MEMBERS

CHAIR	Eric Crombez, M.D.<
Lisa Butterfield, Ph.D.	Expertise: Alternate Industry Representative
Expertise: Tumor Immunology	Term: 12/26/2019-03/31/2024
Term: 11/28/2016-03/31/2023	Chief Medical Officer
Vice President, PICI Research Center	Ultragenyx Gene Therapies
University of California, San Francisco	Cambridge, MA 02139
San Francisco, CA 94129	-
Tabassum (Taby) Ahsan, Ph.D.	Bernard Fox, Jr., Ph.D.
Expertise: Biomedical Engineering	Expertise: Tumor Immunology/Cancer
Term: 05/17/2021-03/31/2024	Therapies
Head, Analytical Development and	Term: 01/27/2020-03/31/2023
Characterization	Chief, Laboratory of Molecular and Tumor
Therapeutic Discovery at MD Anderson	Immunology
Cancer Center	Providence Portland Medical Center
Houston, TX 77030	Portland, OR 97213
Kenneth Berns, M.D., Ph.D.	Randy Hawkins, M.D.**
Expertise: Molecular Genetics, Microbiology	Consumer Representative
Virology, Viral Vectors and Gene Therapies	Expertise: Pulmonary and Critical Care
Term: 09/27/2018-08/31/2022	Medicine
Distinguished Professor Emeritus, Molecular	Term: 04/01/20021-03/31/2022
Genetics and Microbiology	Private Practice
University of Florida	Inglewood, CA 90301
Gainesville, FL 32610	
Christopher K. Breuer, M.D.	Jeannette Yen Lee, Ph.D.
Expertise: General Surgery and Pediatric	Expertise: Biostatistics
Surgery	Term: 05/30/2019-03/31/2023
Term: 06/07/2018-03/31/2022	Professor if Biostatistics
Director of Tissue Engineering Program and	University of Arkansas for Medical Sciences
Surgical Research	Little Rock, AR 72205
Director, Center for Regenerative Medicine	
Nationwide Children's Hospital	
Columbus, OH 43215	

MEMBERS (Cont'd)

Morrison, Sean, Ph.D.+	Joseph Wu, M.D., Ph.D.
Expertise: Stem Cell Biology	Expertise: Cardiology and Radiology
Term: 06/07/2018-03/31/2022	Term: 11/28/2016-03/31/2023
Director, Children's Medical Center Research	Director, Stanford Cardiovascular Institute
Institute	Professor of Medicine and Radiology
University of Texas Southwestern Medical	Stanford University
Center	Stanford, CA 94305
Dallas, TX 75390	
Geoffrey M. Nichol, M.D., M.B.A.***+	John A. Zaia, M.D.
Expertise: Industry Representative	Expertise: Virology and Infectious Disease
Term: 12/26/2019-03/31/2024	Term: 06/07/2018-03/31/2022
Senior Vice President, Global Clinical	Director, Center for Gene Therapy,
Research and Chief Medical Officer	Hematologic Malignancies and Stem Cell
BioMarin Pharmaceutical	Transfer
Novato, CA 94949	Department of Hematology, Aaron D. Miller
	and Edith Miller Chair in Gene Therapy
	Beckman Research Institute of City of Hope
	Duarte, CA 91010
Mark C. Walters, M.D.	
Expertise: Hematology and Oncology,	
Blood and Bone Marrow Transplantation, and	
Stem Cell Biology	
Term: 04/01/2018-03/31/2022	
Jordan Family Director Blood and Marrow	
Transplantation	
USCF Benioff Children's Hospital Oakland	
Oakland, CA 94609	

TEMPORARY VOTING MEMBERS

Frederic Bushman, Ph.D.	Peggy DiCapua>
Professor and Chair	Executive Assistant/Transaction Coordinator
Department of Microbiology	Advanced Real Estate, LLC
Co-Director Center for Research on	Crown Point, IN 46307
Coronaviruses and Other Emerging Pathogens	,
Perelman School of Medicine University of	
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Philadelphia, PA 19104	
Barry J. Byrne, M.D., Ph.D.	Theo Heller, M.D.
Professor and Associate Chair of Pediatrics,	Section Chief, Translational Hepatology
Molecular Genetics & Microbiology	Section, Liver Diseases Branch
Director, Powell Center, School of Medicine	National Institute of Diabetes and Digestive
University of Florida	and Kidney Diseases (NIDDK)
Gainesville, FL 32610	National Institutes of Health
	Bethesda, MD 20892
LaTasha Crawford, V.M.D., Ph.D.,	Roland W. Herzog, Ph.D.
D.A.C.V.P.	Professor of Pediatrics
Assistant Professor	Director, Gene and Cell Therapy Program
Department of Pathological Sciences	Herman B. Wells Center for Pediatric
University of Wisconsin-Madison	Research
School of Veterinary Medicine	Indiana University School of Medicine
Madison, WI 53706	Indianapolis, IN 46202
James DeFilippi, M.B.A., P.M.P.>	Raymond Roos, M.D.
BR+A Consulting Engineer	Marjorie and Robert E. Straus Professor in
Private Practice	Neurological Science
DeFilippi Consulting, LLC	Department of Neurology
Arlington, VA 22201	University of Chicago
	Chicago, IL 60637

TEMPORARY VOTING MEMBERS (Cont'd)

Carlos Sanchez, M.D. Pediatric Neurosurgeon Principal Investigator, Center for Cancer and Immunology Research Children's National Hospital Washington, DC 20010	Charles Vite, B.S., D.V.M., Ph.D. Diplomate, ACVIM (Neurology) Professor of Neurology Department of Clinical Sciences and Advanced Medicine School of Veterinary Medicine University of Pennsylvania Philadelphia, PA 19104
Charles P. Venditti, M.D., Ph.D. Head, Organic Acid Research Section Senior Investigator, National Human Genome Research Institute (NHGRI) National Institute of Health (NIH) Bethesda, MD 20892	Caroline Zeiss, B.V.Sc., Ph.D., D.A.C.V.P., D.A.C.L.A.M. Professor, Comparative Medicine Chief of Pathology Professor of Ophthalmology and Visual Science Yale University School of Medicine New Haven, CT 06520

INVITED GUEST SPEAKERS

Deepa Chand, M.D. (Session 3)	Mark S. Sands, Ph.D. (Session 1)
Executive Medical Director	Professor, Department of Medicine
Global Patient Safety & Pediatric	Oncology Division, Stem Cell Biology
Nephrologist	Department of Genetics
Novartis Gene Therapies	Washington University School of Medicine
Bannockburn, IL 60015	St. Louis, MO 63110
Ronald Crystal, M.D. (Session 5)	Denise E. Sabatino, Ph.D. (Session 1)
Chair/Professor	Research Associate Professor of Pediatrics
Department of Genetic Medicine	Vice Chair of the Gene Therapy and Vaccine
Weill Cornell Medicine	Graduate Program
New York, NY 10065	Perelman School of Medicine
	University of Pennsylvania
	The Children's Hospital of Philadelphia
	Philadelphia, PA 19104
Lindsey A. George, M.D. (Session 2)	James (Jim) Wilson, M.D., Ph.D. (Session 2 & 4)
Assistant Professor	Rose H. Weiss Orphan Disease Center
Department of Pediatrics	Director, Gene Therapy Program
Perelman School of Medicine	Department of Medicine
University of Pennsylvania	Perelman School of Medicine
The Children's Hospital of Philadelphia	University of Pennsylvania
Philadelphia, PA 19104	Philadelphia, PA 19104

FDA PARTICIPANTS/SPEAKERS

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Director	Deputy Director
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Wilson Bryan, M.D.	Rachael F. Anatol, Ph.D.
Director	Deputy Director
Office of Tissues and Advanced Therapies	Office of Tissues and Advanced Therapies
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Food and Drug Administration	Food and Drug Administration
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Leila Hann	Tejashri Purohit-Sheth, M.D.
Associate Director for Policy (Acting)	Director
Office of Tissues and Advanced Therapies	Division of Clinical Evaluation and
Center for Biologics Evaluation and Research	Pharmacology/Toxicology
Food and Drug Administration	Office of Tissues and Advanced Therapies
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	Research
	Food and Drug Administration
	Silver Spring, MD 20993
Raj Puri, M.D., Ph.D.	Andrew Byrnes, Ph.D.
Director	Branch Chief
Division of Cellular Tissue and Gene	Gene Transfer and Immunogenicity Branch
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Denise Gavin, Ph.D.	
Branch Chief	
Gene Therapies Branch	
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+ Not Attending

** Consumer Representative

***Industry Representative

<Alternate Industry Representative

>Patient Representative

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Pharmacology/Toxicology Branch	General Medicine Branch II
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Pharmacology/Toxicology	Pharmacology/Toxicology
Office of Tissues and Advanced Therapies	Office of Tissues and Advanced Therapies
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Mercedes Serbian, M.S.	Zenobia F. Taraporewala, Ph.D.
Supervisory Toxicologist	Team Lead
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Rosa Sherafat-Kazemzadeh, M.D.	Gaya Hettiarachchi, Ph.D.
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	Pharmacology-Toxicology Reviewer Pharmacology and Toxicology Branch 2
Medical Officer	Pharmacology-Toxicology Reviewer
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Medical Officer Division of Clinical Evaluation and Pharmacology/Toxicology Office of Tissues and Advanced Therapies Center for Biologics Evaluation and Research Food and Drug Administration	Pharmacology-Toxicology Reviewer Pharmacology and Toxicology Branch 2 Division of Clinical Evaluation and Pharmacology/Toxicology Office of Tissues and Advanced Therapies Center for Biologics Evaluation and Research
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+ Not Attending

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