CSU) IN ADOLESCENTS AND ADULTS INADEQUATELY CONTROLLED WITH H1-ANTIHISTAMINES CQGE031C2302

REAL-WORLD AR101 MARKET-SUPPORTING EXPERIENCE STUDY IN PEANUT-ALLERGIC CHILDREN, ACTIVE TREATMENT ARM OPEN-LABEL EXTENSION STUDY (RAMSES OLE) ARC011

A MULTICENTER, OPEN-LABEL, LONG-TERM SAFETY STUDY OF AR101 CHARACTERIZED ORAL DESENSITIZATION IMMUNOTHERAPY IN SUBJECTS WHO PARTICIPATED IN A PRIOR AR101 STUDY ARC008

PEANUT ALLERGY ORAL IMMUNOTHERAPY STUDY OF AR101 FOR DESENSITIZATION IN CHILDREN AND ADULTS (PALISADE) FOLLOW-ON STUDY ARC004

REAL-WORLD AR101 MARKET-SUPPORTING EXPERIENCE STUDY IN PEANUT- ALLERGIC CHILDREN AGES 4 TO 17 YEARS (RAMSES) ARC007

A PHASE 2, MULTICENTER, RANDOMIZED, DOUBLE-BLIND, PLACEBO- CONTROLLED STUDY IN PEDIATRIC SUBJECTS WITH PEANUT ALLERGY TO EVALUATE THE EFFICACY AND SAFETY OF DUPILUMAB AS ADJUNCT TO AR101- CODIT (PEANUT ORAL IMMUNOTHERAPY) R668-ALG-16114

A STUDY TO EVALUATE THE EFFICACY AND SAFETY OF DUPILUMAB MONOTHERAPY IN PEDIATRIC PATIENTS WITH PEANUT ALLERGY R668- ALG-1702

A MULTICENTER, RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED, PHASE 2 CROSSOVER STUDY TO EVALUATE THE EFFICACY AND SAFETY OF LY3454738 IN ADULTS WITH CHRONIC SPONTANEOUS URTICARIA INADEQUATELY CONTROLLED WITH H1-ANTIHISTAMINES J1B-MC-FRCF

A SINGLE-PERIOD, SINGLE-TREATMENT STUDY OF THE PHARMACOKINETICS AND PHARMACODYNAMICS OF EPINEPHRINE AFTER ADMINISTRATION OF INTRANASAL ARS-1 TO PEDIATRIC SUBJECTS WITH SYSTEMIC ALLERGIES EPI 10

A PHASE 3, DOUBLE-BLIND, RANDOMIZED, 8-WEEK, VEHICLE-CONTROLLED EFFICACY AND SAFETY STUDY OF RUXOLITINIB CREAM FOLLOWED BY A LONG-TERM SAFETY EXTENSION PERIOD IN ADOLESCENTS AND ADULTS WITH ATOPIC DERMATITIS INCB 18424-303

A RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED DOSE-RANGING BIOMARKER STUDY OF THE EFFECTS OF DEXPRAMIPEXOLE ON EOSINOPHILS IN SUBJECTS WITH EOSINOPHILIC ASTHMA KNS-760704-AS201

A PLACEBO-CONTROLLED TRIAL OF THE MOLEKULE AIR PURIFIER IN THE TREATMENT OF PET ALLERGY

PRECISE: PRECISION INTERVENTIONS FOR SEVERE AND/OR EXACERBATION-PRONE ASTHMA NETWORK

AN OBSERVATIONAL, NON-INTERVENTIONAL, STUDY OF PATIENTS WITH HEREDITARY ANGIOEDEMA IN THE UNITED STATES AND CANADA (EMPOWER STUDY) SHP643-403

A ONE-YEAR PLACEBO-CONTROLLED PHASE III TRIAL EVALUATING THE EFFICACY AND SAFETY OF THE HOUSE DUST MITE (HDM) SLIT-TABLET IN CHILDREN (5-11 YEARS OF AGE) WITH HDM ALLERGIC RHINITIS/RHINOCONJUNCTIVITIS WITH OR WITHOUT ASTHMA MT-12

A RANDOMIZED, BLINDED, PARALLEL GROUP, PLACEBO-CONTROLLED, MULTIPLE DOSE, MULTICENTER STUDY TO COMPARE THE THERAPEUTIC EQUIVALENCE OF FLUTICASONE PROPIONATE PRESSURIZED METERED DOSE INHALER, 110 MCG, TO FLOVENT® HFA 110 MCG, IN ADULT SUBJECTS WITH ASTHMA. TPI-18-03

AN OPEN-LABEL STUDY TO EVALUATE THE LONG-TERM SAFETY OF DAILY ORAL BCX7353 IN SUBJECTS WITH TYPE I AND II HEREDITARY ANGIOEDEMA BCX7353-204

II. BASIC AND CLINICAL RESEARCH SUPPORT

ENDOWMENTS

Joy McCann Culverhouse Endowment and Chair in Allergy and Immunology
(Richard F. Lockey, M.D., M.S.)

Mabel and Ellsworth Simmons Endowment and Professorship of Allergy and Immunology
(Dennis K. Ledford, M.D.)

(Both endowments are used to support research and teaching within the Division)

EXTRAMURAL FUNDING

Government Funding

National Institute of Allergy and Infectious Diseases

National Heart, Lung and Blood Institute

Florida Department of Health

Non-Profit Funding

Patient Centered Outcomes Research Institute

Food Allergy Network

Pharmaceutical Funding (past or present)

Ablynx, NV

Afferent

Aimmune Therapeutics

Almirall Pharmaceuticals

AstraZeneca COmpleware

CSL Behring

Cytos

Dyax Corporation

Forest Laboratories

Genentech Inc

GlaxoSmithKline

Jerini US

Merck and Co., Inc.

MedImmune

Novartis Pharmaceuticals

Pfizer

Pharming Inc.

Roche

Sanofi-Aventis Pharmaceuticals

Schering-Plough Corporation

Shire

Stallergenes

Teva Pharmaceuticals

Vertex

Viropharma

III. FACULTY AND STAFF AWARDS

Richard F. Lockey, MD:

The American Academy of Allergy Asthma and Immunology, the premier society globally in the field of allergy and immunology, established the Richard F. Lockey, MD MS FAAAAI & University of South Florida Allergy and Immunology Program Lectureship and Faculty Development Award with a goal of \$250,000 which was 100% funded and completed.

Tom B. Casale, MD:

2019 Andrew Grant, MD distinguished lecture series, Texas Allergy Asthma and Immunology Society.

Joseph Diaz, MD: (graduate of the division - 1988)

Recipient of the Samuel C. Bukantz Allergy-Immunology Outstanding Research/Leadership Achievement Award, Division of Allergy and Immunology, University of South Florida Morsani College of Medicine, 2019.

Narasaiah Kolliputi, PhD:

National Institute of Health award for USF directed by Dr. Kolliputi:

Project Title: Molecular Mechanisms of Hyperoxic Lung Injury

Research Federal Award Date: 07/19/2019

Total Federal Award Amount \$373,750

Budget Period: 09/01/2019 – 08/31/2020

Tom B. Casale, MD, Mark C. Glaum, MD, PhD, Dennis K. Ledford, MD, Richard F. Lockey, MD, MS, and Hugh H. Windom, MD

Selected as Castle Connolly Top Allergy & Immunology Doctors in Tampa, Florida, 2019

IV. Major Accomplishments:

Division of Allergy and Immunology, Department of Internal Medicine

Selected as a World Allergy Organization (WAO) Center of Excellence for the term 2016 – 2019. The purpose of WAO Centers of Excellence is to intensify and accelerate multi-disciplinary scientific and clinical innovation, education, and advocacy worldwide providing excellence in education, research, and training to various stakeholders in allergy, asthma and clinical immunology.

Narasaiah Kolliputi, PhD

Received a new three-year grant (project period 09/01/2017 - 09/31/2020) from NHBLI/NIH entitled “Molecular Mechanisms of Hyperoxic Lung Injury” in the total amount of \$1,121,250.00.

Invited to serve as a new member of the Respiratory, Cell & Molecular Biology Program Committee for ATS 2017-2018.

Invited to serve as an editorial board member of the *AJP Lung* journal.

Served as Chairman and ad hoc study section member, National Institutes of Health/National Heart Lung and Blood Institute.

Blanca Camoretti-Mercado, PhD

Chair, The PhD and Basic and Translational Scientists Working Group, American Thoracic Society, 2019 - Member, Task Force on Governance, American Thoracic Society, 2019.

Amber Pepper, MD

Project entitled “A Placebo-controlled Trial of the Molekule Air Purifier in the Treatment of Pet Allergy” between the University of South Florida and Molekule has been selected to receive support from the Florida High Tech Corridor Council’s Matching Grants Research Program. This program fosters the development of commercially applicable emerging technologies by encouraging applied research between Corridor universities and the region’s high technology industry partners. Funds in the amount of \$93,386 will be made available to the principal investigator, Amber N. Pepper, MD. This award will match Molekule’s cash and in-kind contributions.

Seong H. Cho, MD

Received 2 research grants:

An investigator initiated study grant from Sanofi/Regeneron. “An evaluation of dupilumab in patients with chronic rhinosinusitis without nasal polyposis”. Direct cost about 0.8 million over 22 months.

Clinical trial grant. Sanofi DRI15103 (anti-IL-monoclonal antibody) clinical trial in severe asthma.

Study entitled “Soy supplements may benefit asthma patients with specific genetic variations” featured on USF Health Social Media and included as a Featured Publication in the August 2019 Research Matters newsletter.

V. PUBLICATIONS FROM THE DIVISION

BOOKS PUBLISHED BY FACULTY

Lockey RF, Ledford DK (eds): Allergens and Allergen Immunotherapy for Allergic Diseases, Subcutaneous, Sublingual and Oral, 6th edition. CRC Press/Taylor & Francis Group, New York, NY, in press.

BOOK CHAPTERS PUBLISHED BY FACULTY

Gaefke CL*, Carr TF: Blood and Sputum Eosinophils as a Biomarker for Selecting and Adjusting Asthma Medication. In: Personalizing Asthma Management for the Clinician. Szeffler S, Holguin F, Wechsler M (eds.) Elsevier Publishing, pp. 59-65, 2018.

Ledford R, Feldman M, Casale T: Asthma, COPD and the Overlap Syndrome: A case-based overview of similarities and differences. In: Medications for asthma, COPD, and Overlap Syndrome. Taylor and Francis, 2019.

Stokes J, Casale TB: Anti-IgE Therapy. In: Middleton's Allergy: Principles and Practice, 9th edition. Burks A, Holgate S, O'Hehir R, Bacharier L, Broide D, Khurana GH, Peebles S (eds). December 2019.

Stokes J, Casale TB: Recombinant and Modified Vaccines and Adjuvants used for Allergen Immunotherapy. In: Allergens and Allergen Immunotherapy: Subcutaneous, Sublingual and Oral, 6th ed. Lockey RF, Ledford DK (eds). CRC Press/Taylor & Francis Group, UK. In press.

Fernández-Caldas E, Puerta L, Caraballo L, Iraola V, Lockey RF: Mite Allergens. In: Allergens and Allergen Immunotherapy: Subcutaneous, Sublingual and Oral, 6th ed. Lockey RF, Ledford DK (eds). CRC Press/Taylor & Francis Group, UK. In press.

Golden DBK, Tabatabaian F, Müller-Gierok U, Lockey RF: Indications for and Preparing and Administering Hymenoptera Vaccines. In: Allergens and Allergen Immunotherapy: Subcutaneous, Sublingual and Oral, 6th ed. Lockey RF, Ledford DK (eds). CRC Press/Taylor & Francis Group, UK. In press.

Bagg AS*, Lockey RF: Adverse Effects and Fatalities Associated with Allergen Skin Testing and Subcutaneous Allergen Immunotherapy. In: Allergens and Allergen Immunotherapy: Subcutaneous, Sublingual and Oral, 6th ed. Lockey RF, Ledford DK (eds). CRC Press/Taylor & Francis Group, UK. In press.

Patel SS*, Cox L, Lockey RF: Instructions and Consent Forms for Subcutaneous Allergen Immunotherapy. In: Allergens and Allergen Immunotherapy: Subcutaneous, Sublingual and Oral, 6th ed. Lockey RF, Ledford DK (eds). CRC Press/Taylor & Francis Group, UK. In press.

Codina R, Pineda F, Palacios R: Tree pollen allergens. In: Allergens and Allergen Immunotherapy, 6th ed. Lockey RF, Ledford DK (eds). CRC Press/Taylor & Francis Group. In press.

Codina R, Pineda F, Palacios R: Tree pollen allergens. In: Allergens and Allergen Immunotherapy, 6th ed. Lockey RF, Ledford DK (eds). CRC Press/Taylor & Francis Group. In press.

Esch RE, Codina R, Pineda F, Palacios R: Manufacturing pollen and fungal extracts. In: Allergens and Allergen Immunotherapy, 6th ed. Lockey RF, Ledford DK (eds). CRC Press/Taylor & Francis Group. In press.

Fernandez-Caldas E, Cho S: Manufacturing Arthropod and Mammalian Extracts. In: Allergens and Allergen Immunotherapy, 6th ed. Lockey RF, Ledford DK (eds). CRC Press/Taylor & Francis Group. In press.

*Fellow-in-Training

Casanovas M, Fernandez-Caldas E: Indications for and Preparing and Administering Sublingual Allergen Vaccines. In: *Allergens and Allergen Immunotherapy*, 6th ed. Lockey RF, Ledford DK (eds). CRC Press/Taylor & Francis Group. In press.

Ferguson J, Hoffman DR: Biting Insect and Tick Allergens. In: *Allergens and Allergen Immunotherapy*, 6th ed. Lockey RF, Ledford DK (eds). CRC Press/Taylor & Francis Group. In press.

SCIENTIFIC ARTICLES PUBLISHED BY FACULTY AND TRAINEES

Turkeltaub PC, Lockey RF, Holmes K, Friedmann E: Asthma and/or hay fever as predictors of fertility/impaired fecundity in U.S. women: National Survey of Family Growth. *Sci Rep* 2019; 9(1):18711.

Patel SS*, Lovko VJ, Lockey RF: Red Tide: Overview and Clinical Manifestations: *J Allergy Clin Immunol Pract* 2019; pii: S2213-2198(19)30921-3, doi: 10.1016/j.jaip.2019.10.030. [Epub ahead of print] Review.

Camoretti-Mercado B, Lockey RF: Letter to the Editor. Reply to Lipworth B, et al: Non-canonical β 2-receptor signaling. *J Allergy Clin Immunol* 2019;144(6):1735-1736.

Cohen L, Seminario-Vidal L, Lockey RF: Dermatologic Problems Commonly Seen by the Allergist/Immunologist. *J Allergy Clin Immunol Pract* 2019; pii: S2213-2198(19)30637-3. doi: 10.1016/j.jaip.2019.07.019. [Epub ahead of print]

Camoretti-Mercado B, Lockey RF: The β -adrenergic theory of bronchial asthma: 50 years later. *J Allergy Clin Immunol*. 2019 Nov;144(5):1166-1168.

Fukumoto J, Sidramagowda Patil S, Krishnamurthy S, Saji S, John I, Narala VR, Hernández-Cuervo H, Alleyn M, Breitzig MT, Galam L, Soundararajan R, Chaudhari UK, Hansen BC, Lockey RF, Kolliputi N: Altered expression of p63 isoforms and expansion of p63- and club cell secretory protein-positive epithelial cells in the lung as novel features of aging. *Am J Physiol Cell Physiol* 2019; 316(4):C492-C508.

Fukumoto J, Leung J, Cox R, Czachor A, Parthasarathy PT, Lagishetty V, Mandry M, Hosseinian N, Patel P, Perry B, Breitzig MT, Alleyn M, Failla A, Cho Y, Cooke AJ, Galam L, Soundararajan R, Sharma N, Lockey RF, Kolliputi N: Oxidative stress induces club cell proliferation and pulmonary fibrosis in Atp8b1 mutant mice. *Aging (Albany NY)* 2019; 11(1):209-229.

Ledford DK: Skin Testing and Specific-IgE Following IVIG or Omalizumab. *J Allergy Clin Immunol Pract* 2019; 7(5):1703-1704.

Ledford DK: Mastocytosis with Bee Sting Anaphylaxis. *J Allergy Clin Immunol Pract* 2019; 7(4):1374-1375.

Nyenhuis SM, Akkoyun E, Liu L, Schatz M, Casale TB: Real-World Assessment of Asthma Control and Severity in Children, Adolescents, and Adults with Asthma: Relationships to Care Settings and Comorbidities. *J Allergy Clin Immunol Pract* 2019; Nov 7. pii: S2213-2198(19)30923-7. doi: 10.1016/j.jaip.2019.10.032. [Epub ahead of print]

Casale TB, Aalbers R, Bleecker ER, Meltzer EO, Zaremba-Pechmann L, de la Hoz A, Kerstjens HAM: Tiotropium Respimat® add-on therapy to inhaled corticosteroids in patients with symptomatic asthma improves clinical outcomes regardless of baseline characteristics. *Respir Med* 2019; 158:97-109.

FitzGerald JM, Buhl R, Casale TB, Jugovic B, Zaremba-Pechmann L, Halpin DMG: Tiotropium add-on therapy reduces seasonal peaks of asthma worsening in adults with symptomatic severe asthma. *Eur Respir J*. 2019 Oct 16. pii: 1900964. doi: 10.1183/13993003.00964-2019. [Epub ahead of print] No abstract available.

*Fellow-in-Training

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- Casale TB, Murphy TR, Holden M, Rajput Y, Yoo B, Bernstein JA: Impact of omalizumab on patient-reported outcomes in chronic idiopathic urticaria: Results from a randomized study (XTEND-CIU). *J Allergy Clin Immunol Pract* 2019; 7(7):2487-2490.
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- Cardet JC, Casale TB: New insights into the utility of omalizumab. *J Allergy Clin Immunol* 2019; 143(3):923-926.
- Hanania NA, Chipps BE, Griffin NM, Yoo B, Iqbal A, Casale TB: Omalizumab effectiveness in asthma-COPD overlap: Post hoc analysis of PROSPERO. *J Allergy Clin Immunol* 2019 Apr;143(4):1629-1633.
- Bosnic-Anticevich S, Costa E, Menditto E, Casale TB, et al: ARIA pharmacy 2018 “Allergic rhinitis care pathways for community pharmacy”: AIRWAYS ICPs initiative (European Innovation Partnership on Active and Healthy Ageing, DG CONNECT and DG Santé) POLLAR (Impact of Air Pollution on Asthma and Rhinitis) GARD Demonstration project. *Allergy* 2019; 74(7):1219-1236.
- Casale TB, Haselkorn T, Ciaccio CE, Sriaroon P, Chipps BE: Harmonization of Terminology for Tolerated and Reactive Dose in Food Allergy Immunotherapy. *J Allergy Clin Immunol Pract* 2019; 7(2):389-392.
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- Cardet JC, Jiang X, Lu Q, Gerard N, et al: *J Allergy Clin Immunol* 2019 Sep; 144(3):873-874.
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- Reply to Incorvaia C, et al: The many abilities of omalizumab and the unbeaten path. *J Allergy Clin Immunol* 2019 Jun; 143(6):2335-36.
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*Fellow-in-Training

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Saji S, Patil SS, Alleyn M, Lockey R, Kolliputi N: Nicotine in E-cigarette smoke: cancer culprit? *J Cell Commun Signal* 2019 Dec 18. doi: 10.1007/s12079-019-00519-5. [Epub ahead of print]. PMID:31853716

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TRAINEE* PUBLICATIONS AND ABSTRACTS

Oxner A, Kongpakpaisarn K, **Hudey SN***, Myers A, et al. Bundling HIV and TB Care at a District-Level Center in Sierra Leone: A high-yield method for diagnosing co-infection with TB and antiretroviral treatment failure among people living with HIV. *Int J Infect Dis.* 2019; 82: 124-128.

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Villarreal R*, Tabatabaian F. “A Case of Recalcitrant Verruca Vulgaris in a Patient with CLL”. American College of Allergy, Asthma, and Immunology Annual Conference. Houston, Texas, November 2019. Poster presentation.

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Imanirad D, **Villarreal RS***, Tabatabaian F. “A Cryptococcal Conundrum. A New Diagnosis of ALPS in a Patient Presenting with Non-Specific Rash”. American College of Allergy, Asthma, and Immunology Annual Conference, Houston, Texas, November 2019.

Diaz-Cabrera N, **Villarreal RS***, Tabatabaian F. “Noninvasive Yet Destructive Allergic Fungal Rhinosinusitis in an Immunocompetent Patient”. American College of Allergy, Asthma, and Immunology Annual Conference, Houston, Texas, November 2019.

Gubernick D*, **Shepard K***, Lockey RF. “Eastern Coral Snake Antivenom Anaphylaxis”. American College of Allergy, Asthma, and Immunology Annual Conference, Houston, Texas, November 2019.

Saco TV*, Imanirad D, Ledford DK, Walter JE. “Hereditary Alpha Trypsinemia: A New Cohort.” First annual AIM meeting, May 4 2019, San Mateo, California. Poster Presentation

Chen M, **Shepard KV***, Holweg C, Rajput Y, Ahmed A, Yang M, Raut P, Pazwash H, Cho E. “Quantifying the Degree of Overlap Between Allergic and Eosinophilic Subtypes in Patients with Moderate-to-Severe Asthma”. IPSOR 2019 annual meeting. Presented in New Orleans, LA on May 21, 2019.

Chen M, **Shepard KV***, Holweg C, Yang M, Raut P, Pazwash H, Cho E. “The Prevalence of Eosinophilic and Type 2 Asthma Among Patients with Allergic Asthma”. Western Society of Allergy, Asthma & Immunology (WSAAI) 2019 annual meeting. Presented in Maui, HI, January 20-24, 2019.

Hudey SN*, **Villarreal RS***, Cho SH. A Common Diagnosis Misidentified as Hereditary Angioedema During Pregnancy. Presented at ACAAI in Houston, Texas, November 2019.

Hudey SN*, **Saco TV***, Cho S. Seminal Fluid Sensitivity: Abstinence Is Not the Answer. Presented at the American College of Allergy, Asthma and Immunology Annual Meeting in Seattle, WA on November 15-19, 2018 and the Florida Allergy, Asthma, & Immunology Society Annual Meeting, Orlando, FL, July 19-21, 2019.

Patel SS*, Tabatabaian F. Nephropathy in common variable immunodeficiency. American Academy of Allergy, Asthma & Immunology Annual Meeting, San Francisco, CA, February 2019.

Joseph Diaz, MD graduated as a trainee from the program in 1988. He is now in practice in San Antonio, Texas. He has been instrumental in funding the American Academy of Allergy Asthma and Immunology's Foundation, used to fund young scientists in the specialty. He received the Academy's Special Recognition Award in 2019 for this outstanding work. He also initiated the Academy "5K Run/Walk" at each year's meeting--a tremendous success.



American College of Allergy Asthma and Immunology (ACAAI) 2019 Annual Meeting, Fellows-in-Training Bowl, Houston, TX, 2019

Left to right:
Maria Chitty-Lopez, MD, Raul Villarreal, MD, 3rd place



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