Coming Together for DRESS Syndrome 2022 Global Conference

November 5th & 6th, 2022

MEETING PROGRAM

Meeting Chairs



Roni P. Dodiuk-Gad

Head, Inflammatory and Autoimmune Skin Diseases Unit, Dermatology Department, Emek Medical Center, Israel

Assistant Professor- Status Only, Department of Medicine, University of Toronto, Canada



Rambi Cardones MD, MHSc

Chief of Dermatology, Kansas University Medical Center

Message from the Chairs

Elizabeth J. Phillips

MD, FIDSA, FAAAAI

Professor of Medicine.

Dermatology, Pathology, Microbiology

Professor of Pharmacology

John A. Oates Chair in Clinical

Research.

Center for Drug Safety and Immunology, Vanderbilt University Medical Center

We would like to welcome you all to the inaugural DRESS Syndrome 2022 meeting: "Coming Together for DRESS Syndrome". Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS), also known as Drug-Induced Hypersensitivity Syndrome (DHS), is a severe T-cell mediated reaction that affects one in every 1,000 - 10,000 medication exposures. Certain antibiotics such as vancomycin, trimethoprim-sulfamethoxaole, minocycline and aromatic anti-epileptic drugs and allopurinol are particularly associated. Over two days, this meeting will unite the DRESS Syndrome community with researchers and healthcare workers globally to bring together over 300 participants from six continents. On November 5th, on day one, there is a community workshop which will be an interactive session joining the community with DRESS experts to identify research gaps and set priorities and goals. In the spirit of diversity, equity and inclusion, there will be an opening plenary to discuss challenges in DRESS diagnosis and management in skin of varying pigmentation and skin tones. A poster hall will feature 33 posters presented by early investigators. day two will include several important topics including clinical and risk assessment, diagnosis, management,

DRESS 2022 - Meeting Program

mechanisms, long-term complications, regulation, the Electronic Health Records, and new drug causes. Virtual booths from the HHV-6 and DRESS Syndrome Foundations will be available with educational materials, and a virtual lounge will draw together community members and DRESS Syndrome medical experts. I would like to particularly thank Tasha Tolliver and Nancy Szakacsy from the DRESS Syndrome Foundation for their tireless dedication in supporting this meeting and DRESS Syndrome community. I would like to thank my co-chairs Dr. Roni Dodiuk-Gad and Dr. Rambi Cardones as well as our community members and esteemed faculty members for their very generous donation of their time to this meeting. Many thanks to colleagues and staff at the Center for Drug Safety and Immunology at Vanderbilt University Medical Center for their diligence and hard work. Particular thanks to the DRESS Syndrome Foundation, the Izzy McKinney Foundation, and the HHV-6 Foundation for their donations that made this meeting possible. Please take full advantage of everything that this virtual meeting has to offer and please join us in raising awareness, teaching and learning for DRESS Syndrome. Wishing you all a wonderful meeting.

Please do not hesitate to contact us (email: <u>drugsafetyresearch@vumc.org</u>).

DRESS Syndrome 2022 General Information

Continuing Medical Education (CME)

The Vanderbilt Office for Continuing Professional Development has approved the meeting for a maximum of 17.5 AMA PRA Category 1 Credit(s)TM. Instructions on how to obtain CME credit will be on the website and given throughout the meeting.

Funding Acknowledgements

This conference was funded by <u>DRESS Syndrome Foundation</u>, <u>HHV-6 Foundation</u>, Izzy McKinney Foundation.

Release

Registration to attend or participate in DRESS Syndrome 2022 meeting constitutes an agreement by the registrant to the meeting organizers' use and distribution (both now and in the future) of the registrant or attendee's image or voice in photographs, videotapes, electronic reproductions and audio tapes of such events and activities, unless expressly communicated in writing to the meeting organizers at drugsafetyresearch@vumc.org

Feedback

Please don't forget to fill out the evaluation and feedback for the meeting. A REDCap questionnaire link will be emailed to all registrants.

Other Questions

drugsafetyresearch@vumc.org

Scientific Program

November 5th times listed are in US CDT, 5 hours behind UTC.

November 6^{th} times listed are in US CST, 6 hours behind UTC.

Saturday, November 5th, 2022 (Day 1)

9:00 AM – 12:00 PM

Arrivals, Virtual Lounge Networking, Poster viewing

12:00 PM – 1<mark>2:15 P</mark>M

Welcome

Elizabeth Phillips, MD (USA), <u>Roni Dodiuk-Gad</u>, MD (Israel), and <u>Rambi Cardones</u>, MD, MA (USA)

12:15 PM – 2:00 PM

DRESS Syndrome Foundation and Community Members Forum: *Priority Areas to Move the Field Forward*

Interactive discussion between healthcare and patient communities on important DRESS topics:

- Prevention and Risk (<u>Tasha Tolliver</u> / <u>Neil Shear</u>)
- DRESS in Children (Ashley Berryhill / Allison Norton)
- Long-term Mental Health (<u>Nancy Szakacsy</u> / <u>Roni Dodiuk-Gad</u>)
- Long-term Physical Health (Joanne Foy / Rambi Cardones)
- Earlier Diagnosis (Kirt Thibodeaux / Alina Bridges)
- Better Treatments (Jenna Pehrson / Ben Kaffenberger)

DRESS Syndrome Foundation: <u>Tasha Tolliver</u> (USA), <u>Nancy Szakacsy</u> (USA)

Community Representatives: Ashley Berryhill, Joanne Foy, Jenna Pehrson, Kirt Thibodeaux

DRESS Medical Experts: <u>Neil Shear</u>, MD, FRCPC, FACP, FCDA (Canada), <u>Alina Bridges</u>, DO, FAAD (USA), <u>Ben Kaffenberger</u>, MD, MS (USA), <u>Allison Norton</u>, MD (USA), <u>Roni</u> <u>Dodiuk-Gad</u>, MD (Israel), and <u>Rambi Cardones</u>, MD, MA (USA)

2:00 PM - 3:45 PM

Poster Viewing & Networking

3:45 PM - 4:00 PM

Introduction <u>Elizabeth Phillips</u>, MD (USA), <u>Roni Dodiuk-Gad</u>, MD (Israel), and <u>Rambi Cardones</u>, MD, MA (USA)

4:00 PM – 5:00 PM

Opening Plenary Session Moderators: <u>Elizabeth Phillips</u>, MD (USA), <u>Rambi Cardones</u>, MD, MA (USA)

DRESS and Diversity: Challenges in Diagnosing DRESS and Other Immune Mediated Adverse Drug Reactions in Skin of Color

Helena Pasieka, MD, PhD (USA)

5:00 PM - 7:00 PM

Poster Viewing & Networking

End of Day 1

Sunday, November 6th, 2022 (Day 2)

7:00 AM - 8:00 AM

Arrivals, Virtual Lounge Networking, Poster viewing

8:00 AM - 8:15 AM

Introduction

Elizabeth Phillips, MD (USA), Roni Dodiuk-Gad, MD (Israel), and Rambi Cardones, MD, MA (USA)

8:15 AM – 10:30 AM

SESSION 1: Clinical Presentation, Risk Assessment, and Networks Moderators: <u>Daniela Kroshinsky</u>, MD (USA), <u>Caroline Nelson</u>, MD (USA)

8:15 AM-8:30 AM	Severity Scores and Risk Stratification	Riichiro Abe, MD, PhD (Japan)
8:30 AM-8:45 AM	Clinical Presentation and Management of DRESS/DIHS – What's New in 2022	Roni Dodiuk-Gad, MD (Israel)
8:45 AM-9:00 AM	Experience from Society of Hospital Dermatologists	Rambi Cardones, MD (USA)
9:00 AM-9:15 AM	DELPHI Study 2022	Charlotte Bruggen, MD, PhD (Switzerland)
9:15 AM-9:30 AM	Pediatric Perspective	<u>Irene Lara-Corrales,</u> MD, MSc (Canada)
9:30 AM-10:30 AM	Interactive Discussion for Priority Areas in Clinical and Epidemiological Science of DRESS to Move the Field Forward	

10:30 AM - 12:00 PM

Poster Viewing & Networking

12:00 PM - 2:30 PM

SESSION 2: Tools for Prediction and Prevention of DRESS Moderators: <u>Kathy Chang</u>, PhD (Canada), <u>Neil Shear</u>, MD, FRCPC, FACP, FCDA (Canada)

12:00 PM-12:15 PM

In Vivo Tools- Skin Testing into Implicating a Culprit Drug and Defining Cross-reactivity Annick Barbaud, MD, PhD (France)

12:15 PM-12:30 PM	Using genomics panels for DRESS prevention	Sir Munir Pirmohamed MB ChB (Hons), PhD, FRCP, FRCP(E), FBPhS, FFPM, FMedSci (United Kingdom)
12:30 PM-12:45 PM	Moving to Integrated Models of Diagnosis and Management in Complex Treatment Populations: The South African Experience	Jonny Peter, MB ChB, PhD (South Africa)
12:45 PM-1:00 PM	Sequential Oral Challenges in Patients with DRESS Associated with Anti- tuberculous Agents	Ranks Lehloenya, MMChB, FC Derm (South Africa)
1:00 PM-1:15 PM	Exploring the potential for molecular diagnostics	Michael Ardern-Jones, BSc, MBBS, DPhil, FRCP (United Kingdom)
1:15 PM-1:30 PM	In Vitro/Ex Vivo Tools: Insights into Implicating a Culprit Drug and Cross Reactivity	<u>Ana Copaescu,</u> MD, FRCPC (Canada)
1:30 PM-1:45 PM	Special Considerations for DRESS/DIHS in Immunocompromised Populations	<u>Jason Trubiano</u> , MBBS, PhD (Australia)
1:45 PM-2:30 PM	Discussion for Priorities to Move the Field Forward	

2:30 PM – 2:45 PM

Break

2:45 PM – 4:30 PM

SESSION 3: Insight into Viral Reactivation, Long-term Complications, and Immunopathogenesis

Moderators: Surbhi Sharma, PhD (USA), Eric Mukherjee, MD, PhD (USA)

2:45 PM-3:00 PM	What's New in Kno Reactivation, HHV-	U	<u>Vincent Decamps, MD, PhD</u> (France)
3:00 PM-3:15 PM	Histopathological II Diagnosis	nsights into D	<u>Alina Bridges</u> , DO, FAAD (USA)

3:15 PM-3:30 PM	Specific T Cell Populations and Immunopathogenesis	Sherrie Divito, MD, PhD (USA)
3:30 PM-3:45 PM	Hypersensitivity reactions to IL-1 and IL-6 inhibitors in Still's Disease	<u>Vivian Saper,</u> MD (USA)
3:45 PM-4:00 PM	Mechanisms of reactions to IL-1 and IL- 6 inhibitors.	Elizabeth Mellins, MD (USA)
4:00 PM-4:15 PM	Risk Factors for Developing Severe DRESS/DIHS – Associated Complications and Sequelae	<u>Yoshiko Mizukawa,</u> MD (Japan)
4:15 PM-4:30 PM	Early Diagnostic and Prognostic Biomarker for DRESS	<u>Hideo Asada, MD, PhD (Japan)</u>
4:30 PM-5:00 PM	Roundtable Discussion: Prioritizing Studies on Mechanisms and Immunopathogenesis	

5:00 PM - 6:30 PM

SESSION 4: Regulation, EHR, and New Drug Causes Moderators: <u>Kim Blumenthal</u>, MD, MSc (USA), <u>Jason Kwah</u>, MD (USA)

5:00 PM-5:15 PM	Pharmacovigilance and DRESS/DIHS	<u>Melissa Reyes</u> , MD, MPH, DTMH (USA)
5:15 PM-5:30 PM	Mining the EHR for DRESS/DIHS	Li Zhou, PhD (USA)
5:30 PM-5:45 PM	DRESS/DIHS Associated with Immunomodulatory Drugs	<u>Alina Markova</u> , MD (USA)
5:45 PM-6:30 PM	Roundtable Discussion and Closing Comments: Next steps for International Priorities – Moving the field forward	

End of Meeting

Biographies – Meeting Chairs



Elizabeth Phillips, MD, FIDSA, FAAAAI

Professor of Medicine, Pathology, Microbiology Professor of Pharmacology John A. Oates Chair in Clinical Research Center for Drug Safety and Immunology Vanderbilt University Medical Center

Dr. Phillips is a world leader in translational approaches to drug hypersensitivity and has pioneered the discovery and implementation of immunogenomic predictors, immunopathogenesis and novel

technologies to improve the safety of drugs into clinical practice. She has a clinical practice dedicated to drug hypersensitivity and has led clinical and research programs in SJS/TEN and other severe immunemediated adverse drug reactions across different medical systems for over 25 years. She is PI on NIH funded research to define genetic and other markers to lead to prediction and prevention earlier diagnosis and to define the most effective treatment. She has been a great advocate of integration and engagement of the community in science. In addition to being a Chair of SJSTEN 2021 she also founded and chaired the 2017 and 2019 meetings.



Roni Dodiuk-Gad, MD

Head, Inflammatory and Autoimmune Skin Diseases Unit, Dermatology Department, Emek Medical Center, Israel Assistant Professor- Status Only, Department of Medicine, University of Toronto, Canada

Dr. Dodiuk-Gad is a clinician, researcher, educator, and opinion leader in Dermatology on the topics of adverse cutaneous drug reactions and Darier disease. She mentors students and residents both in Israel and Canada and leads several research teams focusing specifically on these

topics. Dr. Dodiuk-Gad graduated from the Technion and conducted clinical and research fellowships in the University of Toronto. She is currently an Assistant Professor in both these institutes, the Head of the Dermatology Program Bruce Rappaport Faculty of Medicine, Technion - Institute of Technology, Israel and the Head of Inflammatory and Autoimmune Skin Diseases Unit, Dermatology Department, Emek Medical Center, Israel. Dr. Dodiuk-Gad initiated several global educational platforms in Dermatology, and she is engaged in major international collaborations.



Rambi Cardones, MD, MHSc *Chief of Dermatology, Kansas University Medical Center*

Dr. Adela Rambi G. Cardones is the Dermatology Division Chief and is a Tenured Professor at the University of Kansas Medical Center. She completed a research fellowship in immunology at the National Institutes of Health, in Bethesda MD, and her residency training in Dermatology at Duke University Medical Center. She received her Masters' Degree in Clinical Research through the Duke-NIH Clinical Research Training Program. She was the Director of Inpatient

Dermatology at Duke University from 2010-2022, during which she also attained the rank of Tenured Associate Professor in the Department of Dermatology. Dr. Cardones has interest and expertise in Complex Medical Dermatology and Immunodermatology, including severe cutaneous drug reactions, autoimmune and fibrosing disorders, and graft-versus-host disease.

Biographies – Academic Faculty



Riichiro Abe, MD, PhD

Professor and Chair, Division of Dermatology Niigata University Graduate School of Medical and Dental Sciences

Dr. Riichiro Abe studied medicine at the Hokkaido University, Sapporo, Japan, and received his MD degree in 1994. Following his clinical training in dermatology at the Hokkaido University, he studied immunology and regenerative medicine at Picower Institute for Medical Research, New York. He received a Ph.D. degree in 2001 from the Hokkaido University. Under the supervision of Prof. Hiroshi Shimizu he identified and

characterized bone marrow derived keratinocyte and showed the availability for congenital skin disorders as regenerative therapy. He accepted the professorship for Dermatology at Niigata University in 2025. His research is in the field of immunodermatology with special emphasis on severe adverse drug reactions. His interest in severe adverse drug reactions was sparked by clinical experiments and study on cell death. He has revealed the mechanism of cell death in the diseases. Subsequently, he focused his research activities on the development of therapeutic drugs targeting cell death mechanism.



Michael R. Ardern-Jones, BSc, MBBS, DPhil, FRCP

Director, Severe Cutaneous Adverse Reaction service University of Southampton

Michael Ardern-Jones (MAJ) trained in Dermatology at St John's Institute of Dermatology, London and subsequently Oxford. His DPhil (PhD) at Oxford explored the immunology of atopic dermatitis. He was appointed to University Hospitals Southampton NHS Trust and to the Faculty of Medicine, University of Southampton in 2007.

He has a specific academic interest in inflammatory skin disease and leads the clinical service for eczema, skin allergy and drug hypersensitivity reactions. MAJ has long-standing research interest in all aspects of drug hypersensitivity including: immunological mechanisms, long term outcomes and therapy. His research team comprises MSc students post-doctoral scientists, PhD students, clinical fellows and technicians. MAJ is the Drug allergy module leader for University of Southampton MSc Allergy. MAJ previously served as President of the British Society for Medical Dermatology and Chair of the British Society for Investigative Dermatology. He also chairs The Skin Investigation Society. He is lead author on the Drug allergy chapters in Rook's Textbook of Dermatology. He is an expert advisor to NICE and the MHRA on dermatology.



prognostic markers.



Hideo Asada, MD, PhD

Professor, Department of Dermatology, Nara Medical University

Hideo Asada completed his MD in 1984 at Nara Medical University and his PhD in Virology from Research Institute for Microbial Diseases at Osaka University. He was a visiting fellow at the National Cancer Institute from 1994-1997. Since 2002 he has been appointed in the Department of Dermatology at Nara Medical University and Professor of Dermatology there from 2007-present. His research interests have focused on the immunopathogenesis of DRESS/DIHS with particular contributions in the area of biological markers as diagnostic and

Annick Barbaud, MD, PhD

Dermatologist and Allergist Head of the Department of Allergy and Dermatology in AP-HP.Sorbonne université in Paris (France).

Dr. Barbaud is highly specialized in Dermato-allergology and drug allergy. Most of the 475 papers Pubmed referenced are devoted to skin testing in contact dermatitis or drug allergy with, to the standardization of

these methods, cross reactivities to drugs and the management of severe cutaneous adverse drug reactions. Chair of the Drug Allergy interest group of the European Academy of Allergy and Clinical Immunology and of the European network for drug allergy.



Kimberly Blumenthal, MD, MSc

Assistant Professor of Medicine, Harvard Medical School Co-Director, Clinical Epidemiology Program, Division of Rheumatology, Allergy and Immunology, Massachusetts General Hospital

Kimberly Blumenthal, MD, MSc is an Allergist/Immunologist and clinical researcher at Massachusetts General Hospital and Assistant Professor of Medicine at Harvard Medical School. She is the Co-Director of the Clinical Epidemiology Program within the Division of

Rheumatology Allergy and Immunology and the Quality and Safety Officer for Allergy at the Edward P. Lawrence Center for Quality and Safety. Dr. Blumenthal performs drug and vaccine allergy research that uses methods of epidemiology, informatics, economics, and decision science. Her research has been funded by the National Institute of Health, Agency for Healthcare Research and Quality, and foundations, including the American Academy of Allergy, Asthma, and Immunology Foundation and CRICO, the risk management foundation of Harvard Medical School. Dr. Blumenthal is recognized for identifying the morbidity and mortality associated with unverified penicillin allergy and creating innovative approaches to the evaluation of penicillin and cephalosporin antibiotic allergies in diverse patient settings. Dr. Blumenthal has authored more than 100 peer-reviewed publications including manuscripts published in high-impact journals such as *NEJM*, *Lancet*, *JAMA*, and the *BMJ*.

Dr. Blumenthal graduated from Columbia University with a BA in Economics. She studied medicine at Yale University School of Medicine, before training at the Massachusetts General Hospital for Internal Medicine and Allergy and Immunology. She completed a Master of Science in Clinical Epidemiology at the Harvard T.H. Chan School of Public Health in 2017.



Alina Bridges, DO, FAAD

Director of Dermatopathology Donald and Barbara Zucker School of Medicine at Hofstra/Northwell, New York

Alina Bridges, DO, FAAD is the Director of Dermatopathology at the Zucker School of Medicine at Hofstra/Northwell in NY. She is an accomplished, visionary leader in the field of Dermatology, Dermatopathology, & Immunodermatology with over 20 years of experience. She is the former director of Immunodermatology at the Dermpath Diagnostics in Cincinnati, OH. She was Associate Professor of

Dermatology as well as Laboratory Medicine and Pathology at the Mayo Clinic, Rochester, Minnesota for 20 years where she is the Emeritus Director of Dermatopathology. She completed her residency in Dermatology at the University of Cincinnati, where she was Chief Resident. Her fellowships include

Dermatopathology and Immunodermatology, both in the Department of Dermatology at Mayo Clinic Rochester. She has a great depth of knowledge & expertise in the diagnosis & management of challenging inflammatory, autoimmune, & neoplastic cases, hospital, & cosmetic dermatology. She has done academic & pharma research in the areas of biochemistry, molecular biology, and test development & has published extensively. She also makes leadership, advocacy & health care policy contributions nationally.



Marie-Charlotte Brüggen, MD, PhD

Assistant Professor for Clinical Allergy Research University Hospital Zurich, University Zurich Faculty of Medicine, Swiss Institute for Allergy Research

Dr. Brüggen is an Assistant Professor for Clinical Allergology at the University Hospital Zurich. After a PhD in Immunology at the Medical University of Vienna, she did her residencies in Dermatology as well as in Allergology/Immunology at the University Hospitals in Vienna and Zurich. She now works as a physician scientist between the University

Hospital Zurich and the Swiss Institute of Allergy Research in Davos. During her career, she has pursued her interest in delayed-type drug hypersensitivity reactions, with the aim to explore the cellular and molecular mechanisms underlying these reactions and to improve patients' treatment. Her research group mostly works with multiplex imaging as well as (spatial) RNA sequencing. Her work has been published in high-impact journals such as *Allergy* and has earned her various awards.



Wan-Chun Chang, PhD

Postdoctoral Research Associate, University of British Columbia

Dr. Wan-Chun Chang is a Postdoctoral Research Associate in the Department of Pediatrics, Faculty of Medicine, at the University of British Columbia (UBC) and British Columbia Children's Hospital Research Institute in Vancouver, BC Canada. Dr. Chang holds a Bachelor's degree in Pharmacy from Taipei Medical University, a Master's degree in Pharmacology, and a dual Doctoral degree in Pharmacology and Molecular Medicine both at the National Yang-Ming University in

Taiwan. Dr. Chang, along with Drs. Bruce Carleton, Elizabeth Phillips, and Wen-Hung Chung, helped coordinate SJS/TEN 2019 and SJS/TEN 2021 conferences. During her training, Dr. Chang has focused on the pharmacogenomics of drug-induced severe cutaneous adverse reactions (SCARs), including drug reaction with eosinophilia and systemic symptoms (DRESS). Dr. Chang's current research at the Canadian Pharmacogenomics Network for Drug Safety (CPNDS) involves both pharmacogenomics and immunogenesis of antiepileptic and antibiotic drug-induced SCARs in patients with different ancestries.



Ana Copaescu, MD, FRCPC

Clinician-Scientist, Division of Clinical Immunology and Allergy, McGill University Health Center

Dr. Ana Copaescu is an allergy-immunology and internal medicine specialist at the rank of Assistant Professor at the McGill University Health Center in Montreal, Canada. She is an early career clinicianscientist at the Research Institute of the McGill University Health Centre, McGill University. She has completed a specialized Fellowship in Drug and Antibiotic Allergy and currently occupies an Honorary Clinical

Fellow in Immunology position at the Centre for Antibiotic Allergy and Research, Department of Infectious Diseases, Austin Health, Melbourne, Australia. Dr Copaescu has published as an expert on severe cutaneous adverse reactions and is currently a PhD candidate in drug allergy immune-mediated hypersensitivity reactions with an interest for the severe phenotypes.



Vincent Descamps, MD, PhD

Chief of the Department of Dermatology, Bichat Claude Bernard Hospital, APHP, Paris Paris Cité University, Paris, France

Vincent Descamps, MD, PhD, is Professor of Dermatology. He is the Chief of the Department of Dermatology at the Bichat Claude Bernard Hospital, University Paris Cité in Paris, France. For completing a PhD in virology, he developed viral vectors using adenovirus and adenoassociated virus for gene transfer in the skin. As a dermatologist he has

continued his research in the field of virology principally studying the pathogenicity of human herpesviruses and papillomavirus in skin diseases. One of his major interest is the role of Human Herpesvirus 6 and other Human Herpesviruses in DRESS (Drug Reaction with Eosinophilia and Systemic Symptoms). Its pathogenesis remains partially understood. The aim of his research in DRESS is the better understanding of the link between immunogenetic background, offending drugs, and HHV-6 reactivation, to develop new treatments based on antiviral therapy, and to propose new tests for the prevention and early diagnosis of DRESS.



Sherrie J. Divito, MD, PhD

Assistant Professor, Department of Dermatology Harvard Medical School Brigham and Women's Hospital Dana Farber Cancer Institute Boston Children's Hospital

Dr. Divito is a dermatologist and immunologist specializing in drug hypersensitivity reactions and graft-versus-host disease. She is principal investigator of an immuno-dermatology research laboratory studying the

immunopathogenesis of these diseases. Her lab's efforts span bedside to bench and back again with the

direct goal of improving patient care. Their work is highly translational, incorporating prospective and retrospective human studies and novel humanized mouse models of disease. They utilize both innovative and traditional laboratory techniques in their research and are highly collaborative with clinicians and investigators across multiple disciplines. Dr. Divito is the recipient of a prestigious Early Independence Award from the NIH Office of the Director, the AAD Young Investigators Award 2021, and was named a Future Leader by the European Society for Dermatological Research. She is currently PI on two NIH grants. Clinically, she attends on the inpatient dermatology consult service and in a specialized embedded oncodermatology clinic.



Ben Kaffenberger, MD, MS

Associate Professor of Dermatology Ohio State University Wexner Medical Center

Ben Kaffenberger graduated from Ohio State University College of Medicine and completed his residency at Ohio State. His clinical interests are in cellulitis and pseudoinfections of the skin, wounds, hidradenitis suppurativa, graft-versus-host disease, and drug reactions. He has research interests in hospital dermatology outcomes, imaging techniques and analysis in dermatology, teledermatology/patient access to

dermatology, and clinical trials. His research has been funded by the National Psoriasis Foundation, American Acne and Rosacea Society, Dermatology Foundation, National Rosacea Society, and the Ohio Department of Medicaid. In his spare time, he enjoys music, gardening, being outdoors, fishing, home improvement, cross-country skiing, and spending time with his wife and four children.



Daniela Kroshinsky, MD, MPH

Associate Professor of Dermatology, Harvard Medical School Director of Inpatient Dermatology Director of Pediatric Dermatology Massachusetts General Hospital/MassGeneral Hospital for Children

Dr. Kroshinsky graduated *summa cum laude* from Northwestern University BA/MD Combined Honors Program in Medical Education, where she was inducted to the Alpha Omega Alpha Honor Society, and her Masters of Public Health from the Harvard School of Public Health.

Presently, Dr. Kroshinsky is an attending physician in dermatology at the Massachusetts General Hospital and MassGeneral Hospital *for* Children where she serves as the Director of Inpatient Dermatology and the Director of Pediatric Dermatology. She specializes in complex medical dermatology in the outpatient and hospital setting. She is an Associate Professor of Dermatology at Harvard Medical School. She greatly enjoys teaching and mentoring and has received numerous awards across multiple departments recognizing her efforts in these arenas.

She is past-President of the Medical Dermatology Society and President of the Society of Dermatology Hospitalists. She is an active researcher with over 170 peer reviewed medical publications.



Jason Kwah, MD

Assistant Professor of Medicine, Section of Rheumatology, Allergy and Immunology, Department of Medicine, Yale School of Medicine

Dr. Kwah is an Assistant Professor of Medicine in the Section of Rheumatology, Allergy and Immunology in the Department of Medicine at Yale School of Medicine. He completed his Internal Medicine residency training at the Icahn School of Medicine at Mount Sinai and Allergy Immunology fellowship at Northwestern University Feinberg School of Medicine. He has an interest in drug allergy and medical

education, and currently serves as the Associate Program Director of the Allergy Immunology Fellowship Program at Yale.



Irene Lara-Corrales, MD, MSc

Associate Professor of Pediatrics, University of Toronto Staff Physician Pediatric Dermatology Pediatric Dermatology Fellowship Director Hospital for Sick Children, Toronto, Canada

Dr. Irene Lara-Corrales is an Associate Professor of Pediatrics at the University of Toronto and a staff physician in Pediatric Dermatology at the Hospital for Sick Children in Toronto, Canada. She completed her medical training and pediatric residency at the University of Costa Rica,

in San Jose, Costa Rica and her pediatric dermatology training at the Hospital for Sick Children. She obtained a Master in Science degree from the University of Toronto. She is involved in numerous clinical and research endeavours, as well as in teaching commitments. He co-directs the Genodermatoses, Epidermolysis Bullosa, Vascular Tumors and Café-au-Lait Screening clinics at SickKids. She is currently the Pediatric Dermatology Fellowship director at SickKids. Her research interests include genodermatoses, inflammatory diseases and vascular anomalies



Rannakoe Lehloenya, MBChB, FCDerm

Consultant Dermatologist, Combined Drug Allergy Clinic, Groote Schuur Hospital & Division of Dermatology, Department of Medicine University of Cape of Cape Town

Professor Rannakoe Lehloenya, commonly referred to as Ranks, is a dermatologist and an associate professor of medicine at the University of Cape Town. His main interests include cutaneous adverse drug reactions, pigmentary disorders, and the anthropology of human perception of beauty.



Alina Markova, MD

Assistant Attending Director of Inpatient Consultative Dermatology Memorial Sloan Kettering Cancer Center

Dr. Markova is a board-certified dermatologist who specializes in treating skin conditions that result from bone marrow transplantation (BMT). Her outpatient clinical practice is devoted to caring for people affected by graft-versus-host disease (GVHD) of the skin. She also specializes in treating people who develop skin, hair, and nail conditions as a side effect of their bone marrow transplant, and people who have cancerous wounds.

As Co-Director of the Multidisciplinary GVHD Clinic with the BMT Service, Dr. Markova partners with oncologists, hematologists, nurses, and other experts to provide patients with comprehensive care to effectively address their symptoms. She also has the privilege of leading the Inpatient Dermatology Service, where she provides high-quality dermatology care to patients who have been admitted to the hospital.



Elizabeth Mellins, MD

Professor of Pediatrics, Program in Immunology Stanford University

Dr. Elizabeth Mellins is a Pediatric Rheumatologist and a Molecular Immunologist at Stanford University School of Medicine, where she is a Professor.. She has focused her career on laboratory-based research on normal and disease-causing immune responses, particularly antigen presentation events regulated by MHC class II molecules. She has served on the NIH Cellular and Molecular Immunology study section and has

received continuous research funding over the last 30 years from the NIH, the Arthritis Foundation and other foundations, and several pharmaceutical companies. She has authored over 165 peer-reviewed publications and is a Distinguished Fellow of the American Association of Immunologists. She has also contributed to the field of Pediatric Rheumatology as an editor of the premier textbook in Pediatric Rheumatology and as the founder and first Chairperson of the Childhood Arthritis and Rheumatology Research Alliance, an organization that now includes almost all Pediatric Rheumatology Divisions in the US and Canada.



Yoshiko Mizukawa, MD

Professor (Medical), Department of Dermatology Kyorin University School of Medicine

Yoshiko Mizukawa did her post-graduate clinical fellowship in 1985 at Kyorin University School of Medicine in Tokyo, Japan. She has been appointed as Lecturer in the Department of Dermatology in 2010, and as an Associate Professor in 2013, and is a Medical Professor from 2019present, at Kyorin University School of Medicine. Her research interests have focused on clinical and basic research on drug rashes, atopic dermatitis, and sweating disturbance in contact hypersensitivity response.



Eric Mukherjee, MD, PhD

Instructor, Vanderbilt Dermatology Clinical Pharmacology Fellow, Vanderbilt Internal Medicine

Dr. Mukherjee completed his undergraduate degree in Biochemistry at Brown University, magna cum laude. While there, he completed an honors thesis on the epigenetics of aging in the laboratory of Stephen Helfand. He then matriculated to the University of Pennsylvania School of Medicine MD-PhD program. His doctoral work was supervised by Aimee Payne, whose laboratory studies autoimmune blistering disease.

His PhD dissertation focused on the role of antibody subclass in the pathogenesis of pemphigus vulgaris, including the first to trace the lineage of autoreactive antibodies in a class-specific and antigen-specific manner. He subsequently completed his residency in dermatology at Vanderbilt University Medical Center and has joined the laboratory of Elizabeth Phillips, where his work focuses on severe cutaneous adverse reactions to immune checkpoint inhibitors.



Caroline Nelson, MD

Assistant Professor, Director of Inpatient Dermatology Department of Dermatology, Yale University School of Medicine

Caroline A. Nelson, MD is an Assistant Professor in the Department of Dermatology and the Director of Inpatient Dermatology at the Yale University School of Medicine. Prior to joining the faculty, she completed a complex medical dermatology fellowship at Brigham and Women's Hospital and the Dana Farber Cancer Institute of Harvard Medical School. Her research focuses on immunologic skin diseases in hospitalized

patients. Through the "Yale Severe Cutaneous Adverse Reactions (SCAR) Program", Dr. Nelson collaborates with the Department of Medicine, Section on Rheumatology, Allergy, and Immunology on clinical, research, and educational initiatives related to drug reaction with eosinophilia and systemic symptoms (DRESS).





Allison Norton, MD

Director of Vanderbilt Pediatric Drug Allergy Clinic, 100 Oaks Assistant Professor Pediatric Allergy & Immunology Vanderbilt University

Dr. Allison Norton is board-certified in pediatric allergy-immunology and has over 10 years of experience caring for children and families with chronic asthma, allergic disease, immunodeficiency, and drug allergy at Vanderbilt Children's Hospital. While she see patients of all types of

allergic and immunologic conditions, since 2015, she focused her clinical and research efforts in drug allergy. These efforts have resulted in a strong referral center at Vanderbilt University for children with drug and vaccine allergies. She is also supported by the CDC as a Subject Matter Expert in vaccine adverse events and has contributed to National guidelines regarding the safe administration of the COVID vaccine in adults and children. In her clinic, she has evaluated and treated hundreds of patients with concerns ranging from mild to severe drug allergy and created outpatient protocols for skin testing and de-labeling.



Helena Pasieka, MD, MS

Assistant Professor of Dermatology & Medicine, Uniformed Services University, Bethesda, Maryland; Adjunct Assistant Professor of Dermatology, Georgetown University, Washington D.C.

Dr. Helena Pasieka is an Internist and Dermatologist, an Assistant Professor of Dermatology at Uniformed Services University & Georgetown University School of Medicine, and is the director of the Inpatient and Consultative Dermatology Service at MedStar Washington Hospital Center & Georgetown University Hospital in Washington

D.C. Her area of interest lies in severe and life-threatening diseases of the skin, primarily as it pertains to severe adverse cutaneous reactions to drugs, Complementing this work, she also has an interest in the impact of evaluation to dermatology expertise in the hospitalized patient, and the role of novel or unique multidisciplinary teams for the treatment of severe skin diseases.



Jonny Peter, MD, PhD

Head of Allergy and Clinical Immunology, University of Cape Town

A/Prof Jonny Peter is Head of the Division of Allergology and Clinical Immunology at Groote Schuur Hospital, University of Cape Town and the Allergy and Immunology unit, UCT Lung Institute. Current clinical and research interests include: i) immune-mediated adverse drug reactions, with a focus on delayed hypersensitivity in HIV and TB coinfected populations, ii) urticaria and angioedema, as well as the intersection between COVID19 and immunogenomic pathways associated with Angioedema iii) primary immunodeficiencies, and iv) the aerobiology of South Africa. Jonathan has over 100 publications in high impact factor journals, and H-index of 41. His research work is supported by international and local grant funding from the NIH, EDCTP, SA NRF and MRC. He is a member of the National Immunisation Safety Expert Committee.



Sir Munir Pirmohamed, MB ChB (Hons), PhD, FRCP, FRCP(E), FFPM, FRSB, FBPhS, FMedSci

University of Liverpool David Weatherall Chair of Medicine and NHS Chair of Pharmacogenetics

Sir Munir Pirmohamed is the David Weatherall Chair of Medicine at the University of Liverpool, and a Consultant Physician at the Royal Liverpool University Hospital. He is also Director of the Centre for Drug Safety Sciences, and Director of the Wolfson Centre for

Personalised Medicine. He is an inaugural NIHR Senior Investigator, Fellow of the Academy of Medical Sciences in the UK, Chair of the Commission on Human Medicines and is a nonexecutive director of NHS Improvement, and immediate Past President of British Pharmacological Society. He was awarded a Knights Bachelor in the Queen's Birthday Honours in 2015. His research is data-centred, and focuses on personalised medicine, genomics, clinical pharmacology and drug safety.



Melissa Reyes, MD, MPH, FAAD

Medical Regulatory Officer, Food and Drug Administration, Center for Drug Evaluation and Research, Division of Pharmacovigilance

Lieutenant Commander Melissa serves as a Commissioned Corps Officer in the United States Public Health Service, working for the Food and Drug Administration as a regulatory physician. She is boarded in dermatology and pediatric dermatology and provides subject matter expertise related to adverse drug reactions of the skin. Her interests including ensuring that safe and effective drugs are available for patients with dermatologic

conditions and that healthcare providers have evidence-based, up-to-date drug information to facilitate the care of patients.



Vivian Saper, MD

Clinical Professor of Pediatrics Division of Human Gene Therapy, Department of Pediatrics Stanford University School of Medicine

Dr. Saper received her specialty training in Pediatrics at Stanford University after completing undergraduate education at Brown University and medical school at George Washington University. After briefly practicing general pediatrics, she completed post-doctoral fellowship training in allergy, asthma, immunology, and pediatric rheumatology at

University of California San Francisco and Stanford University. Dr. Saper is a fellow of the American College of Rheumatology and the American Academy of Allergy Asthma and Immunology. She has served as medical director and clinical laboratory director for an allergy diagnostic company and as a member of the FDA's Allergenic Products Advisory Committee. In 2016, at the request of her Stanford rheumatology colleague, Dr. Elizabeth Mellins, she began her role as clinical lead for a Stanford led clinical translational project to uncover the etiology of a serious emerging lung disease. This collaborative work led to the discovery of an HLA associated DRESS reaction linked to a class of new biologic drugs. Her current work includes clinical research related to this DRESS reaction, patient care in allergy, immunology, and pediatric rheumatology and as teaching faculty for Stanford medical students in their pre-clinical years.



Surbhi Sharma, PhD

Post-doctoral Fellow, Stanford University.

Dr. Surbhi Sharma is a post-doctoral fellow at Stanford School of Medicine, where she is studies the underlying mechanism behind drug hypersensitivity reactions in sJIA patients. Dr. Sharma received her Ph.D. in Cell and Molecular Biology from the University of Nevada, Las Vegas, where she discovered the functions of the human proteins at the carboxylend. She, then, did her first post-doctoral fellowship in Neurogenetics and Precision Medicine, where she worked on identifying a mechanism

behind the seizure-like-phenotype associated with16p13.2 copy number variant. As a doctoral and a postdoctoral fellow, Dr. Sharma received multiple grants. Dr. Sharma has also taught biology courses and mentored both research and teaching undergraduate assistants for several years. Dr. Sharma is passionate about biomedical research and firmly believes in its power in improving patients' lives.



Neil H. Shear, MD, FRCPC, FACP, FCDA

Professor Emeritus, University of Toronto, Department of Medicine Canada Board Member, SJS Canada

Neil Shear is a Professor Emeritus at the University of Toronto. His primary academic research is in Drug Safety, including basic mechanisms that lead to increased risk for drug-induced harm. His practice is considered advanced medical dermatology. Diseases of focus are atopic dermatitis, psoriasis, auto-immune blistering disease, drug-induced

diseases, hidradenitis suppurativa, cutaneous lymphomas and auto-immune skin disease. Shear trained in Engineering Science (University of Toronto), Medicine (McMaster), Internal Medicine (FRCPC), Dermatology (University of Toronto; FRCPC) and Clinical Pharmacology (Hospital for Sick Children, Toronto). Professor Shear was the Head of Clinical Pharmacology at the University of Toronto for 9 years, and the Head of Dermatology at the University for the 16 years following.



Jason Trubiano BBiomedSci MBBS(hons) FRACP PhD FAAAAI

Director of Infectious Diseases - Austin Health Research Fellow - University of Melbourne

Associate Professor Jason Trubiano is an Infectious Diseases Physician and current Director of the Department of Infectious Diseases at Austin Health. He is also the Director of Antimicrobial Stewardship and Drug and Antibiotic Allergy Service. Jason leads The Centre for Antibiotic Allergy and Research which is based here and is a current NHMRC Emerging Leadership Fellow with the University of Melbourne,

Department of Infectious Diseases. Dr Trubiano and his group lead antibiotic allergy research nationally and internationally, focused on novel diagnostics and health services solutions.



Li Zhou, MD, PhD, FACMI, FAMIA

Associate Professor of Medicine Division of General Internal Medicine and Primary Care Brigham and Women's Hospital, Harvard Medical School

Dr. Li Zhou is an Associate Professor of Medicine at Harvard Medical School and a Lead Investigator at the Brigham and Women's Hospital. She earned her PhD in Biomedical Informatics from Columbia University and then served as a Medical Informatician at Massachusetts General Brigham for over ten years. Her research has focused on temporal

reasoning, natural language processing (NLP), machine learning and clinical decision support. Dr. Zhou directs the MTERMS Lab at BWH and her team have applied informatics methods to diverse clinical domains. She has served as PI on numerous research projects, including an NIH/NIAID R01 that aims to

leverage advanced informatics and longitudinal EHR data to identify severe cutaneous adverse reactions (SCAR) cases (including DRESS and SJS/TEN) to study genetic and epidemiological risk factors for SCAR. She is an Associate Editor for International Journal of Medical Informatics and serves on the AMIA Board of Directors.

Community Representatives



Ashley Berryhill

Mom of pediatric patient diagnosed with DRESS Syndrome in 2021 caused by Bactrim, which was used to treat a Nocardia skin infection.



Joanne Foy

Joanne Foy is a wife, a mother, a sibling, a daughter, a friend, a critical care nurse, and fortunately a DRESS Syndrome Survivor.



Jenna Pehrson

Jenna Pehrson was 31 years old when she was diagnosed with DRESS Syndrome from Lamotrigine in 2019. She was being treated for chronic migraine and Lamotrigine was the only medication for 12 days before her reaction. She was one of the lucky ones who had knowledgeable doctors that had a diagnosis within 48 hours of the onset of symptoms. She has been ill since November 2021 with no known cause, but she is starting to see an autoimmune pattern on her most recent ANA. There is no official diagnosis yet. DRESS is the gift that keeps on giving.

Kirtus Kwincy Thibodeaux

Kirtus Kwincy Thibodeaux is a 33-year DRESS Syndrome survivor from Saint Martinville, La. He is the 2nd of 4 kids and a graduate from The Southern University and A&M college.

D.R.E.S.S. Syndrome Foundation



Tasha Tolliver

Tasha Tolliver is Executive Director and Founder of the DRESS Syndrome Foundation. She is also mother to Izzy McKinney, whom the Foundation honors. After Izzy's unexpected death in 2015 from DRESS– induced eosinophilic myocarditis caused by Bactrim, Tasha became acutely aware of the lack of understanding surrounding DRESS syndrome. After a year researching the condition and making connections with DRESS Syndrome experts, she believed that a better understanding of DRESS could have saved her daughter's life. Driven by this

knowledge, Tasha became determined to deepen medical awareness, understanding, and treatment of DRESS Syndrome. In 2019, Tasha combined advocacy efforts with another parent who'd lost a child to

DRESS, Nancy Szakacsy. Together they created the DRESS Syndrome Foundation Tasha has also worked as a photographer for over 20 years, has nonprofit board member experience, and has worked account management positions in communications and advertising firms such as the internationally acclaimed Martin Agency. She helped develop strategy and manage advertising for brands such as Rémy Martin, Richmond Symphony, VF Corporation apparel brands, and Marriott International, Inc.



Nancy Szakacsy, MS. LMFT

Nancy Szakacsy is Board Vice President and mother to Hannah Szakacsy who this Foundation honors. After Hannah tragically died from Minocycline induced D.R.E.S.S. with multiple organ failure and myocarditis in 2011, Nancy became determined to create awareness of this horrific illness and the dangers of certain medications. She founded the first and largest Facebook support community for DRESS patients and loved-ones that has now become a thriving, interactive site with over 800 contributors. She is author of *Hannah Was Here. D.R.E.S.S. an alarm that must be heard*, which tells the heartbreaking story of Hannah's illness.

Nancy met Tasha Tolliver in 2015 when the two bonded over the shared losses of their daughters to DRESS. That was the beginning of not only a special friendship but also a partnership which would eventually result in the founding of the DRESS Syndrome Foundation.



Deanna Lorianni

Deanna Lorianni is the Communications Director for the DRESS Syndrome Foundation and is a plain language expert, writing trainer, and communication strategist. She has over 15 years of experience and is passionate about the power of language and the role it can play in connecting people and improving lives. With clarity as her goal, she's well-versed at turning complex information into clear, actionable content. Deanna's worked with global corporations, public and private organizations, and nonprofits to boost their communication clarity and

brand messaging. Her plain language expertise is integral in helping to ensure that DRESS-related content is clear and easy for patients and their loved ones to understand and use. Deanna holds a bachelor's degree in English with focuses in linguistics and creative writing from Virginia Commonwealth University, and a certificate in adult teaching from the University of Richmond.

Connie Stevens



Connie Stevens is the host of the "Addressing D.R.E.S.S." 11-episode podcast, a production of the DRESS Syndrome Foundation. Connie is a long-time communications professional, and is currently the Communications Director for Virginia Poverty Law Center in Richmond, VA. Her career also includes years as news director for Virginia Public Radio and WVTF/RADIO IQ, and she is also a former health reporter and news anchor for CBS affiliate, WDBJ. Her interest in D.R.E.S.S. began after her dear friend's daughter died unexpectedly from D.R.E.S.S.

complications stemming from a prescribed antibiotic.

HHV-6 Foundation



Kristin Loomis

Kristin has served as the Executive Director of the HHV-6 Foundation since 2005. A graduate of Wellesley and Harvard Business School, Kristin was a publishing and marketing executive before devoting herself full-time to the Foundation.