

**CURRICULUM VITAE**  
**EIRINI P. PAPAPETROU, M.D. Ph.D.**  
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Date prepared: November 26, 2025

**APPOINTMENTS/EMPLOYMENT**

2012-2014 Assistant Professor, Division of Hematology, Department of Medicine, University of Washington School of Medicine, Seattle, WA

2012-2014 Member, Fred Hutchinson/University of Washington Cancer Consortium

2012-2014 Member, Institute for Stem Cell and Regenerative Medicine, University of Washington

2013-2014 Adjunct Assistant Professor, Department of Pathology, University of Washington

2014-2018 Associate Professor, Department of Oncological Sciences, Icahn School of Medicine at Mount Sinai, New York, NY

2014-2018 Associate Professor, Division of Hematology & Oncology, Department of Medicine, Icahn School of Medicine at Mount Sinai

2014-present Member, Tisch Cancer Institute, Icahn School of Medicine at Mount Sinai

2014-2025 Member, Black Family Stem Cell Institute, Icahn School of Medicine at Mount Sinai

2018-2021 Associate Professor w/ Tenure, Department of Oncological Sciences, Icahn School of Medicine at Mount Sinai

2020-2024 Co-Director, Stem Cell Engineering Core, Icahn School of Medicine at Mount Sinai

2021-present Member, Icahn Genomics Institute, Icahn School of Medicine at Mount Sinai

2022-2025 Member, Institute for Regenerative Medicine, Icahn School of Medicine at Mount Sinai

2022-present Professor, Department of Oncological Sciences, Icahn School of Medicine at Mount Sinai

2023-present Founding Director, Center for Advancement of Blood Cancer Therapies, Icahn School of Medicine at Mount Sinai

**GAPS IN EMPLOYMENT**

Not applicable

**EDUCATION**

1994-2000 M.D. University of Patras, Greece

2000-2003 M.Sc. Basic Medical Sciences, University of Patras, Greece (Mentor: Zoi Lygerou)

2003-2006 Ph.D. Molecular Genetics, University of Patras, Greece (Mentor: Aglaia Athanassiadou)

2006-2011 Postdoctoral Genetic engineering and Stem cell biology, Memorial Sloan Kettering Cancer Center, New York, NY (Mentor: Michel Sadelain)

**Clinical training**

2000-2002 Intern, Patras General Hospital

2002-2003 Hematology Fellow, University Hospital of Patras

2004-2006 Resident, Internal Medicine, University Hospital of Patras

**CERTIFICATION**

None in the US

## **LICENSURE**

None in the US (EU medical license held 8/2000–8/2006, not renewed since)

## **HONORS/AWARDS**

2005	“Arkagathos Gouttas” Award, Hellenic Society of Hematology
2010	Excellence in Research Award, American Society of Gene and Cell Therapy (ASGCT)
2011	NIH K99/R00 Pathway to Independence Award
2013	American Society of Hematology (ASH) Junior Faculty Scholar Award
2013	University of Washington Research Royalty Fund Award
2013	Sidney Kimmel Foundation Scholar Award
2013	Aplastic Anemia & MDS International Foundation Research Grant Award
2013	John H. Tietze Stem Cell Scientist Award
2013	Ellison Medical Foundation New Scholar in Aging Award
2013	Damon Runyon-Rachleff Innovation Award
2014	American Society for Clinical Investigation (ASCI) Young Physician-Scientist Award
2015	Tito Bastianello Young Investigator Award, International MDS foundation
2016	Outstanding New Investigator Award, American Society of Gene and Cell Therapy (ASGCT)
2017	Pershing Square Sohn Prize
2018	Leukemia & Lymphoma Society (LLS) Scholar Award
2018	Elected member of the American Society for Clinical Investigation (ASCI)
2021	American Association for Cancer Research (AACR)-MPM oncology charitable foundation transformative cancer research award

## **OTHER PROFESSIONAL ROLES**

### **Extramural service**

#### **Advisory boards**

2024-present	Scientific Advisory Board member, Biomedical Council, Greek Ministry of Development, Research and Innovation
2022-present	Scientific Advisory Board member, Henry and Marilyn Taub Foundation Pilot Award Program for Myelodysplastic Syndrome research
2023-present	Medical Advisory Board member, Gabrielle's Angel Foundation
2022-present	Scientific Review board member, Alex's Lemonade Stand (ALSF) Crazy 8 Initiative
2022-present	External Scientific Advisory Board member, Alexander Fleming Institute, Greece

#### **Study sections (selected)**

2025	Member, California Institute for Regenerative Medicine (CIRM) DISCO Grants Working Group
2025	Reviewer, NIH Program Project (P01) review meeting
2025	Member, NIH ZRG1 CDPT 02Z (member conflict Special Emphasis Panel, Cancer Prevention and Therapeutics)
2022	Member of NCI P50 SPORE study section
2022	Member, Study Section, Edward Evans foundation Discovery Research Grant Program
2021	Member, Study Section, RUNX1 Research Program (RRP) and Edward Evans Foundation FIRE (Focused Impact Research) Grant Program
2018	Member, Cell and Molecular Biology (CMB) study section, Bone Marrow Failure Research Program (BMFRP), Department of Defense (DOD) Congressionally Directed Medical Research Programs (CDMRP)
2016, 2019, 2023	Member, Grants Review Committee. Tri-Institutional (Weill Cornell Medicine, Memorial Sloan-Kettering Cancer Center and The Rockefeller University) Stem Cell Initiative (Tri-

	SCI)
2015, 2016, 2019, 2021	Member, Study Section, American Society of Hematology (ASH) Scholar Award
2017	Grant Reviewer, Emerson Collective Cancer Research Fund's inaugural collaboration with Memorial Sloan-Kettering Cancer Center
2017-2021	Regular member, NIH Study Section Therapeutic Approaches to Genetic Diseases (TAG)
2016 2014-present	Grant Reviewer, Connecticut Regenerative Medicine Research Fund Ad Hoc Member of NIH study sections (TAG, CAMP), and NIGMS, NHLBI, NIDDK, NCI and NIA special emphasis panels (ZDK1 GRB-6, ZRG1GGG Q, ZGM1 PPBC-9, ZCA1 SRB-T and others)
2012-present	Grant Reviewer, Alex's Lemonade Stand Foundation, Doris Duke Charitable Foundation, Fanconi Anemia Research Fund, French National Cancer Institute, Pasteur Institute, Research Councils UK, Cancer Research UK, Israel Science Foundation, French National Research Agency (ANR) and other international funding agencies, research institutes, industry and government grant programs

### **Professional societies**

2022-present	Member, American Society of Gene and Cell Therapy (ASGCT) Publications Committee
2017-2023	Member, Vice Chair (2022) and Chair (2023), American Society of Hematology (ASH) Stem Cells and Regenerative Medicine
2015-present	Founding Member, Hellenic Society of Gene Therapy and Regenerative Medicine
2013-2020	Member and Chair (2018-2020), American Society of Gene and Cell Therapy (ASGCT) Stem Cell Committee
2011-2017	Member, American Society of Gene and Cell Therapy (ASGCT) New Investigator Committee

### **Editorial boards**

2021-2024	Member, Editorial Board, <i>Blood</i>
2024	Guest Editor, <i>Experimental Hematology</i> Special Issue "Human pluripotent stem cell-derived hematopoietic progenitors and mature cells"
2021-present	Member, Editorial Board, <i>Stem Cell Research</i>
2019	Guest Editor, <i>Stem Cell Research</i> Special Issue "Cellular Reprogramming for modeling neoplastic diseases"
2012-present	Member, Editorial Board, <i>Molecular Therapy-Nucleic Acids</i>
2012-2019	Member, Faculty of 1000 Medicine, Hematology
2012-2019	Member, Editorial Board, <i>F1000 Research</i>

### **Abstract reviewer**

2011-2020	Abstract Reviewer for the American Society of Gene and Cell Therapy (ASGCT), American Society of Hematology (ASH), International Society for Stem Cell Research (ISSCR)
2013, 2018, 2024	Abstract Review Chair of the "Cell Therapies" category for the American Society of Gene and Cell Therapy (ASGCT) Annual Meeting
2019	Abstract Reviewer for the American Society for Clinical Investigation (ASCI)

### **Manuscript reviewer**

*Ad hoc* reviewer: Nature, Cell, Cell Stem Cell, Cell Systems, Cell Genomics, Cell Reports, Nature Communications, Science Translational Medicine, Journal of Experimental Medicine, Blood, Blood Cancer Discovery, Blood Advances, Blood Neoplasia, PNAS, eLife, Stem Cell Reports, Stem Cells, Trends in

Immunology, Molecular Therapy, Gene Therapy, Human Gene Therapy, PLOS One, Current Opinion in Pharmacology

### **Intramural service**

2012-2014	Member, University of Washington Institutional Biosafety Committee Ad Hoc Viral Vector Subcommittee
2014-present	Member, Scientific review committee for tissue distribution for the Hematological Malignancies Tissue Bank of Mount Sinai
2015-present	Interviewer, Graduate School (CAB, DRS, GDS)
2015-present	Interviewer, MD/PhD Program
2016	TCI development grants reviewer
2016	Cell, Developmental & Regenerative Biology Faculty Search Committee
2016	Faculty Participant, MD/PhD Retreat
2017	Celgene Consortium Committee
2017	Academic Advisor, MD/PhD program
2018-present	Member, Advisory Committee for the Flow Cytometry CoRE
2018	Screener, MD/PhD program
2019	TCI Innovation Seed Fund Review Committee
2019-2024	Co-Director, Stem Cell Engineering Core
2017-2022	Member, Black Family Stem Cell Institute Faculty Search Committee
2021-2022	Co-Chair, Black Family Stem Cell Institute Faculty Search Committee
2022-present	Member, Committee on Special Awards

### **RESEARCH PROFILE**

I trained in clinical hematology and, subsequently, in the genetic engineering of murine and human hematopoietic stem and progenitor cells (HSPCs) in Dr Michel Sadelain's laboratory at Memorial Sloan-Kettering Cancer Center. I developed diverse viral and non-viral genome engineering technologies and innovative technologies for the generation, differentiation and characterization of human induced pluripotent stem cells (iPSCs). I derived some of the very first human induced pluripotent stem cell (iPSC) lines and performed early proof-of-principle studies demonstrating the use of human iPSCs in disease modeling, drug screening and regenerative medicine.

My laboratory pioneered human iPSCs as models of myeloid malignancies – including acute myeloid leukemia (AML) and myelodysplastic syndrome (MDS) –, as well as premalignant conditions – inherited bone marrow failure syndromes (IBMFS) and clonal hematopoiesis (CH). By combining patient cell reprogramming with CRISPR/Cas9-mediated precise gene editing, we develop models of myeloid leukemias and preleukemic blood disorders and exploit the unique capabilities they offer: the ability to perform genotype-to-phenotype studies and to study the oncogenic mechanisms of driver mutations in a faithful cellular and genomic environment; the ability to obtain relatively homogeneous cell populations in large numbers for multi-omics analyses and genetic and small molecule screens; and, finally, the ability to validate findings thoroughly through functional assays in isogenic conditions. With these models we are uncovering novel disease mechanisms and identifying new therapeutic targets for CH, IBMFS, MDS and AML.

The iPSC lines developed in my laboratory have been distributed widely in the international scientific community and empowered a variety of studies by numerous other investigators in collaborative studies.

### **OVERALL IMPACT**

Since 2012, my independent laboratory pioneered the development of human iPSCs as models of myeloid malignancies. Up until that time iPSC technology had found several applications in human disease, but the overwhelming majority of those involved the modeling of inherited monogenic disorders. It had never been

applied to the modeling of cancer and it was less than obvious that this approach would have any value in basic cancer or translational oncology research. My laboratory performed pioneering work in this area. We established the first iPSC lines from patients with myelodysplastic syndrome (MDS) and acute myeloid leukemia (AML) and reported for the first time the important observation that these, upon differentiation to hematopoietic lineages, recapitulate key hallmarks of malignant cells at the phenotypic, molecular and chromatin level (Nat Biotechnology 2015; Cell Stem Cell 2017; Cell Stem Cell 2021; Blood Cancer Discov 2023). We generated multiple, genetically diverse, iPSC-based cellular and *in vivo* models of MDS and AML and developed functional assays for mechanistic studies. We thus established the main tools and concepts of this field that we pioneered and we are now the world-leading laboratory in this area.

We are now increasingly using these models to make new discoveries about mechanisms and, importantly, new therapeutic targets for myeloid malignancies. Our focus is now shifting more towards the identification and validation of therapeutic targets and translation of our research findings to new therapeutics that can be tested in the clinic. In recent work we discovered a new mechanism by which splicing factor mutations drive MDS and a new therapeutic target (GNAS-L), possibly relevant to more than 50% of MDS patients (Cancer Discovery 2022). We are actively working with clinical collaborators at ISMMS to translate our findings to a clinical trial for MDS.

More recently, we harnessed the unique ability to separate the effects of mutational status from those of differentiation stage afforded by our iPSC models to tackle a conundrum in AML therapy that has arisen since the transformative introduction of Venetoclax (VEN)-containing therapies in the clinic, namely the contribution of monocytic leukemia phenotype to VEN responses (Nature 2024). We uncovered that *N*/KRAS mutations, which often present during progression or relapse, specifically transform progenitors committed to the myelomonocytic lineage (granulocyte-monocyte progenitors, GMPs), into leukemia stem cells (LSCs). These RAS-mutant GMP-type LSCs, in contrast to RAS-WT LSCs arising from more primitive HSPCs, generate leukemic blasts with monocytic differentiation and are themselves resistant to VEN, driving clinical relapse and resistance. Importantly, it is the RAS mutations and not the GMP cell state nor the monocytic blasts that determines this response. These findings reconcile previously seemingly conflicting evidence into one coherent and unified model of VEN resistance in AML and have important implications in the clinic for patient stratification in VEN-combination therapies.

## **MENTORING PROFILE**

In the past 13 years I have mentored in my laboratory 17 postdoctoral fellows, 4 graduate students, 2 Instructors, 2 senior scientists and 5 visiting researchers, who are all currently holding scientist positions in academia or industry. I have served as mentor in two NIH F31 predoctoral and one NIH F32 postdoctoral fellowships; two postdoctoral T32 fellowships; two postdoctoral fellowships from the German Research Foundation (DFG); and one post-doctoral (New York State Stem Cell Science) NYSTEM fellowship. I also currently serve in the mentoring committees of three junior faculty at ISSMS and as mentor or co-mentor in their career development grants.

## **GRANTS, CONTRACTS, FOUNDATION SUPPORT**

### **PAST GRANTS**

<u>List Funding Source, Project Title &amp; Number</u>	<u>Role in Project</u>	<u>Dates</u>	<u>Direct Costs</u>
NIH/NCI P30 CA15704	Recruitment support funding from the Fred Hutchinson Cancer Research	05/10/12 – 05/10/14	\$30,000 annual

	Center/University of Washington Cancer Consortium		
University of Washington Royalty Research Fund Grant "Development of an iPS cell-based model of myelodysplasia with chromosome 7 deletions."	PI	05/01/13 – 04/30/14	\$37,000 annual
University of Washington Institute for Stem Cell and Regenerative Medicine, John H. Tietze Stem Cell Scientist Award "Functional human genetics with directly reprogrammed and genetically engineered human pluripotent stem cells."	PI	06/01/13 – 06/01/14	\$25,000 annual
NIH/NIDDK K99 DK 087923 "Genetic correction of human beta-thalassemic induced pluripotent stem cells."	PI	07/01/11 – 11/30/12	\$83,333 annual
American Society of Hematology (ASH) Scholar Award "Modeling Myelodysplastic Syndromes using Human Induced Pluripotent Stem Cells."	PI	07/01/13 – 06/30/15	\$75,000 annual
Sidney Kimmel Foundation for Cancer Research Scholar Award "Mining cancer genomes using directly reprogrammed and genetically engineered human pluripotent stem cells."	PI	07/01/13 – 06/30/15	\$86,957 annual
AA&MDS International Foundation Research Grant "Modeling 7q- MDS with human induced pluripotent stem cells."	PI	07/01/13 – 06/30/15	\$27.273 annual
NIH/NIDDK R00 DK087923 "Genetic correction of human beta-thalassemic induced pluripotent stem cells."	PI	12/01/12 – 11/30/16	\$161,165 annual
Damon Runyon Cancer Research Foundation, Damon Runyon-Rachleff Innovation Award "Dissecting chromosome hemizygosity with human pluripotent stem cells."	PI	04/01/14 – 03/31/17	\$150,000 annual
Ellison Medical Foundation New Scholar in Aging Award "Haploinsufficiency of protein-coding	PI	12/01/13 – 03/31/18	\$92,593 annual

genes as an age-related disease mechanism."			
Edward P Evans Foundation Evans MDS Discovery Research Grant "Clinical and Biological Consequences of SF3B1 Mutations in MDS"	Co-I (PI: Papaemmanuil/ MSKCC)	09/01/16 – 08/31/18	\$181,818 (Papapetrou \$91,146) annual
Edward P Evans Foundation Research Grant "Role of the Defects of Spliceosomal Gene LUC7L2 in Pathogenesis of MDS"	Co-I (PI: Maciejewski/ Cleveland Clinic)	09/01/16 – 08/31/18	\$181,818 (Papapetrou \$33,636) annual
NIH/NHLBI R01 HL132071 "Novel Spliceosomal Defects in Myelodysplastic Syndromes"	Subcontract co-I (co-PIs: Maciejewski, Padgett/Cleveland Clinic)	09/01/16 – 09/30/18	Papapetrou \$72,000 annual
Henry and Marilyn Taub Foundation, Grants Program for MDS Research "A novel genotype-to-phenotype platform to study MDS pathogenesis"	PI	11/01/15 – 10/31/18	\$181,818 annual
NIH/NHLBI R01 HL121570 "Modeling chromosome 7 loss in Myelodysplasia-iPSCs"	PI	01/01/14 – 02/28/19	\$250,000 annual
Incyte Corporation Collaborative Research Agreement "Phenotype-driven drug testing for myeloid malignancies using patient- derived induced pluripotent stem cells"	PI	11/01/17 – 10/31/19	\$58,997 annual
NIH/NHLBI R01 HL137219 "Dissecting splicing factor mutations in iPSCs"	Contact PI (MPI: Yeo/UCSD)	04/01/17 – 03/31/21	\$499,652 (Papapetrou \$249,815) annual
New York Stem Cell Board NYSTEM Investigator Initiated Research Project (IIRP) "Reprogramming leukemia to study human pluripotent stem cell- derived hematopoiesis"	PI	08/01/18 – 07/31/21	\$300,000 (Papapetrou \$150,000) annual
The RUNX1 Research Program/Alex's Lemonade Stand Foundation RUNX1 Research Grant "Identifying therapeutic targets to prevent progression of familial RUNX1 disorder to AML using novel iPSC models"	PI	01/16/17 – 07/16/21	\$125,000 annual
Pershing Square Foundation SARS-CoV-2 Research Grant Genetic determinants of COVID-19 disease severity	PI	07/01/20 – 06/30/21	\$90,909 annual
NIH/NCI R01 CA225231 "Identification of therapeutic targets for leukemia stem cells in AML-iPSC models"	Contact MPI (co-PI: Kharas/MSKCC)	03/01/18 – 02/28/23	488,314 (Papapetrou \$208,608) annual

Leukemia & Lymphoma Society (LLS) Scholar Award "Studying the biology and therapeutic vulnerabilities of leukemia stem cells using AML-iPSCs"	PI	07/01/18 – 06/30/23	\$104,763 annual
Tri-institutional Stem Cell Initiative "Understanding and Characterizing the role of Spliceosome mutations in progression of Myeloproliferative Neoplasms to accelerated and blast phase"	Co-I (PIs: Rampal/MSKCC; Landau/Cornell)	06/01/21 – 05/31/23	(Papapetrou \$20,000) annual
AACR-MPM Oncology Charitable Foundation Transformative Cancer Research Grant "G protein signaling as a novel target for splicing factor-mutant cancers"	PI	12/01/21 – 11/30/23	\$200,000 annual
Edward P Evans Foundation Discovery Research Grant "The role of mutations in epigenetic regulators in the pathogenesis of MDS"	PI	09/01/21 – 08/31/24	\$181,818 annual

## CURRENT GRANTS

List Funding Source, Project <u>Title &amp; Number</u>	<u>Role in Project</u>	<u>Dates</u>	<u>Direct Costs</u>
NIH/NCI R01 CA271418 "Mechanisms and targeting of aberrant Gas activation in myeloid neoplasms"	PI	04/01/23 – 03/31/28	\$397,009 annual
NIH/NCI R01 CA260711 "Impact of mutational order on molecular mechanisms of oncogenesis"	PI	05/10/22 – 02/28/27	\$435,820 annual
NIH/NCI R01 CA271331 "Mechanisms and therapeutic implications of clonal hematopoiesis (CH) mutations"	PI	06/15/22 – 05/31/27	\$449,940 annual
Leukemia & Lymphoma Society (LLS) Blood Cancer Discoveries Grant Program (BCDG) "GNAS as a new therapeutic target for MDS"	PI	10/01/22 – 09/30/25	\$225,023 annual
Edward P Evans Foundation Discovery Research Grant "Role of the type I interferon pathway in the clonal fitness of TET2-mutant cells"	PI	09/01/25 – 08/31/28	\$181,818 annual

NIH/NCI R01 CA205975 "Lysosomes and their communications with mitochondria in leukemic stem cell disease progression"	Co-I (PI: Ghaffari)	05/10/22 – 02/28/27	\$250,000 (Papapetrou \$7,353) annual
NIH/NIA R01 "Epigenetic deregulation of osteoblasts promotes age-related clonality in hematopoietic cells"	Co-I (PI: Kousteni)	08/15/24 – 08/15/29	\$359,994 (Papapetrou \$72,753) annual
NIH/NIA R56 "Unraveling the role of clonal hematopoiesis in neurodegenerative diseases"	Co-I (PI: Raj)	09/18/24 – 08/31/25	

#### PENDING GRANTS

List Funding Source, Project <u>Title &amp; Number</u>	<u>Role in Project</u>	<u>Dates</u>	<u>Direct Costs</u>
NIH/NCI P01CA310888 "Genetic, differentiation state and developmental origins of leukemia stem cells"	PI	04/01/26 – 03/31/31	Total Award Amount (including indirect costs): \$16,737,945
NIH/NCI R01CA304556-A1 "Genetic driver - target cell type interactions and leukemia stem cell properties"	PI	04/01/26 – 03/31/31	\$485,125 annual requested
NIH/NIA R01AG092559-A1 "The biological properties of myeloid cells with clonal hematopoiesis mutations in the CNS"	Contact PI (MPI: Marro)	04/01/26 – 03/31/31	\$493,857 annual requested
NIH/NCI R01 000000 "Targeting inflammatory RAS-mutated AML leukemia stem cells"	Contact PI (MPI: Konopleva)	07/01/26 – 06/30/31	\$499,304 (Papapetrou \$249,305) annual requested
NIH R01 000000 "Investigating the determinants of response to Pan-RAS inhibition in juvenile myelomonocytic leukemia"	Co-Investigator (PI: Stieglitz, UCSF)	07/01/26 – 06/30/31	Papapetrou \$134,400 (including indirect costs) annual requested
NIH R01 000000 "Elucidating mutant ASXL1-mediated leukemic resistance to T cell therapies"	Co-Investigator (PI: Bachireddy, MDACC)	07/01/26 – 06/30/31	Papapetrou \$22,008 (including indirect costs) annual requested

BrightFocus Foundation "Clonal hematopoiesis and protection from Alzheimer's disease"	Collaborator (PI: Marro)	07/01/25 – 06/30/28	\$300,000
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## **CLINICAL TRIALS PARTICIPATION**

Not applicable

## **TRAINEES**

### **I. Laboratory Training and Supervision**

<u>Mount Sinai</u>		<u>2014-present</u>
Current position:		
<i>Faculty:</i>		
09/2017 – 08/2021	Andriana Kotini, PhD <i>(Instructor)</i>	Assistant Professor, University of Patras Medical School, Greece
03/2023 – present	Emmanuel Olivier, PhD <i>(Research Assistant Professor)</i>	NA
<i>Senior Scientists:</i>		
10/2023 – present	Minh Nguyen, PhD	NA
01/2024 – present	Baosen Jia, PhD	NA
<i>Postdoctoral Fellows:</i>		
12/2012 – 09/2017	Andriana Kotini, PhD	Assistant Professor, University of Patras, Greece
08/2014 – 01/2017	Chan-Jung Chang, PhD	Senior Scientist, Chan Zuckerberg Biohub New York
04/2016 – 01/2021	Tiansu Wang, PhD	Senior Scientist, Hillstar Bio
01/2017 – 04/2019	Henrik Sperber, PhD	Chief technology officer, QUICKR Bio
01/2017 – 03/2020	Josephine Wesely, PhD	Principal Scientist, New York Stem Cell Foundation
03/2017 – 09/2020	Wei Wang, PhD	Postdoctoral fellow, University Hospital Freiburg
08/2017 – 12/2020	Maria Georgomanoli, PhD	Account Manager & Field Application Scientist for Flow Cytometry, SB BioAnalytica
09/2020 – 05/2021	Nikolaos Spyrou, MD	Hematology/Oncology fellow, Mount Sinai Hospital
01/2021 – 09/2022	Nataly Cruz Rodriguez	Postdoctoral fellow, Versiti Blood Center
06/2021 – 12/2022	Leigh-anne Thomas	Senior Scientist, Horizon Discovery
07/2022 – 06/2024	Manon Jaud	Postdoctoral fellow, MD Anderson Cancer Center
10/2022 – present	Hager Mansour	NA
11/2022 – present	Junya Sango	NA
02/2025 – present	Yujing Zhang	NA
<i>Technical Personnel:</i>		
09/2016 – present	Malgorzata Olszewska <i>(Research Coordinator II)</i>	NA
04/2014 – 08/2017	Chrystel Husser	Academic Research Technician, France

<b>Graduate Students:</b>		
04/2016 – 08/2021	Shailee Vora	Scientist, Monte Rosa Therapeutics
06/2016 – 01/2022	Nicole Stokes	Biotechnology Equity Research Associate, Bank of America
06/2016 – 06/2020	Andre Deslaurier	Principal Scientist, Novo Nordisk
<b>Visiting Researchers:</b>		
06/2018 – 09/2018	Manuel Colado	Head, Laboratory of Stem Cells in Cancer and Aging, Health Research Institute of Santiago de Compostela, Spain
03/2019 – 09/2019	Tina Schnoeder	Scientist, University Hospital Jena, Jena, Germany
07/2019 – 08/2019	Pierre-Jacques Hamard	Manager, Epigenetics Research Innovation Lab, MSKCC
01/2022 – 01/2024	Kohei Takashima	Senior Scientist, Daiichi Sankyo
<b>Graduate Student Lab Rotations:</b>		
09/2014 – 12/2014	Yesai Fstkchyan	Scientist, Amgen
09/2015 – 12/2015	Maria Gomez	Scientist, Rutgers
09/2015 – 12/2015	Jessica Esernio	NA
01/2016 – 03/2016	Shailee Vora	Scientist, Monte Rosa Therapeutics
04/2016 – 07/2016	Nicole Stokes	Multiple Myeloma Foundation
09/2016 – 12/2016	Francesca Di Domenico	NA
06/2018 – 08/2018	Matthew Lin	MSTP student, ISSMS
08/2021 – 11/2021	Natalie Suhy	NA
08/2021 – 11/2021	Gayatri Mainkar	NA
08/2024 – 10/2024	Maryna Kucheriva	Graduate student CAB
09/2024 – 10/2024	Briana Brown	Master's student
01/2025 – 03/2025	Xin Fang	Graduate student CAB
<b>High School Students:</b>		
06/2018 – 09/2018	David Murtha	NA
06/2021 – present	Yisang Moon	High School student (Bronx Science)
<b>University of Washington</b>		<b>2012-2014</b>
<b>Postdoctoral Fellows:</b>		Current position:
05/2012 – 01/2014	Ibrahim Boussaad	Research Associate, Centre Hospitalier de Luxembourg
12/2012 – 04/2014	Andriana Kotini	Assistant Professor, University of Patras
<b>Clinical Fellows:</b>		
07/2013 – 04/2014	Melisa Ruiz-Gutierrez	Instructor, Boston's Children Hospital
<b>Visiting Faculty:</b>		
12/2013 – 02/2014	Luis Daniel Hernandez	Faculty, University of Guadalajara, Mexico
<b>Technicians:</b>		
03/2012 – 03/2013	Jeffrey Wijaranakula	Laboratory technician, UW
03/2013 – 11/2013	Steve Padilla	Laboratory technician, UW
11/2013 – 04/2014	Raisa Stolitenko	Laboratory technician, UW

*Graduate Student Lab Rotations:*

09/2013 – 12/2013

Michelle Krutein

Graduate Student

*Undergraduate students:*

01/2013 – 08/2013

Victoria Saykally

Research Associate, Gladstone Institute

**II. Dissertation Thesis Committees**

Mount Sinai

2014-present

Michael Daniel, MSTP, Mentor: Kateri Moore/Ihor Lemischka (co-mentors)

Jenielle Jobson, GGS, Mentor: Brian Brown

Mark Roberts, CAB, Mentor: David Dominguez-Sola

Foramben Patel, Mentors: Amir Horowitz, Lew Silverman

Mimi Zhang, CAB, Mentor: Elvin Wagenblast

Dror Perk, Albert Einstein College of Medicine, Mentor: Britta Will

External examiner

2014-present

Anna Sophia McKenney (Mentor: Ross Levine), Memorial Sloan-Kettering, Tri-I MD-PhD student (2016)

Ana Rita Leitoguinho (Mentor: Andrew Elefanty), Murdoch Children's Research Institute, Australia (2019)

Ya-Chi Angela Mo (Mentor: Aly Karsan), University of British Columbia (2022)

Georgios Asimomitis (Mentor: Elli Papaemmanuil), Memorial Sloan-Kettering Cancer Center (2024)

Madeline Kowalski (Mentor: Rahul Satija), New York Genome Center (2025)

University of Washington

2012-2014

Kristin Mussar, Mentor: Laura Crisa (2013-2014)

**III. Mentorship Committees**

2021 – present	Bridget K Marcellino, MD, PhD, Assistant Professor, Division of Hematology/Medical Oncology, Icahn School of Medicine at Mount Sinai
2021 – present	Stephanie Luff, PhD, Postdoctoral Fellow, Sturgeon lab, Icahn School of Medicine at Mount Sinai
2022 – present	Elvin Wagenblast, PhD, Assistant Professor, Department of Oncological Sciences, Icahn School of Medicine at Mount Sinai
2024 – present	Franco Izzo, PhD, Assistant Professor, Department of Oncological Sciences, Icahn School of Medicine at Mount Sinai

**GRANTS OF TRAINEES IN WHICH I SERVE(D) AS MENTOR:**

1. Chan-Jung Chang: T32 Postdoctoral Fellowship, Training Program in Cancer Biology, 2016-2017
2. Nicole Stokes: T32 Predoctoral Fellowship, Training Program in Cancer Biology, 2017-2018
3. Nicole Stokes: NIH/NHLBI Predoctoral Fellowship F31HL142208, 2018-2021
4. Shailee Vora: NIH/NCI Predoctoral Fellowship F31CA22829, 2018-2021
5. Henrik Sperber: NIH/NHLBI Postdoctoral Fellowship F32HL140869, 2018-2019
6. Wei Wang: German Research Foundation (DFG) Postdoctoral Fellowship WA 4138, 2017-2020
7. Josephine Wesely: German Research Foundation (DFG) Postdoctoral Fellowship WE 6233, 2018-2020
8. Tiansu Wang: NYSTEM Training Program Postdoctoral Fellowship, 2019-2021

**GRANTS OF FACULTY IN WHICH I SERVE(D) AS MENTOR or CO-MENTOR:**

1. NIH K08 Award, Bridget K Marcellino, MD, PhD, Assistant Professor, Division of Hematology/Medical Oncology, Icahn School of Medicine at Mount Sinai
2. ALSF A Award, Elvin Wagenblast, Assistant Professor, Department of Oncological Sciences, Icahn School of Medicine at Mount Sinai
3. Young Investigator Award, CureSearch for Children's Cancer, Elvin Wagenblast, Assistant Professor, Department of Oncological Sciences, Icahn School of Medicine at Mount Sinai
4. V Scholar Award, V Foundation, Elvin Wagenblast, Assistant Professor, Department of Oncological Sciences, Icahn School of Medicine at Mount Sinai
5. ASH Junior Investigator Scholar Award, Franco Izzo, Assistant Professor, Department of Oncological Sciences, Icahn School of Medicine at Mount Sinai

**TEACHING ACTIVITIES**

<u>Teaching Activity/Topic</u>	<u>Level</u>	<u>Role</u>	<u>Indicate Level and Number of Learners Taught, and Venue</u>	<u>Number of hours week/month/yr</u>	<u>Evaluation Summary</u>	<u>Years Taught</u>
1 <sup>st</sup> year/Gene therapy University of Patras, Greece	Graduate School Course	Lecturer	Graduate Students (~40)	3 hours per year	N/A	2005-2006
1 <sup>st</sup> year/Stem Cells University of Patras, Greece	Graduate School Course	Lecturer	Graduate Students (~30)	4 hours per year	N/A	2005-2006
1 <sup>st</sup> year/Gene regulation Gerstner Sloan-Kettering Graduate School of Biomedical Sciences	Graduate School Course	Lecturer	Graduate Students (~20)	4 hours per year	N/A	2008-2009
Research Seminars University of Washington, Seattle, WA	Hematology Division Level	Organizer	Postdocs (~20)	2 hours per month	N/A	2012-2014
1 <sup>st</sup> year/ iPSC technology University of Washington, Seattle, WA	Graduate School Course "Advanced Drug Delivery"	Lecturer	Graduate Students (~30)	2 hours per year	N/A	2013-2014
Lecture on Career Development University of Washington, Seattle, WA	MSTP Program	Lecturer	MSTP Students (~25)	1 hour per year	N/A	2013-2014
Path 507 University of Washington, Seattle, WA	Graduate School Course	Lecturer	Graduate Students (12)	2 hours per year	N/A	2013-2014
"Cancer Stem Cells" in Stem Cell and Regenerative Biology (SCRB) course	Graduate School Course	Lecturer	Graduate Students	2 hours every two years	N/A	2018

**ADMINISTRATIVE LEADERSHIP APPOINTMENTS****INTERNAL:****Center for Advancement of Blood Cancer Therapies (CABCT):**

In 2022, I became the Founding Director of the Center for Advancement of Blood Cancer Therapies (CABCT) at ISMMS. My vision for this new Center was to bring together investigators with a commitment to basic or translational cancer research that directly aims to uncover mechanisms of human blood cancers and/or develop therapeutics, including conventional drugs and cell therapies. The Center's emphasis is on research using human models of normal and malignant hematopoiesis, specifically primary human cells, human iPSCs, and patient-derived xenografts, as well as multimodal single-cell genomics technologies to extract information from patient cells. The Center supports Core facility services specific to blood cancer

research, including bioinformatics, flow cytometry and sorting, iPSC modeling and mouse xenograft models. Active new faculty recruitment within the Center is ongoing and planned over the next 3 years.

### **Stem Cell Engineering Core (SCEC):**

In January 2020 I helped establish a new Core Facility at ISMMS, the Stem Cell Engineering Core (SCEC), which I co-directed until 2024. I led, together with Dr Sarah Millar, Director of the Black Family Stem Cell Institute (BFSCI) at ISMMS, the efforts to establish this as a new Dean's Core (administratively supported and subsidized by ISMMS). I helped develop the initial business plan and hire a Co-Director, Dr Samuele Marro, whom we recruited from Stanford University. Dr Marro and I hired additional personnel (4 technicians). I oversaw, together with Dr Marro, all research activities of the Core, whose focus and mission is to assist the ISSMS community (and a more limited number of external researchers from other Institutes) in the derivation of iPSCs from primary patient cells and the generation of genetically engineered, mainly CRISPR/Cas9-gene edited, iPSC lines, as human genetic models. The Core has been an important asset to the ISSMS research community.

## **COMMUNITY SERVICE:**

### **INTERNAL:**

#### **Department of Oncological Sciences Work-in-Progress seminar series:**

I established a new monthly Work-in-Progress (WIP) seminar series for trainees (PhD students and postdoctoral fellows) which run for two consecutive years (2022 and 2023). In its first academic year the WIP included laboratories of the Tisch Cancer Institute located at the 6<sup>th</sup> floor of the Hess building (and was dubbed "Hess 6 WIP") and was subsequently expanded to include additional laboratories of the Department of Oncological Sciences (and was renamed "Onc Sci WIP"). The series was an initiative aimed at boosting morale in the aftermath of the COVID-19 pandemic, reverse social isolation of many of our trainees and encourage interactions, feedback and collaborations between trainees from neighboring laboratories. To this end, I secured Departmental funds to also support a social event after each seminar at a local pub, co-organized by the trainees. These series and social event has been well-attended and well-liked by our trainees.

### **EXTERNAL:**

- During my time as the Chair of the American Society of Gene and Cell Therapy (ASGCT) Stem Cell Committee, I established a "**Stem Cell Workshop**", that was enthusiastically adopted as a standing pre-meeting to the annual meeting of the society. I co-organized and co-chaired (with Dr Dan Bauer) the inaugural workshop that was scheduled to take place in Boston in May 2020 (but in the end was held virtually due to the COVID19 pandemic).
- I conceived and established a new symposium on "**Human pluripotent stem cell-derived hematopoiesis**" as a satellite symposium to the International Society of Experimental Hematology (ISEH) annual meeting. I polled and mobilized researchers from the broader international hematopoiesis/hematology community that are invested in this topic in support of this idea, led the fund-raising and developed the program for the inaugural symposium, which was scheduled to take place in NYC in August 2020. It was postponed due to the pandemic and finally took place in September 2022 in Seattle, WA, with me as the co-organizer (together with local organizer Dr Sergei Doulatov). The second symposium took place in NYC in 2023, as a pre-meeting before the main ISEH meeting and the third in Chicago in 2024, again in conjunction with the annual ISEH meeting. It is now slated to recur every year in conjunction with the ISEH annual meeting. This meeting is now well-known in the stem cell and hematopoietic communities and is attended by over 100 participants.

- I co-organized (with Dr Ernesto Guccione) the fourth “**Workshop on Splicing Factor Mutations and RNA Biology in Cancer**”. This is the fourth in a series of workshops: first workshop in 2015 at MSKCC with co-organizers Drs Harold Varmus and Omar Abdel-Wahab; second workshop in 2017 at Harvard with co-organizers Drs Catherine Wu and Tim Graubert; third workshop in 2019 at Yale with co-organizers Drs Stephanie Halene and Manoj Pillai. We planned the fourth workshop to take place in NYC in the Spring of 2021. It was postponed due to COVID-19 and was rescheduled to the Spring of 2023. The workshop was very well-attended and enthusiastically received.
- Since 2023 I serve as co-organizer of the “**Leukemia Working Group**” meetings, monthly meetings for faculty working on hematopoiesis and leukemia from the broader New York area – including MSKCC, Cornell, NYU, Columbia, Albert Einstein, Rutgers and MSSM. This series has been ongoing since several years, housed at MSKCC or Cornell. In 2023, Dr Michael Kharas and I took over coordination of these meetings from Drs Ross Levine and Ari Melnick. One faculty member is invited to present each month in a relatively informal and collegial environment and receives expert feedback on ongoing projects.
- Since 2023 I serve as co-organizer of the “**nNYC Heme Club**” meetings. These meetings are held bi-annually and include faculty and trainees working on hematopoiesis and leukemia from MSSM, Columbia, Albert Einstein and the NY Blood Center (i.e. the “northern” NYC Institutes). They are formatted as mini-symposia, hosted by one of the participating institutes in rotation and involve talks by senior trainees and junior faculty, followed by a social event. They are intended to foster cross-institutional interactions between faculty and their trainees.

## **PUBLICATIONS** (\*indicates corresponding author)

### **Peer Reviewed Original Contributions**

1. Huang AY\*, Zhou Z, Talukdar M, Enyenih L, Miller MB, Chhouk B, Yang, A, Rosen I, Zhou M, Zheng, M, Stronge E, Durens M, Nguyen M, Choi J, Zhao B, Khoshkho S, Kim J, Andersen R, An Z, Cheng Y, Ganz J, Travaglini KJ, Gabitto MI, Hodge RD, Kaplan ES, Belk JA, Lein ES, De Jager PL, Bennett DA, Marro SG\*, **Papapetrou EP\***, Lee EA\*, Walsh CA\*. Somatic cancer driver variants are enriched in Alzheimer’s disease brain macrophages and associated with inflammatory and proliferative states. **Cell** Provisionally Accepted
2. Naito T, Hirata K, Jang B, Lakhani CM, Buonfiglioli A, Lee WP, Valladares O, Wang LS, Okada Y, Won HH, **Papapetrou EP**, Marro SG, Knowles DA, Raj T. Mosaic chromosomal alterations in blood are associated with an increased risk of Alzheimer’s disease. **medRxiv** 2025 Jun 4:2025.05.29.25328544. doi: 10.1101/2025.05.29.25328544. PMID: 40502569
3. Wang K, Sanie S, Poddar N, Autar S, Carcamo S, Sreenath M, Peplinski JH, Ries RE, Martinez IG, Chao C, Mei AH, Rahman N, Mekerishvili L, Quijada-Álamo M, Freed G, Zhang M, Lachman K, Diaz Z, Gonzalez MM, Zhang J, Pham G, Filipescu D, Berisa M, Balestra T, Reisz JA, D’Alessandro A, Puleston DJ, Bernstein E, Chipuk JE, Wunderlich M, Tasian SK, Marcellino BK, Glass IA, Sturgeon CM, Landau DA, Chen Z, **Papapetrou EP**, Izzo F, Meshinchi S, Hasson D, Wagenblast E. Ontogeny dictates oncogenic potential, lineage hierarchy, and therapy response in pediatric leukemia. **Cancer Discovery** 2025 Dec 6: OF1-OF30. doi: 10.1158/2159-8290.CD-25-0556. Online ahead of print. PMID: 41351880
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6. Almaghrabi R, Alyahyawi Y, Keane P, Mian S, Habel K, Atkinson A, Ward C, Bayleu R, Sargas C, Menendez P, Murphy GJ, Sobahy T, Baghdadi MA, Blemban AF, Kabrah S, Torres-Ruiz R, **Papapetrou EP**, Akerman I, Reghavan M, Barragan E, Bonnet D, Bonifer C, Garcia P. A heterozygous CEBPA mutation disrupting the bZIP domain in patient-derived iPSC harbouring RUNX1 and SRSF2 mutations faithfully recapitulates MDS disease progression *Nature Communications* 2025; 16(1):5489.
7. Sirenko M, Lee S, Sun Z, Chaligne R, Loghavi S, Asimomitis G, Brierley CK, Bernard E, Cai SF, Myers RM, Nadorp B, Sango J, Lallo M, Levine MF, Domenico D, Arango Ossa JE, Medina-Martinez JS, Menghrajani K, Lasry A, Mims AS, Desai H, Leganson A, Famulare C, Patel M, Lozanski G, Bolton KL, Viny AD, Roshal M, Levine RL, **Papapetrou EP**, Stein EM, Landau DA, Eisfeld A-K, Aifantis I, Papaemmanuil E. Deconvoluting clonal and cellular architecture in *IDH*-mutant acute myeloid leukemia. *Cell Stem Cell* 2025; 32(7):1102-1121.
8. Wang Z, Skwarska A, Poigaialwar G, Chaudhry S, Rodriguez-Meira A, Sui P, Olivier E, Jia Y, Gupta V, Fiskus W, Ramage CL, Zheng G, Schurer A, Gritsman K, **Papapetrou EP**, Bhalla KN, Zhou D, Mead AJ, Rampal RK, Tyner JW, Abbas HA, Pemmaraju N, Tatarata QZ, Konopleva MY. Efficacy of a novel BCL-xL degrader, DT2216, in preclinical models of JAK2-mutated post-MPN AML. *Blood* 2025; 146(3):341-355.
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### Invited Contributions

1. **Papapetrou EP\***. Breaking ribosomes to fight leukemia. *Blood* 2025;146(10): 1155-1156. (Commentary)
2. **Papapetrou EP\***. The clones have STRACK: Tracing responses to leukemic mutations. *Cell Stem Cell* 2025; 32: 499-501. (Invited "Preview" article)
3. Sturgeon CM, **Papapetrou EP**, McKinney-Freeman S. Human pluripotent stem cell-derived hematopoietic progenitors and mature cells. *Exp Hematol* 2025;143: 104713. (Editorial)
4. Sturgeon CM, Wagenblast E, Izzo F, **Papapetrou EP\***. The crossroads of clonal evolution, differentiation hierarchy and ontogeny in leukemia development. *Blood Cancer Discovery* 2025; 6: 94-109. (Invited Review article)
5. **Papapetrou EP\***. Base-editors dissect genetic-variants in human hematopoietic-cells at large-scale. *Trends in Immunology* 2023; 44(7):490-492. (Invited "Spotlight" article)
6. **Papapetrou EP\***. MDS/AML with del5q: an acquired "laminopathy"? *Cell Stem Cell* 2022; 29(4):498-499. (Invited "In Translation" commentary)
7. **Papapetrou EP\***, Lee D-F. Reprogramming and cancer. *Stem Cell Res* 2021; 52: 102249. (Editorial)
8. Doulatov S\*, **Papapetrou EP\***. Studying clonal evolution of myeloid malignancies using induced pluripotent stem cells. *Curr Opin Hematol* 2021; 28(1): 50-56. (Invited review article)
9. Deslauriers AG, Kotini AG, **Papapetrou EP\***. Modeling leukemia stem cells with patient-derived induced pluripotent stem cells. *Methods Mol Biol* 2021; 2185: 411-422.
10. Spyrou N, **Papapetrou EP\***. Studying leukemia stem cell properties and vulnerabilities with human iPSCs. *Stem Cell Res* 2020; 50: 102117. (Invited review article)
11. **Papapetrou EP\***. Modeling leukemia with human induced pluripotent stem cells. *Cold Spring Harb Perspect Med* 2019; 9: a034868. (Invited review article)
12. Georgomanoli M, **Papapetrou EP\***. Modeling blood diseases with human induced pluripotent stem cells. *Dis Model Mech* 2019; 12(6). (Invited review article)
13. **Papapetrou EP\***. Modeling myeloid malignancies with patient-derived iPSCs. *Exp Hematol* 2019;

71:77-84. (Invited review article)

14. **Papapetrou EP\***. Gene and cell therapy for  $\beta$ -thalassemia and sickle cell disease with induced pluripotent stem cells (iPSCs): the next frontier. *Adv Exp Med Biol* 2017; 1013: 219-240. (Invited review article)
15. **Papapetrou EP\***. Patient-derived induced pluripotent stem cells in cancer research and precision oncology. *Nature Medicine* 2016; 22(12): 1392-1401. (Perspective article)
16. **Papapetrou EP\***. Induced pluripotent stem cells, past and future. *Science* 2016; 353(6303): 991-992. (Perspective article)
17. **Papapetrou EP\***, Schambach A. Gene insertion into genomic safe harbors for human gene therapy. *Molecular Therapy* 2016; 24(4): 678-684. (Invited review article)
18. Davilla ML, **Papapetrou EP\***. CARs move to the fast lane. *Molecular Therapy* 2014; 22(3): 477-478. (Editorial)
19. **Papapetrou EP\***. FA iPS: correction or reprogramming first? *Blood* 2012; 119: 5341-5342. (Inside Blood commentary)
20. Sadelain M, **Papapetrou EP**, Bushman FD. Safe harbors for integration of new DNA in the human genome. *Nature Reviews Cancer* 2011; 12(1): 51-58. (Perspective article)
21. **Papapetrou EP**, Sadelain M. Reconstructing blood from induced pluripotent stem cells. *F1000 Medicine Reports* 2010, 2: 44. (Invited review article)
22. **Papapetrou EP\***, Zoumbos NC, Athanassiadou A. Genetic modification of hematopoietic stem cells with non-viral systems: past progress and future prospects. *Gene Therapy* 2005; 12: S118-30. (Invited review article)

## **Books and Book Chapters**

1. "Modeling leukemia with human induced pluripotent stem cells" In: Leukemia and Lymphoma. Editors: RL Levine, AM Melnick, MG Kharas, Publisher: Cold Spring Harbor Laboratory Press. 2019
2. "Gene and Cell Therapy for  $\beta$ -Thalassemia and Sickle Cell Disease with Induced Pluripotent Stem Cells (iPSCs): The Next Frontier" In: Gene and Cell Therapies for Beta-Globinopathies. Editors: P Malik, J Tisdale, Publisher: Springer. 2017
3. Molecular Basis of Blood Disorders. Editor: N. C. Zoumbos, Publisher: Synedra, Patras, Greece. 2009

## **INVITED LECTURES/PRESENTATIONS (Recent, selected)**

### **Selected invited talks in national and international meetings**

2025 JMMI Summit, Orlando FL  
2025 Frontiers in Cancer Science Conference, Singapore  
2025 FEBS Workshop on Molecular and Cellular pathways of Aging in Hematopoiesis, Crete, Greece  
2025 ESH 7<sup>th</sup> International Conference Acute Myeloid Leukemia "Molecular and Translational": Advances in Biology and Treatment, Estoril, Portugal  
2025 Deerfield Foundation AML summit, New York, NY  
2025 Symposium on "Human pluripotent stem cell-derived hematopoiesis", Kumamoto, Japan  
2025 NIH Regenerative Medicine Summit, Bethesda, MD  
2025 FASEB conference on Hematologic Malignancies, Southbridge, MA  
2025 Keynote lecture, Cancer Center Amsterdam annual conference, Amsterdam, Netherlands  
2025 Keynote lecture, Department of Biomolecular Medicine, Ghent University, Ghent, Belgium  
2025 Keynote speaker, Annual Hematology Conference, University Hospital of Alexandroupolis, Greece  
2025 Hematopoietic Stem Cell and Myelodysplastic Syndromes (MDS) Symposium, MD Anderson

Cancer Center, Houston, TX

2025 Biology and Therapy of Myeloid Malignancies Fusion Conference, Chania, Greece

2025 5th Workshop on Splicing Factor Mutations and RNA Biology in Cancer, Boston, MA

2025 European Hematology Association (EHA)-SWG Scientific Meeting on Recent Advances in the Pathogenesis and Treatment of Secondary Acute Myeloid Leukemias, Berlin, Germany

2025 International Symposium Acute Leukemias XIX (ISALXIX), Munich, Germany

2024 American Society of Hematology (ASH) Annual Meeting Spotlight Session, San Diego, CA

2024 Myeloid workshop, American Society of Hematology (ASH) Annual Meeting, San Diego, CA

2024 Evans Foundation MDS Summit, Philadelphia, PA

2024 AstraZeneca Hematology speaker series

2024 NCI/NHLBI workshop on MDS, Bethesda, MD

2024 International workshop on molecular aspects of myeloid stem cell development and leukemia, Cincinnati, OH

2024 18th Wisconsin Stem Cell Symposium "Blood Stem Cells: Mechanisms, Pathogenesis, and Genome Editing", Madison, WI

2024 MD Anderson Cancer Center Hematopoietic Stem Cell and MDS Symposium, Houston, TX

2024 Blood Cancer Discovery Symposium, Boston, MA

2024 Keystone symposium on Hematopoiesis, Keystone, CO

2023 American Society of Hematology (ASH) Annual Meeting Friday Scientific Workshop on Therapy Resistance Mechanisms in Blood Malignancies, San Diego, CA

2023 Evans Foundation MDS Summit, Nashville, KY

2023 Symposium on "Human pluripotent stem cell-derived hematopoiesis", New York, NY

2022 Institute for Stem Cell and Regenerative Medicine (ISCRM)/University of Washington symposium on "Human pluripotent stem cell-derived hematopoiesis", Seattle, WA

2022 HEME Myeloid Diseases Business Development Advisory Board, Janssen Oncology

2022 International Society for Experimental Hematology (ISEH) Annual Scientific Meeting, Edinburgh, UK

2022 International workshop on molecular aspects of myeloid stem cell development and leukemia, Cincinnati, OH

2021 Annual Meeting of the German, Austrian and Swiss Associations for Hematology and Medical Oncology, Berlin

2021 European Hematology Association (EHA) Molecular hematopoiesis workshop (virtual)

2019 Evans MDS summit, St Louis, MO

2019 RUNX1 Research Program Retreat, Aspen, CO

2019 3<sup>rd</sup> International Stem Cell meeting, Chania, Greece

2019 Nature conference: Translating cell and gene therapies, Guangzhou, China

2019 Taub Foundation Symposium for MDS Research, Teaneck, NJ

2019 Merck Scientific Input Engagement "Cancer Models", San Francisco, CA

2018 American Society of Hematology (ASH) Annual Meeting (Scientific session), San Diego, CA

2018 American Society of Hematology (ASH) Annual Meeting (Meet the Expert), San Diego, CA

2018 RUNX1 Research Program Retreat, Santa Barbara, CA

2018 Evans MDS summit, Boston, MA

2018 FASEB Science Research Conference "Genome Engineering: Cutting-Edge Research and Applications", Florence, Italy

2018 Stem cell Niche conference of the Novo Nordisk Foundation, Copenhagen, Denmark

2018 International workshop on molecular aspects of myeloid stem cell development and leukemia, Cincinnati, OH

2018 AA&MDS International Foundation Sixth International Bone Marrow Failure Disease Scientific Symposium, Washington DC

2017 Sharing radically novel visions in cancer – a think-tank meeting, Berlin, Germany

2016 Annual Gene Therapy Symposium for Heart, Lung and Blood Diseases, Sonoma, CA

2016 Evans MDS Summit, Nashville, TN

2016 ASH workshop on genome editing, Washington DC

2016 NYSTEM (New York Stem Cell Science) Annual Meeting

2016 International workshop on molecular aspects of myeloid stem cell development and leukemia, Cincinnati, OH

2016 Keystone Symposium "Stem Cells and Cancer", Breckenridge, CO

2016 Damon Runyon Accelerating Cancer Cures Symposium, Summit, NJ

2015 American Society of Hematology (ASH) Annual Meeting (Workshop on Myeloid Development), Orlando, FL

2015 Splicing factor mutations in Cancer Workshop, New York, NY

2015 International Society for Experimental Hematology (ISEH) Annual Meeting, Kyoto, Japan

2015 Evans Foundation MDS Summit, Washington DC

2015 Annual NextGen Stem Cell Conference, Saratoga, NY

2015 American Association for Cancer Research (AACR) Annual Meeting (Recent Advances session), Philadelphia, PA

2014 American Society of Hematology (ASH) Annual Meeting (Workshop on Myeloid Development), San Francisco, CA

2013 Annual Gene Therapy Symposium for Heart, Lung and Blood Diseases, Sonoma, CA

2013 Annual Symposium of the Institute for Stem Cell and Regenerative Medicine, University of Washington, Seattle, WA

2012 American Society of Gene and Cell Therapy (ASGCT) Annual Meeting (Scientific session), Philadelphia, PA

2011 American Society of Hematology (ASH) Annual Meeting (Scientific session), San Diego, CA

2011 American Society of Gene and Cell Therapy (ASGCT) Annual Meeting (Education session), Seattle, WA

2011 Cold Spring Harbor Laboratory Meeting "Stem Cell Engineering and Cell-Based Therapies", NY

2011 Memorial Sloan-Kettering Center for Cell Engineering Annual Retreat, New York, NY

2010 Red Cell Club Conference, Cincinnati, OH

2010 Annual Gene Therapy Symposium for Heart, Lung and Blood Diseases, Sonoma, CA

2010 IEEE International Conference on Bioinformatics and Bioengineering (BIBE), Philadelphia, PA

2010 Hellenic Association of Life Sciences Annual Meeting, Athens, Greece

2009 Memorial Sloan-Kettering Center for Cell Engineering Annual Retreat New York, NY

#### **Additional selected talks in national and international meetings**

2024 2nd Probing Human Disease using Single-Cell Technologies Conference, Cancun, Mexico

2023 FASEB conference on Hematologic Malignancies, Southbridge MA

2023 Late breaking minisymposium, AACR Annual meeting

2021 FASEB Hematologic Malignancies Conference (virtual)

2016 Workshop on Splicing Factor Mutations in Cancer, Boston, MA

2016 Cell Symposium "10 years of iPSCs", Berkeley, CA

2015 Keystone Symposium on "Transcriptional and Epigenetic Influences on Stem Cell States" (Short talk), Banff, Alberta, Canada

2015 Keystone Symposium on Hematopoiesis (Workshop presenter), Keystone, CO

2013 Keystone Symposium on "Stem Cell Regulation in Homeostasis and Disease" (Workshop presenter), Steamboat Springs, CO

2010 New York Stem Cell Science (NYSTEM) Annual Meeting, New York, NY

2008 Gene Therapy & Stem Cell Reprogramming Workshop, Paris, France

#### **Selected invited talks in regional meetings and departmental seminars**

2025 Princess Margaret Cancer Centre Seminar Series, Toronto, ON, Canada

2025 University of Miami/Sylvester Cancer Center Hematology/Medical Oncology Grand Rounds (virtual)

2025 The University of Texas-MD Anderson Cancer Center Hematology Grand Rounds (virtual)

2025 MRC Weatherall Institute of Molecular Medicine Seminar Series, University of Oxford, Oxford, UK

2025 Myeloid Malignancy Workshop, New York, NY

2024 Ohio State University Hematology Grand Rounds

2024 University of Pennsylvania Perelman School of Medicine Abramson Family Cancer Research

2023 Institute Distinguished Lectures in Cancer Research (DLCR)  
2023 Institute for Regenerative Medicine/Department of Cell, Developmental & Regenerative Biology Annual Retreat  
2023 Fred Hutchinson Cancer Research Center Stem Cell and Gene Therapy seminar series  
2023 Memorial Sloan-Kettering Cancer Center and Columbia University Evans MDS Centers Symposium  
2023 Albert Einstein College of Medicine Ruth L and David S Gottesman Institute for Stem Cell and Regenerative Medicine Research Seminar series  
2023 Mass General Brigham Pathology Grand Rounds  
2023 Indiana University Simon Comprehensive Cancer Center seminar series presentation  
2023 Daiichi Sankyo Global Research Seminar  
2022 Hematology Grand Rounds, Division of Hematology, Brigham and Women's Hospital  
2022 Regeneron  
2022 Tisch Cancer Institute seminar series  
2022 Baylor College of Medicine HemHub meeting  
2022 New York Cancer Genomics Research Network meeting, New York Genome Center  
2021 Black Family Stem Cell Institute Annual Retreat  
2020 St Jude Children's Research Hospital, Memphis, TN (virtual visit)  
2020 Incyte Corporation (virtual visit)  
2020 Columbia University Medical Center, Department of Physiology (virtual visit)  
2019 MPN/Leukemia Strategic Planning Retreat  
2019 Stony Brook University, Laufer Center Workshop  
2019 University of Miami, Sylvester Comprehensive Cancer Center, Distinguished Lecture Series  
2018 Cancer Precision Medicine retreat, Tisch Cancer Institute, Icahn Institute for Genomics and Multiscale Biology and Department of Genetics and Genomic Sciences, New York, NY  
2018 Boston Children's Hospital, Joint Program in Transfusion Medicine Research Seminar Speaker  
2018 Children's Hospital of Philadelphia Research Institute, Normal and Malignant Hematopoiesis Research Affinity Group Seminar Series Speaker  
2018 NYU School of Medicine, Kimmel Center of Stem Cell Biology, Stem Cell Club  
2018 University of Texas (UT Health) Mc Govern Medical School, Department of Integrative Biology and Pharmacology  
2017 Northwestern University, Chicago, IL  
2016 University of British Columbia  
2015 Johns Hopkins, Institute for Cell Engineering guest seminar  
2015 Memorial Sloan-Kettering, Developmental Biology guest seminar  
2014 University of Washington, Institute for Stem Cell and Regenerative Medicine Stem Cell Club  
2014 University of Washington, Hematology Division Grand Rounds guest speaker  
2013 New York University, Department of Pathology  
2011 Albert Einstein College of Medicine, Institute for Stem Cell Biology and Regenerative Medicine  
2011 Cincinnati Children's hospital Medical Center, Experimental Hematology and Cancer Biology  
2011 University of Toronto, Institute of Biomaterials and Biomedical Engineering, Toronto, Canada  
2011 Children's Hospital of Philadelphia, Philadelphia, PA  
2011 NHLBI, Hematology Division, Bethesda, MD  
2011 Children's Hospital Boston, Stem Cell Transplantation Program, Boston, MA

## **VOLUNTARY PRESENTATIONS**

### **SELECTED ORAL ABSTRACT PRESENTATIONS BY LAB MEMBERS AT INTERNATIONAL MEETINGS:**

1. *"iPS Cells From Del(7q)-MDS Patients Display Impaired Proliferation and Hematopoietic Commitment"*  
Boussaad I, Dolezal EK, Perna F, Nimer SD, Papapetrou EP. 54<sup>th</sup> American Society of Hematology (ASH) Annual Meeting, 2012, Atlanta, GA. (**Abstract Achievement Award to I. Boussaad**)
2. *"Chromosome 7q Hemizygosity Recapitulates MDS-Related Cellular Phenotypes In Genetically*

*Engineered Human Pluripotent Stem Cells*" Kotini A, Boussaad I and Papapetrou EP. 55<sup>th</sup> American Society of Hematology (ASH) Annual Meeting, 2013, New Orleans, LA. (**Abstract Achievement Award to A. Kotini**)

3. "An iPSC-Based Model Of MDS For Phenotype-Driven Gene and Drug Discovery" Boussaad I, Kotini A, Dolezal EK, Nimer SD, Papapetrou EP. 55<sup>th</sup> American Society of Hematology (ASH) Annual Meeting, 2013, New Orleans, LA. (**Abstract Achievement Award to I. Boussaad**)

4. "Modeling chromosome hemizygosity in isogenic human pluripotent stem cells" Kotini A, Boussaad I, Papapetrou EP. 17<sup>th</sup> American Society of Gene and Cell Therapy (ASGCT) Annual Meeting, 2014, Washington DC.

5. "Functional Dissection of Chromosome 7q Loss and Haploinsufficient Gene Discovery Using iPSC Models of MDS" Kotini A, Delrow JJ, Graubert, TA, Nimer SD, Papapetrou EP. 56<sup>th</sup> American Society of Hematology (ASH) Annual Meeting, 2014, San Francisco, CA. (**Abstract Achievement Award to A. Kotini**)

6. "Isogenic iPSC Models of SRSF2-Mutant Myelodysplastic Syndrome Capture Disease Phenotypes, Splicing Defects and Drug Responses" Chang CJ, Kotini AG, Teruya-Feldstein J, Abdel-Wahab O, Bradley RK, Papapetrou EP. 58<sup>th</sup> American Society of Hematology (ASH) Annual Meeting, 2016, San Diego, CA. (**Abstract Achievement Award to C-J Chang**)

7. "A novel iPSC model reveals a role for RUNX1 in the maintenance of AML Leukemia Stem Cells" Wesely J, Kotini A, Georgomanoli M, Luo H, Yuan H, Izzo F, Landau D, Leslie C, Kharas M, Papapetrou EP. 60<sup>th</sup> American Society of Hematology (ASH) Annual Meeting, 2018, San Diego, CA. (**Abstract Achievement Award to J. Wesely**)

8. "A "De Novo Leukemogenesis" iPSC Model Charts the Clonal Evolution of Acute Myeloid Leukemia" Wang T, Kotini A, Papapetrou EP. 60<sup>th</sup> American Society of Hematology (ASH) Annual Meeting, 2018, San Diego, CA. (**Abstract Achievement Award to T. Wang**)

9. "Functional Analysis of MYC Deregulation By Diverse Genetic Mechanisms during Hematopoiesis" Stokes N, Dominguez-Sola D, Papapetrou EP. 60<sup>th</sup> American Society of Hematology (ASH) Annual Meeting, 2018, San Diego, CA. (**Minority Graduate Student Abstract Achievement Award to N. Stokes**)

10. "SRSF2 and U2AF1 mutations drive MDS through alternate GNAS isoform usage and cooperate with GNAS hotspot mutations" Vora S, Wheeler EC, Kotini AG, Yeo GW, Papapetrou EP. 50<sup>th</sup> International Society for Experimental Hematology (ISEH) Annual Meeting, 2021 (virtual).

11. "Integrative mRNA binding and splicing analysis identifies altered GNAS isoform usage as a phenotypic driver in splicing factor mutant neoplasms" Vora S, Wheeler EC, Kotini AG, Yeo GW, Papapetrou EP. FASEB Hematologic Malignancies Conference, 2021 (virtual). (**Abstract Award to S. Vora**)

12. "N/KRAS-Mutant AML LSCs Originate from Committed Myelomonocytic Progenitors and Drive Clinical Resistance to Venetoclax" Sango J, Carcamo S, Sirenko M, Maiti A, Cruz-Rodriguez N, Olszewska M, Wang T, Ulukaya G, Tomalin L, Olivier E, Jaud M, Chaligne R, Mansour H, Demircioglu D, Landau DA, Papaemmanuil E, DiNardo CD, Hasson D, Konopleva M, Papapetrou EP. 65<sup>th</sup> American Society of Hematology (ASH) Annual Meeting, 2023, San Diego, CA. (**Abstract Achievement Award to J. Sango and highlighted in "Best of ASH"**)

13. "N/KRAS-mutant AML LSCs originate from committed myelomonocytic progenitors and drive clinical resistance to Venetoclax" Sango J, Carcamo S, Sirenko M, Maiti A, Mansour H, Ulukaya G, Tomalin L, Olivier E, Olszewska M, Demircioglu D, Landau DA, Papaemmanuil E, DiNardo CD, Hasson D, Konopleva M, Papapetrou EP. 53<sup>th</sup> International Society for Experimental Hematology (ISEH) Annual Scientific Meeting, 2024, Chicago, IL. (**Travel Award to J. Sango**)

14. "RAS mutations transform granulocyte-monocyte progenitors into inflammatory acute myeloid leukemia stem cells" Sango J, Fan C-W, Mansour H, Sirenko M, Jethalia M, Carcamo S, Hasson D, Papapetrou EP. FASEB conference on Hematologic Malignancies, 2025, Southbridge, MA. (**Travel Award to J. Sango**)

15. "RAS mutations transform granulocyte-monocyte progenitors into inflammatory leukemia stem cells in acute myeloid leukemia" Sango J, Fan C-W, Mansour H, Sirenko M, Jethalia M, Carcamo S, Hasson D, Papapetrou EP. 54<sup>th</sup> International Society for Experimental Hematology (ISEH) Annual Scientific Meeting, 2025, Kumamoto, Japan. **(Travel Award to J. Sango)**

16. "*TET2 mutations drive cell-autonomous type I interferon production and selective advantage through TRIM4 silencing*" Jia B, Fijalkowski I, Jaud M, Nguyen M, Tomalin L, Olivier E, Fan C-W, Jethalia V, Thongon N, Dougherty M, Carcamo S, Izzo F, Colla S, Themeli M, Wagenblast E, Hasson D, Byun M, Ntziachristos P, Papapetrou EP. 67<sup>th</sup> American Society of Hematology (ASH) Annual Meeting, 2025, Orlando, FL. **(Abstract Achievement Award to B. Jia)**