## SCHOLAR-IN-TRAINING AWARDS

The AACR is proud to offer Scholar-in-Training Awards to enable the participation of meritorious early-career scientists at the Annual Meeting 2022. In 2022, 16 organizations or individuals generously provided the funding to support this program. The names and affiliations of the 2022 Scholar-in-Training Award recipients, along with the abstract numbers and titles of their abstracts, are listed below.

### **2022 AACR Scholar-in-Training Awards**

The AACR has received and distributed funds to support early-career investigators who will be presenting high quality abstracts in breast cancer research at the AACR Annual Meeting 2022.

**Pooja Middha Kapoor, MBBS, MPH, PhD**, University of California San Francisco, San Francisco, CA. **Abstract 3631.** Transcriptome-wide association study identifies novel genes associated with breast cancer susceptibility in Latinas.

**Sarah-Jane Neuberth**, **MS**, German Cancer Research Center, Heidelberg, Germany. **Abstract 652.** An androgen receptor-associated transcription factor regulates fatty acid metabolism driving tumor growth in androgen receptor-positive breast cancer.

**Brandon Tan**, **MS**, **PhD**, City of Hope, Monrovia, CA. **Abstract 2188.** The  $N^6$ -methyladenosine reader YTHDC1 is essential for TGF-beta-mediated metastasis of triple negative breast cancer.

#### 2022 AACR Scholar-in-Training Awards Supported by a Grant from AbbVie

Early career investigators who will be presenting meritorious abstracts at the AACR Annual Meeting 2022 were generously supported by a grant from AbbVie.

**Aftab Alam, PhD**, Roswell Park Comprehensive Cancer Center, Buffalo, NY. **Abstract 2119.** KRAS and fungi cooperate to drive IL33 secretion and type 2 immunity in the pancreatic cancer tumor microenvironment.

**Francesco Caiazza**, **PhD**, UCSF, San Francisco, CA. **Abstract 2226.** Using functional biomarkers to accurately predict advanced neoplasia in pancreatic cystic lesions.

**Lindsey Carlsen, BS**, Brown University, Providence, RI. **Abstract 1231.** Prognostic and predictive druginduced gene signatures for colorectal cancer patients personalized based on p53 status and treatment with FOLFOX, 5-FU, oxaliplatin, or irinotecan.

**Fernando de Miguel**, **PhD**, Yale University, New Haven, CT. **Abstract 1094.** *SMARCA4*-mediated chromatin remodeling regulates osimertinib resistance in *EGFR*-mutant lung adenocarcinoma.

**Marco Galvez-Nino**, **MD**, Instituto Nacional de Enfermedades Neoplasicas, Lima, Peru. **Abstract 509**. Tumor inflammation signature (TIS) in residual disease is associated with survival in breast cancer patients with high risk of recurrence.

Martina Ghetti, MD, PhD, Istituto Scientifico Romagnolo per lo Studio e la Cura dei Tumori "Dino Amadori", Meldola, Italy. Abstract 1555. CircPVT1 and linear PVT1 isoforms regulate cell growth, metabolic and DNA damage response related gene signatures in acute myeloid leukemia.

**Soma Ghosh, PhD**, MD Anderson Cancer Center, Houston, TX. **Abstract 1858.** Rb deficient HPV+ HNSCC experienced enhanced sensitivity to aurora kinase inhibitors by altering the balance of MAD2 and TRIP13 levels.

**Kuldeep Gupta, M Phil, PhD**, Johns Hopkins University School of Medicine, Baltimore, MD. **Abstract 2481.** Imaging pancreatic ductal adenocarcinoma using an EphA2 receptor tyrosine kinase binding <sup>68</sup>Galabeled peptide radiotracer.

**Humna Hasan, M Phil,** Department of Biological Sciences, Purdue University, West Lafayette, IN. **Abstract 1537.** Understanding role of uniquely enriched RNAs carried in non-small cell lung cancer derived extracellular vesicles and dynamics of their selective export.

**Simon Heeke**, **PhD**, MD Anderson Cancer Center, Houston, TX. **Abstract 3473.** Use of DNA methylation from tumor and plasma to identify four major small cell lung cancer subtypes with distinct biology and therapeutic vulnerabilities.

**Cameron Herberts**, **BS**, University of British Columbia, Vancouver, BC, Canada. **Abstract 3625.** Clonal architecture and evolution of treatment-resistant prostate cancer via deep whole-genome ctDNA sequencing.

**Corbin Jensen**, **MS**, **PhD**, University of Arizona, Tucson, AZ. **Abstract 263.** PIM kinase regulates actin dynamics in hypoxia.

**Yun Lu**, **BS**, University of Alabama at Birmingham, Hoover, AL. **Abstract 2482.** Evaluating immune checkpoint blockade treatment efficacy via [89Zr]-CD4 and [89Zr]-CD8 PET imaging in breast cancer mouse models.

**Simone Minnie**, **PhD**, Fred Hutchinson Cancer Research Center, Seattle, WA. **Abstract 1360.** CD8 T cells display distinct trajectories of T cell exhaustion in the bone marrow of mice with multiple myeloma.

**Rebecca Nash**, **MPH**, Emory University, Atlanta, GA. **Abstract 3672.** Area-level drivers of the breast cancer mortality race disparity in Georgia.

**Jovia Nierenberg**, **PhD**, **MPH**, University of California San Francisco, San Francisco, CA. **Abstract 1446**. Genetic risk factors for the development of multiple primary cancers.

**Michelle Ozaki**, **BA**, Oregon Health and Science University, Portland, OR. **Abstract 983.** RNA-seq analysis of murine liver to identify breast cancer metastatic potential during liver involution.

**Santosh Paidi**, **MS**, **PhD**, University of California, Berkeley, Berkeley, CA. **Abstract 1943.** Elucidating early tumor microenvironmental changes due to immunotherapy with label-free Raman spectroscopy and machine learning.

**Samantha Perez**, **PhD**, University of Virginia, Charlottesville, VA. **Abstract 3591.** First in class drug ZB131 shows efficacy in cholangiocarcinoma models.

**Zuen Ren, MD, PhD**, Albert Einstein College of Medicine, Bronx, NY. **Abstract 968.** Loss of glutathione peroxidase 2 promotes epithelial to mesenchymal transition and breast cancer metastasis.

**Andrea Romanos-Nanclares**, **MS**, **PhD**, Brigham and Women's Hospital and Harvard Medical School, Boston, MA. **Abstract 16.** Inflammatory and insulinemic dietary patterns and risk of endometrial cancer: Results from two prospective US cohort studies.

**Stephen-John Sammut**, **MD**, **PhD**, University of Cambridge, Cambridge, United Kingdom. **Abstract 476.** Predicting response to treatment in early breast cancer using dynamic integrative multi-omic profiling.

**Trine Strandgaard**, **MS**, Aarhus University Hospital, Aarhus N, Denmark. **Abstract 1282.** Elevated T cell exhaustion and immune cell infiltration is associated with BCG failure in patients with non-muscle invasive bladder cancer.

**Timothy Trotter**, **PhD**, Duke University, Durham, NC. **Abstract 2451.** Dormant mammary tumors resist antigen-specific killing and regulate systemic immunity in association with PTN and DKK3.

**Anqi Wang, MPH**, University of Southern California, Pasadena, CA. **Abstract 1437.** Ambient air pollution and risk of prostate cancer: The multiethnic cohort study.

**Yanning Wu**, **MS**, Case Western Reserve University, School of Medicine, Cleveland, OH. **Abstract 3676.** Race-specific methylation profiles and epigenetic age acceleration differentiates estrogen receptor status breast cancer.

**Daniel Zabransky**, **MD**, **PhD**, Johns Hopkins University School of Medicine, Baltimore, MD. **Abstract 3638**. Age-related changes in pancreatic fibroblasts promote growth and progression of pancreatic cancer.

**Jimmy Zhao, MD, PhD,** Memorial Sloan Kettering Cancer Center, New York, NY. **Abstract 1728.** Single cell RNA-seq analysis reveals a role of pro-inflammatory tumor-associated macrophages in driving prostate cancer progression.

**Feng Zhu**, **PhD**, National Cancer Institute, Frederick, MD. **Abstract 3044.** *C. albicans* infection mediates upper gastrointestinal tract malignancy independently of II17a in an APECED-like mouse model.

**Nicholas Zorko**, **MD**, **PhD**, University of Minnesota, Minneapolis, MN. **Abstract 2761.** FT573: Preclinical development of multiplexed-engineered iPSC-derived NK cells expressing a novel camelid nanobody chimeric antigen receptor (CAR) targeting pan-cancer antigen B7-H3.

2022 AACR-American Brain Tumor Association Scholar-in-Training Awards

The American Brain Tumor Association has graciously donated funds to support young investigators who will be presenting high-quality abstracts in brain cancer research for both primary and secondary (metastatic) brain tumors at the AACR Annual Meeting 2022.

**Matthew Dankner**, **BS**, Rosalind and Morris Goodman Cancer Institute, Montreal, QC, Canada. **Abstract 1569.** pSTAT3+ stromal cells drive the invasive growth of brain metastases.

**Daniel Doheny**, **BS**, **MS**, Wake Forest School of Medicine, Winston-Salem, NC. **Abstract 2433.** Targeting tGLI1 pharmacologically as a new therapeutic strategy for breast cancer brain metastases.

**Inbal Greenberg**, **BS**, Tel Aviv University, Bat Yam, Israel. **Abstract 266.** Adaptation of colorectal cancer cells to the brain microenvironment: The role of IRS2.

**Radhika Mathur**, **PhD**, University of California San Francisco, San Francisco, CA. **Abstract 3621.** 3D spatial sampling and integrated omics reveal sources and patterning of intratumoral heterogeneity in glioblastoma.

**Aram Modrek**, **MD**, **PhD**, NYU Grossman School of Medicine, New York, NY. **Abstract 3622.** DNA damage drives DNA methylation and 3D chromatin organization alterations in glioblastoma.

**Frederick Varn, MS, PhD**, The Jackson Laboratory for Genomic Medicine, Farmington, CT. **Abstract 2168.** Longitudinal analysis of diffuse glioma reveals cell state dynamics at recurrence associated with changes in genetics and the microenvironment.

## 2022 AACR-Breast Cancer Research Foundation Scholar-in-Training Awards in Memory of Rebecca Scheinkman

The Breast Cancer Research Foundation has graciously donated funds to support young investigators who will be presenting high quality abstracts in breast cancer research at the AACR Annual Meeting 2022. This year, this funding has been given by the Breast Cancer Research Foundation to honor the memory of Rebecca Scheinkman.

**Sara Busatto**, **PhD**, Boston Children's Hospital, Boston, MA. **Abstract 2190.** Brain-seeking extracellular vesicles derived from metastatic breast cancer cells modulate brain endothelial cell metabolism.

**Diana Drago Garcia**, **MS**, Weizmann Institute of Science, Rehovot, Israel. **Abstract 991.** OVO-like genes are master regulators of the epithelial fate in breast cancer.

#### 2022 AACR-Bristol Myers Squibb Scholar-in-Training Awards

Bristol Myers Squibb has graciously donated funds to support early career investigators who will be presenting meritorious abstracts at the AACR Annual Meeting 2022.

**Afaf Abed**, **MBBS**, Edith Cowan University, Caversham, WA, Australia. **Abstract 5132.** HLA-I homozygosity as a protective biomarker for developing immune related adverse events (irAE) among

non-small cell lung cancer (NSCLC) patients treated with single agent immunotherapy in the first- or second-line setting.

**James Black**, **BA**, **MBBS**, University College London Cancer Institute, London, United Kingdom. **Abstract 1603.** Genomic transcriptomic evolution in TRACERx lung cancer and metastasis.

**Liyun Chen, MS, PhD**, Department of Radiation Oncology, Washington University School of Medicine, St. Louis, MO. **Abstract 212.** Squamous cell carcinoma antigen counteracts the radiation-induced antitumor response by driving an immune evasion phenotype through STAT signaling.

**En Cheng, MD, PhD,** Kaiser Permanente Northern California, Oakland, CA. **Abstract 682.** Associations of inflammatory biomarkers with survival among patients with stage III colon cancer (CALGB/SWOG 80702 [Alliance]).

**Michelle Dietzen**, **BS**, **MS**, University College London Cancer Institute, London, United Kingdom. **Abstract 3620.** Investigating the role of altered replication timing during tumor evolution in lung and breast cancer.

**Amanda Frydendahl, MS**, Aarhus University Hospital, Aarhus N, Denmark. **Abstract 1959.** Sensitive detection of circulating tumor DNA by whole genome sequencing: Validation of MRDetect using serial blood samples from stage III colorectal cancer patients.

**Yuanyuan Fu**, **PhD**, University of Hawaii John A. Burns School of Medicine, Honolulu, HI. **Abstract 5865.** Analysis of RNA sequencing data to advance our understanding of colorectal cancer health disparity in Native Hawaiians.

**Ben Jin, MD**, Tulane University School of Medicine, New Orleans, LA. **Abstract 1313.** IL-17RC, but not PLK4 inhibitor centrinone, plays a critical role in the development of skin papilloma and psoriasis in mouse models.

**Md Imtiaz Khalil, BS, MS**, Louisiana State University Health Sciences Center- Shreveport, Shreveport, LA. **Abstract 2424.** TLK1-MK5 axis modulates actin filaments and focal adhesion components to promote PCa cell migration and invasion.

**Homma Khosroyani**, **BS**, Oregon Health and Science University, Portland, OR. **Abstract 660.** Predicting imatinib responses in exon 18 PDGFRA-mutant GIST.

**David Lee, MD, MPH,** Massachusetts General Hospital, Boston, MA. **Abstract 3651.** Obesity, metabolic comorbidities, and lifestyle factors and their association with monoclonal gammopathies in a high-risk screened population: Results of the PROMISE study.

**Hong-Tao Li**, **PhD**, USC Norris Comprehensive Cancer Center, University of Southern California, Los Angeles, CA. **Abstract 3618.** Loss of *SETD2* sensitizes kidney cancer cells to DNA methylation inhibitors by inducing viral mimicry and RNA mis-splicing.

**Elizabeth Lightbody**, **PhD**, Dana-Farber Cancer Institute, Boston, MA. **Abstract 641.** Single-cell RNA sequencing of rare circulating tumor cells in precursor myeloma patients reveals molecular underpinnings of tumor cell circulation.

**Joanna Lima**, **D Phil**, **PhD**, Ludwig Institute for Cancer Research, University of Oxford, Oxford, United Kingdom. **Abstract 939.** A novel lineage-tracing model of *VhI* deletion reveals time-dependent cellular changes in the kidney.

**Akhilesh Mishra**, **BS**, Johns Hopkins University, Baltimore, MD. **Abstract 2477.** PD-L1 PET quantifies the pharmacodynamic effects of immunotherapy.

**M Muntinghe-Wagenaar**, **MD**, University Medical Center Groningen, Groningen, Netherlands. **Abstract 666.** A phase 1 study to detect adverse events after SBRT and immunotherapy by electronic nose in advanced NSCLC.

**Yuki Muroyama**, **MD**, **PhD**, University of Pennsylvania, Perelman School of Medicine, Philadelphia, PA. **Abstract 3579.** T cell intrinsic DNA damage and repair response as a novel marker associated with clinical response to PD-1 blockade.

**Jeffrey Patterson-Fortin, MD, PhD**, Dana-Farber Cancer Institute, Boston, MA. **Abstract 1133.** Novobiocin-mediated polymerase theta inhibition induces cGAS/STING pathway activation and T-cell infiltration in BRCA-associated cancers.

**Evgenii Tcyganov**, **PhD**, The Wistar Institute, Philadelphia, PA. **Abstract 5610.** Targeting Rb1 in experimental pancreatic cancer remodels immune cell landscape and suppresses tumor progression.

**Krupa Thakkar**, **BS**, **MS**, University College London, London, United Kingdom. **Abstract 3043.** Exploring the microbial landscape of NSCLC through TRACERx.

**Tomotaka Ugai, MD, PhD**, Brigham and Women's Hospital, Boston, MA. **Abstract 684.** Body mass index throughout adulthood and incidence of colorectal cancer subclassified by T cell, macrophage, and myeloid cell infiltrates in cancer tissue.

**Chien-Huan Weng, MS, PhD**, Memorial Sloan-Kettering Cancer Center, New York, NY. **Abstract 6150.** Potential role of CD47 in T cell exhaustion program.

**Sarah Winter**, **BS**, Queen's University Belfast, Belfast, United Kingdom. **Abstract 3354.** A gene expression signature of high serum cholesterol and prostate cancer outcomes.

**2022 AACR-Doreen J. Putrah Cancer Research Foundation Scholar-in-Training Awards**These awards are presented to early career investigators of meritorious abstracts to be presented at the AACR Annual Meeting 2022. These awards are made possible through the Doreen J. Putrah Cancer Research Foundation.

**Fawzi Abu Rous**, **MD**, Henry Ford Health System, Detroit, MI. **Abstract 511.** Prognostic relevance of 3q amplification in squamous cell carcinoma of the lung.

**Yasmine Benslimane**, **BS**, McGill University, Montreal, QC, Canada. **Abstract 2515.** Estrogen regulates the immune microenvironment of colorectal cancer liver metastases.

**Daniel Boiarsky, MD**, Tufts Medical Center, Cambridge, MA. **Abstract 2181.** Genomic correlates of Metastasis in KRAS mutant lung adenocarcinoma.

**Marco Campisi, MS**, Dana-Farber Cancer Institute, Boston, MA. **Abstract 3874.** Engineered microphysiological systems for testing effectiveness of cell-based cancer immunotherapies in small cell lung cancer.

**MeiKuang Chen**, **PhD**, The University of Texas MD Anderson Cancer Center, Houston, TX. **Abstract 1792.** FGFR3 mediated PARP1 tyrosine 158 phosphorylation promotes PARP inhibitor resistance.

**Stephen Chong**, **PhD**, Dana-Farber Cancer Institute, Boston, MA. **Abstract 3959.** Targeting BCL2 family protein phosphorylation in venetoclax resistant lymphoid malignancies.

**Saikat Chowdhury**, **MS**, **PhD**, The University of Texas MD Anderson Cancer Center, Houston, TX. **Abstract 1246.** Consensus molecular subtypes (CMS) of colorectal cancer predict anti-EGFR response irrespective of tumor sidedness.

**Marika Colombo**, **DMSc**, Istituto di ricerche farmacologiche Mario Negri, IRCCS, Milano, Italy. **Abstract 4025.** Identification of ERK inhibitor-based combinations targeting LKB1-mutated NSCLC.

**Jennifer Eng**, **BA**, Oregon Health and Science University, Portland, OR. **Abstract 6149.** Prognostic tumor microenvironment subtypes in triple-negative breast cancer.

**Athena Golfinos**, **BS**, University of Wisconsin-Madison, Madison, WI. **Abstract 1994.** Defining tumor infiltrating myeloid microenvironment landscapes in HPV+ and HPV- head and neck cancers.

**Jeffrey How**, **MD**, **MPH**, **MS**, The University of Texas MD Anderson Cancer Center, Houston, TX. **Abstract 1248.** Predictors of innate resistance to pembrolizumab in patients with microsatellite instability-high endometrial cancer.

**Claire Ihle**, **BA**, University of Colorado Anschutz Medical Campus, Aurora, CO. **Abstract 2512.** The metastatic breast cancer microenvironment in bone exhibits unique BMP signaling.

**Yon Ho Jee, MS**, Harvard T.H. Chan School of Public Health, Boston, MA. **Abstract 5903.** Polygenic risk scores for prediction of breast cancer in Korean women.

**Saumya Kasliwal**, **BS**, The University of Texas MD Anderson Cancer Center, Houston, TX. **Abstract 432.** Video-based germline testing for individuals with pancreatic ductal adenocarcinoma: Influence of COVID-19 pandemic.

**Allison Kirk**, **BS**, **MS**, St. Jude Children's Research Hospital, Memphis, TN. **Abstract 1383.** Characterization of CD8 T cell responses to DNAJB1-PRKACA fusion neoantigens in fibrolamellar carcinoma.

**Carmen Kut**, **MD**, **PhD**, Johns Hopkins, Baltimore, MD. **Abstract 1971.** Lymphocyte kinetics, frailty and survival outcomes in HNSCC.

**Xue Li**, **PhD**, Seoul National University Hospital, Seoul, Korea, Republic of. **Abstract 904.** Neural stem cells of the subventricular zone evolve into tumors around the resection cavity after surgical resection of glioblastoma via the CXCL12/CXCR4 axis.

**Shimeng Liu**, **PhD**, Dana Farber Cancer Institute, Boston, MA. **Abstract 6147.** Immune population changes in mammary adipose tissue during the development of obesity and their influence on triple negative breast cancer progression.

**Saloni Malla**, **B Pharm**, University of Toledo, Toledo, OH. **Abstract 5659**. Development of mitochondrial fission inhibitors in inducing non-apoptotic cell death in triple-negative breast cancer.

**Rohan Maniar**, **MD**, **Pharm D**, Columbia University Irving Medical Center, New York, NY. **Abstract 1240**. Peripherally measured T cell self-renewal capacity associates with response to immune checkpoint blockade (ICB) in non-small cell lung cancer (NSCLC).

**Sofia Mastoraki**, **PhD**, UT MD Anderson Cancer Center, Houston, TX. **Abstract 515.** Single-cell transcriptomic analysis of HR+/HER2- breast cancer identifies gene signatures that predict outcomes of luminal A and B subtypes.

**Soo Park**, **MD**, University of California San Diego, La Jolla, CA. **Abstract 1435.** Clonal hematopoiesis profiles in breast cancer survivors using error-corrected sequencing.

**Sandhya Prabhakaran, MS, PhD**, H. Lee Moffitt Cancer Center and Research Institute, Tampa, FL. **Abstract 5037.** Distinct tumor-immune ecologies in NSCLC patients predict progression and define a clinical biomarker of therapy response.

**Monali Praharaj**, **MS**, Johns Hopkins School of Medicine, Baltimore, MD. **Abstract 2115.** Glutamine blockade via prodrug JHU083 reprograms immunosuppressive tumor associated macrophages (TAMs) and drives tumor immunity in urologic cancers.

**Aristeidis Sionakidis**, **B Pharm, MS**, The University of Edinburgh, Edinburgh, United Kingdom. **Abstract 1233.** A novel 14-gene signature to predict response to neoadjuvant chemotherapy and endocrine treatment in breast cancer patients.

**Jeanny Wang, MBBS**, National Institutes of Health, Division of Cancer Epidemiology and Genetics, Bethesda, MD. **Abstract 2250**. Eosinophil-to-lymphocyte ratio and cancer risk in the UK Biobank.

**Chi-Yun Wu**, **PhD**, University of Pennsylvania, Philadelphia, PA. **Abstract 5042.** Reconstructing the spatial evolution of cancer through subclone detection on copy number profiles in tumor sequencing data.

**Haochen Zhang**, **MS**, **PhD**, Memorial Sloan Kettering Cancer Center, New York, NY. **Abstract 59**. Optimization of high-throughput, high-depth, targeted single-cell DNA sequencing to pancreatic ductal adenocarcinoma.

**Fen Zhu**, **PhD**, Dana Farber Cancer Institute, Boston, MA. **Abstract 5377.** Decitabine sensitizes diffuse large B cell lymphoma cells to venetoclax.

### 2022 AACR-Heyman Family Fund Scholar-in-Training Awards

These awards are presented to early career authors of meritorious abstracts to be presented at the AACR Annual Meeting 2022. These awards are made possible through the Heyman Family Fund.

**Rebecca Caeser**, **PhD**, Memorial Sloan Kettering Cancer Center, New York, NY. **Abstract 90.** STAT3-driven MAPK activation represents a therapeutic vulnerability in ASCL1 high SCLC.

**Aya Elmarsafawi**, **MS**, H. Lee Moffitt Cancer Center & Research Institute, Tampa, FL. **Abstract 1354.** Regulation and roles of polyamines in CD8<sup>+</sup> T cell fate and function.

**Sarah Jensen**, **BS**, Aarhus University Hospital, Aarhus N, Denmark. **Abstract 3391**. Methylation analysis using TriMeth indicate that asymptomatic colorectal cancers (CRCs) release less circulating tumor DNA (ctDNA) compared to symptomatic cancers.

**Jiye Liu**, **PhD**, Dana-Farber Cancer Institute, Boston, MA. **Abstract 5352.** Genome-wide CRISPR-cas9 screening identifies KDM6A as a modulator of CD38 expression in multiple myeloma: Therapeutic implications.

### 2022 AACR-James V. Buzzitta, MD Family Fund Scholar-in-Training Awards

Funds have been graciously donated to the AACR by the James V. Buzzitta, MD Family Fund to recognize outstanding young investigators for their meritorious work in cancer research and to support their attendance at the 2022 AACR Annual Meeting.

**Daniel Bronder**, **PhD**, Memorial Sloan Kettering Cancer Center, New York, NY. **Abstract 2164.** Chromosomal instability as a mediator of anti-tumor immunity in pancreatic cancer.

**Shih-Ying Wu**, **MS**, Wake Forest University, Winston-Salem, NC. **Abstract 6153.** MyD88-mediated chimeric antigen receptor macrophage suppresses brain metastasis by target-specific phagocytosis and bystander effect through TNF- $\alpha$ .

## **2022 AACR-John and Elizabeth Leonard Family Foundation Scholar-in-Training Awards**Funds have been graciously donated to the AACR by the John and Elizabeth Leonard Family

Foundation to recognize outstanding young investigators for their meritorious work in cancer research and to support their attendance at the 2022 AACR Annual Meeting.

**Nicole Kettner**, **PhD**, UT MD Anderson Cancer Center, Houston, TX. **Abstract 1774.** Circulating IL-6, an early biomarker in HR-positive, HER2-negative metastatic breast cancer patients progressing on CDK4/6 inhibitors.

**John Kwon**, **BS**, Memorial Sloan Kettering Cancer Center, New York, NY. **Abstract 1330.** Role of ENPP1 mediated extracellular cGAMP hydrolysis in cancer metastasis and immune evasion.

**Serena Lucotti**, **PhD**, Weill Cornell Medicine, New York, NY. **Abstract 3138.** The lung pro-thrombotic niche drives cancer-associated thromboembolism via exosomal ITGB2.

**John McVey, MD**, Hospital of the University of Pennsylvania, Philadelphia, PA. **Abstract 1372.** Macrophages impair antigen specific CD8<sup>+</sup> T cell response against HCC in NAFLD mice.

**Minh-Tam Pham**, **PhD**, Johns Hopkins School of Medicine, Baltimore, MD. **Abstract 680.** Topoisomerase 2 beta facilitates chromatin reorganization during Androgen Receptor induced transcription and contributes to chromoplexy in prostate cancer.

**Jason Wong**, **ScD**, National Cancer Institute, Rockville, MD. **Abstract 2251.** Alu retroelement copy number, leukocyte telomere length, and lung cancer risk in the prospective Prostate, Lung, Colorectal and Ovarian Cancer (PLCO) Screening Trial.

#### 2022 AACR-John and Joe Warner Fund Scholar-in-Training Awards

Funds have been graciously donated to the AACR by the John and Joe Warner Fund to recognize outstanding young investigators for meritorious work in cholangiocarcinoma research being presented at the 2022 AACR Annual Meeting.

**Timothy DiPeri**, **MD**, The University of Texas MD Anderson Cancer Center, Houston, TX. **Abstract 2618.** Convergent MAPK pathway alterations mediate acquired resistance to FGFR inhibitors in cholangiocarcinoma with FGFR fusions/rearrangements.

**Lorenzo Tomassoni**, **MS**, **PhD**, Columbia University, New York, NY. **Abstract 4083**. Case study of single-cell protein activity-based drug prediction and validation for precision treatment of cholangiocarcinoma.

#### 2022 AACR-June L. Biedler Scholar-in-Training Awards

These awards are presented to authors of meritorious abstracts to be presented at the AACR Annual Meeting 2022. These awards are made possible through the Estate of Dr. June L. Biedler. The late Dr. Biedler was a dedicated member of AACR and a distinguished scientist at Memorial Sloan Kettering Cancer Center. Dr. Biedler believed that science communication is a cornerstone to the acceleration of progress.

**Lu Han, PhD,** Medical University of South Carolina, Charleston, SC. **Abstract 3645.** The splanchnic mesenchyme is the main tissue origin of fibroblasts in the pancreas during homeostasis and tumorigenesis.

**Jennifer Hon**, **BS**, University of Michigan, Ann Arbor, MI. **Abstract 2538.** Role of *Argonaute* 2 in regulation of immune microenvironment in pancreatic cancer.

**Minh Nguyen**, **BA**, Memorial Sloan Kettering Cancer Center, New York, NY. **Abstract 1370.** Targeting LSD1 rescues MHC-I antigen presentation in small cell lung cancer.

**Bobak Parang**, **MD**, **PhD**, Weill Cornell, New York, NY. **Abstract 2378.** Methylmalonic acid is elevated in non-small cell lung cancer and promotes drug resistance.

**Abhijit Parolia**, **MS**, **PhD**, University of Michigan, Ann Arbor, MI. **Abstract 3592.** Targeting SWI/SNF ATPases in enhancer-addicted human cancers.

**Jongeun Rhee**, **ScD**, National Cancer Institute, Rockville, MD. **Abstract 685.** Circulating immune markers and risks of non-Hodgkin lymphoma subtypes: A pooled analysis.

**Guan-Yu Xiao**, **PhD**, The University of Texas MD Anderson Cancer Center, Houston, TX. **Abstract 673.** The EMT activator ZEB1 initiates polarized secretion of pro-tumorigenic effector proteins to drive lung adenocarcinoma progression.

### 2019 AACR-Margaret Foti Foundation Scholar-in-Training Awards

Through a generous gift of the Margaret Foti Foundation, these awards recognize outstanding young investigators for their meritorious work in pediatric, ovarian, pancreatic, or lung cancer research.

Maral Adel Fahmideh, MS, PhD, Baylor College of Medicine, Houston, TX. Abstract 1448. Novel specific susceptibility loci identified for pediatric and adult ependymoma in first histology-specific genome-wide association study.

**Hongchen Cai**, **BS**, Stanford University, Stanford, CA. **Abstract 827.** A journey to deconvolute the multifaceted functions and context-dependency of cancer driver genes.

**Emily Cybulla, BS**, St. Louis University School of Medicine, Saint Louis, MO. **Abstract 803.** Identifying a RAD18/UBC13-dependent mechanism of replication fork recovery to modulate chemoresponse in BRCA1-deficient cancers.

**Muhammed Elhadi, MBBCh**, University of Tripoli, Tripoli, Libyan Arab Jamahiriya. **Abstract 1999.** The impact of the COVID-19 pandemic on 30-day survival in pediatric cancer patients in low, middle, and high-income countries: an international, observational cohort study.

**Amal Elhaw**, **B Pharm**, Pittsburgh University, Pittsburgh, PA. **Abstract 2445.** Orchestrated expression of the atypical Rho-GTPase RHOV mediates multicellular aggregate formation in ovarian cancer.

Marie Hasselluhn, Dr Rer Nat, Columbia University Irving Medical Center, New York, NY. Abstract 3648. Hedgehog represses angiogenesis in PDAC through a paracrine cascade mediated by Wif1.

**Joash Joy, M Eng**, Barts Cancer Institute, London, United Kingdom. **Abstract 693.** TGFβ-mediated targeting of the extracellular matrix enhances the migration and cytotoxicity of CAR-T cells in 3D models of ovarian cancer.

**Casey Langdon**, **PhD**, St. Jude Children's Research Hospital, Memphis, TN. **Abstract 1667.** Synthetic essentiality between PTEN and core dependency factor PAX7 dictates rhabdomyosarcoma identity.

**Mingli Li**, **MD**, Beckman Research Institute of City of Hope, Duarte, CA. **Abstract 1467.** RUVBL1 controls protein synthesis and tumor progression via MYC-dependent EEF1A1 expression.

**Bikesh Nirala**, **PhD**, Baylor College of Medicine, Houston, TX. **Abstract 1668.** Development and characterization of a c-Myc-driven preclinical mouse model of osteosarcoma to investigate the tumor immune microenvironment.

**Catherine Pham-Danis**, **PhD**, University of Colorado Anschutz Medical Campus, Aurora, CO. **Abstract 3607.** A novel adjunctive LAT-activating CAR T (ALA-CART) cell platform demonstrates enhanced antigen sensitivity and eradication of antigen-low leukemia.

**Biagio Ricciuti**, **MD**, Dana-Farber Cancer Institute, Boston, MA. **Abstract 2143.** Clinicopathologic, genomic and immunophenotypic landscape of *ATM* mutations in non-small cell lung cancer.

**Arunachalam Sekar, M Eng**, Weizmann institute of science, Rehovot, Israel. **Abstract 1165.** Therapeutic targeting of glucocorticoid receptor in ETS rearranged cancer.

**Christian Tegeler**, **MD**, University Hospital of Tübingen, Tübingen, Germany. **Abstract 1972.** Clinical implications of HLA expression and immunopeptidome-presented tumor antigens in ovarian carcinoma.

**Ignacio Vázquez-García**, **PhD**, Memorial Sloan Kettering Cancer Center, New York, NY. **Abstract 2553.** Immune and malignant cell phenotypes of ovarian cancer are determined by distinct mutational processes.

**Meilin Xue**, **MD**, Ruijin Hospital, Shanghai Jiaotong University School of Medicine, Shanghai, China. **Abstract 3644.** Schwann cells reshape tumor cells and cancer associated fibroblasts in pancreatic ductal adenocarcinoma microenvironment.

**Xiyuan Zhang**, **PhD**, National Cancer Institute, Bethesda, MD. **Abstract 701.** Loss of PRC2 enforces a mesenchymal neural crest stem cell phenotype in NF1-deficient cancer through activation of core transcription factors.

#### 2022 AACR-Pezcoller Foundation Scholar-in-Training Awards

The Pezcoller Foundation supports these awards to enhance participation in the programs and activities of the AACR by early-career investigators residing in Europe and to provide these outstanding Scholar-in-Training Awardees with an opportunity to share their research findings with the international cancer research community at the AACR Annual Meeting.

**Ariana Huebner**, **MS**, UCL Cancer Institute, London, United Kingdom. **Abstract 3792.** TRACERx: Mapping the evolution of metastases in non-small cell lung cancer.

**Samvid Kurlekar**, **MS**, Nuffield Department of Medicine, University of Oxford, Oxford, United Kingdom. **Abstract 862.** Negative cellular outcomes following acute *in vivo VhI* inactivation in mice.

**Ferran Nadeu**, **PhD**, Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona, Spain. **Abstract 3795.** Early seeding of Richter transformation in chronic lymphocytic leukemia.

Maria Serena Roca, PhD, Istituto Nazionale per lo Studio e la Cura dei Tumori "Fondazione G. Pascale" – IRCCS, Naples, Italy. Abstract 1840. Repurposing of valproic acid and simvastatin in pancreatic cancer: *in vitro* and *in vivo* synergistic antitumor interaction and sensitization to gemcitabine/nab-paclitaxel via inhibition of TGFβ-EMT signaling pathway.

**Vera Thiel**, **MS**, German Cancer Research Center/HI-STEM, Heidelberg, Germany. **Abstract 3650.** Trace'n'Seq: Assessing neuronal infiltration and its impact in pancreatic ductal carcinoma.

#### 2022 AACR-Prostate Cancer Foundation Scholar-in-Training Awards

The Prostate Cancer Foundation has graciously donated funds to the AACR to support early-career investigators who will be presenting meritorious abstracts in prostate cancer research at the AACR Annual Meeting 2022.

**Carolina Gomes Alexandre**, **MD**, The Johns Hopkins University School of Medicine, Baltimore, MD. **Abstract 653.** Molecular pathology of metastatic prostatic adenocarcinoma treated with bipolar androgen theraphy (BAT) reveals a correlation between MYC mRNA and protein.

**Alessandro Vasciaveo**, **MS**, **PhD**, Columbia University, New York, NY. **Abstract 1905.** Accelerating clinically-translatable discoveries using a network- and RNA-based precision-oncology framework.

**Jiaren Zhang**, **BS**, Weill Cornell Medicine, New York, NY. **Abstract 646.** Liquid biopsy transcriptomics identify pathways associated with poor outcomes and immune phenotypes in men with mCRPC.

# 2022 AACR-Sygnature Discovery Scholar-in-Training Award in Association with the CICR Working Group

Sygnature Discovery has graciously donated funds to the AACR to support an early-career investigator who will be presenting a meritorious abstract in small molecular drug discovery research at the AACR Annual Meeting 2022.

**Rita Avelar**, **BS**, University of Michigan, Ann Arbor, MI. **Abstract 3340.** Small molecule mediated stabilization of PP2A modulates the homologous recombination pathway and potentiates DNA damage-induced cell death.

# 2022 AACR-WuXi AppTec Scholar-in-Training Award in Association with the CICR Working Group

**Ahmed Abdelaal**, Purdue University, West Lafayette, IN. **Abstract 1482.** Efficient targeting of prostate cancer using ligand conjugated and chemically modified tumor suppressive miRNA.

**Shurui Cai**, **PhD**, The Ohio State University, Columbus, OH. **Abstract 3325.** ERK inhibitor increases cancer stem cell population in NSCLC through Slug-Mediated epithelial-to-mesenchymal transition.

**Young Hun Chung**, **BS**, University of California, San Diego, San Diego, CA. **Abstract 297.** Prophylaxis and treatment of metastatic breast cancer and melanoma using S100A9-targeted cowpea mosaic virus nanoparticles.

**Kelsey Huntington, BS**, Brown University, Providence, RI. **Abstract 4166.** Small-molecule inhibition of glycogen synthase kinase-3 (GSK-3) increases the efficacy of anti-PD-L1 therapy in a murine model of microsatellite stable colorectal cancer (CRC); Therapeutic response correlates with T cell ratios and serum cytokine profiles.

**Costanza Lo Cascio**, **BS**, Ivy Brain Tumor Center at Barrow Neurological Institute, Phoenix, AZ. **Abstract 349.** Pharmacokinetics- and pharmacodynamics-based evaluation of quisinostat as a radiosensitizer in preclinical models of human glioblastoma.

**Nicole Mattson**, **BS**, City of Hope, Monrovia, CA. **Abstract 2920.** Targeting integrin alpha V beta 5 heterodimer stability using a novel small molecular inhibitor for tumor suppression.

**Caitlin O'Connor**, **PhD**, University of Michigan, Ann Arbor, MI. **Abstract 3341.** Synthetic lethality by targeting ribonucleotide reductase in PP2A deficient uterine serous carcinoma.

**Sarah Naomi Olsen, PhD**, Dana-Farber Cancer Institute, Boston, MA. **Abstract 681.** Targeted MLL-AF9 degradation is phenocopied by combined DOT1L and Menin inhibition.

**Zahraa Rahal**, **MD**, The University of Texas MD Anderson Cancer Center, Houston, TX. **Abstract 223.** Chronic exposure to waterpipe smoke elicits immunomodulatory and carcinogenic effects in the lung.