Myelodysplastic Syndromes (MDS) Workshop Speaker Bios

1. **Peter Aplan** is a Senior Investigator, Head of Leukemia Biology Section at CCR, NCI. Dr. Aplan is co-organizer and Steering Committee member of the Trans-NIH Myeloid Malignancies Program, a multidisciplinary network of researchers and clinicians dedicated to improving early detection, diagnosis, prognosis and development of novel therapeutics for myeloid malignancies. Dr. Aplan uses the tools of molecular biology and molecular genetics to understand the causes of hematopoietic malignancy, including myelodysplastic syndrome (MDS), acute myelogenous leukemia (AML), T cell acute lymphoblastic leukemia (ALL), and B cell precursor ALL. The general approach taken is to identify mutations, such as chromosomal translocations and single nucleotide variants, in leukemic cells, and study these mutations using a combination of in vitro and in vivo models. Recent accomplishments include generation of the first genetically engineered model for MDS (the NUP98-HOXD13 mouse), a genetically engineered model for progenitor B1 cell ALL, and the discovery of templated sequence insertion polymorphisms (TSIPs) in humans.
2. **Laura Calvi** is the Leader of the Cancer Microenvironment Research Program at Wilmot Cancer Center. Dr. Calvi graduated from Union College, obtained her medical degree from Harvard Medical School, and then completed her residency in internal medicine at Massachusetts General Hospital, Harvard Medical School. Dr. Calvi then pursued fellowship training in endocrinology at MGH, where she trained in neuroendocrinology at the MGH Neuroendocrine Clinical Center and Pituitary Tumor Center. She then moved to Rochester to assume the position of Assistant Professor in the Department of Medicine, Division of Endocrinology, University of Rochester Medical Center. Together with Dr. Vates, Dr. Calvi has developed the University of Rochester Multidisciplinary Neuroendocrinology Clinic as a center of excellence for management of patients with pituitary tumors. Dr. Calvi currently leads her research program on the bone marrow microenvironment and holds several administrative and educational responsibilities within the University of Rochester.
3. **Tim Chlon** is an Assistant Professor of Pediatrics at Cincinnati Children's Hospital Medical Center. The Chlon Lab studies how inherited mutations in certain genes cause predisposition to blood cancers. Inherited mutations in genes involved in DNA repair, protein synthesis and telomere maintenance commonly cause genetic disorders where one facet is high susceptibility to blood cancers.
4. **Pinkal Desai** is an Assistant Professor of Medicine at Weill Cornell Medical College and Assistant Attending Physician at the New York-Presbyterian Hospital. Dr. Desai was recruited to serve in our Leukemia Program to develop a clinical practice devoted to leukemia, myelodysplastic syndrome (MDS) and myeloproliferative neoplasms (MPN). She will be developing clinical and translational research protocols and projects in the areas of leukemia, MDS and MPN.
5. **Dan Gallahan** is a Director for the NCI Division of Cancer Biology (DCB), Dr. Gallahan is part of the senior leadership team that helps NCI staff carry out its mission, especially in the area of basic cancer research. Dr. Gallahan has enjoyed a long history with the NCI,

initially as an intramural researcher focusing on the utilization of model systems to help understand the role of genetic alterations in breast cancer and the role of human papillomaviruses in cancer. In the NCI extramural community, he has been responsible for the establishment of many important programs and scientific innovations having direct impact on new knowledge and cancer advances, such as the STAMP Out Breast Cancer Program, Innovative Molecular Analysis Technologies (IMAT) initiative, and the Integrative Cancer Biology Program (ICBP).

6. **Guillermo Garcia-Manero** is a Deputy Chair, Chief, Section of Myelodysplastic Syndromes and Chronic Myelomonocytic Leukemia (MDS-CMML), and Director, Leukemia Clinical Fellowship Program. Dr. Garcia-Manero research is focused on improving the outcomes and quality of life of patients with leukemia and in particular myelodysplastic syndromes. His work centers around the understanding of the pathophysiology of these disorders in an attempt to develop new therapeutic interventions. He currently leads the largest MDS program in the world and directs the MDS/AML Moon Shot ® program at MD Anderson. This work has resulted in over 500 publications in the areas of biology, therapy and prognostication of these disorders, and development of multiple therapeutic clinical trials.
7. **Lucy Godley** is a Jeffrey and Marianne Silver Family Professor of Oncology, Professor of Medicine at Northwestern Feinberg School of Medicine. The Godley Laboratory studies the molecular pathways that drive hematopoietic malignancies, with a focus on understanding how germline predisposition alleles contribute to individual and family risk as well as how covalently modified cytosines in DNA control cellular differentiation. Dr. Godley has contributed to the recognition of germline DDX41, ETV6, and CSF3R variants as risk factors to developing hematopoietic malignancies. She is also studying how deleterious germline RUNX1, CHEK2, and BRCA variants drive these cancers, especially considering how the development of clonal hematopoiesis and inflammatory pathways contribute to tumorigenesis.
8. **Lukasz Gondek** is an Assistant Professor of Oncology at the Johns Hopkins University School of Medicine in the Division of Hematologic Malignancies. Dr. Gondek received his medical degree from the University of Silesia, Poland and his Ph.D. from the University of Warsaw, Poland. He completed his residency in internal medicine at the Cleveland Clinic and his fellowship training in hematology at the Johns Hopkins University. Dr. Gondek's primary research is to better understand the role of molecular events in initiation and progression of myelodysplastic syndromes and leukemia as well as develop novel targeted therapies to prevent disease progression and relapse. Dr. Gondek has a clinical interest in hematologic malignancies and in particular myelodysplastic syndromes and acute myeloid leukemia. He is an attending on the inpatient adult leukemia service.
9. **Monica Guzman** is an Associate Professor of Pharmacology in Medicine, Weill Medical College of Cornell University, Chair for the American Society of Hematology Scholar Awards, Scientific Committee of Myeloid Biology, American Society of Hematology.

   Dr. Guzman's research interest is the identification of novel therapeutic approaches for selective targeting of malignant stem cells without harming normal hematopoietic stem

cells (HSCs) with the objective to improve the success of novel anti-leukemia compounds to be translated to the clinic.

10. **Stephanie Halene** is Arthur H and Isabel Bunker Professor of Medicine (Hematology) and Professor of Pathology; Chief, Section of Hematology; Director, DeLuca Center for Innovation in Hematology Research, Yale Cancer Center, Assistant Medical Director CRSL, Yale Cancer Center, Chief, Translational Hematology. Dr. Halene's laboratory studies hematopoiesis and myelopoiesis and in particular how mutations in splicing factors and perturbations in RNA modifications contribute to hematologic malignancies such as myelodysplasia and leukemia.
    Dr. Halene, in collaboration with the Flavell laboratory in the YSM Department of Immunobiology, has developed the first efficient xenotransplantation model in humanized mice to study myelodysplasia and enable testing of novel drug treatment.
11. **Brendan Harley** is a Professor in Chemical and Biomolecular Engineering and a research theme leader in the Carl R. Woese Institute for Genomic Biology at the University of Illinois at Urbana-Champaign. Dr. Harley develops biomaterials that replicate the dynamic, spatially-patterned, and heterogeneous microenvironment found in the tissues and organs of our body. He and members of his lab use this approach to generate new insight regarding how biomaterial cues can instruct cell responses in the context of development, disease, and regeneration.
12. **Stavroula Kousteni** is Edward P. Evans Chair in Myelodysplastic Syndromes Research and Professor in Physiology & Cellular Biophysics and the Herbert Irving Comprehensive Cancer Center, Director of the Evans P. Foundation Center for Myelodysplastic Syndromes at Columbia University, Professor, Department of Physiology & Cellular Biophysics, Vagelos College of Physicians and Surgeons, Columbia University, New York, NY. Dr.Kousteni's research is to examine the role of the stromal marrow niche in hematopoietic stem cell (HSC) fate with a particular emphasis in the development of myelodysplasia (MDS) and acute myeloid leukemia (AML). Specifically, she is exploring how extrinsic factors triggered from the bone marrow stroma microenvironment can affect growth of disease initiating stem cells in MDS or AML as well as the transformation of MDS to AML.
13. **Ravi Majeti** is Professor of Medicine, Division of Hematology, and Director of the Institute for Stem Cell Biology and Regenerative Medicine at the Stanford University School of Medicine. With Dr. Weissman, he developed a humanized anti-CD47 antibody, initiated first-in-human clinical trials. Dr. Majeti directs an active NIH-funded laboratory that focuses on the molecular characterization and therapeutic targeting of leukemia stem cells in human hematologic disorders, particularly AML, and has published >100 peer-reviewed articles. He is a recipient of the Burroughs Wellcome Career Award for Medical Scientists, the New York Stem Cell Foundation Robertson Investigator Award, and the Leukemia and Lymphoma Society Scholar Award. Dr. Majeti is currently a member of the Committee on Scientific Affairs for the American Society of Hematology (ASH) and serves of the editorial board of Blood and eLife.
14. **Lisa McReynolds** is an Assistant Clinical Investigator at Clinical Genetics Branch, CCR, NCI. Dr. McReynolds focuses on inherited predisposition to hematopoietic malignancies,

incorporating genomics with epidemiology to understand their causes. Her research utilizes the Inherited Bone Marrow Failure Syndrome (IBMFS) and Transplant Outcomes of Aplastic Anemia (TOAA) cohorts to investigate the effect of both germline and somatic mutations on disease and transplant outcomes. She also studies the prevalence of pathogenic germline variation and the penetrance of disease in hematological malignancy predisposition syndrome genes in the general population.

15. **Eirini Papapetrou** is a Member, Icahn Genomics Institute, Icahn School of Medicine in Mount Sinai, Co-Director, Stem Cell Engineering Core, Icahn School of Medicine in Mount Sinai, Associate Professor with Tenure, Department of Oncological Sciences, Icahn School of Medicine in Mount Sinai, New York, NY. She was one of the first investigators to derive patient-specific induced pluripotent stem cells (iPSCs) and use them in disease modeling and regenerative medicine applications. As an independent investigator, first at the University of Washington in Seattle and, since 2014, at the Icahn School of Medicine at Mount Sinai in New York, she developed the first iPSC models of myeloid malignancies, in particular Myelodysplastic Syndromes (MDS) and Acute Myeloid Leukemia (AML). Her lab harnesses somatic cell reprogramming, CRISPR genome editing and human pluripotent stem cell-derived hematopoiesis to develop novel iPSC-based models of MDS and AML for genotype-to-phenotype studies, interrogation of disease mechanisms and genetic and small molecule screens with the goal to understand disease mechanisms, identify new therapeutic targets and repurpose drugs.
16. **Russell Rockne** is an Associate Professor in the Department of Computational and Quantitative Medicine within Beckman Research Institute of City of Hope. He also serves as director of the Division of Mathematical Oncology, with the goal of translating mathematics, physics and evolution-based research to clinical care.
    Dr. Rockne received his doctorate in mathematical biology from University of Washington in 2013, and then conducted a postdoc in mathematical oncology at Northwestern University. He also has been a research associate in neurological surgery, and a research scientist in pathology and applied mathematics. In 2014, Dr. Rockne received the "Future of Mathematical Biology" award from the Society for Mathematical Biology.
17. **Dan Starczynowski** is an Institute Associate Director, Cancer and Blood Diseases Institute, Member, Division of Experimental Hematology and Cancer Biology, Co-Leader, Hematologic Malignancies Program Co-Chief Scientific Officer, Innovations Ventures; Associate Director for Basic Sciences, UC Cancer Center Katherine Stewart Waters Endowed Chair of Hematologic Malignancies Professor, UC Department of Pediatrics. The Starczynowski Laboratory is interested in the molecular, cellular, and genetic basis of hematologic malignancies, with a specific focus on myelodysplastic syndromes (MDS) and acute myeloid leukemia (AML). MDS is a hematopoietic stem cell (HSC) disorder resulting in abnormal blood cell production and a propensity to progress to AML.
18. **Brett Stevens** is an Associate Research Professor at University of Colorado Anschutz Medical Campus. His research interest is in the phenotypic and metabolic characterization of myelodysplastic syndrome (MDS) and acute myeloid leukemia stem

cells and how these can be exploited to develop novel therapeutic strategies. In 2019 he become funding recipient of EvansDS Young Investigator Award.

19. **Justin Taylor** is a physician-scientist devoted to improving outcomes for patients with hematologic malignancies. The Taylor lab studies the role of recurrent mutations in hematologic malignancies and how to target them with novel therapeutics using animal modeling, molecular biology, and single-cell genomic techniques. Dr. Taylor holds a faculty position in the Department of Medicine, Division of Hematology where he sees patients with hematologic malignancies. He completed residency in Internal Medicine at the Brigham and Women's Hospital and Hematology/Oncology fellowship at Memorial Sloan Kettering Cancer Center followed by post-doctoral training in the lab of Omar Abdel-Wahab, MD. He is the principal investigator on grants sponsored by the National Cancer Institute (K08), American Society of Hematology, the Robert Wood Johnson Foundation and the Edward P. Evans Foundation for MDS. He has received Young Investigator Awards from ASCO Conquer Cancer Foundation, Hairy Cell Leukemia Foundation, and Evans MDS Foundation.
20. **Zuzanna Tohova** is an Assistant Professor at Harvard Medical School, Investigator in the Department of Medical Oncology and Division of Hematologic Neoplasia at the DFCI, and an Associate Member of the Broad Institute. Dr. Tothova received her B.A. in Biology and Chemistry from Williams College, a doctorate in Genetics from Harvard University for her work on FoxO transcription factors in self-renewal mechanisms of hematopoietic stem cells in Dr. Gary Gilliland's laboratory, and an M.D. from Harvard Medical School/MIT in the Health Sciences and Technology program. She completed residency training in internal medicine at the BWH and fellowship training in adult hematology and oncology at the DFCI and MGH Cancer Center. Dr. Tothova carried out her postdoctoral studies in Dr. Benjamin Ebert's laboratory at the Brigham and Women's Hospital where she studied the mechanisms of cohesin mutations in MDS and AML. She is a recipient of multiple career development awards from the American Society of Hematology, Leukemia and Lymphoma Society, the Conquer Cancer Foundation of the American Society of Clinical Oncology, the Burroughs Wellcome Fund, and the National Institutes of Health.
21. **Marcin Wlodarski** is an Assistant Member, St. Jude. The Wlodarski lab has identified specific genetic mutations that are inherited in cases of pediatric MDS. He is working to better understand genetic predisposition, clinical patterns of disease, and mechanisms for progression as well as somatic genetic rescue. Additional research is focused on the etiology and pathology of bone marrow failure syndromes. He is also conducting basic research and clinical studies with the hope of improving diagnosis and treatment.
22. **Kira Young** is an Associate Research Scientist at JAX. She studies hematopoiesis and the molecular basis of aging in the blood. In 2019 she has received the ASH Scholar Award from the American Society for Hematology to support her research studying "old blood." Dr. Young is using the award to understand the different types of white blood cells that make up the immune system and how they change as we age.
23. **Amer Zeidan** is an Associate Professor of Medicine (Hematology) at Yale University. He is also the medical director of Hematology Early Therapeutics Research, the leader of the Myeloid malignancies Clinical Research Team (CRT), and the director of Continuing

Medical Education (CME) at the Hematology division at Yale Cancer Center. The focus of Dr. Zeidan's clinical/translational research is the development of novel therapies for myeloid malignancies, with a special focus on targeted therapies and immunotherapy-based approaches. Dr. Zeidan is also active in health outcomes and comparative effectiveness research for blood cancers and their therapies. Dr. Zeidan has and continues to serve as the principal investigator of many investigator-initiated, cooperative group and industry sponsored clinical trials for myeloid malignancies.