

CURRICULUM VITAE

DATE: July 14, 2021

NAME: Gailen D. Marshall, Jr., M.D., Ph.D.

PRESENT TITLE: The R Faser Triplett Sr MD Chair in Allergy and Immunology
Professor of Medicine, Pediatrics, Pathology and Population Health Science

Vice Chairman for Research, Department of Medicine
Director, Division of Allergy, Asthma & Clinical Immunology

Executive Director
Mississippi Clinical Research and Trials Center

Medical Director
UMMC Clinical Research Support Program
UMMC Clinical Research and Trials Units

Translational Science Track Director
Master of Science in Clinical Investigation Program
Graduate School in the Health Sciences

Professor of Population Health Science
John D. Bower School of Population Health

The University of Mississippi Medical Center

Staff Physician and Consultant in Allergy and Immunology
Medical Services,
G.V. (Sonny) Montgomery Veterans Affairs Medical Center
Jackson, MS

BUSINESS 2500 North State Street N416
ADDRESS: Jackson, MS 39216

BIRTHDATE: September 9, 1950

CITIZENSHIP: U.S.A.

UNDERGRADUATE EDUCATION

1972 B. Science (Biology)
University of Houston
Houston, Texas

GRADUATE EDUCATION

1975 M. Science (Microbiology/Immunology)
Texas A&M University
College Station, Texas

1979 Ph.D. (Immunology)
University of Texas
Graduate School of Biomedical Sciences
Galveston, Texas

1984 M.D.
University of Texas Medical Branch
Galveston, Texas

POSTGRADUATE TRAINING

1979–1980 Postdoctoral Research Fellowship
University of Texas Medical Branch
Galveston, Texas

1984–1985 Internship (Straight Medicine)
University of Iowa Hospitals
Iowa City, Iowa

1985–1986 Research Fellowship
Division of Allergy-Immunology
University of Iowa Hospitals
Iowa City, Iowa

1986–1988 Resident Physician (Internal Medicine)
University of Tennessee Medical Center
Baptist Memorial Hospital
Memphis, Tennessee

1988–1989 Chief Resident (Internal Medicine)
University of Tennessee Medical Center
Baptist Memorial Hospital
Memphis, Tennessee

1988–1989 Clinical Fellowship
Division of Allergy-Immunology
University of Tennessee Medical Center
Memphis, Tennessee

HONORS AND AWARDS

1971 Alpha Epsilon Delta

	Premedical Honor Society
1975, 1977	S. Edward Sulkin Awards Texas Branch American Society of Microbiology
1976–1978	James W. McLaughlin Predoctoral Fellowship University of Texas Graduate School of Biomedical Sciences
1978	Named to "Outstanding Young Men in America"
1979–1981	James W. McLaughlin Postdoctoral Fellowship University of Texas Medical Branch
1979	President's Award for Best Paper Sixteenth Annual Meeting The Reticuloendothelial Society
1985	Named to "Who's Who in Frontiers of American Science"
1985–1986	NIH Postdoctoral Fellowship Immunology Training Grant University of Iowa
1986	President's Grant-In-Aid Award American Academy of Allergy & Immunology
1987	Clinical Teaching Award Department of Internal Medicine Baptist Memorial Hospital Memphis, Tennessee
1991–1992	Excellence in Teaching Award
1994–2004	School of Medicine University of Texas Health Science Center Houston, Texas
1995, 2000–2002	Named to "Who's Who in the South and Southwest"
1996	Named to "Best Doctors in America - Central Region"

1997	Named to "Who's Who in America"
2004–2007	
2009–2014	
2001–2018	Named to "Best Doctors in America"
2002	Honored Speaker Award 2002 Medical Student Retreat The University of Texas Health Science Center at Houston Medical School Houston, TX
2003	Selected to the "Guide to Top Doctors" Center for the Study of Services Washington, D.C.
2003	The Jean A Chapman Lectureship American College of Allergy, Asthma, and Immunology New Orleans, LA
2004	The Daniel Goodman Lectureship American College of Allergy, Asthma, and Immunology Boston, MA
2004–2005	Named to "Who's Who in Medicine and Healthcare"
2006–2007	Named to "Who's Who in Medicine and Healthcare"
2006–2007	Named to "Who's Who in American Education"
2006	The Jaros Memorial Lectureship American College of Allergy, Asthma, and Immunology Philadelphia, PA
2007	Distinguished Service Award American College of Allergy, Asthma and Immunology Dallas, TX
2008	The Bernard Berman Memorial Lectureship American College of Allergy, Asthma and Immunology Seattle, WA
2009	Named to "America's Top Physicians"
2009	Distinguished Fellow Award American College of Allergy, Asthma and Immunology Miami, FL

2010	Distinguished Alumnus Award Graduate School of Biomedical Sciences University of Texas Medical Branch Houston, Texas
2011-2012 2016-2017	Named to “Who’s Who in Science and Engineering”
2015	Named Inaugural Recipient of the 2015 Mentor of the Year Award from the Southern Section for Clinical Investigation
2017	Named to “2000 Outstanding Intellectuals of the 21 st Century”
2017	Golden Headed Cane Award American College of Allergy, Asthma, & Immunology Boston, MA
2018	Top Allergist/Immunologist International Association of HealthCare Professionals The Leading Physicians of the World
2020	COVID Hero Investigator University of Mississippi Medical Center
2021	COVID Physician Hero Award Mississippi State Medical Association
2021	Inaugural Speaker The William S. Silvers MD Integrative Allergy Immunology Respiratory Wellness Program National Jewish Health Denver, CO

BOARD CERTIFICATIONS

1988	American Board of Internal Medicine Certificate #118388
1989–2029	American Board of Allergy and Immunology Certificate #3111
1990	American Board of Allergy & Immunology Diagnostic Laboratory Immunology Certificate #0129

LICENSURE

1985 Iowa
License #24884 (Inactive)

1985 Illinois
License #036-071230 (Inactive)

1986 Tennessee
License #MD 17214 (Inactive)

1989 Texas
License #H5925 (Inactive)

2004 Mississippi
License #18705 (Active)

PROFESSIONAL ORGANIZATIONS

* indicates Fellow status

Regional: Southeastern Allergy, Asthma and Immunology Society
*Southern Society for Clinical Investigation

National: Academy of Behavioral Medicine Research
*American Academy of Allergy, Asthma and Immunology
American Association of Immunologist
*American College of Allergy, Asthma and Immunology
*American College of Physicians
American Thoracic Society
American College of Chest Physicians
Association of Subspecialty Professors
American Clinical and Climatological Association

International: European Academy of Allergology and Clinical Immunology
Interasma – International Association of Asthmatology
International Society of NeuroImmunoModulation
International Society of Behavioral Medicine
Psychoneuroimmunology Research Society
World Allergy Organization

ACADEMIC AND RESEARCH APPOINTMENTS

1978–1979 Lecturer in Biology and Immunology
George Mason University
Fairfax, Virginia

1982–1984	Research Scientist in Transplant Immunology Division of Nephrology University of Texas Medical Branch
1986–1989	Laboratory Director & Cellular Immunology Division Chief Biotherapeutics, Inc. Memphis, Tennessee
1989–1990	Associate Medical Director Research for Health, Inc. Houston, Texas
1990–1991	Clinical Assistant Professor Department of Internal Medicine University of Texas Health Science Center Houston, Texas
1991–1998	Assistant Professor of Medicine and Pathology Director, Division of Allergy & Clinical Immunology Department of Internal Medicine University of Texas Houston Health Science Center Houston, Texas
1998–2003	Associate Professor of Medicine & Pathology Director, Division of Allergy & Clinical Immunology Department of Internal Medicine University of Texas Medical School at Houston Houston, Texas
2003–2004	Professor of Medicine and Pathology Director, Division of Allergy & Clinical Immunology Department of Internal Medicine University of Texas Medical School at Houston Houston, Texas
2004–2011	Professor of Medicine and Pediatrics Vice Chair for Faculty Development Director, Division of Clinical Immunology and Allergy Chief, Laboratory of Behavioral Immunology Research The University of Mississippi Medical Center Jackson, Mississippi
2011–Present	Professor of Medicine and Pediatrics The R. Faser Triplett, Sr. MD Chair in Allergy and Immunology Vice Chair for Research Director, Division of Clinical Immunology and Allergy

Chief, Laboratory of Behavioral Immunology Research
The University of Mississippi Medical Center
Jackson, Mississippi

2017 Professor of Medicine, Pediatrics, Pathology and Population Health Science
The R. Faser Triplett, Sr. MD Chair of Allergy and Immunology
Vice Chair for Research, Department of Medicine
Director, Division of Clinical Immunology and Allergy
Chief, Laboratory of Behavioral Immunology Research
The University of Mississippi Medical Center
Jackson, Mississippi

2019 Professor of Medicine, Pediatrics, Pathology and Population Health Science
The R. Faser Triplett, Sr. MD Chair of Allergy and Immunology
Vice Chair for Research, Department of Medicine
Director, Division of Clinical Immunology and Allergy
Chief, Laboratory of Behavioral Immunology Research
Executive Director, Mississippi Clinical Research and Trials Center
Medical Director, UMMC Clinical Research Support Program
The University of Mississippi Medical Center
Jackson, Mississippi

INSTITUTIONAL APPOINTMENTS (University of Mississippi)

2005–2014	Chair Institutional Review Board 2
2006–2010	Co-chair Institutional Faculty Development Committee
2006	<i>Ad hoc</i> Committee on Nontenure Faculty Development
2007–Present	Institutional Stem Cell Research Oversight Committee
2007–2017	Mississippi Cancer Registry Advisory Committee Chair, Data Use Subcommittee
2008–2012	Chair Institutional Conflict of Interest Committee
2014–Present	Member UMMC Research Council
2016	Faculty Member, Pathology Graduate Training Program School of Graduate Studies in Health Sciences

2016-2021 Member
Internal Advisory Committee
NIH Grant #1UG1HD090848-01
Mississippi Pediatric Clinical Trials Center

PAST HOSPITAL APPOINTMENTS (University of Texas at Houston)

1990–2004 Allergy & Clinical Immunology Division Chief
Internal Medicine Service
Memorial Hermann Hospital
Allergy & Clinical Immunology Service Chief
Lyndon B Johnson General Hospital

1991–1995 Member, Pharmacy and Therapeutics Committee
Chairman, Adverse Drug Reaction Subcommittee
Memorial Hermann Hospital

1991–1998 Institutional Ethics Committee (Chair 1994-98)
Memorial Hermann Hospital

1997–2004 Scientific Advisory Committee
University Clinical Research Center (NIH GCRC)
Vice Chair 2001-2003
Chair 2003-2004

EDITORIAL POSITIONS

1992–1993 Molecular Biotherapy (editorial board)

1994–2004 Allergy and Asthma Proceedings (editorial board)

1994–1996 Cancer Biotherapy (editorial board)

1995–1999 Annals of Allergy, Asthma & Immunology (editorial board)

1996–2000 Lifetime Health Letter Editorial Advisory Board

1997–1998 Asthma & Allergy Exchange, Medical Editor
Asthma, Allergy Foundation of America Newsletter

2000–2005 Journal of Interferon and Cytokine Therapy (Editorial Board)

2001–2005 Allergy Watch (Assistant Editor)

2002–2005 Journal of Clinical Immunology (Editorial Board)

2003–2005 Clinical and Molecular Allergy (Editorial Board)

2002–2007	Clinical Immunology (Editorial Board)
1998–2010	Ad Hoc Reviewer: American Review of Respiratory and Critical Care Medicine Circulation Cellular Immunology Journal of Allergy & Clinical Immunology Journal of Psychosomatic Medicine Annals of Allergy, Asthma & Immunology Brain, Behavior and Immunity
2004–2005	Clinical and Diagnostic Laboratory Immunology (Editorial Board)
2005–2006	Associate Editor-in-chief Annals of Allergy, Asthma, & Immunology
2006–2021	Editor-in-chief Annals of Allergy, Asthma & Immunology
2011	WAO Book Review Editor
2013	WAO Journal Editorial Advisory Board

SERVICE ON NATIONAL GRANT REVIEW PANELS AND COMMITTEES:

2006–2011	Association of Professors of Medicine Program Planning Committee
2007–2010	NIH External Advisory Council Center for Research on Botanical Dietary Supplements Iowa State University Ames, IA
2007–2011 2011–2014	Clinical Immunology Society Publications Committee Member
2007–2012	Board of Directors (At Large Member) Intrasma – International Association of Asthmatology
2008–2009	Scientific Program Committee World Allergy Congress Buenos Aires, Argentina
2010–2014	Department of Health and Human Services Chronic Fatigue Syndrome Advisory Committee Chair Elect (2010-11); Chair (2011-14) Research Subcommittee

2018-2024 Pulmonary and Allergy Drug Advisory Committee
US Food and Drug Administration
Bethesda, MD

American Academy of Allergy, Asthma and Immunology

1991–1995 Committee for *In Vitro* Tests

1991–1995 Postgraduate Education Committee

1993–2001 HIV Committee (Chair 1999-2001)

1993–2004 Cytokine and Cells Committee

1992–1998 Allied Health Professionals Committee
Co-Chair (1993-95)
Newsletter Subcommittee Co-Chair (1996-98)

1999–2002 Board of Directors (At Large Member)

1999–2002 Continuing Medical Education Committee

2000–2001 Educational Accreditation Subcommittee

2000–2004 Postgraduate Education Subcommittee
Vice Chair (2000 – 02)
Chair (2002 – 04)

2000–2004 AI-MKSAP Committee

2000–2002 Joint Council of Allergy, Asthma and Immunology Board of Directors
Chair, Training Program Directors Liaison Committee

2001–2004 Academy CAN! Committee

2002–2004 Annual Meeting Committee

2002–2007 Workforce Committee (Chair)

2002–2006 Educational and Research Trust
Resource Development Committee (Chair)
Oversight Committee

2008–2017 Cell and Mediators of Allergic Inflammation Committee

2008–2017 Complementary & Alternative Practices in Allergy Committee

2010–2012	Autoimmunity, Immunomodulation & Secondary Immunodeficiencies Committee
2010-2017	Committee on the Underserved
2012-2017	A/I Division Directors Committee
2012-2017	Altered Immune Response Committee
2012-2013	Symposium Committee (Vice Chair)
2012-2015	Conference Online Allergy (COLA) Committee

American College of Allergy, Asthma and Immunology

2000–2001	Public Education Committee
2000–2003	Basic and Clinical Immunology Committee
2002–2005	Annual Program Committee
2002–2005	AllergyWatch Editorial Board
2004–2010	Professional Allergy/Immunology Education Committee
2005–2008	Women in Allergy Committee
2005–2008	Complementary & Alternative Medicine Committee
2005–2010	Board of <i>Regents ex officio</i> (Annals Editor-in-Chief)
2005–2011	Abstract Review Committee
2005–2010	Publications Committee EIC Annals (<i>ex officio</i>)
2006–2007	Ad Hoc Committee on Research Ethics
2006–2009	Literature Review Committee
2006–2010	Annals Editorial Board (Editor-in-Chief)
2005–2013	Continuing Medical Education Committee
2008–2014	Integrative Medicine Committee (Chair 2012 - 2014)
2016-2018	Ethics Committee

2017-2019	Appointments Committee (chair)
2021-2022	Vice President
2022-2023	President elect
2023-2024	President

National Aeronautics and Space Administration

1998–2016	Integrative Planning Team for Infection and Immunology Johnson Space Center Houston, Texas
2009–2016	Chair Immunology Standing Review Panel Human Health and Countermeasures Taskforce Washington, DC

Center for Scientific Review, National Institute of Health

1999	National Center for Complementary and Alternative Medicine Special Emphasis Panel
2000–2006	Special Emphasis Panel SSS-9
2008–2012	Center for Scientific Review MESH Study Section (Temporary Member)
2012	ZRGI CFS-M (80) Chronic Fatigue Syndrome Special Emphasis Panel

Other Service

1991–1994	Scientific Advisory Board Carrington Laboratories, Inc. Dallas, Texas
1992	Original Investigations Committee Chair, Allergy-Immunology Subcommittee American College of Chest Physicians
1994–1999	Co-Chair, Public Education Committee Member, Annual Meeting Committee Texas Allergy & Immunology Society

1999–2005	Initial Review Board Medical and Scientific Advisory Council Alzheimer’s Association
2000–2002	Medical Students and Associates Committee Texas Academy of Internal Medicine
2001–2004	Allergic Rhinitis Advisory Board – US Merck & Company
2002–2006	Western Review Consortium Committee American Heart Association
2016-2017	Center for Clinical and Translational Science Panels Done Quickly/Nascent Panel Project team

SERVICE TO THE COMMUNITY

1994–1998	Public Education Committee Co-Chair Texas Allergy, Asthma and Immunology Society
1998–2000	Founding President, Alumni Association Graduate School of Biomedical Sciences University of Texas Medical Branch Galveston, TX
1998–2000	Executive Committee Member Development Board University of Texas Medical Branch Galveston, TX
2015-Present	Member Myrlie Evers-Williams Institute for the Elimination of Health Disparities Community Advisory Board

SPONSORSHIP OF CANDIDATES FOR POSTGRADUATE DEGREE

Research

UT Houston

Sandeep K. Agarwal, MD PhD	(major professor, clinical advisor)
Eleni Maniatis, PhD	(major professor)
Susan Ritter, MD PhD	(major professor, clinical advisor)

Adriano N. Salicru, MD PhD	(major professor, clinical advisor)
Brenda Rivera	(major professor)
Grant Woodard	(major professor)
Rolando Diaz, MD PhD	(supervisory committee)
Christopher Boehme, MD PhD	(supervisory committee)
Omen Ced, PhD	(supervisory committee – UTMB Galveston)
Elizabeth LaFleur, PhD	(advisory committee)
Dorothy Long, MD PhD	(advisory committee)
Laurel Fohn, MD PhD	(advisory committee)
Hays Young, PhD	(advisory committee)
Timothy King, MD PhD	(advisory/supervisory committee)
Larry Anderson, MD PhD	(advisory/supervisory committee)
Esther Guzman, PhD	(advisory/supervisory committee)
Roshini Kandyil, MD PhD	(advisory/supervisory committee)
Jeffrey Druck, MD	(summer medical student)
Ann Shippy, MD	(summer medical student)
Crystal Cassidy, MD	(summer medical student)
Myla Skinner, MD	(summer medical student)
Deborah Cornelius, MD	(summer medical student)
Margaret Griffith, MD	(summer medical student)

UMMC

William Darsey, MD	(summer medical student)
Laura L. Maxwell, MD	(summer medical student)
James B. Brock, MD	(summer medical student)
Blaine Britt, MD	(summer medical student)
Lee Ferguson, MD	(summer medical student)
Donald Carlisle Livingston	(summer medical student)
James E. Thompson	(summer medical student)
Jillian Merica	(summer medical student)
Evan Ciarloni	(summer medical student)

SPONSORSHIP OF CANDIDATES FOR UNDERGRADUATE DEGREE

Research

Marcus Daniels	(undergraduate)
Trent Winford	(undergraduate)
Jessica Ware	(undergraduate)
Davis Ware	(undergraduate)
David Moffitt	(undergraduate)

SPONSORSHIP OF POSTDOCTORAL FELLOWS:

UT Houston

Simon Gould, PhD (postdoctoral fellow)
Elena Gotoskova, MD PhD (postdoctoral fellow)

UMMC

Kristina Rehm, PhD (postdoctoral fellow)
Michael Rupp, MD (fellowship research advisor)
Vikram Tarugu, MD (fellowship research advisor)
Jamie Lagos, MD (fellowship research advisor)
Matthew Oswald, MD (fellowship research advisor)
Tran Ly, MD (fellowship research advisor)
Jo Reed, MD (fellowship research advisor)
John W. Pulcini, MD (fellowship research advisor)
John W. Tole, DO (fellowship research advisor)
Sarah Bozeman, DO (fellowship research advisor)
Ninabahen Dave, MBBS (fellowship research advisor)
Bilal Khan, MD (fellowship research advisor)
Anette E. Morris, MD (fellowship research advisor)
Ashley G. Hall, MD (fellowship research advisor)
Lan Zhou, MD, PhD (fellowship research advisor)
Chelle R. Pope, MD (fellowship research advisor)
Chet A. Tharpe, MD (fellowship research advisor)
Lindsey Moore, DO (fellowship research advisor)
Barbara Brunet, MD (fellowship research advisor)
Blake R. Olmsted, MD (fellowship research advisor)
Jason Guillot, MD (residency research advisor)
Alan Grimm, MD (residency research advisor)
Patricia Stewart, MD (residency research advisor)
Chet A. Tharpe, MD (residency research advisor)
Susan Claire Brabec, MD (residency research advisor)
Joseph T. Ellenburg, MD (residency research advisor)
Priya Patel, MD (residency research advisor)

CLINICAL ADVISOR

UT Houston

Howard Anderson, MD
Marjorie Chelly, MD
Christina Desantos, MD
Sheena Gibbons-Stubbers, MD
Shanaz Karam Ali, MD
Michael McGinnis, MD
Patel Smith, MD
Shirley Tad, MD
Peter Wollan, MD
Sohail Ahmed, MD
Jason Ricardo Cacioppo, MD
Bruce Cuevas, MD
Laura Diekman, MD
Roger Galindo, MD
Kara Kahan, MD
Lisa Moore, MD
Kevin Sirmons MD
Patrick Tripp, MD
Nathan Strobel, MD
Amy Loercher, MD

Alfredo Gonzalez, MD

UMMC

Richard C. Robertson Jr., MD

RESEARCH SUPPORT

Sponsor and Title: NIH/Medical University of South Carolina. "Peer Approaches to Lupus Self-Management (PALS): A novel lupus peer mentorship intervention"

Program Announcement #: PA-14-344

Principal Investigator: Edith Williams PhD

Role: Site Principal Investigator

Project Period: 04/01/2017 – 03/31/2022

Funding Amount: \$280,385

Sponsor and Title: DOD/Medical University of South Carolina. "Peer Approaches to Lupus Self-Management-Military Extension (PALS): A Novel Lupus Peer Mentorship Intervention"

Funding Opportunity #: W81XWH-16-PRMRP-CTA

Principal Investigator: PI – Dr. Edith Williams

Role: Site Principal Investigator

Project Period: 09/30/2017 – 09/30/2021

Funding Amount: \$236,356

Sponsor and Title: AstraZeneca AB. "A Multicenter, Randomized, Double-blind, Parallel Group, Placebo controlled, Phase 3b Study to Evaluate the Safety and Efficacy of Benralizumab 30 mg sc in Patients with Severe Asthma Uncontrolled on Standard of Care Treatment"

Principal Investigator: Gailen D. Marshall, Jr., MD, PhD

Project Period: October 1, 2017 – Present

Funding Amount: \$207,348

Sponsor and Title: NICHD/Rhode Island Hospital. "Immune Balance in Response to Sleep Extension Following Sleep Restriction in Urban Children with Asthma"

Program Announcement #: PA-18-480

Principal Investigator: PI - Daphne Koinis-Mitchell, MD

Role: Site Principal Investigator

Project Period: 09/01/2018 – 08/31/2023

Funding Amount: \$615,389

Sponsor and Title: NHLBI/Rhode Island Hospital. "Asthma, Obesity, and Biomarkers Related to Asthma Control in Urban Children"

Program Announcement #: PA-18-345

Principal Investigator: MPI - Daphne Koinis-Mitchell, MD, MPI – Gailen D. Marshall, Jr, MD, PhD, MPI – Elissa Jelalian

Role: Site Principal Investigator

Project Period: 09/01/2018 – 08/31/2023

Funding Amount: \$805,185

Sponsor and Title: NIH/Rhode Island. “Disparities in Sleep, Asthma, and the Sleep Context in Urban Children”
Funding Opportunity # 1R01HL142058-02
Principal Investigator: PI – Dr. Koinis Mitchell
Role: Co-Investigator
Project Period: -5/24/2019-04/30/2024
Funding Amount: \$308,986

Sponsor and Title: I-Mab Biopharma; “A Single-Arm, Open-Label Pilot Study to Evaluate the Safety and Efficacy of TJ003234 in Subjects with Severe Coronavirus Disease 2019 (COVID-19)”
Principal Investigator: Gailen D. Marshall, MD, PhD
Project Period: 4/17/2020 – 3/31/2022
Funding Amount: \$543,650

Sponsor and Title: NIH/NCCIH/NIA/University of Mississippi. “Effects of spirulina”
Principal Investigator: Iklas Khan PhD
Role: Co-Investigator (Project 2 PI)
Project Period: 07/01/2020-06/30/2025
Funding Amount: \$1,190,664

Sponsor and Title: CSL Behring LLC; CSL312: “A Phase 2, Multicenter, Double-blind, Randomized, Placebo-controlled Study to Evaluate CSL312 in Coronavirus Disease 2019 (COVID-19)”
Principal Investigator: Gailen D. Marshall, MD, PhD
Project Period: 8/1/2020 – 7/31/2022
Funding Amount: \$338,660

Sponsor and Title: Regeneron Pharmaceuticals; “A Master Protocol Assessing Safety, Tolerability and Efficacy of Anti-Spike SARS CoV-2 Monoclonal Antibodies for the Treatment of Ambulatory Patients with COVID 19”
Principal Investigator: Gailen D. Marshall, MD, PhD
Project Period: 9/1/2020 – 8/31/2022
Funding Amount: \$120,950

Sponsor and Title: NIH/Community Engagement Alliance (CEAL). COVID-19 research
Subcontract No. 18-312-0217571-66100L
Role: Co-Investigator
Project Period: 09/2020 – 09/2021
Funding Amount: \$799,938

Sponsor and Title: Duke Clinical Research Institute; ACTIV-1 IM: “Randomized Master Protocol for Immune Modulators for Treating COVID-19”
Principal Investigator: Gailen D. Marshall, MD, PhD
Project Period: 11/1/2020 – 10/31/2022
Funding Amount: \$100,000

Sponsor and Title: Duke Clinical Research Institute; “HERO-TOGETHER Registry”
Principal Investigator: Gailen D. Marshall, MD, PhD
Project Period: 3/15/2021 – 3/14/2022
Funding Amount: \$40,000

PAST RESEARCH SUPPORT (10 YEARS)

Sponsor and Title: NIH/NCCAM 5 U01 AT006239-04 “Effects of Yoga on CVD Risk Factors among African Americans: Jackson Heart Study”

Principal Investigator: Gailen D. Marshall, Jr., MD, PhD

Project Period: September 30, 2010 – September 29, 2015

Funding Amount: \$2,840,238

Sponsor and Title: Cephalon, Inc. “A 16-Week, Randomized, Double-blind, Placebo-Controlled Study to Evaluate the Efficacy and Safety of Reslizumab (3.0 mg/kg) Treatment in Patients with Moderate to Severe Asthma”

Principal Investigator: Gailen D. Marshall, Jr., MD, PhD

Project Period: March 19, 2012 – October 4, 2013

Funding Amount: \$112,861

Sponsor and Title: Amgen, Inc. “A Randomized, Double-blind, Placebo-controlled Study to Evaluate the Safety and Efficacy of Brodalumab in Subjects with Inadequately Controlled Asthma and High Bronchodilator Reversibility”

Principal Investigator: Gailen D. Marshall, Jr., MD, PhD

Project Period: May 1, 2013 – February 15, 2015

Funding Amount: \$210,933.79

Sponsor and Title: AstraZeneca LP. “A 26-Week, Randomized, Double-blind, Parallel-group, Active Controlled, Multicenter, Multinational Safety Study Evaluating the Risk of Serious Asthma-related Events During Treatment with Symbicort, a Fixed Combination of Inhaled Corticosteroid and a Long Acting B2-Agonist as Compared to Treatment with an Inhaled Corticosteroid Alone in Adult and Adolescent (greater than or equal to 12 years of age) Patients with Asthma”

Principal Investigator: Gailen D. Marshall, Jr., MD, PhD

Project Period: June 1, 2013 – December 31, 2016

Funding Amount: \$140,510.60

Sponsor and Title: NHLBI/Rhode Island Hospital. “Pediatric Asthma Disparities: The Role of Sleep and Immune Balance”

Grant #: 5K24HL130451-02

Principal Investigator: Daphne Koinis-Mitchell, MD

Role: Site Principal Investigator

Project Period: 02/01/2016 – 01/31/2018

Funding Amount: \$23,590

Sponsor and Title: PCORI

Principal Investigator: Elliott Israel MD

Role: co investigator

Project Period: 3/1/16 – 2/28/21

Funding Amount: \$133,700

Sponsor and Title: Stallergenes, Inc. SL75.14

Principal Investigator: Gailen D. Marshall, Jr., MD, PhD

Project Period: 9/16/16-12/31/18

Funding Amount: \$90,738

Sponsor and Title: AstraZeneca AB. "A Multicenter, Randomized, Double-blind, Parallel Group, Placebo controlled, Phase 3b Study to Evaluate the Safety and Efficacy of Benralizumab 30 mg sc in Patients with Severe Asthma Uncontrolled on Standard of Care Treatment"

Principal Investigator: Gailen D. Marshall, Jr., MD, PhD

Project Period: October 1, 2017 – December 31, 2019

Funding Amount: \$207,348

PUBLICATIONS

Published Abstracts

1. Marshall GD, Thurman GB, and Goldstein AL. Alterations in the mitogen responsiveness from mice with moloney sarcoma virus (MV). *Fed Proc.* 1976; 35:249.
2. Marshall GD, Thurman GB, and Goldstein AL. *In vivo* generation of suppressor T cells in thymic nude mice by thymosin. *Fed Proc.* 1980; 39:1196.
3. Thurman GB, Marshall GD, Rossio JL, and Goldstein AL. Two distinct suppressors T cell populations in tumor-bearing mice. *Fed Proc.* 1980; 39:1196.
4. Marshall GD, Wilson JB, Mader JT, and Reinartz JA. Immunostimulatory effects of ketoconazole in patients with invasive fungal diseases. *Clin Res.* 1980; 28:829A.
5. Marshall GD, Shaw BA, and Bell JD. Effect of thoracic duct drainage on mixed lymphocyte reactions of human peripheral blood and thoracic duct lymphocytes. *Clin Res.* 1982; 30:874A.
6. Shaw BA, Bell JD, and Marshall GD. Changes in natural killer and antibody-dependent cellular cytotoxicity of thoracic duct lymphocytes from patients undergoing thoracic duct drainage. *Clin Res.* 1982; 30:851A.
7. Bell JD, Marshall GD, and Shaw BA. T cell subpopulations of peripheral blood after thoracic duct drainage. *Kidney Inter.* 1983; 23:287.
8. Marshall GD, Shulan D, Ginrich R, and Ballas ZK. A prospective study of immediate skin reactivity in bone marrow transplantation: Early findings. *J Allergy Clin Immunol.* 1986; 77:231.
9. Ballas ZK and Marshall GD. Lymphokine activated killers (LAK), natural killers (NK) and cytotoxic T lymphocytes (CTL). *Fed Proc.* 1986; 45:488.
10. Marshall GD and Ballas ZK. Ontogenic studies of human lymphokine activated killers (LAK) using cord blood and thymic lymphocytes. *Fed Proc.* 1986; 45:630.
11. West WH, Tauer KW, Yanelli JR, Orr DW, Thurman GB, Marshall GD, and Oldham RK. Constant infusion interleukin-2 in adoptive cellular therapy of cancer. *Proc Am Soc Clin Oncol.* 1987; 28:342.

12. Marshall GD, Tauer KW, and West WH. Biological effect of constant recombinant interleukin-2 in adoptive cellular therapy of cancer: Serum IL-2 receptors and circulating cytotoxic cells. *Proc Am Soc Clin Oncol.* 1987; 28:357.
13. Marshall GD, Foglesong PD, Price JO, and West WH. Changes in soluble interleukin-2 receptor levels in cancer patients receiving interleukin-2. *J Leukocyte Biol.* 1987; 42:362.
14. Oldham RK, Bartal AH, Birch R, Orr DW, Lewis M, Yannell, JR, Thurman GB, Sharp E, Marshall GD, and West WH. Intracavitary administration of adoptive immunotherapy with interleukin-2 activated cells in patients with disseminated cancers. *Proc Am Assoc Cancer Res.* 1988; 29:396.
15. Marshall GD, Tauer KW, Schwartzberg LS, Lee P, Price JO, Holbert JM, and West WH. *In Vivo* and *in vitro* recombinant interleukin-2 potentiates *in vitro* heteroconjugate antibody targeted cellular cytotoxicity. *Proc Am Assoc Cancer Res* 1988; 29:220.
16. Marshall GD, McDonald TM, Sweet SM, Price JO, and West WH. *In Vitro* induction of suppressor T cells by high dose recombinant interleukin-2. *Proc 19th Leucocyte Culture Conf.* 1988; p. 19.
17. Marshall GD, Price JO, Sweet SM, Copenhaver JM, and West WH. Heteroconjugate antibody augments the cytotoxic potential of multiple CD3+ effector populations. *Clin Res.* 1988; 36:443A.
18. Price JO, Marshall GD, Reese MA, Maloney LB, Foglesong PD, and West WH. Effector-target binding by heteroconjugate antibody is necessary for cytolytic activity. *Proc Am Assoc Cancer Res.* 1988; 29:426.
19. Winkler MA, Foglesong PD, Price JO, West WH, and Marshall GD. Biochemical and biological stability of anti-CD-3 monoclonal antibodies cross-linked to antitumor antibodies. *FASEB J.* 1988; 2:A692.
20. Marshall GD and Lieberman PL. Evaluation of various pretreatments for radiocontrast media reactions. *J Allergy Clin Immunol.* 1989; 83:254.
21. Calabrese DM and Marshall GD. Differential expression of tumor necrosis factor alpha and interleukin-6 in plasma of specific patients. *Ann Rev Resp Dis.* 1992; 145:A313.
22. Marshall GD, Gibbons AC and Parnell LS. Human cytokines induced by acemannan. *J Allergy Clin Immunol.* 1993; 91:295.
23. Marshall GD and Druck JP. *In Vitro* stimulation of NK activity by acemannan (ACM) *J Immunol.* 1993; 150:241A.
24. Marshall GD, Mahmud MA, Gibbons AC, Habib M, Hossain M and DuPont HL. Fecal IgE in infants with diarrhea. *J Allergy Clin Immunol.* 1994; 93:246.
25. Marshall GD, Gibbons CC, Gould S, Gonzales A, Chintu A, Zumla A and DuPont HL. HIV-specific IgE in AIDS patients with diarrhea. *Clin Res.* 1994; 42:279A.
26. Marshall GD, Cassidy CC, Agarwal SK, and Henninger EM. Cytokine basis for decreased cellular immune responses in elderly humans. *J Allergy Clin Immunol.* 1994; 95:36.

27. Marshall GD, Calabrese DM, and Schwartz LB. Serum tryptase levels in ICU patients with unexplained acute hypotension. *J Allergy Clin Immunol.* 1996; 97:270.
28. Duvic MM, McHam JB, Mays S, Adu-Oppong A, Lewis DE, and Marshall GD. TH1 and TH2 cytokines differ in HIV+ psoriatic and pruritic patients and are modulated by ultraviolet B therapy. *J Invest Derm.* 1994
29. Marshall GD, and Talkington SA. Allergen mixes as cost effective screens for allergy skin testing. *Ann Allergy Asthma Immunol.* 1996; 76:72.
30. Breuer-McHam J, Ledbetter L, Marshall GD, and Duvic MM. Cytokine profiles distinguish AIDS related skin diseases. *J Invest Derm.* 1997; 108(4):585.
31. Duvic MM, Breuer-McHam J, Marshall GD, Adu-Oppong A, Berger T, and Lewis DE. Ultraviolet light dosage influences HIV and IL-10 cytokine expression in AIDS patients. *J Invest Derm.* 1997; 108(4):556.
32. Marshall GD, Agarwal SA, and Henninger EM. Safety and efficacy of allergen immunotherapy (AIT) in a HIV+ male with severe allergic rhinitis. *J Allergy Clin Immunol.* 1997; 99(1):S48.
33. Agarwal SK, Shippy AM, Henninger EM, and Marshall GD. Immune alterations in healthy females during a normal menstrual cycle. *J Allergy Clin Immunol.* 1997; 99(1):S27.
34. Agarwal SK and Marshall GD. Human type-1 not type-2 cytokines are sensitive to dexamethasone. *FASEB J.* 1998; 12(5): A764.
35. Marshall GD, Agarwal SK, Henninger EM, and Morris GJ. Type-1/type-2 cytokine balance is altered during exam stress in medical students. *FASEB J.* 1998; 12(5):A485.
36. Skinner MQ, Agarwal SK, and Marshall GD. Monophasic oral contraceptives promote type-2 cytokine production during the menstrual cycle. *FASEB J.* 1998; 12(5):A726.
37. Agarwal S and Marshall GD. *In Vivo* alteration in type-1 and type-2 cytokine balance: a possible mechanism for elevated total IgE in HIV-infected patients. *J Allergy Clin Immunol.* 1998; 101(1):S56.
38. Agarwal SK and Marshall GD. Dexamethasone differentially regulates human IL-4 and IL-5 production *in vitro*. *J Allergy Clin Immunol.* 1999; 103(1 pt. 2):S86.
39. Marshall GD, Agarwal SK, Cohen L, Baile W, Morris GJ, and Kudelka AP. Acute stress increases NK activity and TH1 cytokine production in human PBMC. *Clin Immunol.* 1999; 90(3):450.
40. Agarwal SK and Marshall GD. Stress hormone induced alterations in *in vitro* type-1/type-2 cytokine production. *FASEB.* 1999; 13(4 pt. 1):A320.
41. Marshall GD, Agarwal SK, and Glaser R. Enhancement of chronic HIV infection *in vitro* by stress hormones. *NeuroImmunoModulation.* 1999; 6(3):235.
42. Cohen L, Baile WF, Kudelka AP, Agarwal SK, Lenzi R, Guber G, Beale F, and Marshall GD. Physiological and psychological effects of delivering bad medical news: Implications for educational workshops. *Int J Gynecol Cancer.* 1999; 9(1):145.

43. Cornelius D, Agarwal SK, Marshall GD, and Riley WJ. Insulin-specific cytokine balance in prediabetes. *Diabetes*. 1999; 48(1):A212.
44. Cohen L, Wei Q, Cheng L, Agarwal SA, and Marshall GD. Exam stress increases DNA repair capacity in healthy medical students. *Psychosom Med*. 2000; 62:101.
45. Maniatis E and Marshall GD. Effects of 17- β estradiol and progesterone on intracellular cytokine production by T-lymphocytes. *J Allergy Clin Immunol*. 2002; 109(1): S158.
46. Marshall GD, Henninger ED, Maniatis E, Ritter SY, Salicru AN, Messick CD, Steffen B, Marshall SE, Iezzoniz D, and Harris A. Immunomodulatory effects of desloratadine: changes in type-1/type-2 cytokine expression in PBMC cultures. *J Allergy Clin Immunol*. 2002; 109(1): S206.
47. Ritter SY and Marshall GD. Stress effects on type-1/type-2 cytokine balance: a rapid *in vitro* model. *J Allergy Clin Immunol*. 2002; 109 (1): S356.
48. Escobar M, Salicru AN, Hoots WK, and Marshall GD. Elevated IgE associated with factor VIII inhibitor levels in patients with hemophilia A. *Blood*. 2003; 102:799A.
49. Salicru AN, Escobar M, Hoots WK, and Marshall GD. Elevated IgE associated with factor VIII inhibitor levels in patients with hemophilia A. *J Allergy Clin Immunol*. 2004; 113:S216.
50. Woodard GW and Marshall GD. A flow cytometry based method of studying natural killer cell cytotoxicity. *FASEB J*. 2004; 18:A1156.
51. Ritter SY and Marshall GD. Immunomodulation by vitamin c in an exam stress model. *FASEB J*. 2004; 18:A457.
52. Salicru AN and Marshall GD. Increased sympathetic reactivity in human T-lymphocytes subjected to chronic stress – An *in vitro* model. *FASEB J*. 2004; 18:A1148.
53. Marshall GD. Impact of Psychological Stress on Asthma-from bench to bed side. *Psychosom Med*. 2005; 67:A6.
54. Rupp M, Marshall GD, and deShazo RD. Concurrent latex and seminal fluid allergy. *J Allergy Clin Immunol*. 2005; 115(2):S109.
55. Inamdar SR, Marshall GD, Oswald M, Phillips J, Laney C, and deShazo RD. Chronic rhinosinusitis (CRS): what constitutes standard of care? *J Allergy Clin Immunol*. 2005; 115(2):S197.
56. Salicru AN and Marshall GD. Timing of acute stress hormone exposure produces variable effect on human peripheral blood mononuclear cells. *J Allergy Clin Immunol*. 2005; 115(2):S222.
57. Roy SR, Yates AB, Moffitt JE, and Marshall GD. Reduced FEV₁/FVC in obese versus normal weight children with asthma. *J Allergy Clin Immunol*. 2005; 115(2):S228.

58. Salicru AN, Crucian BE, Sams CF, Actor JK, and Marshall GD. *In Vitro* catecholamine exposure produces variable effects on B7 costimulatory molecule expression in human monocytic cells. *J Immunol.* 2006; 176 (Supp): S185.
59. Heffner KL, Suhr JA, Borchardt AR, and Marshall GD. Effects of aging stereotypes on older adults' physiological responses to a memory challenge. *Psychophysiology* 2006; 43(S4).
60. Rupp MR, Baran AS, and Marshall GD. Breathe Right Strips® (BRS) improve respiratory index (I) in patients with rhinitis and obstructive sleep apnea. *J Allergy Clin Immunol.* 2006; 98:A108.
61. Del Ben K, Roy SR, Coffey S, and Marshall GD. Stress associated serum IgE elevations in Hurricane Katrina survivors with PTSD. *Ann Allergy Asthma Immunol.* 2007; 98(Supp)A83.
62. Rupp MR, Baran AS, Marshall GD. Lack of correlation between physical exam (PE), Mini RQLQ (MRQLQ), and nasal peak inspiratory flow (nPIF) as measures of nasal congestion in obstructive sleep apnea (OSA) patients with rhinitis. *J Allergy Clin Immunol.* 2007; 119:S306.
63. Lagos JA, Kemp SF, Marshall GD. IVIG in cicatricial pemphigoid. *J Allergy Clin Immunol.* 2007; 19:S326.
64. Lagos JA, Roy SR, Brown DA, Moffitt JD, and Marshall GD. Seasonal patterns to systemic reactions to allergen immunotherapy. *Ann Allergy Asthma Immunol.* 2007; 98(Supp):A108.
65. Rupp MR, Marshall GD, and Baran AS. Allergic rhinitis patients are less compliant with CPAP therapy than nonallergic rhinitis patients. *Ann Allergy Asthma Immunol.* 2007; 98(Supp):A23.
66. Marshall GD, Montgomery DD, Henninger ED, Brock JB, and Furukawa S. Effects of orotic aciduria and glutathione on nasal symptoms in seasonal allergic rhinitis patients. *Ann Allergy Asthma Immunol.* 2007; 98(Supp):A83.
67. Lagos JA, Kemp SF, and Marshall GD. Intravenous immune globulin (IVIG) in the treatment of ocular-cicatricial pemphigoid (OCP). *J Allergy Clin Immunol.* 2007; 119:S60.
68. Marshall GD, Montgomery DD, Roy SR, and Brock JB. Effects of stress hormones on regulatory T cell (Treg) and intracellular TH1/TH2 cytokine levels in normal human PBMC. *J Allergy Clin Immunol.* 2007; 119:S93.
69. Salicru AN, BE Crucian, Nelman-Gonzales MA, Actor JK, Sams CD, and Marshall GD. Variable effects of combination corticosteroids and catecholamines on total B2-adrenergic receptors in human CD4+T-lymphocytes. *J Allergy Clin Immunol.* 2007; 119:S94.
70. Oswald ML, Ly TH, Marshall GD. Assessing clinical value of elevated IgE receptor antibody titers (α Fc ϵ RI) in patients with chronic urticaria. *J Allergy Clin Immunol.* 2008; 121:S101.
71. Phillips JF and Marshall GD. Effect of supplemental oral vitamin E in patients with elevated serum IGE and a history of atopic conditions. *Ann Allergy Asthma Immunol.* 2008; 100(Supp):P82.
72. Xiang LB and Marshall GD. *In Vitro* stress hormone glucocorticoid (GC) exposure alters gene expression on both GC and cytokine receptors and cytokine production in normal human PBMC. *Brain Behav Immun.* 2008; 22(4)(supp 1): S18.

73. Roy SR, Olivier J, Del Ben KS, and Marshall GD. Increased parental stress correlates with poorer asthma control in children. *Brain Behav Immun.* 2008; 22(4)(supp 1): S45.
74. Del Ben K, McLeish A, Connolly K, and Marshall GD. Relationship between regulatory T cells (Treg) and posttraumatic stress disorder (PTSD). *Brain Behav Immun.* 2008; 22(4)(supp 1):S46.
75. Marshall GD and Del Ben KS. Effects of an acute laboratory stressor on regulatory T cell (Treg) levels in normal human peripheral blood mononuclear cells (PBMC). *Brain Behav Immun.* 2008; 22(4)(supp 1):S46.
76. Ly TH, deShazo RD, Stringer SP, Marshall GD, and Stodard CM. Diagnostic criteria for atrophic rhinosinusitis. *Ann Allergy Asthma Immunol.* 2009; 102(Supp):32.
77. Pulcini JM, Kemp SF, Sease K, and Marshall GD. A window into food allergy – a survey of school nurses. *Ann Allergy Asthma Immunol.* 2009; 102(Supp):P282.
78. Ly TH, Marshall GD, Olivier JH, Roy SR. No difference in asthma control among obese children despite increased airflow obstruction compared to non-obese children. *J Allergy Clin Immunol.* 2009; 123:S220.
79. Pulcini JM, DelBen KS, Marshall GD. The school nurse's perception of food allergy: a statewide survey. *Ann Allergy Asthma Immunol.* 2009; 103:A120.
80. Xiang L and Marshall GD. *In Vitro* immunomodulatory effects of stress hormones on gene expression of cytokines and costimulatory molecules in human peripheral blood mononuclear cells. *J Invest Med.* 2009; 57(1):P368.
81. Xiang L, DelBen KS and Marshall GD. Acute stress-induced immunomodulation upregulates expression of interferon gamma receptor and adrenergic beta-2 receptor in normal human peripheral blood. *Brain Behav Immun.* 2010; 24(supp 1):S4-S5.
82. Marshall GD and Bozeman SA. Novel L670P mutation in the STAT 3 gene discovered in a 44 year old male with Job's syndrome. *J Allergy Clin Immunol.* 2011; 127:AB94.
83. Tole JW, Gratz KL, Dave ND, Smith SK, and Marshall GD. Effect of psychological stress intervention for patients with chronic urticaria. *J Allergy Clin Immunol.* 2011; 127:AB104.
84. Xiang L and Marshall GD. Glucocorticoid receptor gene bell polymorphism associates with immunomodulatory response to stress hormone in human PBMC. *Brain Behav Immun.* 2011; 25(supp 2):S181.
85. Rehm KE, Xiang L, Elci O, Griswold M, and Marshall GD. Variance in laboratory immune parameters of normal humans categorized by stress hormone receptor polymorphisms. *Brain Behav Immun.* 2011; 25 (supp 2):S232.
86. Marshall GD, Xiang L, Rehm KE, Montgomery DD, and Belk S. Translational research paradigm to identify personal stress susceptibility: Potentials for clinical applications. *Brain Behav Immun.* 2011; 25(suppl 2):S220.
87. Xiang L, Rehm KE, Elci OU and Marshall GD Jr. Laboratory immune parameters of normal humans vary by cytokine receptor polymorphisms. *Brain Behav Immun.* 2012; 26(supp 1):S12.

88. Zhou L, Hall, A, Morris and Marshall GD Jr. Disseminated blastomycosis in a patient with idiopathic CD4 lymphocytopenia. *Ann Allergy Asthma Immunol.* 2012; 109(supp):P198.
89. Rehm KE, Montgomery DD, Marshall GD Jr. Decreased regulatory T cell populations in an in vitro stress model using normal human PBMC. *Brain Behav Immun.* 2012; 26(supp 1):S30.
90. Xiang L, Rehm KE, and Marshall GD Jr. Strenuous exercise alters gene expression of Th1/Th2 imbalance in human peripheral blood mononuclear cells of marathon participants. *Brain Behav Immun.* 2013; 32(supp):e4.
91. Xiang L, Rehm KE, Sunesara I, Griswold M, and Marshall GD Jr. Gene polymorphisms of stress hormone receptors and cytokine receptors associate with immunomodulatory profile and psychological measurements. *Brain Behav Immun.* 2014; 40(Supp):e10.
92. Rehm KE, Marshall GD Jr. The influence of running volume on CD4+ T cell subpopulations and the role of stress. *Brain Behav Immun.* 2014; 40(supp):e22-e23.
93. Zhou L and Marshall GD Jr. IgG4-related disease presenting as abdominal pain with mass. *Ann Allergy Asthma Immunol.* 2014; 113(supp):P229.
94. Xiang L, Sunesara I, Rehm KE, and Marshall GD Jr. A modified and cost effective method for hair cortisol analysis. *Brain Behav Immun.* 2015; 49(supp):e2-e3.
95. Rehm KE, and Marshall GD. Relationship between immune biomarkers and both physical activity and stress levels in young and older adults. *Brain Behav Immun.* 2015; 49(supp):e5.
96. Sunesara I, Rehm KE, Xiang L, and Marshall GD Jr. Effects of TSST on immune biomarkers separated by distinct genotypes. *Brain Behav Immun.* 2015; 49(supp):e40.
97. Cranford C and Marshall GD. Urticaria-like follicular mucinosis: a rare cause of urticarial facial rash. *Ann Allergy Asthma Immunol.* 2017; 119:P482.

Refereed Original Articles in Journals

1. Marshall GD, Thurman GB, Foster BG and Goldstein AL. Alterations in the mitogen responsiveness of lymphocytes from mice bearing moloney sarcoma virus-induced tumors. *Immunological Communications* 1977; 6(6):603-615. PMID: 304835
2. Marshall GD and Foster BG. Immunological reactivity of BALB/c mice bearing moloney sarcoma virus infection. *Proc Eur Soc Microbio.* 1978; 3:43-46.
3. Marshall GD, Low TL, Thurman GB, and Goldstein AL. Overview of thymosin activity. *Cancer Treatment Reports.* 1978 Nov; 62(11):1731-1737. PMID: 215305
4. Marshall GD, Thurman GB, Low TL and Goldstein AL. Thymosin: Basic properties and clinical application in the treatment of immunodeficiency diseases and cancer. *Recent Results in Cancer Res.* 1980; 75:100-105. PMID: 6262885
5. Marshall GD, Thurman GB and Goldstein AL. Regulation of *in vitro* generation of cell mediated cytotoxicity. *In vitro* induction of suppressor T lymphocytes by thymosin. *J Reticulo Soc.* 1980 Aug; 28(2):141-149. PMID: 6447785

6. Marshall GD, Thurman GB, Rossio JL and Goldstein AL. Regulation of *in vitro* generation of cell mediated cytotoxicity II: Characterization of thymosin-induced suppressor T cells. *Immunopharm.* 1980 Dec; 2(4):301-312. PMID: 6450736
7. Marshall GD, Thurman GB and Goldstein AL. *In vivo* generation of suppressor T cells in congenitally thymic nude mice by thymosin. *J Immuno.* 1981; 127:741-744.
8. Bell JD, Marshall GD, Shaw BS, Fish JC, Flye MW, Remmers AR and Sarles HE. Alterations in human thoracic duct lymphocytes during thoracic duct drainage. *Transplant Proc.* 1983; 15:677-684.
9. West WH, Tauer KT, Yannelli JR, Marshall GD, Orr DM, Thurman GB and Oldham RK. Constant infusion recombinant interleukin-2 in adoptive immunotherapy of advanced cancers. *NEJM.* 1987 Apr 9; 316(15):898-905. PMID: 3493433
10. Marshall GD, Foglesong PD, Price JO, Winkler MA and West WH. Increased antigen-specific lytic activity of interleukin-2 activated cells by hetero conjugate antibodies. *Immunol Allergy Clin North Am.* 1988; 8:126-128.
11. West WH, Tauer KW, Yannelli JR, Marshall GD, Orr D, Lewis M, Birch R and Oldham RK. Multiple cycles of constant infusion recombinant interleukin-2 in adoptive cellular therapy of metastatic renal carcinoma. *Mol Biother.* 1989; 1(5):268-274. PMID: 2619946
12. Foglesong PD, Winkler MA, Price JO, Marshall GD, Reagh SH, Bush DA, Hixson KS and West WH. Preparation and analysis of bifunctional immunoconjugates containing monoclonal antibodies OKT3 and BABR1. *Cancer Immunol Immunother.* 1989; 30(3):177-184. PMID: 2598187
13. Marshall GD. Adoptive immunotherapy in gastrointestinal malignancies using interleukin-2. Current results and future prospects. *Acta Chir Scand Suppl.* 1989; 549:71-74. PMID: 2784605
14. West WH, Tauer KW, Yannelli JR, Marshall GD, Orr D, Lewis M, Birch R and Oldham RK. Multiple cycles of constant infusion recombinant interleukin-2 in adoptive cellular therapy of metastatic renal carcinoma. *Mol Biother.* 1989; 1:268-274.
15. Marshall GD and Lieberman PL. Comparison of three treatment protocols to prevent anaphylactoid reactions to radiocontrast media. *Ann Allergy.* 1991 Jul; 67(1):70-74. PMID:1859044
16. Brod SA, Khan M, Bright J, Sriram S, Marshall GD, Henninger EM, Kerman RH and Wolinsky JS. Decreased CD3-mediated interferon- γ production in relapsing-remitting multiple sclerosis. *Ann Neurol.* 1995 Apr; 37(4):546-549. PMID:7717692
17. Brod SA, Marshall GD, Henninger EM, Sriram S, Khan M and Wolinsky JS. Interferon-beta 1b treatment decreases tumor necrosis factor-alpha and increases interleukin-6 production in multiple sclerosis. *Neurology.* 1996; 46(6):1633-1638.
18. Brod SA, Kerman RH, Nelson LD, Marshall GD, Henninger EM, Khan M, Jin R, and Wolinsky JS. Ingested IFN-alpha has biological effects in humans with relapsing-remitting multiple sclerosis. *Multiple Sclerosis* 1997 Feb; 3(1):1-7. PMID: 9160341

19. Agarwal S and Marshall GD. *In Vivo* alteration in type-1 and type-2 cytokine balance: A possible mechanism for elevated total IgE in HIV-infected patients. *Hum Immunol.* 1998; 59:99-105.
20. Agarwal SK and Marshall GD. Glucocorticoid-induced type-1/type-2 cytokine alterations in humans – a model for stress-related immune dysfunction. *J Interferon Cytokine Res.* 1998 Dec; 18(12):1059-1068. PMID: 9877450
21. Marshall GD, Agarwal SK, Lloyd CS, Cohen LK, Henninger EM and Morris GJ. Cytokine dysregulation associated with exam stress in healthy medical students. *Brain Behav Immun.* 1998 Dec; 12(4):297-307. PMID: 10080859
22. Breuer-McHam JN, Marshall GD, Lewis DE, and Duvic M. Distinct serum cytokines in AIDS-related skin diseases. *Viral Immunol.* 1998; 11(4):215-20. PMID: 10189188
23. Breuer-McHam JN, Marshall GD, Adu-Oppong A, Goller M, Mays S, Berger T, Lewis D and Duvic M. Alterations in HIV expression in AIDS patients with psoriasis or pruritus treated with phototherapy. *J Am Acad Derm.* 1999; 40(1):48-60.
24. Agarwal SK and Marshall GD. Perimenstrual alterations in type-1/type-2 cytokine balance of normal women. *Ann Allergy Asthma Immunol.* 1999 Sep; 83(3):222-228. PMID:10507267
25. Cohen L, Baile WF, Marshall GD, Kudelka AP, Agarwal SK, Lenzi R and de Moor C. Immune dysregulation in healthy medical students during exposure to acute and chronic stressors. *Psychosom Med.* 1999; 61:83-130.
26. Agarwal SK and Marshall GD. Beta-adrenergic modulation of human type-1/type-2 cytokine balance. *J Allergy Clin Immunol.* 2000 Jan; 105(1 Pt 1):91-98. PMID: 10629458
27. Agarwal SK and Marshall GD. Role of CD28/B7 co stimulation in the dexamethasone induced suppression of IFN-g. *J Interferon Cytokine Res.* 2000 Nov; 20(11):927-934. PMID: 11096449
28. Cohen L, Marshall GD, Cheng L, Agarwal SK and Wei Q. DNA repair capacity in healthy medical students during and after exam stress. *J Behav Med.* 2000 Dec; 23(6):531-544. PMID: 11199086
29. Agarwal SK and Marshall GD. Dexamethasone promotes type-2 cytokine production primarily through inhibition of type-1 cytokines. *J Interferon Cytokine Res.* 2001 Mar; 21(3):147-155. PMID: 11331037
30. Uchakin PN, Tobin B, Cubbage M, Marshall GD and Sams C. Immune responsiveness following academic stress in first-year medical students. *J Interferon Cytokine Res.* 2001; 21:687-694. PMID 11576463
31. Hamilton RF, Pfau JC, Marshall GD and Holian A. Silica and PM1648. Modified human alveolar macrophage antigen presenting cell activity *in vitro.* *J Environ Pathol Toxicol Oncol.* 2001; 20(suppl 1): 75-84. PMID:11570676
32. Mahmud MA, Marshall GD and Hossain MM. Increased fecal IgE among infants in a rural community of Egypt: An analysis of associated risk factors. *J Trop Pediatr* 2001 Dec; 47(6):339-344. PMID:11827301

33. Connor M, Buchman A and Marshall GD. Anaphylaxis-Like Reaction to Infliximab in a Patient with Crohn's Disease. *Dig Dis Sci*. 2002; 47(6):1323-1325. PMID: 12064808
34. Cohen L, Baile WF, Henninger E, Agarwal SK, Kudelka AP, Lenzi R, Stener JM and Marshall GD. Physiological and Psychological effects of delivering bad medical news using a simulated physician-patient scenario. *J Behav Med*. 2003 Oct 26(5):459-471. PMID:14593853
35. Raut CP, Daley MD, Hunt KK, Akins J, Ross MI, Singletary SE, Marshall GD, Meric-Bernstam F, Babiera G, Feig BW, Ames FC and Kuerer HM. Anaphylactoid reactions to isosulfan blue dye during breast cancer lymphatic mapping in patients given preoperative prophylaxis. *J Clin Oncol*. 2004 Feb 1; 22(3):567-8. PMID:14752082
36. Hollier LM, Rivera MK, Henninger ED, Gilstrap LC and Marshall GD. T Helper Cell Cytokine Profiles in Preterm Labor. *Am J Reprod Immunol*. 2004 Sep; 52(3):192-196. PMID:15373758
37. Glaser R, Padgett DA, Litsky ML, Baiocchi RA, Yang EV, Chen M, Yeh PE, Klimas NG, Marshall GD, Whiteside, T, Herberman R, Kiecolt-Glaser J and Williams MV. Stress-associated changes in the steady-state expression of latent Epstein-Barr virus: Implications for chronic fatigue syndrome and cancer. *Brain Behav Immun*. 2005 Mar 19(2): 91-103. PMID: 15664781
38. Raut CP, Hunt KK, Akins JS, Daley MD, Ross MI, Singletary SE, Marshall GD Jr, Meric-Bernstam F, Babiera G, Feig BW, Ames FC and Kuerer HM. Incidence of anaphylactoid reactions to isosulfan blue dye during breast carcinoma lymphatic mapping in patients treated with preoperative prophylaxis: results of a surgical prospective clinical practice protocol. *Cancer*. 2005 Aug 15; 104(4): 692-9. PMID: 15981283
39. Marshall GD. Office-based management of asthma in adults. *Am J Med*. 2006 Mar; 119(3):225-9. PMID:16490465
40. Salicru AN, Sams CF and Marshall GD. Cooperative effects of corticosteroids and catecholamines upon immune deviation of the type-1/type-2 cytokine balance in favor of type-2 expression in human peripheral blood mononuclear cells. *Brain Behav Immun*. 2007 Oct; 21(7):913-20. Epub 2007 May3. PMID:17481854
41. Roy SR, Sigmon JR, Olivier J, Moffitt JE, Brown DA and Marshall GD. Increased frequency of large local reactions among systemic reactors during subcutaneous allergen immunotherapy. *Ann Allergy Asthma Immunol*. 2007 Jul; 99(1):82-6. PMID: 17650835
42. Olivier J, Johnson WD, and Marshall GD. The logarithmic transformation and the geometric mean in reporting experimental IgE results: what are they and when and why to use them? *Ann Allergy Asthma Immunol* 2008 Jun; 100(4):333-7. PMID: 18450118
43. Bousquet J, Khaltaev N, Cruz AA, Denburg J, Fokkens WJ, Togias A, Zuberbier T, Baena-Cagnani CE, Canonica GW, van Weel C, Agache I, Ait-Khaled N, Bachert C, Blaiss MS, Bonini S, Boulet LP, Bousquet JP, Camargos P, Carlsen KH, Chen Y, Custovic A, Dahl R, Demoly p, Douagui H, Durham SR, van Wijk RG, Kalayci O, Kaliner MA, Kim YY, Kowalski ML, Kuna P, Le LT, Lemiere C, Li J, Lockey RF, Mavale-Manuel S, Meltzer EO, Mohammad Y, Mulloi J, Naclerio R, O'Hehir RE, Ohta K, Ouedraogo S, Palkonen S, Papadopoulos N, Passalacqua G, Pawankar R, Popov TA, Rabe KF, Rosado-Pinto J, Scadding GK, Simons FE, Toskala E, Valovirta E, van Cauwenberg P, Wang DY, Wickman M, Yawn BP, Yorgancioglu A, Yusuf OM, Zar H, Annesi-Measano I, Bateman Ed, Ben Kheder A, Boakye DA, Bouchard J, Burney P, Busse WW, Chan-Yeung M,

Chavannes NH, Chuchalin A, Dolen WK, Emuzyte R, Grouse L, Humbert M, Jackson C, Johnston SL, Keith PK, Kemp JP, Klossek JM, Larenas-Linnemann D, Lipworth B, Malo JL, Marshall GD, Naspitz C, Nekam K, Niggemann B, Nizankowska-mogilnicka E, Okamoto Y, Orru MP, Potter P, Price D, Stoloff SW, Vandenplas O, Viegi G, and Williams D. Allergic rhinitis and its impact on asthma (ARIA) 2008 update (in collaboration with the World Health Organization, GA (2) LEN and AllerGen). *Allergy* 2008 Apr; 63(suppl 86):8-160. PMID: 18331513.

44. Kiecolt-Glaser JK, Heffner, KL, Glaser R, Malarkey WB, Porter K, Atkinson C, Laskowski B, Lemeshow S and Marshall GD. How stress and anxiety can alter immediate and late phase skin test responses in allergic rhinitis. *Psychoneuroendocrinology*. 2009; Jun 34(5): 670-80. Epub 2009 Jan 15. PMID:19150180
45. Pulcini JM, Sease KK and Marshall GD. Disparity between the presence and absence of food allergy action plans in one school district. *Allergy Asthma Proc*. 2010 Mar-Apr; 31(2):141-6. PMID:20406595
46. Bousquet J, Schünemann HJ, Zuberbier T, Bachert C, Baena-Cagnani CE, Bousquet PJ, Brozek J, Canonica GW, Casale TB, Demoly P, Gerth van Wijk R, Ohta K, Bateman ED, Calderon M, Cruz AA, Dolen WK, Haughney J, Lockey RF, Lötval J, O'Byrne P, Spranger O, Togias A, Bonini S, Boulet LP, Camargos P, Carlsen KH, Chavannes NH, Delgado L, Durham SR, Fokkens WJ, Fonseca J, Haahtela T, Kalayci O, Kowalski ML, Larenas-Linnemann D, Li J, Mohammad Y, Mullol J, Naclerio R, O'Hehir RE, Papadopoulos N, Passalacqua G, Rabe KF, Pawankar R, Ryan D, Samolinski B, Simons FE, Valovirta E, Yorgancioglu A, Yusuf OM, Agache I, Ait-Khaled N, Annesi-Maesano I, Beghe B, Ben Kheder A, Blaiss MS, Boakye DA, Bouchard J, Burney PG, Busse WW, Chan-Yeung M, Chen Y, Chuchalin AG, Costa DJ, Custovic A, Dahl R, Denburg J, Douagui H, Emuzyte R, Grouse L, Humbert M, Jackson C, Johnston SL, Kaliner MA, Keith PK, Kim YY, Klossek JM, Kuna P, Le LT, Lemiere C, Lipworth B, Mahboub B, Malo JL, Marshall GD, Mavale-Manuel S, Meltzer EO, Morais-Almeida M, Motala C, Naspitz C, Nekam K, Niggemann B, Nizankowska-Mogilnicka E, Okamoto Y, Orru MP, Ouedraogo S, Palkonen S, Popov TA, Price D, Rosado-Pinto J, Scadding GK, Sooronbaev TM, Stoloff SW, Toskala E, van Cauwenberge P, Vandenplas O, van Weel C, Viegi G, Virchow JC, Wang DY, Wickman M, Williams D, Yawn BP, Zar HJ, Zernotti M, Zhong N; WHO Collaborating Center of Asthma and Rhinitis (Montpellier). Development and implementation of guidelines in allergic rhinitis – an ARIA-GA2LEN paper. *Allergy*. 2010 Oct; 65(10):1212-21. PMID: 20887423.
47. Hickson DA, Burchfiel CM, Petrini MF, Liu J, Campbell-Jenkins BW, Bhagat R and Marshall GD. Leptin is inversely associated with Lung function in African Americans, independent of adiposity: the Jackson Heart Study. *Obesity (Silver Spring)*. 2011 May; 19(5): 1054-61 [Epub 2010 Oct 21]. PMID: 20966906.
48. Xiang L and Marshall GD. Immunomodulatory effects of *in vitro* stress hormones on FoxP3, Th1/Th2 cytokine and costimulatory molecule mRNA expression in human peripheral blood mononuclear cells. *Neuroimmunomodulation*. 2011; 18(1):1-10. Epub 2010 Jul 7. PMID:20606488
49. Pulcini JM, Marshall GD Jr and Naveed A. Presence of food allergy emergency action plans in Mississippi. *Ann Allergy Asthma Immunol*. 2011 Aug; 107(2):127-32 Epub 2011 Jun 17. PMID: 21802020.
50. Bousquet J, Anto JM, Demoly P, Schünemann HJ, Togias A, Akdis M, Auffray C, Bachert C, Bieber T, Bousquet PJ, Carlsen KH, Casale T, Cruz A, Keil T, Lodrup-Carlsen KC, Maurer M, Ohta K, Papadopoulos N, Roman M, Samolinski B, Agache I, Andrianarisoa A, Annesi-Maesano I, Ballester F, Baena-Cagnani C, Bateman E, Bell E, Bedbrook A, Bege B, Begi M, Ben Kheder A, Benoor K, Bergmann KC, Berrissoul F, Binslev Jensen C, Bleecker G, Bonini S, Bonner A, Boulet LP, Brightling C, Brozek J, Bush A, Busse WW, Camargos P, Canonica GW, Carr W, Cesario A, Chen Y, Chin-Suorn A, Chiriac A, Costa DJ, Cox L, Custovic A,

Dahl R, Darsow U, didi T, Dolen WK, Douagui H, Dubakiene R, El-Ibrahimi M, El-Meziane A, Fonseca J, Fokkens WJ, Fhtenou E, Gamkrelidze A, Gert van Wijck R, Guerra S, Haahtela T, Haddad H, Helings P, Hellqvist-Dahl B, Hoffman C, Howarth P, Hourihane JO, Humbert M, Jacquemin B, Just J, Kalayci O, Kaliner M, Kauffmann F, Kerhoff M, Khayat G, Koffi N'Goran B, Kogevinas M, Koppelman G, Kowalski ML, Kull I, Kuna P, Larenas D, Le LT, Lieberman P, Lipworth B, Mahamad Y, Mahboub B, Makela MJ, Martin F, Martinez FD, Marshall GD, Mazon A, Mellen E, Meltzer EO, Mihaltan F, Mohammadi A, Momas I, Morais-Almeida M, Mullol J, Muraro A, Naclerio R, Nafti S, Namazova-Baranova L, Nawijn MJ, Oddie S, O'Hehir R, Okamoto Y, Orru MP, Ozdemir C, Oudreaogo GS, Palkonen S, Panzner P, Passalacqua G, Pawankar R, Pin I, Pinart M, Pison C, Popov T, Porta D, Potsma DS, Price D, Rabe K, Ratomaharo J, Reitamo S, Rezagui D, Ring J, Roberts R, Roca J, Rogala B, Romano A, Rosado-Pinto J, Ryan D, Sanchez-Borges M, Scadding GK, Sheikh A, Simons EFR, Siroux V, Schmit-Grendelmeier P, Smit J, Soronboev T, Stein RT, Sterk J, Sunyer J, Terreehorst I, Toskala E, Tremblay Y, Valenta R, Valeyre D, Vandenplas O, van Weel C, Vassilaki M, Varraso R, Viegi G, Wang DY, Wickman M, Williams D, Wöhrl S, Wright J, Yorgancioglu A, Yusuf O, Zar HJ, Zernotti M, Zidarn M, Zhong N, and Zuberbier T. Severe Chronic Allergic (and Related) Diseases: A Uniform Approach – a MedALL – GA²LEN – ARIA Position Paper. WHO Collaborating Center for Asthma and Rhinitis. *Int Arch Allergy Immunol.* 2012; 158(3):216-231. PMID: 22382913.

51. Xiang L, DelBen KS, Rehm KE and Marshall GD. Effects of acute stress-induced immunomodulation on TH1/TH2 cytokine and catecholamine receptor expression in human peripheral blood cells. *Neuropsychobiology.* 2012; 65(1):12-9. Epub 2011 Nov 16. PMID: 22094268
52. Heffner KL, Ng HM, Suhr JA, France CR, Marshall GD, Pigeon WR, and Moynihan JA. Sleep disturbance and older adults' inflammatory responses to acute stress. *Am J Geriatr Psychiatry.* 2012 Sept; 20(9):744-52 PMID: 22327621.
52. Rehm KE, Xiang L, Elci OU, Griswold M and Marshall GD Jr. Variability in laboratory immune parameters is associated with stress hormone receptor polymorphisms. *Neuroimmunomodulation.* 2012; 19(4):220-228. Epub 2012 Mar 21. PMID: 22441538.
53. Melcescu E, Griswold M, Xiang L, Belk S, Montgomery D, Bray M, Del Ben, KS, Uwaifo GI, Marshall GD and Koch CA. Prevalence and cardiometabolic associations of the glucocorticoid receptor gene polymorphisms N363S and Bc1I in obese and non-obese black and white Mississippians. *Hormones.* 2012 Apr-Jun; 11(2): 166-177. PMID: 22801563
54. Bousquet J, Schünemann HJ, Samolinski B, Demoly P, Baena-Cagnani CE, Bachert C, Bonini S, Boulet LP, Bousquet PJ, Brozek JL, Canonica GW, Casale TB, Cruz AA, Fokkens WJ, Fonseca JA, van Wijk RG, Grouse L, Haahtela T, Khaltaev N, Kuna P, Lockey RF, Lodrup Carlsen KC, Mullol J, Naclerio R, O'Hehir RE, Ohta K, Palkonen S, Papadopoulos NG, Passalacqua G, Pawankar R, Price D, Ryan D, Simons FE, Togias A, Williams D, Yorgancioglu A, Yusuf OM, Aberer W, Adachi M, Agache I, Ait-Khaled N, Akdis CA, Andrianarisoa A, Annesi-Maesano I, Ansotegui IJ, Baiardini I, Bateman ED, Bedbrook A, Beghé B, Beji M, Bel EH, Ben Kheder A, Bennoor KS, Bergmann KC, Berrissoul F, Bieber T, Bindslev Jensen C, Blaiss MS, Boner AL, Bouchard J, Braido F, Brightling CE, Bush A, Caballero F, Calderon MA, Calvo MA, Camargos PA, Caraballo LR, Carlsen KH, Carr W, Cepeda AM, Cesario A, Chavannes NH, Chen YZ, Chiriac AM, Chivato Pérez T, Chkhartishvili E, Ciprandi G, Costa DJ, Cox L, Custovic A, Dahl R, Darsow U, De Blay F, Deleanu D, Denburg JA, Devillier P, Didi T, Dokic D, Dolen WK, Douagui H, Dubakiene R, Durham SR, Dykewicz MS, El-Gamal Y, El-Meziane A, Emuzyte R, Fiocchi A, Fletcher M, Fukuda T, Gamkrelidze A, Gereda JE, González Diaz S, Gotua M, Guzmán MA, Hellings PW, Hellquist-Dahl B, Horak F, Hourihane JO, Howarth P, Humbert M, Ivancevich JC, Jackson C, Just J, Kalayci O, Kaliner MA, Kalyoncu AF, Keil T, Keith PK, Khayat G, Kim YY, Koffi N'goran B, Koppelman GH, Kowalski ML, Kull I, Kvedariene V, Larenas-Linnemann D, Le LT, Lemièrre C, Li J, Lieberman P, Lipworth

B, Mahboub B, Makela MJ, Martin F, Marshall GD, Martinez FD, Masjedi MR, Maurer M, Mavale-Manuel S, Mazon A, Melen E, Meltzer EO, Mendez NH, Merk H, Mihaltan F, Mohammad Y, Morais-Almeida M, Muraro A, Nafti S, Namazova-Baranova L, Nekam K, Neou A, Niggemann B, Nizankowska-Mogilnicka E, Nyembue TD, Okamoto Y, Okubo K, Orru MP, Ouedraogo S, Ozdemir C, Panzner P, Pali-Schöll I, Park HS, Pigearias B, Pohl W, Popov TA, Postma DS, Potter P, Rabe KF, Ratomaharo J, Reitamo S, Ring J, Roberts R, Rogala B, Romano A, Roman Rodriguez M, Rosado-Pinto J, Rosenwasser L, Rottem M, Sanchez-Borges M, Scadding GK, Schmid-Grendelmeier P, Sheikh A, Sisul JC, Solé D, Sooronbaev T, Spicak V, Spranger O, Stein RT, Stoloff SW, Sunyer J, Szczeklik A, Todo-Bom A, Toskala E, Tremblay Y, Valenta R, Valero AL, Valeyre D, Valiulis A, Valovirta E, Van Cauwenberge P, Vandenplas O, van Weel C, Vichyanond P, Viegi G, Wang DY, Wickman M, Wöhrl S, Wright J, Yawn BP, Yiallouros PK, Zar HJ, Zernotti ME, Zhong N, Zidarn M and Zuberbier T. Allergic rhinitis and its impact on asthma (ARIA): Achievements in 10 years and future needs. World Health Organization Collaborating Center for Asthma and Rhinitis. *J Allergy Clin Immunol*. 2012; 130(5):1049-62. PMID: 23040884.

55. Rehm KE, Elci OU, Hahn K and Marshall GD Jr. The impact of self-reported psychological stress levels on changes to peripheral blood immune biomarkers in recreational marathon runners during training and recovery. *Neuroimmunomodulation*. 2013; 20(3):164-176. PMID: 23548735.
56. Xiang L and Marshall GD Jr. Glucocorticoid receptor Bcll polymorphism associates with immunomodulatory response to stress hormone in human peripheral blood mononuclear cells. *Int J Immunogenet*. 2013; 40(3):222-9. PMID: 23176645.
57. Xiang L and Marshall GD Jr. Immunomodulatory effects of dexamethasone on gene expression of cytokine and stress hormone receptors in peripheral blood mononuclear cells. *Int Immunopharmacol*. 2013; 17(3):556-560. PMID: 23968846.
58. Xiang L, Elci OU, Rehm KE and Marshall GD Jr. Associations between cytokine receptor polymorphisms and variability in laboratory immune parameters in normal humans. *Hum Immunol*. 2014; 75(1):91-97. PMID: 24060357.
59. Heffner KL, Kiecolt-Glaser JK, Glaser R, Malarkey WB and Marshall GD. Stress and anxiety effects on positive skin test responses in young adults with allergic rhinitis. *Ann Allergy Asthma Immunol*. 2014 Jul; 113(1): 13-8. PMID: 24726195.
60. Xiang L, Rehm KE and Marshall GD Jr. Effects of strenuous exercise on Th1/Th2 gene expression from human peripheral blood mononuclear cells of marathon participants. *Mol Immunol*. 2014; 60(2): 129-34. PMID: 24853398.
61. Xiang L, Rehm KE, Sunesara I, Griswold M and Marshall GD Jr. Gene polymorphisms of stress hormone and cytokine receptors associate with immunomodulatory profile and psychological measurement. *J Psychosom Res*. 2015; 78(5):438-44. PMID: 25434615.
62. Rehm K, Sunesara I and Marshall GD. Increased circulating anti-inflammatory cells in marathon-trained runners. *Int J Sports Med*. 2015 Oct; 36(10):832-6. PMID: 26038877.
63. Bousquet J, Schunemann HJ, Fonseca J, Samolinski B, Bachert C, Canonica GW, Casale T, Cruz AA, Demoly P, Hellings P, Valiulis A, Wickman M, Zuberbier T, Bosnic-Anticevitch S, Bedbrook A, Bergmann KC, Caimmi D, Dahl R, Fokkens WJ, Grisle I, Lodrup Carlsen K, Mullol J, Muraro A, Palkonen S, Papadopoulos N, Passalacqua G, Ryan D, Valovirta E, Yorgancioglu A, Aberer W, Agache I, Adachi M, Akdis CA, Akdis M, Annesi-Maesano I, Ansotegui IJ, Anto JM, Arnavielle S, Arshad H, Baiardini I, Baigenzhin AK, Barbara C, Bateman ED, Beghé B, Bel EH, Ben Kheder A, Bennoor KS, Benson M, Bewick M, Bieber T, Bindslev-Jensen C, Bjermer L, Blain H, Boner AL, Boulet LP, Bonini M, Bonini S, Bosse I, Bourret R, Bousquet PJ, Braido F, Briggs AH, Brightling CE, Brozek J, Buhl R, Burney PG, Bush A, Caballero-Fonseca F, Calderon MA, Camargos P, Camuzat T, Carlsen KH,

Carr W, Cepeda Sarabia AM, Chavannes NH, Chatzi L, Chen YZ, Chiron R, Chkhartishvili E, Chuchalin AG, Ciprandi G, Cirule I, Correia de Sousa J, Cox L, Crooks G, Costa DJ, Custovic A, Dahlen SE, Darsow U, De Carlo G, De Blay F, Dedeu T, Deleanu D, Denburg JA, Devillier P, Didier A, Dinh-Xuan AT, Dokic D, Douagui H, Dray G, Dubakiene R, Durham SR, Dykewicz MS, El-Gamal Y, Emuzyte R, Fink Wagner A, Fletcher M, Fiocchi A, Forastiere F, Gamkrelidze A, Gemicioğlu B, Gereda JE, González Diaz S, Gotua M, Grouse L, Guzmán MA, Haahtela T, Hellquist-Dahl B, Heinrich J, Horak F, Hourihane J, Howarth P, Humbert M, Hyland ME, Bosnic-Anticevitch S, Bedbrook A, Bergmann KC, Caimmi D, Dahl R, Fokkens WJ, Grisle I, Lodrup Carlsen K, Mullol J, Muraro A, Palkonen S, Papadopoulos N, Passalacqua G, Ryan D, Valovirta E, Yorgancioglu A, Aberer W, Agache I, Adachi M, Akdis CA, Akdis M, Annesi-Maesano I, Ansotegui IJ, Anto JM, Arnavielle S, Arshad H, Baiardini I, Baigenzhin AK, Barbara C, Bateman ED, Beghé B, Bel EH, Ben Kheder A, Bennoor KS, Benson M, Bewick M, Bieber T, Bindslev-Jensen C, Bjermer L, Blain H, Boner AL, Boulet LP, Bonini M, Bonini S, Bosse I, Bourret R, Bousquet PJ, Braidó F, Briggs AH, Brightling CE, Brozek J, Buhl R, Burney PG, Bush A, Caballero-Fonseca F, Calderon MA, Camargos P, Camuzat T, Carlsen KH, Carr W, Cepeda Sarabia AM, Chavannes NH, Chatzi L, Chen YZ, Chiron R, Chkhartishvili E, Chuchalin AG, Ciprandi G, Cirule I, Correia de Sousa J, Cox L, Crooks G, Costa DJ, Custovic A, Dahlen SE, Darsow U, De Carlo G, De Blay F, Dedeu T, Deleanu D, Denburg JA, Devillier P, Didier A, Dinh-Xuan AT, Dokic D, Douagui H, Dray G, Dubakiene R, Durham SR, Dykewicz MS, El-Gamal Y, Emuzyte R, Fink Wagner A, Fletcher M, Fiocchi A, Forastiere F, Gamkrelidze A, Gemicioğlu B, Gereda JE, González Diaz S, Gotua M, Grouse L, Guzmán MA, Haahtela T, Hellquist-Dahl B, Heinrich J, Horak F, Hourihane J, Howarth P, Humbert M, Hyland ME, Ivancevich JC, Jares EJ, Johnston SL, Joos G, Jonquet O, Jung KS, Just J, Kaidashev I, Kalayci O, Kalyoncu AF, Keil T, Keith PK, Khaltayev N, Klimek L, N'Goran BK, Kolek V, Koppelman GH, Kowalski ML, Kull I, Kuna P, Kvedariene V, Lambrecht B, Lau S, Larenas-Linnemann D, Laune D, Le L, Lieberman P, Lipworth B, Li J, Louis R, Magard Y, Magnan A, Mahboub B, Majer I, Makela MJ, Manning P, De Manuel Keenoy E, Marshall GD, Masjedi, Maurer M, Mavale-Manuel S, Melén E, Melo-Gomes E, Meltzer EO, Merk H, Miculinic N, Mihaltan F, Milenkovic B, Mohammad Y, Molimard M, Momas I, Montilla-Santana A, Morais-Almeida M, Mösges R, Namazova-Baranova L, Naclerio R, Neou A, Neffen H, Nekam K, Niggemann B, Nyembue TD, O'Hehir RE, Ohta K, Okamoto Y, Okubo K, Ouedraogo S, Paggiaro P, Pali-Schöll I, Palmer S, Panzner P, Papi A, Park HS, Pavord I, Pawankar R, Pfaar O, Picard R, Pigearias B, Pin I, Plavec D, Pohl W, Popov TA, Portejoie F, Postma D, Potter P, Price D, Rabe KF, Raciborski F, Radier Pontal F, Repka-Ramirez S, Robalo-Cordeiro C, Rolland C, Rosado-Pinto J, Reitamo S, Rodenas F, Roman Rodriguez M, Romano A, Rosario N, Rosenwasser L, Rottem M, Sanchez-Borges M, Scadding GK, Serrano E, Schmid-Grendelmeier P, Sheikh A, Simons F, Sisul JC, Skrindo I, Smit HA, Solé D, Sooronbaev T, Spranger O, Stelmach R, Strandberg T, Sunyer J, Thijs C, Todo-Bom A, Triggiani M, Valenta R, Valero AL, van Hage M, Vandenplas O, Vezzani G, Vichyanond P, Viegi G, Wagenmann M, Walker S, Wang DY, Wahn U, Williams DM, Wright J, Yawn BP, Yiallourous PK, Yusuf OM, Zar HJ, Zernotti ME, Zhang L, Zhong N, Zidarn M, Mercier J. MACVIA-RIA Sentinel Network for allergic rhinitis (MASK-rhinitis): The new generation guideline implementation *Allergy*. 2015 Nov; 70(11):1372-92. Epub 2015 Sep 13. PMID: 26148220.

64. Ananthula S, Sinha A, Gassim ME, Batth S, Marshall GD Jr, Gardner LH, Shimizu Y, and ElShamy WM. Geminin overexpression-dependent recruitment and crosstalk with mesenchymal stem cells enhance aggressiveness in triplenegative breast cancers. *Oncotarget*. 2016 Apr 12; 7(15):20869-89. PMID: 26989079
65. Rehm KE, Sunesara I, Tull MT and Marshall GD. Psychological stress moderates the relationship between running volume and CD4+ T cell subpopulations. *J Biol Regul Homeost Agents*. 2016 Apr-Jun; 30(2):449-57. PMID: 27358131
66. Bousquet J, Farrell J, Crooks G, Hellings P, Bel EH, Bewick M, Chavannes NH, de Sousa JC, Cruz AA, Haahtela T, Joos G, Khaltayev N, Malva J, Muraro A, Nogues M, Palkonen S, Pedersen S, Robalo-Cordeiro C, Samolinski B, Strandberg T, Valiulis A, Yorgancioglu A, Zuberbier T, Bedbrook A, Aberer W, Adachi M, Agusti A, Akdis CA, Akdis M, Ankri J, Alonso A, Annesi-Maesano I, Ansotegui IJ, Anto JM, Arnavielhe S, Arshad H, Bai C, Baiardini I, Bachert C, Baigenzhin AK, Barbara C, Bateman ED, Beghé B, Kheder AB, Bennoor KS, Benson M, Bergmann KC, Bieber T, Bindslev-Jensen C, Bjermer L, Blain H, Blasi F, Boner AL, Bonini M, Bonini S, Bosnic-Anticevitch S, Boulet LP, Bourret R, Bousquet PJ, Braidó F, Briggs AH, Brightling CE, Brozek J, Buhl R, Burney PG, Bush A, Caballero-Fonseca F, Caimmi D, Calderon MA, Calverley PM,

Camargos PA, Canonica GW, Camuzat T, Carlsen KH, Carr W, Carriazo A, Casale T, Cepeda Sarabia AM, Chatzi L, Chen YZ, Chiron R, Chkhartishvili E, Chuchalin AG, Chung KF, Ciprandi G, Cirule I, Cox L, Costa DJ, Custovic A, Dahl R, Dahlen SE, Darsow U, De Carlo G, De Blay F, Dedeu T, Deleanu D, De Manuel Keenoy E, Demoly P, Denburg JA, Devillier P, Didier A, Dinh-Xuan AT, Djukanovic R, Dokic D, Douagui H, Dray G, Dubakiene R, Durham SR, Dykewicz MS, El-Gamal Y, Emuzyte R, Fabbri LM, Fletcher M, Fiocchi A, Fink Wagner A, Fonseca J, Fokkens WJ, Forastiere F, Frith P, Gaga M, Gamkrelidze A, Garces J, Garcia-Aymerich J, Gemicioğlu B, Gereda JE, González Diaz S, Gotua M, Grisle I, Grouse L, Gutter Z, Guzmán MA, Heaney LG, Hellquist-Dahl B, Henderson D, Hendry A, Heinrich J, Heve D, Horak F, Hourihane JO, Howarth P, Humbert M, Hyland ME, Illario M, Ivancevich JC, Jardim JR, Jares EJ, Jeandel C, Jenkins C, Johnston SL, Jonquet O, Julge K, Jung KS, Just J, Kaidashev I, Kaitov MR, Kalayci O, Kalyoncu AF, Keil T, Keith PK, Klimek L, Koffi N'Goran B, Kolek V, Koppelman GH, Kowalski ML, Kull I, Kuna P, Kvedariene V, Lambrecht B, Lau S, Larenas-Linnemann D, Laune D, Le LT, Lieberman P, Lipworth B, Li J, Lodrup Carlsen K, Louis R, MacNee W, Magard Y, Magnan A, Mahboub B, Mair A, Majer I, Makela MJ, Manning P, Mara S, Marshall GD, Masjedi MR, Matignon P, Maurer M, Mavale-Manuel S, Melén E, Melo-Gomes E, Meltzer EO, Menzies-Gow A, Merk H, Michel JP, Miculinic N, Mihaltan F, Milenkovic B, Mohammad GM, Molimard M, Momas I, Montilla-Santana A, Morais-Almeida M, Morgan M, Mösges R, Mullol J, Nafti S, Namazova-Baranova L, Naclerio R, Neou A, Neffen H, Nekam K, Niggemann B, Ninot G, Nyembue TD, O'Hehir RE, Ohta K, Okamoto Y, Okubo K, Ouedraogo S, Paggiaro P, Pali-Schöll I, Panzner P, Papadopoulos N, Papi A, Park HS, Passalacqua G, Pavord I, Pawankar R, Pengelly R, Pfaar O, Picard R, Pigearias B, Pin I, Plavec D, Poethig D, Pohl W, Popov TA, Portejoie F, Potter P, Postma D, Price D, Rabe KF, Raciborski F, Radier Pontal F, Repka-Ramirez S, Reitamo S, Rennard S, Rodenas F, Roberts J, Roca J, Rodriguez Mañas L, Rolland C, Roman Rodriguez M, Romano A, Rosado-Pinto J, Rosario N, Rosenwasser L, Rottem M, Ryan D, Sanchez-Borges M, Scadding GK, Schunemann HJ, Serrano E, Schmid-Grendelmeier P, Schulz H, Sheikh A, Shields M, Siafakas N, Sibille Y, Similowski T, Simons FE, Sisul JC, Skrindo I, Smit HA, Solé D, Sooronbaev T, Spranger O, Stelmach R, Sterk PJ, Sunyer J, Thijs C, To T, Todo-Bom A, Triggiani M, Valenta R, Valero AL, Valia E, Valovirta E, Van Ganse E, van Hage M, Vandenplas O, Vasankari T, Vellas B, Vestbo J, Vezzani G, Vichyanond P, Viegi G, Vogelmeier C, Vontetsianos T, Wagenmann M, Wallaert B, Walker S, Wang DY, Wahn U, Wickman M, Williams DM, Williams S, Wright J, Yawn BP, Yiallourous PK, Yusuf OM, Zaidi A, Zar HJ, Zernotti ME, Zhang L, Zhong N, Zidarn M, Mercier J. Scaling up strategies of the chronic respiratory disease programme of the European Innovation Partnership on Active and Healthy Ageing (Action Plan B3: Area 5). *Clin Transl Allergy*. 2016 Jul 29; 6:29 PMID: 27478588

67. Xiang L, Sunesara I, Rehm KE, Marshall GD Jr. Hair cortisol concentrations are associated with hair growth rate. *Neuroimmunomodulation*. 2016; 23(5-6):287-294. PMID: 28249276
68. Williams EM, Hyer JM, Viswanathan R, Faith TD, Egede L, Oates JC, Marshall GD. Cytokine balance and behavioral intervention; findings from the Peer Approaches to Lupus Self-Management (PALS) project. *Hum Immunol*. 2017 Sep; 78(9): 574-581. PMID: 28716698
69. Okhomina VI, Seals SR, Anugu P, Adu-Boateng G, Sims M, Marshall GD Jr. Adherence and retention of African Americans in a randomized controlled trial with a yoga-based intervention: the effects of health promoting programs on cardiovascular disease risk study. *Ethn Health*. 2018 Apr; 2:1-13 PMID: 29609480
70. Okhomina VI, Seals SR, Marshall GD Jr. Recruitment and enrollment of African Americans into health promoting programs: the effects of health promoting programs on cardiovascular disease risk study. *Ethn Health*. 2018 Apr; 3:1-10 PMID: 29611712

71. Weir IR, Marshall GD, Schneider JI, Sherer JA, Lord EM, Gyawali B, Paasche-Orlow, MK, Benjamin EJ, Trinquart L. Interpretation of time-to-event outcomes in randomized trials: an online randomized experiment. *Ann Oncol*. 2019 Jan 1; 30(1):96-102. PMID: 30335127
72. DeCarlo F, Thomas L, Brooke B, Varney ET, Nande R, Boskovic O, Marshall GD, Claudio PP, Howard CM. Microbubble-mediated delivery of human adenoviruses does not elicit innate and adaptive immunity response in an immunocompetent mouse model of prostate cancer. *J Transl Med*. 2019 Jan 11; 17(1):19. PMID 30635014
73. Marshall GD. Identifying individual stress susceptibility using genomic and immune biomarkers. *Trans Am Clin Climatol Assoc*. 2019;130:235-245 PMID 31516188
74. Makedonas G, Mehta S, Choukèr A, Simpson RJ, Marshall G, Orange JS, Aunon-Chancellor S, Smith SM, Zwart SR, Stowe RP, Heer M, Ponomarev S, Whitmire A, Fripiat JP, Douglas GL, Krieger SS, Lorenzi H, Buchheim JI, Ginsburg GS, Ott CM, Downs M, Pierson D, Baecker N, Sams C, Crucian B. Specific immunologic countermeasure protocol for deep-space exploration missions. *Front Immunol*. 2019 Oct 11; 10:2407. PMID 31681296
75. Next-generation ARIA care pathways for rhinitis and asthma: a model for multimorbid chronic diseases. Bousquet JJ, Schünemann HJ, Togias A, Erhola M, Hellings PW, Zuberbier T, Agache I, Ansotegui IJ, Anto JM, Bachert C, Becker S, Bedolla-Barajas M, Bewick M, Bosnic-Anticevich S, Bosse I, Boulet LP, Bourrez JM, Brusselle G, Chavannes N, Costa E, Cruz AA, Czarlewski W, Fokkens WJ, Fonseca JA, Gaga M, Haahtela T, Illario M, Klimek L, Kuna P, Kvedariene V, Le LTT, Larenas-Linnemann D, Laune D, Lourenço OM, Menditto E, Mullol J, Okamoto Y, Papadopoulos N, Pham-Thi N, Picard R, Pinnock H, Roche N, Roller-Wirnsberger RE, Rolland C, Samolinski B, Sheikh A, Toppila-Salmi S, Tsiligianni I, Valiulis A, Valovirta E, Vasankari T, Ventura MT, Walker S, Williams S, Akdis CA, Annesi-Maesano I, Arnavielhe S, Basagana X, Bateman E, Bedbrook A, Bennoor KS, Benveniste S, Bergmann KC, Bialek S, Billo N, Bindeslev-Jensen C, Bjermer L, Blain H, Bonini M, Bonniaud P, Bouchard J, Briedis V, Brightling CE, Brozek J, Buhl R, Buonaiuto R, Canonica GW, Cardona V, Carriazo AM, Carr W, Cartier C, Casale T, Cecchi L, Cepeda Sarabia AM, Chkhartishvili E, Chu DK, Cingi C, Colgan E, de Sousa JC, Courbis AL, Custovic A, Cvetkosvki B, D'Amato G, da Silva J, Dantas C, Dokic D, Dauvilliers Y, Dedeu A, De Feo G, Devillier P, Di Capua S, Dykewickz M, Dubakiene R, Ebisawa M, El-Gamal Y, Eller E, Emuzyte R, Farrell J, Fink-Wagner A, Fiocchi A, Fontaine JF, Gemicioğlu B, Schmid-Grendelmeier P, Gamkrelidze A, Garcia-Aymerich J, Gomez M, González Diaz S, Gotua M, Guldemond NA, Guzmán MA, Hajjam J, O'B Hourihane J, Humbert M, Iaccarino G, Ierodiakonou D, Illario M, Ivancevich JC, Joos G, Jung KS, Jutel M, Kaidashev I, Kalayci O, Kardas P, Keil T, Khaitov M, Khaltaev N, Kleine-Tebbe J, Kowalski ML, Kritikos V, Kull I, Leonardini L, Lieberman P, Lipworth B, Lodrup Carlsen KC, Loureiro CC, Louis R, Mair A, Marien G, Mahboub B, Malva J, Manning P, De Manuel Keenoy E, Marshall GD, Masjedi MR, Maspero JF, Mathieu-Dupas E, Matricardi PM, Melén E, Melo-Gomes E, Meltzer EO, Menditto E, Mercier J, Miculinic N, Mihaltan F, Milenkovic B, Moda G, Mogica-Martinez MD, Mohammad Y, Montefort S, Monti R, Morais-Almeida M, Mösges R, Münter L, Muraro A, Murray R, Naclerio R, Napoli L, Namazova-Baranova L, Neffen H, Nekam K, Neou A, Novellino E, Nyembue D, O'Hehir R, Ohta K, Okubo K, Onorato G, Ouedraogo S, Pali-Schöll I, Palkonen S, Panzner P, Park HS, Pépin JL, Pereira AM, Pfaar O, Paulino E, Phillips J, Picard R, Plavec D, Popov TA, Portejoie F, Price D, Prokopakis EP, Pugin B, Raciborski F, Rajabian-Söderlund R, Reitsma S, Rodo X, Romano A, Rosario N, Rottem M, Ryan D, Salimäki J, Sanchez-Borges MM, Sisul JC, Solé D, Somekh D, Sooronbaev T, Sova M, Spranger O, Stellato C, Stelmach R, Suppli Ulrik C, Thibaudon M, To T, Todo-Bom A, Tomazic PV, Valero AA, Valenta R, Valentin-Rostan M, van der Kleij R, Vandenplas O, Vezzani G, Viart F,

Viegi G, Wallace D, Wagenmann M, Wang Y, Wasserman S, Wickman M, Williams DM, Wong G, Wroczynski P, Yiallourous PK, Yorgancioglu A, Yusuf OM, Zar HJ, Zeng S, Zernotti M, Zhang L, Zhong NS, Zidarn M; ARIA Study Group; MASK Study Group. Clin Transl Allergy. 2019 Sep 9;9:44.

76. Tandon R, Mitra D, Sharma P, McCandless MG, Stray SJ, Bates JT, Marshall GD. Effective screening of SARS-CoV-2 neutralizing antibodies in patient serum using lentivirus particles pseudotyped with SARS-CoV-2 spike glycoprotein. Sci Rep. 2020 Nov 5;10(1):19076. PMID: 33154514
77. Murphy KR, Patel NC, Ein D, Hudelson M, Kodoth S, Marshall GD Jr, Parikh P, Blaiss MS. Insights from American College of Allergy, Asthma, and Immunology COVID-19 Vaccine Task Force: Allergic Reactions to mRNA SARS-CoV-2 Vaccines. Ann Allergy Asthma Immunol. 2021 Jan 23:S1081-1206(21)00025-9. Epub ahead of print. PMID: 33493641
78. Bousquet J, Akdis C, Jutel M, Bachert C, Klimek L, Agache I, Ansotegui IJ, Bedbrook A, Bosnic-Anticevich S, Canonica GW, Chivato T, Cruz AA, Czarlewski W, Del Giacco S, Du H, Fonseca JA, Gao Y, Haahtela T, Hoffmann-Sommergruber K, Ivancevich JC, Khaltaev N, Knol EF, Kuna P, Larenas-Linnemann D, Mullol J, Naclerio R, Ohta K, Okamoto Y, O'Mahony L, Onorato GL, Papadopoulos NG, Pfaar O, Samolinski B, Schwarze J, Toppila-Salmi S, Teresa Ventura M, Valiulis A, Yorgancioglu A, Zuberbier T; ARIA-MASK study group. Intranasal corticosteroids in allergic rhinitis in COVID-19 infected patients: An ARIA-EAACI statement. Allergy. 2020 Mar 31. PMID: 32233040.

Reviews

1. Marshall GD, Low TL, Thurman GB, and Goldstein AL. Recent Advances in Thymosin Research. In: *Human Lymphocyte Differentiation: Its Application to Cancer*. B. Serrou and C. Rosenfeld, eds., Elsevier-North Holland Press, Amsterdam, 1976; 271-286.
2. Thurman GB, Marshall GD, Low TL and Goldstein AL. Recent Developments in the Classification and Bioassay of Thymosin Polypeptides. In: *Cell Biology and Immunology of Leukocyte Function*. M. Quastel, ed., Academic Press, New York, 1979; 189-200.
3. Low TL, Thurman GB, Chincarini C, Hu SK, Marshall GD and Goldstein AL. Current status of thymosin research: Evidence for the existence of a family of thymic factors that control T cell maturation. *Ann N Y Acad Sci*. 1979; 332:33-48. PMID: 394636
4. O'Conner TE, West WH, Marshall GD, Orr DW and Oldham RK. Principles of biotherapy and its application to the treatment of renal cancer. *Semin Surg Oncol*. 1988; 4(3):155-160. PMID: 3055159
5. Marshall GD. Adoptive immunotherapy in gastrointestinal malignancies using interleukin-2: current results and future prospects. *Acta Chir Scand Suppl*. 1989; 549:71-74. PMID: 278465
6. Marshall GD, Schwartzberg LS, Tauer KW, Lee P, Holbert JM and West WH. LAK cell therapy: clinical studies and future potential. *Prog Clin Biol Res*. 1990; 337:555-558. PMID 2191342
7. Marshall GD. Cytokines: clinical potential for the allergic patient. *Allergy Proc*. 1992 Nov-Dec; 13(6):311-315. PMID: 1490623

8. Marshall GD. Cytokines: Potentials for the Clinical Immunologist. *Pediatr Asthma Allergy Immunol.* 1992; 6:259-266.
9. DuPont HL and Marshall GD. HIV-associated diarrhoea and wasting. *Lancet.* 1995 Aug 5; 346(8971):352-56. PMID: 7623535
10. Zimmer S, Pollard V, Marshall GD, Garofalo RP, Traber D, Prough D and Herndon DN. The 1996 Moyer Award. Effects of endotoxin on the Th1/Th2 response in humans. *J Burn Care Rehabil.* 1996 Nov-Dec; 17(6 pt 1):491-496. PMID: 8951535
11. Marshall GD. Allergen immunotherapy in HIV-infected patients. *Immunol Allergy Clin North Am.* 1997; 17(2):303-317.
12. Marshall GD. AIDS, HIV positive patients and allergies. *Allergy Asthma Proc.* 1999 Sep-Oct; 20(5):301-304. PMID: 10566099
13. Marshall GD. Pathophysiology of bronchial inflammation: chemoreceptors as therapeutic targets. *Allergy Asthma Proc.* 2000 Sept-Oct; 21(5):309-313. PMID: 11061042
14. Marshall GD. Therapeutic options in allergic disease: antihistamines as systemic antiallergic agents. *J Allergy Clin Immunol.* 2000 Nov; 106(5 Suppl):S303-309. PMID: 11080746
15. Marshall GD and Agarwal SK. Stress, immune regulation and immunity: applications for asthma. *Allergy Asthma Proc.* 2000 Jul-Aug; 21(4):241-246. PMID: 10951892
16. Marshall GD and Lieberman PL. Determining allergic vs. nonallergic drug reactions. *Clin Allergy Immunol.* 2000; 15:217-232. PMID: 10943295
17. Agarwal SK and Marshall GD. Stress effects on immunity and its application to clinical immunology. *Clin Exp Allergy.* 2001 Jan; 31(1):25-31. PMID: 11167947
18. Krueger GR, Marshall GD, Junker U, Schroeder H, Buja LM and Wang G. Growth factors, cytokines, chemokines and neuropeptides in the modeling of T-cells. *In Vivo.* 2002; 16: 365-386.
19. Marshall GD. Neuroendocrine mechanisms of immune dysregulation: applications to allergy and asthma. *Ann Allergy Asthma Immunol.* 2004 Aug; 93(2 Suppl 1):S11-7. PMID:15330008
20. Marshall GD and Sorkness C. IgE-blocking therapy for difficult-to-treat asthma: a brief review. *Manag Care* 2004 Mar; 13(3):45-50. PMID: 15074156
21. Marshall GD. Internal and external environmental influences in allergic diseases. *J Am Osteopath Assoc.* 2004 May; 104(5 Suppl 5):S1-S6. PMID: 15176522
22. Marshall GD. The status of U.S. allergy/immunology physicians in the twenty first century. A report from the AAAAI Workforce Committee. *J Allergy Clin Immunol.* 2007; 119:802-807. PMID 17418660
23. Lagos JA and Marshall GD. Montelukast in the management of allergic rhinitis. *Ther Clinl Risk Manag.* 2007 Jun; 3(2):327-32. PMID:18360641

24. Oswalt ML and Marshall GD. Ragweed as an example of worldwide allergen expansion. *Allergy Asthma Clin Immunol*. 2008 Sep 15; 4(3):130-5. Epub 2008 Sep 15. PMID: 20525135
25. Marshall GD Jr. The adverse effects of psychological stress on immunoregulatory balance: applications to human inflammatory diseases. *Immunol Allergy Clin North Am*. 2011 Feb; 31(1): 133-40. PMID: 21094928
26. Dave ND, Xiang L, Rehm KE and Marshall GD Jr. Stress and allergic diseases. *Immunol Allergy Clin North Am*. 2011 Feb; 31(1): 55-68. PMID: 21094923
27. Jason LA, Unger ER, Dimitrakoff JD, Fagin AP, Houghton M, Cook DB, Marshall GD Jr, Klimas N and Snell C. Minimum data elements for research reports on CFS. *Brain Behav Immun*. 2012 Mar; 26(3):401-6. Epub 2012 Jan 28. PMID: 22306456
28. Morris AE and Marshall GD. Safety of allergen immunotherapy: a review of premedication and dose adjustment. *Immunotherapy*. 2012 Mar; 4(3):315-22. PMID: 22401636
29. Low TL, Thurman GB, Chincarini C, McClure JE, Marshall GD, Hu SK and Goldstein AL. Current status of thymosin research: evidence for the existence of a family of thymic factors that control T-Cell maturation. 1979. *Ann N Y Acad Sci*. 2012 Oct; 1269(1): 131-146. PMID: 23045981
30. Morris AE, Hall AG and Marshall GD Jr. Not all that itches is urticaria. *Ann Allergy Asthma Immunol*. 2012 Jul; 109(1):10-13. PMID: 22727151.
31. Legendre DP, Muzny CA, Marshall GD Jr, and Swiatlo E. Antibiotic hypersensitivity reactions and approaches to desensitization. *Clin Infect Dis*. 2014 Apr; 58(8):1140-8. PMID: 24368623
32. Fischer DB, William AH, Strauss AC, Unger ER, Jason LA, Marshall GD Jr and Dimitrakoff JD. Chronic fatigue syndrome: the current status and future potentials of emerging biomarkers. *Fatigue*. 2014 Jun 1; 2(2):93-109. PMID: 24932428
33. Wilhelm CP, Wilhelm AM and Marshall GD Jr. Psychological stress interventions and asthma: therapeutic considerations. *JCOM*. 2014; 21(12): 1-7.
34. Bousquet J, Farrell J, Crooks G, Hellings P, Bel EH, Bewick M, Chavannes NH, de Sousa JC, Cruz AA, Haahtela T, Joos G, Khaltaev N, Malva J, Muraro A, Nogues M, Palkonen S, Pedersen S, Robalo-Cordeiro C, Samolinski B, Strandberg T, Valiulis A, Yorgancioglu A, Zuberbier T, Bedbrook A, Aberer W, Adachi M, Agusti A, Akdis CA, Akdis M, Ancri J, Alonso A, Annesi-Maesano I, Ansotegui IJ, Anto JM, Arnavielhe S, Arshad H, Bai C, Baiardini I, Bachert C, Baigenzhin AK, Barbara C, Bateman ED, Beghé B, Kheder AB, Bennoor KS, Benson M, Bergmann KC, Bieber T, Bindslev-Jensen C, Bjermer L, Blain H, Blasi F, Boner AL, Bonini M, Bonini S, Bosnic-Anticevitch S, Boulet LP, Bourret R, Bousquet PJ, Braidó F, Briggs AH, Brightling CE, Brozek J, Buhl R, Burney PG, Bush A, Caballero-Fonseca F, Caimmi D, Calderon MA, Calverley PM, Camargos PA, Canonica GW, Camuzat T, Carlsen KH, Carr W, Carriazo A, Casale T, Cepeda Sarabia AM, Chatzi L, Chen YZ, Chiron R, Chkhartishvili E, Chuchalin AG, Chung KF, Ciprandi G, Cirule I, Cox L, Costa DJ, Custovic A, Dahl R, Dahlen SE, Darsow U, De Carlo G, De Blay F, Dedeu T, Deleanu D, De Manuel Keenoy E, Demoly P, Denburg JA, Devillier P, Didier A, Dinh-Xuan AT, Djukanovic R, Dokic D, Douagui H, Dray G, Dubakiene R, Durham SR, Dykewicz MS, El-Gamal Y, Emuzyte R, Fabbri LM, Fletcher M, Fiocchi A, Fink Wagner A, Fonseca J, Fokkens WJ, Forastiere F, Frith P, Gaga M, Gamkrelidze A, Garces J, Garcia-Aymerich J, Gemicioğlu B, Gereda JE, González Diaz S, Gotua M, Grisle I, Grouse L, Gutter Z, Guzmán MA, Heaney LG,

Hellquist-Dahl B, Henderson D, Hendry A, Heinrich J, Heve D, Horak F, Hourihane JO, Howarth P, Humbert M, Hyland ME, Illario M, Ivancevich JC, Jardim JR, Jares EJ, Jeandel C, Jenkins C, Johnston SL, Jonquet O, Julge K, Jung KS, Just J, Kaidashev I, Kaitov MR, Kalayci O, Kalyoncu AF, Keil T, Keith PK, Klimek L, Koffi N'Goran B, Kolek V, Koppelman GH, Kowalski ML, Kull I, Kuna P, Kvedariene V, Lambrecht B, Lau S, Larenas-Linnemann D, Laune D, Le LT, Lieberman P, Lipworth B, Li J, Lodrup Carlsen K, Louis R, MacNee W, Magard Y, Magnan A, Mahboub B, Mair A, Majer I, Makela MJ, Manning P, Mara S, Marshall GD, Masjedi MR, Matignon P, Maurer M, Mavale-Manuel S, Melén E, Melo-Gomes E, Meltzer EO, Menzies-Gow A, Merk H, Michel JP, Miculinic N, Mihaltan F, Milenkovic B, Mohammad GM, Molimard M, Momas I, Montilla-Santana A, Morais-Almeida M, Morgan M, Mösges R, Mullol J, Nafti S, Namazova-Baranova L, Naclerio R, Neou A, Neffen H, Nekam K, Niggemann B, Ninot G, Nyembue TD, O'Hehir RE, Ohta K, Okamoto Y, Okubo K, Ouedraogo S, Paggiaro P, Pali-Schöll I, Panzner P, Papadopoulos N, Papi A, Park HS, Passalacqua G, Pavord I, Pawankar R, Pengelly R, Pfaar O, Picard R, Pigearias B, Pin I, Plavec D, Poethig D, Pohl W, Popov TA, Portejoie F, Potter P, Postma D, Price D, Rabe KF, Raciborski F, Radier Pontal F, Repka-Ramirez S, Reitamo S, Rennard S, Rodenas F, Roberts J, Roca J, Rodriguez Mañas L, Rolland C, Roman Rodriguez M, Romano A, Rosado-Pinto J, Rosario N, Rosenwasser L, Rottem M, Ryan D, Sanchez-Borges M, Scadding GK, Schunemann HJ, Serrano E, Schmid-Grendelmeier P, Schulz H, Sheikh A, Shields M, Siafakas N, Sibille Y, Similowski T, Simons FE, Sisul JC, Skrindo I, Smit HA, Solé D, Sooronbaev T, Spranger O, Stelmach R, Sterk PJ, Sunyer J, Thijs C, To T, Todo-Bom A, Triggiani M, Valenta R, Valero AL, Valia E, Valovirta E, Van Ganse E, van Hage M, Vandenplas O, Vasankari T, Vellas B, Vestbo J, Vezzani G, Vichyanond P, Viegi G, Vogelmeier C, Vontetsianos T, Wagenmann M, Wallaert B, Walker S, Wang DY, Wahn U, Wickman M, Williams DM, Williams S, Wright J, Yawn BP, Yiallourous PK, Yusuf OM, Zaidi A, Zar HJ, Zernotti ME, Zhang L, Zhong N, Zidarn M, Mercier J. Scaling up strategies of the chronic respiratory disease programme of the European Innovation Partnership on Active and Healthy Ageing (Action Plan B3: Area 5). *Clin Transl Allergy*. 2016 Jul 29; 6:29. PMID: 27478588

35. Bousquet J, Hellings PW, Agache I, Bedbrook A, Bachert C, Bergmann KC, Bewick M, Bindeslev-Jensen C, Bosnic-Anticevitch S, Bucca C, Caimmi DP, Camargos PA, Canonica GW, Casale T, Chavannes NH, Cruz AA, De Carlo G, Dahl R, Demoly P, Devillier P, Fonseca J, Fokkens WJ, Guldemond NA, Haahtela T, Illario M, Just J, Keil T, Klimek L, Kuna P, Larenas-Linnemann D, Morais-Almeida M, Mullol J, Murray R, Naclerio R, O'Hehir RE, Papadopoulos NG, Pawankar R, Potter P, Ryan D, Samolinski B, Schunemann HJ, Sheikh A, Simons FE, Stellato C, Todo-Bom A, Tomazic PV, Valiulis A, Valovirta E, Ventura MT, Wickman M, Young I, Yorgancioglu A, Zuberbier T, Aberer W, Akdis CA, Akdis M, Annesi-Maesano I, Ancri J, Ansotegui IJ, Anto JM, Arnavielhe S, Asaranoj A, Arshad H, Avolio F, Baiardini I, Barbara C, Barbagallo M, Bateman ED, Beghé B, Bel EH, Bennoor KS, Benson M, Białoszewski AZ, Bieber T, Bjermer L, Blain H, Blasi F, Boner AL, Bonini M, Bonini S, Bosse I, Bouchard J, Boulet LP, Bourret R, Bousquet PJ, Braido F, Briggs AH, Brightling CE, Brozek J, Buhl R, Bunu C, Burte E, Bush A, Caballero-Fonseca F, Calderon MA, Camuzat T, Cardona V, Carreiro-Martins P, Carriazo AM, Carlsen KH, Carr W, Cepeda Sarabia AM, Cesari M, Chatzi L, Chiron R, Chivato T, Chkhartishvili E, Chuchalin AG, Chung KF, Ciprandi G, de Sousa JC, Cox L, Crooks G, Custovic A, Dahlen SE, Darsow U, Dedeu T, Deleanu D, Denburg JA, De Vries G, Didier A, Dinh-Xuan AT, Dokic D, Douagui H, Dray G, Dubakiene R, Durham SR, Du Toit G, Dykewicz MS, Eklund P, El-Gamal Y, Eilers E, Emuzyte R, Farrell J, Fink Wagner A, Fiocchi A, Fletcher M, Forastiere F, Gaga M, Gamkrelidze A, Gemicioğlu B, Gereda JE, van Wick RG, González Diaz S, Grisle I, Grouse L, Gutter Z, Guzmán MA, Hellquist-Dahl B, Heinrich J, Horak F, Hourihane JO, Humbert M, Hyland M, Iaccarino G, Jares EJ, Jeandel C, Johnston SL, Joos G, Jonquet O, Jung KS, Jutel M, Kaidashev I, Khaitov M, Kalayci O, Kalyoncu AF, Kardas P, Keith PK, Kerkhof M, Kerstjens HA, Khaltaev N, Kogevinas M, Kolek V, Koppelman GH, Kowalski ML, Kuitunen M, Kull I, Kvedariene V, Lambrecht B, Lau S, Laune D, Le LT, Lieberman P, Lipworth B, Li J, Lodrup Carlsen KC, Louis R, Lupinek C, MacNee W, Magar Y, Magnan A, Mahboub B, Maier D, Majer I, Malva J, Manning P, De Manuel Keenoy E, Marshall GD, Masjedi MR, Mathieu-Dupas E, Maurer M, Mavale-Manuel S, Melén E, Melo-Gomes E,

Meltzer EO, Mercier J, Merk H, Miculinic N, Mihaltan F, Milenkovic B, Millot-Keurinck J, Mohammad Y, Momas I, Mösges R, Muraro A, Namazova-Baranova L, Nadif R, Neffen H, Nekam K, Nieto A, Niggemann B, Nogueira-Silva L, Nogue M, Nyembue TD, Ohta K, Okamoto Y, Okubo K, Olive-Elias M, Ouedraogo S, Paggiaro P, Pali-Schöll I, Palkonen S, Panzner P, Papi A, Park HS, Passalacqua G, Pedersen S, Pereira AM, Pfaar O, Picard R, Pigearias B, Pin I, Plavec D, Pohl W, Popov TA, Portejoie F, Postma D, Poulsen LK, Price D, Rabe KF, Raciborski F, Roberts G, Robalo-Cordeiro C, Rodenas F, Rodriguez-Mañas L, Rolland C, Roman Rodriguez M, Romano A, Rosado-Pinto J, Rosario N, Rottem M, Sanchez-Borges M, Sastre-Dominguez J, Scadding GK, Scichilone N, Schmid-Grendelmeier P, Serrano E, Shields M, Siroux V, Sisul JC, Skrindo I, Smit HA, Solé D, Sooronbaev T, Spranger O, Stelmach R, Sterk PJ, Strandberg T, Sunyer J, Thijs C, Triggiani M, Valenta R, Valero A, van Eerd M, van Ganse E, van Hague M, Vandenplas O, Varona LL, Vellas B, Vezzani G, Vazankari T, Viegi G, Vontetsianos T, Wagenmann M, Walker S, Wang DY, Wahn U, Werfel T, Whalley B, Williams DM, Williams S, Wilson N, Wright J, Yawn BP, Yiallourous PK, Yusuf OM, Zaidi A, Zar HJ, Zernotti ME, Zhang L, Zhong N, Zidarn M. ARIA 2016: Care pathways implementing emerging technologies for predictive medicine in rhinitis and asthma across the life cycle. *Clin Transl Allergy*. 2016 Dec 30; 6:47. PMID: 28050247

36. Crucian BE, Choukèr A, Simpson RJ, Mehta S, Marshall G, Smith SM, Zwart SR, Heer M, Ponomarev S, Whitmire A, Fripiat JP, Douglas G, Lorenzi H, Buchheim J-I, Makedonas G, Ginsburg GS, Ott CM, Pierson DL, Krieger SS, Baecker N and Sams C. Immune system dysregulation during spaceflight: potential countermeasures for deep space exploration missions. *Front Immunol*. 2018; 9:1437. PMID 30018614

37. Marshall GD and Tull MT. Stress, mindfulness, and the allergic patient. *Expert Rev Clin Immunol*. 2018 Dec; 14(12):1065-1079 PMID:30324819

38. Bousquet JJ, Schünemann HJ, Togias A, Erhola M, Hellings PW, Zuberbier T, Agache I, Ansotegui IJ, Anto JM, Bachert C, Becker S, Bedolla-Barajas M, Bewick M, Bosnic-Anticevich S, Bosse I, Boulet LP, Bourrez JM, Brusselle G, Chavannes N, Costa E, Cruz AA, Czarlewski W, Fokkens WJ, Fonseca JA, Gaga M, Haahtela T, Illario M, Klimek L, Kuna P, Kvedariene V, Le LTT, Larenas-Linnemann D, Laune D, Lourenço OM, Menditto E, Mullol J, Okamoto Y, Papadopoulos N, Pham-Thi N, Picard R, Pinnock H, Roche N, Roller-Wirnsberger RE, Rolland C, Samolinski B, Sheikh A, Toppila-Salmi S, Tsiligianni I, Valiulis A, Valovirta E, Vasankari T, Ventura MT, Walker S, Williams S, Akdis CA, Annesi-Maesano I, Arnavielhe S, Basagana X, Bateman E, Bedbrook A, Bennoor KS, Benveniste S, Bergmann KC, Bialek S, Billo N, Bindeslev-Jensen C, Bjermer L, Blain H, Bonini M, Bonniaud P, Bouchard J, Briedis V, Brightling CE, Brozek J, Buhl R, Buonaiuto R, Canonica GW, Cardona V, Carriazo AM, Carr W, Cartier C, Casale T, Cecchi L, Cepeda Sarabia AM, Chkhartishvili E, Chu DK, Cingi C, Colgan E, de Sousa JC, Courbis AL, Custovic A, Cvetkosvki B, D'Amato G, da Silva J, Dantas C, Dokic D, Dauvilliers Y, Dedeu A, De Feo G, Devillier P, Di Capua S, Dykewicz M, Dubakienė R, Ebisawa M, El-Gamal Y, Eller E, Emuzyte R, Farrell J, Fink-Wagner A, Fiocchi A, Fontaine JF, Gemicioglu B, Schmid-Grendelmeier P, Gamkrelidze A, Garcia-Aymerich J, Gomez M, González Diaz S, Gotua M, Guldemond NA, Guzmán MA, Hajjam J, O'B Hourihane J, Humbert M, Iaccarino G, Ierodiakonou D, Illario M, Ivancevich JC, Joos G, Jung KS, Jutel M, Kaidashev I, Kalayci O, Kardas P, Keil T, Khaitov M, Khaltayev N, Kleine-Tebbe J, Kowalski ML, Kritikos V, Kull I, Leonardini L, Lieberman P, Lipworth B, Lodrup Carlsen KC, Loureiro CC, Louis R, Mair A, Marien G, Mahboub B, Malva J, Manning P, De Manuel Keenoy E, Marshall GD, Masjedi MR, Maspero JF, Mathieu-Dupas E, Matricardi PM, Melén E, Melo-Gomes E, Meltzer EO, Menditto E, Mercier J, Miculinic N, Mihaltan F, Milenkovic B,

Moda G, Mogica-Martinez MD, Mohammad Y, Montefort S, Monti R, Morais-Almeida M, Mösges R, Münter L, Muraro A, Murray R, Naclerio R, Napoli L, Namazova-Baranova L, Neffen H, Nekam K, Neou A, Novellino E, Nyembue D, O'Hehir R, Ohta K, Okubo K, Onorato G, Ouedraogo S, Pali-Schöll I, Palkonen S, Panzner P, Park HS, Pépin JL, Pereira AM, Pfaar O, Paulino E, Phillips J, Picard R, Plavec D, Popov TA, Portejoie F, Price D, Prokopakis EP, Pugin B, Raciborski F, Rajabian-Söderlund R, Reitsma S, Rodo X, Romano A, Rosario N, Rottem M, Ryan D, Salimäki J, Sanchez-Borges MM, Sisul JC, Solé D, Somekh D, Sooronbaev T, Sova M, Spranger O, Stellato C, Stelmach R, Suppli Ulrik C, Thibaudon M, To T, Todo-Bom A, Tomazic PV, Valero AA, Valenta R, Valentin-Rostan M, van der Kleij R, Vandenplas O, Vezzani G, Viart F, Vieggi G, Wallace D, Wagenmann M, Wang Y, Wasserman S, Wickman M, Williams DM, Wong G, Wroczyński P, Yiallourous PK, Yorgancioglu A, Yusuf OM, Zar HJ, Zeng S, Zernotti M, Zhang L, Zhong NS, Zidarn M; ARIA Study Group; MASK Study Group. *Clin Transl Allergy*. 2019 Sep 9; 9:44. PMID 31516692

39. Bousquet JJ, Schünemann HJ, Togias A, Erhola M, Hellings PW, Zuberbier T, Agache I, Ansotegui IJ, Anto JM, Bachert C, Becker S, Bedolla-Barajas M, Bewick M, Bosnic-Anticevich S, Bosse I, Boulet LP, Bourrez JM, Brusselle G, Chavannes N, Costa E, Cruz AA, Czarlewski W, Fokkens WJ, Fonseca JA, Gaga M, Haahtela T, Illario M, Klimek L, Kuna P, Kvedariene V, Le LTT, Larenas-Linnemann D, Laune D, Lourenço OM, Menditto E, Mullol J, Okamoto Y, Papadopoulos N, Pham-Thi N, Picard R, Pinnock H, Roche N, Roller-Wirnsberger RE, Rolland C, Samolinski B, Sheikh A, Toppila-Salmi S, Tsiligianni I, Valiulis A, Valovirta E, Vasankari T, Ventura MT, Walker S, Williams S, Akdis CA, Annesi-Maesano I, Arnavielhe S, Basagana X, Bateman E, Bedbrook A, Bennoor KS, Benveniste S, Bergmann KC, Bialek S, Billo N, Bindeslev-Jensen C, Bjermer L, Blain H, Bonini M, Bonniaud P, Bouchard J, Briedis V, Brightling CE, Brozek J, Buhl R, Buonaiuto R, Canonica GW, Cardona V, Carriazo AM, Carr W, Cartier C, Casale T, Cecchi L, Cepeda Sarabia AM, Chkhartishvili E, Chu DK, Cingi C, Colgan E, de Sousa JC, Courbis AL, Custovic A, Cvetkosvki B, D'Amato G, da Silva J, Dantas C, Dokic D, Dauvilliers Y, Dedeu A, De Feo G, Devillier P, Di Capua S, Dykewickz M, Dubakiene R, Ebisawa M, El-Gamal Y, Eller E, Emuzyte R, Farrell J, Fink-Wagner A, Fiocchi A, Fontaine JF, Gemicioğlu B, Schmid-Grendelmeir P, Gamkrelidze A, Garcia-Aymerich J, Gomez M, González Diaz S, Gotua M, Guldmond NA, Guzmán MA, Hajjam J, O'B Hourihane J, Humbert M, Iaccarino G, Ierodiakonou D, Illario M, Ivancevich JC, Joos G, Jung KS, Jutel M, Kaidashev I, Kalayci O, Kardas P, Keil T, Khaitov M, Khaltaev N, Kleine-Tebbe J, Kowalski ML, Kritikos V, Kull I, Leonardini L, Lieberman P, Lipworth B, Lodrup Carlsen KC, Loureiro CC, Louis R, Mair A, Marien G, Mahboub B, Malva J, Manning P, De Manuel Keenoy E, Marshall GD, Masjedi MR, Maspero JF, Mathieu-Dupas E, Matricardi PM, Melén E, Melo-Gomes E, Meltzer EO, Menditto E, Mercier J, Miculinic N, Mihaltan F, Milenkovic B, Moda G, Mogica-Martinez MD, Mohammad Y, Montefort S, Monti R, Morais-Almeida M, Mösges R, Münter L, Muraro A, Murray R, Naclerio R, Napoli L, Namazova-Baranova L, Neffen H, Nekam K, Neou A, Novellino E, Nyembue D, O'Hehir R, Ohta K, Okubo K, Onorato G, Ouedraogo S, Pali-Schöll I, Palkonen S, Panzner P, Park HS, Pépin JL, Pereira AM, Pfaar O, Paulino E, Phillips J, Picard R, Plavec D, Popov TA, Portejoie F, Price D, Prokopakis EP, Pugin B, Raciborski F, Rajabian-Söderlund R, Reitsma S, Rodo X, Romano A, Rosario N, Rottem M, Ryan D, Salimäki J, Sanchez-Borges MM, Sisul JC, Solé D, Somekh D, Sooronbaev T, Sova M, Spranger O, Stellato C, Stelmach R, Suppli Ulrik C, Thibaudon M, To T, Todo-Bom A, Tomazic PV, Valero AA, Valenta R, Valentin-Rostan M, van der Kleij R, Vandenplas O, Vezzani G, Viart F, Vieggi G, Wallace D, Wagenmann M, Wang Y, Wasserman S, Wickman M, Williams DM, Wong G, Wroczyński P, Yiallourous PK, Yorgancioglu A, Yusuf OM, Zar HJ, Zeng S, Zernotti M, Zhang L, Zhong NS,

Zidarn M; ARIA Study Group; MASK Study Group. Next-generation ARIA care pathways for rhinitis and asthma: a model for multimorbid chronic diseases. *Clin Transl Allergy*. 2019 Sep 9;9:44. PMID: 31516692;

40. Marshall GD Jr, Blaiss M, Dixit A, Ein D, Fausnight T, Miller T, Nanda A, O'Connor M, Peng T, Phipatanakul W, Rupp M, Silvers W, Tilles SA, Pfeifer J. Risk of physician burnout in the North American allergist-immunologist workforce: A report from the American College of Allergy, Asthma and Immunology Physician Wellness Taskforce. *Ann Allergy Asthma Immunol*. 2020 Sep;125(3):235-243. Epub 2020 Jun 13. Erratum in: *Ann Allergy Asthma Immunol*. 2020 Dec;125(6):723. PMID: 32544532.
41. Bousquet J, Anto JM, Bachert C, Haahtela T, Zuberbier T, Czarlewski W, Bedbrook A, Bosnic-Anticevich S, Walter Canonica G, Cardona V, Costa E, Cruz AA, Erhola M, Fokkens WJ, Fonseca JA, Illario M, Ivancevich JC, Jutel M, Klimek L, Kuna P, Kvedariene V, Le L, Larenas-Linnemann DE, Laune D, Lourenço OM, Melén E, Mullol J, Niedoszytko M, Odemyr M, Okamoto Y, Papadopoulos NG, Patella V, Pfaar O, Pham-Thi N, Rolland C, Samolinski B, Sheikh A, Sofiev M, Suppli Ulrik C, Todo-Bom A, Tomazic PV, Toppila-Salmi S, Tsiligianni I, Valiulis A, Valovirta E, Ventura MT, Walker S, Williams S, Yorgancioglu A, Agache I, Akdis CA, Almeida R, Ansotegui IJ, Annesi-Maesano I, Arnavielhe S, Basagaña X, D Bateman E, Bédard A, Bedolla-Barajas M, Becker S, Bennoor KS, Benveniste S, Bergmann KC, Bewick M, Bialek S, E Billo N, Bindslev-Jensen C, Bjermer L, Blain H, Bonini M, Bonniaud P, Bosse I, Bouchard J, Boulet LP, Bourret R, Boussey K, Braido F, Briedis V, Briggs A, Brightling CE, Brozek J, Brusselle G, Brussino L, Buhl R, Buonaiuto R, Calderon MA, Camargos P, Camuzat T, Caraballo L, Carriazo AM, Carr W, Cartier C, Casale T, Cecchi L, Cepeda Sarabia AM, H Chavannes N, Chkhartishvili E, Chu DK, Cingi C, Correia de Sousa J, Costa DJ, Courbis AL, Custovic A, Cvetkosvki B, D'Amato G, da Silva J, Dantas C, Dokic D, Dauvilliers Y, De Feo G, De Vries G, Devillier P, Di Capua S, Dray G, Dubakiene R, Durham SR, Dykewicz M, Ebisawa M, Gaga M, El-Gamal Y, Heffler E, Emuzyte R, Farrell J, Fauquert JL, Fiocchi A, Fink-Wagner A, Fontaine JF, Fuentes Perez JM, Gemicioğlu B, Gamkrelidze A, Garcia-Aymerich J, Gevaert P, Gomez RM, González Diaz S, Gotua M, Guldemond NA, Guzmán MA, Hajjam J, Huerta Villalobos YR, Humbert M, Iaccarino G, Ierodiakonou D, Iinuma T, Jassem E, Joos G, Jung KS, Kaidashev I, Kalayci O, Kardas P, Keil T, Khaitov M, Khaltaev N, Kleine-Tebbe J, Kouznetsov R, Kowalski ML, Kritikos V, Kull I, La Grutta S, Leonardini L, Ljungberg H, Lieberman P, Lipworth B, Lodrup Carlsen KC, Lopes-Pereira C, Loureiro CC, Louis R, Mair A, Mahboub B, Makris M, Malva J, Manning P, Marshall GD, Masjedi MR, Maspero JF, Carreiro-Martins P, Makela M, Mathieu-Dupas E, Maurer M, De Manuel Keenoy E, Melo-Gomes E, Meltzer EO, Menditto E, Mercier J, Micheli Y, Miculinic N, Mihaltan F, Milenkovic B, Mitsias DI, Moda G, Mogica-Martinez MD, Mohammad Y, Montefort S, Monti R, Morais-Almeida M, Mösges R, Münter L, Muraro A, Murray R, Naclerio R, Napoli L, Namazova-Baranova L, Neffen H, Nekam K, Neou A, Nordlund B, Novellino E, Nyembue D, O'Hehir R, Ohta K, Okubo K, Onorato GL, Orlando V, Ouedraogo S, Palamarchuk J, Pali-Schöll I, Panzner P, Park HS, Passalacqua G, Pépin JL, Paulino E, Pawankar R, Phillips J, Picard R, Pinnock H, Plavec D, Popov TA, Portejoie F, Price D, Prokopakis EP, Psarros F, Pugin B, Puggioni F, Quinones-Delgado P, Raciborski F, Rajabian-Söderlund R, Regateiro FS, Reitsma S, Rivero-Yeverino D, Roberts G, Roche N, Rodriguez-Zagal E, Rolland C, Roller-Wirnsberger RE, Rosario N, Romano A, Rottem M, Ryan D, Salimäki J, Sanchez-Borges MM, Sastre J, Scadding GK, Scheire S, Schmid-Grendelmeier P, Schünemann HJ, Sarquis Serpa F, Shamji M, Sisul JC, Sofiev M, Solé D, Somekh D, Sooronbaev T, Sova M, Spertini F, Spranger O, Stellato C, Stelmach R, Thibaudon M, To T, Toumi M, Usmani O, Valero AA, Valenta R, Valentin-Rostan M, Pereira MU, van der Kleij R, Van Eerd M, Vandenplas O, Vasankari T, Vaz Carneiro A, Vezzani G, Viart F, Viegi G, Wallace D, Wagenmann M, Wang Y, Wasserman S, Wickman M, Williams DM, Wong G, Wroczynski P, Yiallourous PK, Yusuf OM, Zar HJ, Zeng S, Zernotti ME,

Zhang L, Shan Zhong N, Zidarn M. ARIA digital anamorphosis: Digital transformation of health and care in airway diseases from research to practice. *Allergy*. 2021 Jan;76(1):168-190. PMID: 32512619.

42. Bousquet J, Cristol JP, Czarlewski W, Anto JM, Martineau A, Haahtela T, Fonseca SC, Iaccarino G, Blain H, Fiocchi A, Canonica GW, Fonseca JA, Vidal A, Choi HJ, Kim HJ, Le Moing V, Reynes J, Sheikh A, Akdis CA, Zuberbier T; ARIA group. Nrf2-interacting nutrients and COVID-19: time for research to develop adaptation strategies. *Clin Transl Allergy*. 2020 Dec 3;10(1):58. PMID: 33292691
43. Bousquet JJ, Schünemann HJ, Togias A, Erhola M, Hellings PW, Zuberbier T, Agache I, Ansotegui IJ, Anto JM, Bachert C, Becker S, Bedolla-Barajas M, Bewick M, Bosnic-Anticevich S, Bosse I, Boulet LP, Bourrez JM, Brusselle G, Chavannes N, Costa E, Cruz AA, Czarlewski W, Fokkens WJ, Fonseca JA, Gaga M, Haahtela T, Illario M, Klimek L, Kuna P, Kvedariene V, Le LTT, Larenas-Linnemann D, Laune D, Lourenço OM, Menditto E, Mullol J, Okamoto Y, Papadopoulos N, Pham-Thi N, Picard R, Pinnock H, Roche N, Roller-Wirnsberger RE, Rolland C, Samolinski B, Sheikh A, Toppila-Salmi S, Tsiligianni I, Valiulis A, Valovirta E, Vasankari T, Ventura MT, Walker S, Williams S, Akdis CA, Annesi-Maesano I, Arnavielhe S, Basagana X, Bateman E, Bedbrook A, Bennoor KS, Benveniste S, Bergmann KC, Bialek S, Billo N, Bindslev-Jensen C, Bjermer L, Blain H, Bonini M, Bonniaud P, Bouchard J, Briedis V, Brightling CE, Brozek J, Buhl R, Buonaiuto R, Canonica GW, Cardona V, Carriazo AM, Carr W, Cartier C, Casale T, Cecchi L, Cepeda Sarabia AM, Chkhartishvili E, Chu DK, Cingi C, Colgan E, de Sousa JC, Courbis AL, Custovic A, Cvetkosvki B, D'Amato G, da Silva J, Dantas C, Dokic D, Dauvilliers Y, Dedeu A, De Feo G, Devillier P, Di Capua S, Dykewickz M, Dubakiene R, Ebisawa M, El-Gamal Y, Eller E, Emuzyte R, Farrell J, Fink-Wagner A, Fiocchi A, Fontaine JF, Gemicioğlu B, Schmid-Grendelmeier P, Gamkrelidze A, Garcia-Aymerich J, Gomez M, González Diaz S, Gotua M, Guldemond NA, Guzmán MA, Hajjam J, O'B Hourihane J, Humbert M, Iaccarino G, Ierodiakonou D, Illario M, Ivancevich JC, Joos G, Jung KS, Jutel M, Kaidashev I, Kalayci O, Kardas P, Keil T, Khaitov M, Khaltaev N, Kleine-Tebbe J, Kowalski ML, Kritikos V, Kull I, Leonardini L, Lieberman P, Lipworth B, Lodrup Carlsen KC, Loureiro CC, Louis R, Mair A, Marien G, Mahboub B, Malva J, Manning P, De Manuel Keenoy E, Marshall GD, Masjedi MR, Maspero JF, Mathieu-Dupas E, Matricardi PM, Melén E, Melo-Gomes E, Meltzer EO, Menditto E, Mercier J, Miculinic N, Mihaltan F, Milenkovic B, Moda G, Mogica-Martinez MD, Mohammad Y, Montefort S, Monti R, Morais-Almeida M, Mösges R, Münter L, Muraro A, Murray R, Naclerio R, Napoli L, Namazova-Baranova L, Neffen H, Nekam K, Neou A, Novellino E, Nyembue D, O'Hehir R, Ohta K, Okubo K, Onorato G, Ouedraogo S, Pali-Schöll I, Palkonen S, Panzner P, Park HS, Pépin JL, Pereira AM, Pfaar O, Paulino E, Phillips J, Picard R, Plavec D, Popov TA, Portejoie F, Price D, Prokopakis EP, Pugin B, Raciborski F, Rajabian-Söderlund R, Reitsma S, Rodo X, Romano A, Rosario N, Rottem M, Ryan D, Salimäki J, Sanchez-Borges MM, Sisul JC, Solé D, Somekh D, Sooronbaev T, Sova M, Spranger O, Stellato C, Stelmach R, Suppli Ulrik C, Thibaudon M, To T, Todo-Bom A, Tomazic PV, Valero AA, Valenta R, Valentin-Rostan M, van der Kleij R, Vandenplas O, Vezzani G, Viart F, Viegi G, Wallace D, Wagenmann M, Wang Y, Wasserman S, Wickman M, Williams DM, Wong G, Wroczyński P, Yiallourous PK, Yorgancioglu A, Yusuf OM, Zar HJ, Zeng S, Zernotti M, Zhang L, Zhong NS, Zidarn M; ARIA Study Group; MASK Study Group. Next-generation ARIA care pathways for rhinitis and asthma: a model for multimorbid chronic diseases. *Clin Transl Allergy*. 2019 Sep 9;9:44. PMID: 31516692
44. Bousquet J, Anto JM, Czarlewski W, Haahtela T, Fonseca SC, Iaccarino G, Blain H, Vidal A, Sheikh A, Akdis CA, Zuberbier T; ARIA group. Cabbage and fermented vegetables: From death rate heterogeneity in countries to candidates for mitigation strategies of severe COVID-19. *Allergy*. 2021 Mar;76(3):735-750. PMID: 32762135
45. Bousquet J, Anto JM, Iaccarino G, Czarlewski W, Haahtela T, Anto A, Akdis CA, Blain H, Canonica GW, Cardona V, Cruz AA, Illario M, Ivancevich JC, Jutel M, Klimek L, Kuna P, Laune D, Larenas-Linnemann D,

Mullol J, Papadopoulos NG, Pfaar O, Samolinski B, Valiulis A, Yorgancioglu A, Zuberbier T; ARIA group. Is diet partly responsible for differences in COVID-19 death rates between and within countries? *Clin Transl Allergy*. 2020 May 27;10:16. Erratum in: *Clin Transl Allergy*. 2020 Oct 26;10:44. PMID: 32499909

Chapters/Books

1. Goldstein AL, Marshall GD and Rossio JL. Thymosin Therapy: Approach to Immunoreconstitution of Immunodeficiency Diseases and Cancer. In: *Immunotherapy of Human Cancer*. New York: Raven Press; 1978: 173-179.
2. Marshall GD, Thurman GB, Low TL and Goldstein AL. Regulatory Influences of Thymosin on Various Lymphoid Populations. In: *Biochemical Characterizations of Lymphokine*. A.L. De Weck, ed., New York: Academic Press; 1980: 273-277.
3. Thurman GB, Marshall GD, Low TL and Goldstein AL. (1980) Thymosin: Structural Studies Immunoregulatory Role in Host Immunity. In: *Thymus, Thymic Hormones and T Lymphocytes*. F. Auiti and H. Wigzell, ed. New York: Academic Press; 1980:175-185.
4. Marshall GD and Lieberman PL. Allergic Rhinitis. In: *Internal Medicine for the Practicing Physician*. J.W. Hurst, ed. 1992:172-174.
5. Marshall GD. Allergy Testing. In: *Procedures for Primary Care Physician*. Pfenninger J.L. and Fowler G., eds. St. Louis, MO: C.V. Mosby; 1994: 1096-1101.
6. Marshall GD. Allergic bronchopulmonary aspergillosis. In: *Current Practice of Medicine*. Lieberman P.L. ed. Philadelphia, PA: Current Medicine; 1996: VII:3.1-3.6.
7. Marshall, GD. HIV Infection: Diagnosis and Early Management. In: *Current Practice of Medicine*., Lieberman P.L., ed. Philadelphia, PA: Current Medicine; 1996: VII:16.1-16.10.
8. Marshall GD. Idiopathic anaphylaxis. In: *Current Therapy in Allergy, Immunology and Rheumatology*. 5th ed. L.M. Lichtenstein and A.S. Fance, eds. B.C. Decker, Inc; 1996: 177-179.
9. Marshall GD and Duvic MM. The Immunology of HIV in the skin. In: *Cutaneous Allergy*. E.S. Charlesworth, ed. 1996: 3:91-116.
10. Marshall GD. Allergic bronchopulmonary aspergillosis. In: *Current Practice of Medicine*. Faith T. Fitzgerald, ed. Philadelphia, PA: Current Medicine; 1998: VI:12, 101-106.
11. Marshall GD. HIV Infection: Diagnosis and Early Management. In: *Current Practice of Medicine*. Faith T. Fitzgerald, ed. Philadelphia, PA: Current Medicine; 1999: VI:24, 205-214.
12. Marshall GD and Lieberman PL. Determining Allergic vs. Nonallergic Drug Reactions. In: *Drug Allergy*. Kemp SA and Lockey RL, eds. 1999: 236-245.

13. Marshall GD and Rossio JL. Cytokines. In: *Encyclopedia of Stress*. Fink, G, ed. New York: Academic Press; 2000: 626-632.
14. Marshall GD and Behbod F. Molecular Biology Techniques for the Investigation of Immune Activation and Immunologic Dysfunction. In: *Atlas of Allergic Diseases*. Lieberman P.L. and Blaiss MS, ed. Philadelphia, PA: Current Medicine; 2002: 3-12.
15. Ritter SY and Marshall GD. Chemokines and Their Receptors. In: *Atlas of Allergic Diseases*. Lieberman P.L. and Blaiss MS, ed. Philadelphia, PA; Current Medicine; 2002: 25-29.
16. Marshall GD. Allergic Bronchopulmonary Aspergillosis. In: *Atlas of Allergic Diseases*. Lieberman P.L., and Blaiss MS, ed. Philadelphia, PA: Current Medicine; 2002: 136-140.
17. Marshall GD. Idiopathic Anaphylaxis. In: *Current Therapy in Allergy, Immunology and Rheumatology*. Lichtenstein L, Busse W, Geha R. Missouri: Mosby; 2003.
18. Marshall GD. Allergen Immunotherapy in Asthma. In: *Current Review of Asthma*. Kaliner M, ed. Philadelphia, PA: Current Medicine; 2003: 207-213.
19. Marshall GD and Torres M. Anaphylaxis and serum sickness. In: *Conn's Current Therapy 05*; Rakel RE and Bope ET, ed. Philadelphia, PA: Elsevier Saunders; 2005: 863-866.
20. Ritter SY and Marshall GD. Chemokines and Their Receptors. In: *Atlas of Allergic Diseases, 2nd ed.* Lieberman PL and Blaiss MS, ed. Philadelphia, PA: Current Medicine; 2005: 25-29.
21. Behbod F and Marshall GD. Molecular Biology Techniques for the Investigation of Immune Activation and Immunologic Dysfunction. In: *Atlas of Allergic Diseases, 2nd ed.* Lieberman PL and Blaiss MS, ed. Philadelphia, PA: Current Medicine; 2005: 3-12.
22. Marshall GD. Allergic Bronchopulmonary Aspergillosis. In: *Atlas of Allergic Diseases, 2nd ed.* Lieberman PL and Blaiss MS, ed. Philadelphia, PA: Current Medicine; 2005: 136-140.
23. Torres M and Marshall GD. Anaphylaxis and Serum Sickness. In: *Conn's Current Therapy 06*. Rakel RE and Bope ET, ed. Philadelphia, PA: Elsevier Saunders; 2006: 915-917.
24. Marshall GD and Roy S. Stress and Allergic Diseases. *Psychoneuroimmunology, 4th ed.* Ader R and Felten DL eds. 2007: 99-824.
25. Marshall GD. Cytokines In: *Encyclopedia of Stress, 2nd ed.* Fink G, ed. New York: Academic Press; 2007: 692-69.
26. Marshall GD. Lungenerkrankungen, Atemwegse rkrankungen und atopische Erkrankungen. In: *Psychoendokrinologie und Psychoimmunologie*. Ehlert U and vonKanel R. (eds). Berlin: Springer; 2011: 313-324.

27. Marshall Jr GD. Early insights into the characteristics of asthma. *Landmark Papers in ALLERGY: SEMINAL PAPERS IN ALLERGY with expert commentaries*. Sheikh A, Platts-Mills T, Worth A, eds. Oxford, United Kingdom: Oxford University Press; 2013: 6-8.
28. Marshall Jr GD. Identifying Asthma triggers. *Landmark Papers in ALLERGY: SEMINAL PAPERS IN ALLERGY with expert commentaries*. Sheikh A, Platts-Mills T, Worth A, eds. Oxford, United Kingdom: Oxford University Press; 2013: 9-11.
29. Marshall GD and Leblanc SL. Unconventional theories and unproven methods in allergy. IN MIDDLETON'S ALLERGY: PRINCIPLES AND PRACTICE. Burks AW, Holgate ST, O'Hehir RE, Broide DH, Bacharier LB, Hershey GKK and Peebles RS., eds. Philadelphia , Elsevier 2020. 1599-1611.

EDITORIALS / PERSPECTIVES

1. Marshall GD and Davis F. Dusting off recombinant allergens (editorial). *Nat Biotechnol*. 1997 Aug; 15(8):718-719. PMID: 9255778
2. Lanier BQ and Marshall GD. Unanswered questions on omalizumab (Xolair) patient selection and follow-up. *Ann Allergy Asthma Immunol*. 2004; 92: 198-200. PMID: 14989386
3. Levy ML and Marshall GD. Authors' responsibilities: guidance for submission of manuscripts to medical journals. *Prim Care Respir J*. 2007 Aug; 16(4):203-4. PMID: 17665080
4. Marshall GD. One hundred volumes of the Annals—pausing to look back at the past, around at the present, and forward toward the future. *Ann Allergy Asthma Immunol*. 2008 Jun; 100(6):515. PMID: 18592811
5. Marshall GD. Identifying the stress-susceptible patient at risk for inflammatory diseases: an interdisciplinary approach. *Expert Rev Clin Immunol*. 2009 Mar; 5(2):119-121. PMID: 20477059
6. Marshall GD Jr. A centennial anniversary for allergen immunotherapy: pioneering immunomodulation for atopy and beyond. *Ann Allergy Asthma Immunol*. 2010 Nov; 105(5):325. PMID: 21055656
7. Byrd JS, Minor DS, Elsayed R and Marshall GD Jr. DPP-4 inhibitors and Angioedema: a cause for concern? *Ann Allergy Asthma Immunol*. 2011 May; 106(5):436-8. Epub 2011 Mar 22. PMID: 21530877
8. Marshall GD Jr. Annals 2012-the next steps. *Ann Allergy Asthma Immunol*. 2012; 108(1): 1-2. PMID: 30036913
9. Grayson MH and Marshall GD Jr. Ghosts in the annals: boo! *Ann Allergy Asthma Immunol*. 2012 Jul; 109(1):1-2. PMID: 22727147
10. Marshall GD Jr. Changing healthcare laws and their impact on US allergy-immunology Practice. *Ann Allergy Asthma Immunol*. 2014; 112(1):3. PMID: 24331383

11. Marshall GD Jr. Stress and allergic diseases-still under recognized and undertreated. *Ann Allergy Asthma Immunol.* 2014; 112(4): 275. PMID: 24679730.
12. Desai M, Oppenheimer J and Marshall GD Jr. Exhaled nitric oxide in asthma care: the conundrum continues. *Ann Allergy Asthma Immunol.* 2014; 113(6): 584-586. PMID: 25455521
13. Marshall GD Jr. Stress and immunity: bench to bedside approaches continue. *Ann Allergy Asthma Immunol.* 2015 Nov; 115(5):333-4. PMID: 26505930
14. Marshall GD Jr. Annals 2016-the Journey continues. *Ann Allergy Asthma Immunol.* 2016 Jan; 116(1):1. PMID: 26707768
15. Marshall GD Jr., Grayson MH, Ellis AK, Hsieh FH, Oppenheimer J, Desai M, Lieberman JA, Greenhawt M, Montanaro A, Bielory L. The year in review: the best of 2015 in the Annals. *Ann Allergy Asthma Immunol.* 2016 Jan; 116(1):2-8. PMID: 26707769
16. Marshall GD Jr, Bielory L, Walter Canonica G, Desai M, Ellis AK, Hsieh FH, Grayson MH, Greenhawt M, Lieberman JA, Montanaro A, Oppenheimer J. (2016) The year in review: The best of 2016 in the Annals. *Ann Allergy Asthma Immunol.* 2017 Jan; 118(1):4-9. PMID: 28007087
17. Oppenheimer JJ, Marshall GD Jr. Increasing our knowledge base of asthma. *Ann Allergy Asthma Immunol.* 2017 Dec; 119(6):476-479. PMID: 29223297
18. Marshall GD Jr. Welcome to the Annals 2018: New and improved? Time will tell. *Ann Allergy Asthma Immunol.* 2018 Jan; 120(1):1-2. PMID: 29273117
19. Marshall GD. Thymosin-induced immunoregulation: clinical potentials for allergy and asthma endotypes. *Expert Opin Biol Ther.* 2018 Jul; 18 (sup1):95-97. PMID: 29474790
20. Marshall GD Jr. Nonpharmacologic considerations in the management of allergies and asthma. *Ann Allergy Asthma Immunol.* 2018 Jul;121(1):1-2 PMID: 29802979
21. Marshall GD Jr. Challenges in allergy immunology practice: Solutions needed for persistent patient problems. *Ann Allergy Asthma Immunol.* 2018 Dec; 121(6):647-648. PMID: 30502819
22. Marshall GD Jr. Medical and scientific publishing in the 21st century: a search for equipoise. *Am J Med Sci.* 2019 Jan; 357(1):5-6. PMID: 30470435
23. Marshall GD Jr, Leung DYM, Ellis A, Nowak-Wegrzyn A, Castells M, Grayson M, Greenhawt M, Lieberman J, Oppenheimer J, Spergel J. The best of 2018 in the Annals of Allergy, Asthma, and Immunology: The Editors' Choices. *Ann Allergy Asthma Immunol.* 2019 Feb; 122(2):127-133. PMID: 30711033
24. Marshall GD Jr. Practicing allergy-immunology in the 21st century: Socioeconomic challenges. *Ann Allergy Asthma Immunol.* 2019 Apr; 122(4):353-354. PMID: 30954126
25. Marshall GD Jr. Pro-Con Debate. *Ann Allergy Asthma Immunol.* 2019 June; 122(6):565. PMID: 31171238

26. Marshall GD Jr. Evolving paradigms for asthma management. *Ann Allergy Asthma Immunol.* 2019 Oct; 123(4): 323-324. PMID 31586535
27. Grayson MH, Marshall GD Jr. Here come the omics! *Ann Allergy Asthma Immunol.* 2019 Dec;123(6)531. PMID 31761011
28. Marshall GD, Ellis A, Grayson M, Leung DYM, Lieberman J, Nowak-Wegrzyn A, Oppenheimer J. Best of 2019. *Ann Allergy Asthma Immunol.* 2020 Feb; 124(2):111-115. PMID 31790813
29. Marshall GD Jr. Psychological stress, immune dysfunction, and allergy: Opportunities for improved patient health. *Ann Allergy Asthma Immunol.* 2020 Oct;125(4):365-366. PMID: 32981592
30. Marshall GD Jr. The exposome and allergy: Discovering and applying new insights to a classical clinical tool. *Ann Allergy Asthma Immunol.* 2020 Dec;125(6):623. PMID: 33218453.
31. Marshall GD. Emerging clinical scientist paradigm: a call for spectrum recognition in team science. *J Investig Med.* 2021 Jan;69(1):4-6. Epub 2020 Dec 14. PMID: 33318055.

OTHER PROFESSIONAL COMMUNICATIONS

Selected Presentations

- | | |
|-------|---|
| 01/02 | <p>“Human Stem Cell Research-Rights of Society vs. Individuals”
 2002 Ethics in Medicine Lecture Series
 University of Texas Medical School
 Houston, Texas</p> |
| 01/02 | <p>“Stress and Immunity”
 Southwest Allergy Forum, Eastern Allergy Conference & Texas Allergy Asthma & Immunology Society Combined Meeting on Allergy/Asthma/Immunology (Plenary)
 Cancun, Mexico</p> |
| 01/02 | <p>“Stress and Immunity”
 Western Society of Allergy, Asthma & Immunology
 40th Annual Scientific Session (Plenary)
 Kohala Coast, Hawaii</p> |
| 02/02 | <p>“Psychoneuroimmunology and Human Inflammatory Disease” (Plenary)
 2002 University of Texas Medical School Research Retreat
 The Woodlands, TX</p> |
| 02/02 | <p>“Asthma and Leukotrienes”
 Internal Medicine Grand Rounds
 Wilford Hall Medical Center
 San Antonio, TX</p> |

- 02/02 "Stress, Immunity, and Health"
American Academy of Allergy, Asthma & Immunology
58th Annual Meeting (Workshop, Symposium Speaker)
New York, NY
- 03/02 "Asthma Update"
Medical Staff Grand Rounds
Citizens Medical Center
Victoria, TX
- 05/02 "Stress and Asthma-Mechanistic Basis for Therapy"
Allergy Grand Rounds
Thomas Jefferson University
Philadelphia, PA
- 06/02 "Stress, Immunity and Health"
Florida Allergy, Asthma & Immunology
Annual Meeting (Plenary)
Key Largo, Florida
- 07/02 "Asthma and Leukotrienes"
10th National Congress (Plenary)
Mexican College of Pediatric Allergy, Asthma & Pediatric Immunology
Morelia, Michuacan Mexico
- 08/02 "Stress, Immunity and Health"
European Academy of Allergology & Clinical Immunology
Annual Summer Course (Plenary)
Sofia, Bulgaria
- 08/02 "Stress and Asthma-Basic Mechanisms"
Alabama Society for Allergy, Asthma and Immunology
Annual Meeting (Plenary)
Destin, FL
- 09/02 "Asthma and Psychological Stress-Mechanistic Basis for Therapy"
5th International Congress of the International Society for
Neuroimmunomodulation (Plenary)
Montpellier, France
- 11/02 "Asthma, Leukotrienes and Inflammation"
Internal Medicine Grand Rounds
Veterans Administration Medical Center
Tucson, AZ
- 01/03 "Emerging Therapies in Treatment of Asthma" (Plenary)
Baylor College of Medicine

Houston, TX

- 01/03 “Effects of Stress on Immune System: Applications for Trauma Medicine”
Department of Surgery Grand Rounds
The University of Texas Health Science Center
Houston, TX
- 02/03 “Can Stress Really Kill You?”
Social Determinants of Health 2003 (Plenary)
The University of Texas School of Public Health
Houston, TX
- 03/03 “Stress and Asthma”
American Academy of Allergy, Asthma & Immunology (Workshop)
59th Annual Meeting
Denver, CO
- 07/03 “Internal and External Environmental Factors and Asthma”
Association of Asthma Educators (Plenary)
The Allergy-Asthma Connection
Dallas, TX
- 08/03 “Stress and Asthma” (Plenary)
“Non allergic role of IgE in Inflammatory Diseases” (Plenary)
California State Allergy, Asthma and Immunology Society
Napa, California
- 08/03 “Asthma – Inflammatory Mediators as Targets for Intervention” (Plenary)
European Academy of Allergology and Clinical Immunology
Summer School Lithuania, Allergy
Vilnius, Lithuania
- 09/03 “Stress and Asthma”
Grand Rounds
Mayo Clinic
Phoenix, AZ
- 11/03 Jean Chapman Lectureship (plenary speaker)
American College of Allergy, Asthma and Immunology
National Meeting
- 01/04 Western Allergy Society (plenary speaker)
Kona, Hawaii
- 02/04 San Antonio Allergy Society (Plenary)
San Antonio, Texas

- 03/04 "Epidemiology and Natural History of Asthma: The TENOR Study"
American Academy of Allergy, Asthma and Immunology
Plenary session moderator
Dinner Symposium moderator and speaker
- 06/04 Grand Rounds
Department of Internal Medicine
University of Kansas Medical School
Kansas City, KS
- 06/04 "Elevated IgE in Non allergic Inflammatory Diseases" (Plenary)
Case Management Society of America
Nashville, TN
- 07/04 Keynote Address
"Can Stress Kill You? A Clinical Immunologist's Perspective" (Plenary)
"Elevated IgE in Non allergic Inflammatory Diseases" (Plenary)
Intermountain West Allergy Association
Sun Valley, ID
- 08/04 "Can Stress Kill You? A Clinical Immunologist's Perspective" (Plenary)
"Elevated IgE in Non allergic Inflammatory Diseases" (Plenary)
Argentinian Allergy and Clinical Immunology Association
XXVII National Meeting
Buenos Aires, Argentina
- 09/04 Pediatric Grand Rounds
Brown University Medical School
Providence, Rhode Island
- 10/04 "Target Cells and Mediator Response: Influence of Stress"
NIH/American Thoracic Society Workshop
Washington, DC
- 11/04 Daniel Goodman Lectureship
"Complementary and Alternative Medicine I Allergy and
Asthma Care: CAM Interventions Using Psychological Factors" (Plenary)
American College of Allergy Asthma & Immunology
Boston, MA
- 12/04 Internal Medicine Grand Rounds
The University of Mississippi Medical Center
Jackson, MS
- 01/05 "The Role of IgE in Allergic Asthma: Rationale for Therapy"
Visiting Professor
Department of Internal Medicine (Pulmonology)
George Washington University School of Medicine

Washington, DC

- 02/05 "Immunological Principles of Asthma Inflammation" (Plenary)
Asthma Summit
American Lung Association – Mississippi Affiliate
Jackson, MS
- 03/05 "Impact of Psychological Stress on Asthma: From Bench to Bedside" (Plenary)
American Psychosomatic Society
Vancouver, BC
- 03/05 "Do We Really *Outgrow* Asthma? Natural History with Implications for Intervention and Prevention"
Medicine Grand Rounds
Howard University Medical School
Washington, DC
- 03/05 Visiting Professor
Allergy-Immunology Training Program
Walter Reed Army Medical Center
Bethesda, MD
- 06/05 "Stress and Allergic Diseases: Translational Model for Inflammation Research"
Pediatric Grand Rounds
University of Kansas Medical School
Kansas City, KS
- 06/05 "The Allergic Patient as a Model for Stress Induced Inflammatory Diseases" (Plenary)
Presidential Invited Lecturer Psychoneuroimmunology Research Society
12th Annual Meeting
Denver, CO
- 10/05 "Do We Really *Outgrow* Asthma? Natural History with Implications for Intervention and Prevention"
Internal Medicine Grand Rounds
James H. Quillen College of Medicine
East Tennessee State University
Johnson City, TN
- 11/05 "Immunotherapy for Asthma"
ACAAI Visiting Professor
LSU Medical School
Shreveport, LA
- 04/06 "Immune Consequences of Stress"
Eighth Annual Allergy/Asthma Conference
Medical University of Ohio
Toledo, OH

- 09/06 “Can Stress REALLY Make You Sick? The Allergic Patient as a Translational Model Linking Mechanisms and Clinical Outcomes” (Plenary)
 “Do We Really Outgrow Asthma? Natural History with Implications for Intervention and Prevention” (Plenary)
 Asthma & Allergy Foundation of America Annual Meeting
 Anchorage, AK
- 10/06 “Bioregulation of IgE Activity: Therapeutic Potentials for Allergic and Nonallergic Diseases”
 Greater DC Asthma, Allergy, and Immunology Society
 Bethesda, MD
- 11/06 Jaros Memorial Lectureship
 “Immunomodulation in Dermatology: New Frontiers for the Allergist-Immunologist” (Plenary)
 “Effects of Orotic Acid and Glutathione on Nasal Symptoms in Seasonal Allergic Rhinitis Patients” (Symposium)
 “Critical Evaluation of a Submitted Manuscript” (Workshop)
 American College of Allergy, Asthma and Immunology
 Philadelphia, PA
- 02/07 “New Asthma Guidelines”
 Pri-Med CME Lecture
 Charlotte, NC
- 02/07 “Ethical Safeguards in Clinical Research – What Every Clinician Should Know: Safeguarding the Literature”
 “New Allergens Worldwide: The Ragweed Example”
 American Academy of Allergy, Asthma and Immunology
 Symposium speaker
 San Diego, CA
- 04/07 “Stress and Asthma, Mechanistic Basic to Improve Patient Care”
 San Diego Allergy Society
 San Diego, CA
- 05/07 NASA Workshop on Public Health Uses for Satellites (Plenary)
 Washington, D.C.
- 06/07 “Stress and Asthma: Mechanisms for Intervention” (Plenary)
 Louisiana Society of Allergy, Asthma & Immunology
 34th Annual Meeting
 New Orleans, Louisiana
- 08/07 “Do we Really Outgrow Asthma? Natural History with Implications for Intervention and Prevention”
 Medicine Grand Rounds
 Oregon Health & Science University
 Portland, Oregon

- 09/07 "Pathophysiology of Asthma: New Findings to Improve Patient Care"
Northwest Society of Allergy Nurses
Welches, Oregon
- 11/07 "The Anatomy and Physiology of a Good Scientific Paper. How to Write and Review Effectively"
American College of Allergy, Asthma and Immunology
Dallas, Texas
- 03/08 "In vitro Effects of Stress Hormones on regulatory T cell Subpopulations"
American Psychosomatic Society 66th Annual Meeting
Baltimore, Maryland
- 03/08 "Identifying Stress Susceptible Populations through Genetic and Immune Mechanisms"
American Academy of Allergy, Asthma and Immunology
Philadelphia, PA
- 04/08 "Effects of Stress on Asthma and the Immune Response"
Oklahoma Allergy & Asthma Society Annual Meeting
Tulsa, Oklahoma
- 05/08 "Future of Allergy Physicians Workforce"
Allergy & Asthma Network Mothers of Asthmatics (AANMA) Advocacy Conference & Asthma Awareness Day
Capitol Hill 2008
Arlington, VA
- 05/08 "Effects of an Acute Laboratory Stressor on Regulatory T-Cell (Treg) Levels in Normal Human Peripheral Blood Mononuclear Cells (PBMC)"
Psychoneuroimmunology Research Society (PNIRS)
Madison, Wisconsin
- 06/08 "Differential effect of acute and chronic stress on immune parameters"
XXVII EAACI 2008
Barcelona, Spain
- 06/08 "Stress Immunity and Asthma: Cellular and Molecular Approaches to Identifying the Susceptible"
Academy of Behavioral Medicine Research (ABMR)
Calgary, Canada
- 09/08 "Stress and Asthma"
Long Island Allergy & Asthma Society
Montauk, LI, NY
- 10/08 "Stress, Immunity and Asthma: Translational Mechanisms for Clinical Applications"
Swedish Association for Allergy (SFFA)
Stockholm, Sweden

- 11/08 “Identifying the Stress Susceptible Patient: Immune & Genetic Perspectives”
American College of Allergy, Asthma and Immunology
Seattle, WA
- 12/08 “Psychological Stress and Allergy/Asthma Risk in Children: Pathophysiology and Potentials for Prophylaxis and Intervention”
ACAAI Visiting Professor
Department of Pediatrics
Brown University School of Medicine
Providence, RI
- 1/09 “Stress & Chronic Disease” (Plenary)
What Should Our Asthma “Inflamm-O-Meter” Be? (Plenary)
Western Society of Allergy, Asthma and Immunology (WSAAI)
Annual Scientific Session
Maui, Hawaii
- 2/09 “Developing Research in Clinical Faculty” (Plenary Session Moderator)
Association of Professors of Medicine (APM)
San Francisco, CA
- 3/09 “Identifying the Stress Susceptible Individual: Molecular, Immune & Psychological Approaches”
and “Can Stress Really Kill You”
ACAAI Visiting Professor
Department of Family Practice Grand Rounds
Department of Internal Medicine Grand Rounds
University of Texas HSC
Houston, TX
- 5/09 “Human Regulatory T Cell Subpopulations: Normal and Inflammatory Disease Associated Immunophysiology”
Department of Rheumatic & Immunologic Diseases
Cleveland Clinic
Cleveland, OH
- 5/09 “Allergies & Asthma in Pediatrics and Adults” (CME Presentation)
Grenada Lake Medical Center
Grenada, MS
- 7/09 “The Hygiene Hypothesis and Asthma Care: Exploring Internal as Well as External Environmental Control (Keynote)”
Association of Asthma Educators 2009 Annual Conference
New Orleans, LA
- 11/09 “The Anatomy and Physiology of a Good Scientific Paper: How to Write and Review Effectively”
“Chronic Cough in Adults” (Plenary)
American College of Allergy, Asthma and Immunology, Annual Scientific Meeting

Miami, Florida

- 12/09 "Stress and Severe Asthma"
World Allergy Congress
Buenos Aires, Argentina
- 3/10 "Biotanical Products as Inflammatory/Immune Modulators: Perils and Potentials defined by Mechanisms"
Nutracon Conference 2010
Anaheim, CA
- 5/10 "Serum IgE as a Clinical Marker in Non-Allergic Inflammatory Diseases", "Stress and Immune Dysfunction: Clinical Implications of Maternal Stress on Incidence and Severity of Childhood Atopy and Asthma" and "Identifying the Stress-Susceptible Patient: Genetic, Molecular and Immune Considerations"
Medical College of Wisconsin, Children's Hospital of WI
Wauwatosa, WI
- 10/10 "Role of dendritic cells in allergen tolerance"
International Conference on Specific Immunotherapy State of the art and perspectives
Taormina, Sicily, Italy
- 11/10 "The Secrets of Getting Published"
American College of Allergy, Asthma and Immunology, Annual Scientific Meeting
Phoenix, AZ
- 2/11 "Psychological Stress, Immunoregulation and Asthma: Cellular and Molecular Approaches to Identify Clinical Susceptible Patient"
SSCI Regional Meeting
New Orleans, LA
- 3/11 "Asthma, Stress, and Immune Response"
International Update of Allergic Diseases
San Francisco, CA
- 8/11 "Chronic Cough"
Mississippi Lung Summit
Jackson, MS
- 9/11 "Stress, Immunity and Asthma: Identifying the Susceptible Patients"
Southeastern Allergy, Asthma and Immunology Society
Point Clear, AL
- 9/11 "Asthma in the South: A Survivor's Guide"
Mississippi Pharmacists Association
Jackson, MS

- 10/11 “The Allergic March: Internal & Environmental Influences”
 Pediatric Grand Rounds
 “IgE as a marker for nonallergic immune dysregulation”
 A/I Fellows & Faculty
 The 2011 Donald Fournier Lecture Program
 Louisiana State University Health Sciences Center
 Shreveport, LA
- 11/11 “Psychological Stress and Asthma Risk – Identifying Patient Susceptibility”
 University of Texas Health Science Center
 Department of Internal Medicine Grand Rounds
 Houston, TX
- 11/11 “Is There a Difference in Potency of Nasal Corticosteroids: Does Receptor Affinity Equate to Efficacy?”
 American College of Allergy, Asthma and Immunology, Annual Scientific Meeting
 Boston, MA
- 2/12 “Psychological Stress and Asthma Risk: Clinical and Molecular Approaches to Identifying Individual Susceptibility”
 Keynote Address
 Department of Internal Medicine Research Day
 Louisiana State University School of Medicine
 New Orleans, LA
- 7/12 “Stress, Immunity and Health: Integrative Approach to Managing Clinical Risk”
 UTMB/NASA-JSC Aerospace Medicine Grand Rounds
 Universities Space Research Association
 The University of Texas Medical Branch
 Houston, TX
- 8/12 “Integrative Approach to Lung Disease: Treating the Mind and the Spirit as well as the Lungs”
 Mississippi 2012 Lung Summit
 Jackson, MS
- 11/12 “Integrative Medicine for the Allergist-Immunologist-Why Should We Care?”
 American College of Allergy, Asthma and Immunology, Annual Scientific Meeting
 Anaheim, CA
- 2/13 “Stress Management and Asthma Care: Why Should It Matter?”
 “Managing Stress as a Therapeutic Option for Allergy Patients”
 “Integrative Medicine Should Be a Component of Allergy/Immunology Practice”
 American Academy of Allergy, Asthma and Immunology
 Annual Meeting (Workshop, Symposium Speaker)
 San Antonio, TX
- 4/13 “Asthma risk as a result of various forms of Psychological stress?”
 VI World Asthma, Allergy & COPD Forum (Plenary)

London, UK

- 10/13 “Stress, Immunity and Health: Applications for Allergists-Immunologists”
Department of Allergy & Immunology Grand Round
Winthrop University Hospital
Mineola, NY
- 11/13 “Hormonal Influence on Atopy and Autoimmune Disease” (Plenary)
“Stress and the Immune System”
“Integrative Allergy: CAM Resources and References for the Allergist”
American College of Allergy, Asthma and Immunology
Annual Scientific Meeting
Baltimore, MD
- 4/14 “How to address barriers to make effective education”
“Immune mechanisms in asthma based on gender and race therapeutic implications”
2014 Scientific Programme of the World Congress of Asthma
Mexico City, Mexico
- 4/14 “Stress and Asthma Risk: Implications for optimal Management”
Department of Pediatrics Grand Rounds
Rhode Island Hospital
Providence, RI
- 4/14 “Integrative approach to management of stress in allergy and asthma patients” (Plenary)
VII World Asthma, Allergy & COPD Forum
New York Hilton Hotel
New York, NY
- 7/14 “Psychological Stress and Immunity: Applications for Allergy-Immunology”
“Integrative Medicine for Allergy and Asthma Patients”
The California Society of Allergy, Asthma and Immunology (CSAAI)
A MidSummer Night’s Wheeze
Westin St. Francis
San Francisco, CA
- 8/14 “Integrative Medicine Approach to Asthma Care: Treating the Whole Patient”
Mississippi 2014 Lung Summit
Jackson, MS
- 9/14 “Immune Mechanisms in Allergy and Asthma Based upon Gender, Therapeutic Implications”
“Therapeutic Stress Management for Allergy and Asthma, Is it Worthwhile?”
2014 Southeastern Allergy, Asthma & Immunology (SEAAI) Conference at Wild Dunes
Isle of Palms, SC
- 11/14 “P-4 Challenges of Allergy and Asthma Drug Therapies in Seniors”
“Meet the Professor Breakfast: M4-Epigenetics”
American College of Allergy, Asthma and Immunology

- Annual Scientific Meeting
Atlanta, GA
- 11/14 “Hot Topics in Allergy 2015: The Editor’s View”
Highlights in Allergy and Respiratory Diseases
Starhotels President
Genoa, Italy
- 3/15 “Red Meat, Ticks and Food Allergy, Possible Role for Galactose-alpha-1, 3-galactose (Alpha Gal)”
Biological sciences Department Seminar
University of Southern Mississippi
Hattiesburg, MS
- 8/15 “Red Meat, Ticks and Food Allergy, Possible Role for Galactose-alpha-1, 3-galactose (Alpha Gal)”
Annual Meeting of the Association of Medical Laboratory Immunologists (AMLI)
Hyatt Regency New Orleans, LA
- 10/15 “Integrative Medicine for Internists: Comprehensive Approach to the Whole Patient”
East Tennessee State University
Quillen College of Medicine
Department of Internal Medicine Grand Rounds
Johnson City, TN
- 10/15 “Integrative Medicine for Internists: Comprehensive Approach to the Whole Patient”
SSCI Visiting Professor Program
University of Central Florida College of Medicine
Health Sciences Campus at Lake Nona
Grand Rounds
Orlando, FL
- 11/15 “M5 High Eos and /or High IgEs: How Do You Evaluate?”
Meet the Professor Breakfasts
American College of Allergy, Asthma and Immunology, Annual Scientific Meeting
San Antonio, TX
- 12/15 “Integrative Medicine for Internist: Caring for the Whole Patient”
University of Texas Health Science Center
Department of Internal Medicine Grand Rounds
The Walter M. Kirkendall, MD & Margaret K. Kirkendall Annual Endowed Lecture Series
Houston, TX
- 1/16 “Integrative Medicine and Dentistry: New Opportunities to Improve Health”
University of Mississippi Medical Center, School of Dentistry
The 61st Southern Conference of Dental Deans and Examiners
Jackson Marriott Jackson, MS
- 3/16 “Asthma COPD Overlap Syndrome”
UMMC Family Medicine Talk

Hilton Hotel Convention Center
Jackson, MS

- 9/16 "Spirituality in Medicine: Applications for the Practicing Allergist-Immunologist"
Southeastern Allergy, Asthma, and Immunology Annual Meeting
Miramar Beach, FL
- 9/16 "Atopy and Cancer Risk"
Mississippi Cancer Registry 2016 Annual Fall Educational Workshop
Jackson, MS
- 11/16 "Stress, Mindfulness, and the Allergic Patient"
American College of Allergy, Asthma and Immunology, Annual Scientific Meeting
San Francisco, CA
- 11/16 "Integrative Medicine in the Allergist's Office: Science and in Practice"
American College of Allergy, Asthma and Immunology Annual Scientific Meeting (Workshop,
Symposium)
San Francisco, CA
- 11/16 "Management of Asthma: Beyond Just Medications"
American College of Allergy, Asthma and Immunology Annual Scientific Meeting (Workshop,
Symposium)
San Francisco, CA
- 12/16 "Stress and Immune System"
World Allergy Organization International Scientific Conference (Workshop)
Jerusalem, Israel
- 01/17 "The Psychoneuroimmune Components of Immunity in Allergy and
Asthma Care"
Western Society of Allergy, Asthma, & Immunology Annual Scientific Meeting
Big Island, HI
- 02/17 "An Integrative Approach to Allergy and Asthma Care"
Western Society of Allergy, Asthma, & Immunology Annual Scientific Meeting
Big Island, HI
- 02/17 "SNPs as Biomarkers to Predict Psychological Stress-Associated Immune Changes"
Southern Society for Clinical Investigation Southern Regional Meeting
New Orleans, LA
- 03/17 "Psychological stress, environmental factors and the immune response: impact for space flight
and various diseases including allergic rhinitis, asthma, cancer and diabetes."
NASA 2nd Annual ESA Topical Team Workshop
Rome, Italy
- 06/17 "Finding Balance"

ACAAI Physician Well-Being Task Force Webinar

- 07/17 "Stress and Immunology/Allergy"
Aspen Allergy Conference
Aspen, CO
- 08/17 "Current Strategies in Asthma Care: Beyond the NAEPP Guidelines"
American Lung Association Lung Force Expo
Clyde Muse Center-Hinds Community College-Rankin Campus
Pearl, MS
- 9/17 "The Connection between Cancer and Allergy/Immunology"
Southeastern Allergy, Asthma & Immunology Society 2017 Annual Meeting
Greensboro, GA
- 10/17 "Biologics: What We Know and Don't Know"
"Integrative Allergy: Evidence-based Integrative Medicine in Allergy Practice" (Workshop)
"ACAAI in Today's Healthcare Environment"
"Integrative Allergy: Tools for Taking an Integrative Medicine History and Resources"
"Current Controversy: Alternative Therapies in Asthma & Allergy Mngmt,
Vitamin D, Fish Oil & Prebiotics/Probiotics
American College of Allergy, Asthma & Immunology Annual Scientific Meeting
Boston, MA
- 11/17 Potentials for Thymosin Peptides in the Treatment of Severe Asthma Endotypes
Fifth International Symposium on Thymosins
Washington, DC
- 02/18 "Use of Biologics to Treat Inflammatory Diseases"
Internal Medicine Grand Rounds
The University of Mississippi Medical Center
Jackson, MS
- 6/18 "Vitamin Therapy and the Allergic Patient"
John Salvaggion Memorial Symposium
Louisiana Society of Allergy, Asthma, & Immunology
New Orleans, LA
- 7/18 Keynote Speaker
Building with Biology Forum
The University of Southern Mississippi
Hattiesburg, MS
- 8/18 "Biologics for Allergic Diseases: Perils, Pitfalls and Potentials for Patients and
Providers"
Tennessee Society of Allergy, Asthma and Immunology
Pigeon Forge, TN

- 9/18 "Stress and Immunity- A Precision Medicine-Based Assessment"
Los Angeles Society of Allergy, Asthma, & Clinical Immunology Fall Symposium
Los Angeles, CA
- 11/18 "The Importance of Addressing Psychological Aspects of Integrative Medicine for
Patient and Practitioner"
"Academic and Community Allergists-Immunologists: A Critical Partnership"
(Bela Schick Lecture)
American College of Allergy, Asthma & Immunology Annual Scientific Meeting
Seattle, WA