Workshop on:

Immunotherapies and Cellular Therapies for Systemic Sclerosis and Chronic GVHD

April 30 – May 1, 2024 Building 35, Rooms 620/630 National Institutes of Health, Bethesda, Maryland

Agenda Items

April 30, 2024

Steven Pavletic M.D., PhD, Senior Clinician; Head, GVHD and Late Effects Section, Immune Deficiency and Cellular Therapy Program; Clinical Director, Myeloid Malignancies Program, National Cancer Institute, Center for Cancer Research

John Varga M.D., Frederick G. L. Huetwell Professor of Rheumatology; Chief, Division of Rheumatology; Professor of Internal Medicine. University of Michigan

Bruce Blazar M.D., Regents Professor, Children's Cancer Research Fund Land Grant Chair in Pediatric Oncology, University of Minnesota

8:10 AM - 8:20 AM Introductory Remarks

James Gulley M.D., PhD, Clinical Director; Deputy Director; Director, Medical Oncology Service; Senior Investigator, Co-Director, Center for Immuno-Oncology, National Cancer Institute, Center for Cancer Research

8:20 AM - 8:30 AM Opening Remarks

Lindsey A. Criswell, M.D., M.P.H., D.Sc., Director of the National Institute of Arthritis and Musculoskeletal and Skin Diseases.

Part I Moderator Bruce Blazar M.D., Regents Professor, Children's Cancer Research Fund

Land Grant Chair in Pediatric Oncology, University of Minnesota

(20 minutes presentation, 5 min Q&A)

Session 1: Basic Mechanisms

8:30 AM - 8:55 AM "Fibrosis: Major Advances and Ongoing Challenges"

Thomas A. Wynn, Ph.D., Vice President, and Discovery Head Inflammation & Immunology Pfizer Research & Development

8:55 AM – 9:20 AM "TGF-Beta Production by Trem2+ Lipid-Associated Macrophages"

Jesse Williams, Ph.D., Assistant Professor, Department of Integrative
Biology and Physiology, University of Minnesota

9:20 AM - 9:45 AM "Resident Memory T Cells and Fibrosis"

Rachael Clark, MD, PhD, Martin C. Mihm, Jr., MD and Shing-Yiu Yip Professor of Dermatology, Harvard Medical School

9:45 AM - 10:10 AM "The Role of Microvascular Dysfunction and Microvasculopathy"

Nicholas A Flavahan PhD, Edward D. Miller Endowed Professor, Department of Anesthesiology and Critical Care Medicine

John's Hopkins University

10:10 AM - 10:25 AM BREAK

Session 2: SSc and cGVHD Biology

10:25 AM - 10:50 AM "SSc Pathogenesis Overview"

John Varga M.D., Chief, Division of Rheumatology, Professor of Internal Medicine, University of Michigan

10:50 AM - 11:15 AM "Current cGVHD Overview"

Nataliya Prokopenko Buxbaum, MD., Assistant Professor of Oncology, Division of Pediatric Oncology, Roswell Park Comprehensive Cancer Center, Department of Pediatrics, University at Buffalo Jacobs School of

Medicine and Biomedical Sciences, Oishei Children's Hospital

11:15 AM - 11:40 AM "SSc Pathogenesis: Myeloid Cells Transcriptome"

Michael L. Whitfield, Ph.D., Chair and Professor of Biomedical Data Science, Professor of Molecular and Systems Biology, Director, COBRE Center for Quantitative Biology, Co-Director, Burroughs Wellcome Big Data in the Life Sciences Training Program, Geisel School of Medicine at

Dartmouth

11:40 AM - 12:15 PM Panel 1: Current State of Affairs

Moderator: Edward Cowen, M.D., M.H.Sc., National Institute of Arthritis and Musculoskeletal and Skin Diseases

Panelists:

Miguel-Angel Perales, Memorial Sloan Kettering Cancer Center Robert Colbert, National Institute of Arthritis and Musculoskeletal

and Skin Diseases

Donna Przepiorka, Food and Drug Administration

Mary Wheatley, National Scleroderma Foundation

Vicki Shanmugam, Office of Research on Women's Health, NIH, OD

12:15 PM - 1:15 PM LUNCH

12:25 PM - 1:10 PM Lunch Panel: "Novel approaches to funding and infrastructure"

Moderator(s): John Varga, University of Michigan Keith Sullivan, Duke University

Panelists:

Lindsey Criswell, National Institute of Arthritis and Musculoskeletal and Skin Diseases

Steven Pavletic, National Cancer Institute
Luke Evnin, Scleroderma Research Foundation
Sophie Paczesny, University of Southern California
Lis Welniak, National Heart, Lung, and Blood Institute

Aimee Ahmed, Foundation for the National Institutes of Health

12:15 PM - 1:15 PM LUNCH

Part II Moderator John Varga M.D., Division of Rheumatology; Professor of Internal

Medicine, University of Michigan

(20 minutes presentation, 5 min Q&A)

Session 3: Preclinical Studies

1:15 PM - 1:40 PM "Preclinical Models of Chronic GVHD"

Bruce Blazar, MD., Director, Clinical and Translational Science Institute

(CTSI), University of Minnesota

1:40 PM - 2:05 PM "Transcriptomics in cGVHD non-human primates, cause-effect (Abatacept

for Acute GVHD)"

Leslie S. Kean, MD, PhD, Director, Stem Cell Transplant Center, Dana-Farber/Boston Children's Cancer and Blood Disorders Center, Robert A.

Stranahan Professor of Pediatrics, Harvard Medical School

2:05 PM - 2:30 PM "Operational Tolerance, Omics, and Clinical Outcomes"

Gerard Socie, MD., Ph.D., Prof of Hematology, University Paris Cité / Hematology Transplantation, AP-HP Hospital Saint Louis, Paris

2:30 PM - 2:55 PM "Scleroderma: NOTCHing it up"

Pravitt Gourh MD., Head, Scleroderma Genomics and Health Disparities Unit, Assistant Clinical Investigator, National Institute of Arthritis and Musculoskeletal and Skin Diseases, Adjunct Investigator, NIMHD

2:55 PM - 3:10 PM BREAK

Session 4: Anti-fibrotics - Cell Therapies

3:10 PM - 3:35 PM "Fibrosis Therapies"

Joe Arron, MD, Ph.D., Chief Scientific Officer, Sonoma Biotherapeutics

3:35 PM – 4:00 PM "CART-T: Targeting Fibroblasts"

Jonathan Epstein, MD., Interim Dean and Executive Vice President of the University of Pennsylvania Health System

4:00 PM - 4:25 PM "Profiling and Immunotherapeutic Targeting of Fibrogenic Cells" Christian Stockman, MD., Assistant Professor

Institute of Anatomy Winterthurerstrasse, Switzerland

4:25 PM - 5:00 PM Panel 2: Road Towards Novel Therapeutic Strategies

Moderator: Pravitt Gourh, National Institute of Arthritis and Musculoskeletal and Skin Diseases

Panelists:

Nair Raj, Food and Drug Administration
Rachel Rosenstein, Hackensack Meridian School of Medicine
Resat Cinar, National Institute on Alcohol Abuse and Alcoholism
Leanne Peiser, Bristol Myers Squibb
Joe Arron, Sonoma Biotherapeutics

5:00 PM - 5:10 PM Day 1: Concluding Remarks

John Varga M.D., Division of Rheumatology; Professor of Internal Medicine, University of Michigan

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9:30 AM - 9:45 AM

BREAK

May 1, 2024

8:00 AM - 8:15 AM	Opening Remarks
	John Varga M.D., Frederick G. L. Huetwell Professor of Rheumatology; Chief, Division of Rheumatology; Professor of Internal Medicine, University of Michigan.
Part III Moderator	Steven Pavletic M.D., PhD, Senior Clinician; Head, GVHD and Late Effects Section, Immune Deficiency and Cellular Therapy Program; Clinical Director, Myeloid Malignancies Program, National Cancer Institute, Center for Cancer Research
	Session 5: Senolytics
8:15 AM - 8:40 AM	"Senolytics: The Path to Translation" Jim Kirkland, MD, PhD, Consultant, Division of General Internal Medicine, Department of Internal Medicine, Consultant, Department of Physiology & Biomedical Engineering, Consultant, Section of Geriatric Medicine and Gerontology, Department of Internal Medicine, Mayo Clinic
	Session 6: Immune Regulation and B Cell Studies
8:40 AM - 9:05 AM	"B Cells and cGVHD" Stefanie Sarantopoulos, MD., PhD, Professor of Medicine, Professor of Integrative Immunobiology, Member of the Duke Cancer Institute, Hematologic Malignancies and Cellular Therapy, Duke University
9:05 AM - 9:30 AM	"B cells in SSC: Resetting immune system/ tolerance (SSc) HSCT trials form the mechanistic perspective (tolerance)" Bill Robinson, MD, PhD, Professor of Medicine, Stanford University

Session 7: Overview & Clinical Studies

9:45 AM - 10:10 AM "Precision Medicine in Systemic Sclerosis."

> Elizabeth Volkmann, MD., MS., Associate Professor, Director, UCLA Scleroderma Program, Co-Director, CTD-ILD Program, Division of Rheumatology, Department of Medicine

10:10 AM - 10:35 AM

"Systemic Sclerosis - Current Therapeutic Targets [including HSCT] and **Lessons Learned from Recent Trials**"

> Dinesh Khanna, MD., MSc., Professor of Medicine, Frederick G. L. Huetwell Professor of Rheumatology, Director, University of Michigan Scleroderma Program, Division of Rheumatology/Dept. of Internal

Medicine

"Overview of cGVHD Therapies and Pipeline" 10:35 AM - 11:00 AM

Stephanie Lee, MD., MPH., Professor, Fred Hutchinson Cancer Center

11:00 AM - 11:35 AM Panel 3: "Road to Tomorrow"

Moderator: Steven Payletic, National Cancer Institute, Center for Cancer

Research

Panelists:

Aimee Payne, Columbia University

Eric Tkaczyk, Vanderbilt University Medical Center

Max Konig, Johns Hopkins University

Vedran Radojcic, Syndax Pharmaceuticals, Inc.

Bruce Blazar, University of Minnesota

11:35 AM - 12:00 PM **Day 2: Concluding Remarks**

> John Varga M.D., Frederick G. L. Huetwell Professor of Rheumatology; Chief, Division of Rheumatology; Professor of Internal Medicine, University of Michigan.

Bruce Blazar M.D., Regents Professor, Children's Cancer Research Fund Land Grant Chair in Pediatric Oncology, University of Minnesota

Steven Pavletic M.D., PhD, Senior Clinician; Head, GVHD and Late Effects Section, Immune Deficiency and Cellular Therapy Program; Clinical Director, Myeloid Malignancies Program, National Cancer Institute, **Center for Cancer Research**