10 YEARS OF SUPPORTING WOMEN RESEARCHERS
MESSAGE FROM THE CHAIR

Although the oncology landscape has changed since I launched my career more than 35 years ago, women oncologists continue to be underrepresented and are at a disadvantage for securing research grant funding. That’s why I am proud to work with Conquer Cancer®, the ASCO Foundation, to raise much needed support for women in oncology.

In 2013, under my ASCO (American Society of Clinical Oncology) presidency, I started Women Who Conquer Cancer (WWCC). WWCC works to bridge the gap to ensure the brightest women researchers receive the funding they need to help patients everywhere. WWCC funds Conquer Cancer awards enabling women to explore innovative research for new cancer treatments and to launch clinical trials. Since its founding, Women Who Conquer Cancer has raised nearly $8M to fund over 80 grants and awards for women in oncology. Women play a crucial role in the mission to conquer cancer, and we are proud to support the work of women researchers that are shown here as well as all the future women researchers to come.

Thank you to all our past, current, and future supporters of Women Who Conquer Cancer.

Sincerely,

Sandra M. Swain, MD, FACP, FASCO
Chair, Women Who Conquer Cancer
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2013-2023
10 YEARS

TOTAL NUMBER OF AWARDS GIVEN:
54 YIAs + 8 CDAs + 7 Merit Awards + 15 Mentorship Awards

TOTAL NUMBER OF INDIVIDUALS: 84

TOTAL NUMBER OF INSTITUTIONS: 47

TOTAL NUMBER OF COUNTRIES: 6

NEARLY $8 MILLION IN TOTAL FUNDS RAISED
MENTORSHIP AWARDS

Launched in 2016, this award program recognizes extraordinary women leaders in oncology and role models who have excelled as mentors and have demonstrated outstanding commitment to the professional development of women colleagues as clinicians, educators, and researchers in oncology. The awards seek to recognize and promote the work of women mentors in oncology and, ultimately, narrow career gender disparities through the mentorship and professional development of women oncology professionals.
2023 Hologic, Inc Endowed Women Who Conquer Cancer Mentorship Award

Carolyn D. Runowicz, MD, FASCO
Florida International University

2023 International Women Who Conquer Cancer Mentorship Award

Maria Teresa Bourlon, MD, MS
Instituto Nacional de Ciencias Medicas y Nutricion Salvador Zubiran

2022 Hologic, Inc Endowed Women Who Conquer Cancer Mentorship Award

S. Gail Eckhardt, MD, FASCO
The University of Texas at Austin Dell Medical School

2022 International Women Who Conquer Cancer Mentorship Award

Cynthia Villarreal-Garza, MD, DSc
Tecnológico de Monterrey
2021 Hologic, Inc Endowed Women Who Conquer Cancer Mentorship Award

Jennifer Ligibel, MD, FASCO
Dana-Farber Cancer Institute

Lorna Awo Renner, MBChB
University of Ghana School of Medicine and Dentistry

2020 Hologic, Inc Endowed Women Who Conquer Cancer Mentorship Award

Dawn Hershman, MD, MS, FASCO
Columbia University

2020 International Women Who Conquer Cancer Mentorship Award

Lillian L. Siu, MD, FRCPC, FASCO
Princess Margaret - University Health Network
2019 Hologic, Inc Endowed Women Who Conquer Cancer Mentorship Award

Lynn M. Schuchter, MD, FASCO
University of Pennsylvania

2019 International Women Who Conquer Cancer Mentorship Award

Verna Vanderpuye, MBChB
Korle Bu Teaching Hospital

2018 Hologic, Inc Endowed Women Who Conquer Cancer Mentorship Award

Lori J. Pierce, MD, FASTRO, FASCO
University of Michigan

2018 International Women Who Conquer Cancer Mentorship Award

Rejin Kebudi, MD
Istanbul University
2017 International Women Who Conquer Cancer Mentorship Award

Mary K. Gospodarowicz, MD
Princess Margaret - University Health Network

2017 Hologic, Inc Endowed Women Who Conquer Cancer Mentorship Award

Elizabeth Shpall, MD
University of Texas MD Anderson Cancer Center

2016 Women Who Conquer Cancer Mentorship Award

Sarah Donaldson, MD, FASCO
Stanford Cancer Center

Women Who Conquer Cancer Mentorship Tribute Award

Arti Hurria, MD, FASCO†
City of Hope
(1970 - 2018)
CAREER DEVELOPMENT AWARDS (CDA)

The CDA provides three years of research funding to clinical investigators in the first to third year of faculty appointment to establish an independent clinical cancer research program.
**Gina Keiffer, MD**

**Award Institution:** Thomas Jefferson University Hospital  
**Project Title:** “Tazemetostat in Combination with CPX-351 following Palbociclib Pre-Treatment for Patients with Relapsed or Refractory Acute Myeloid Leukemia”  
**Research Area:** Leukemia, Myelodysplasia, and Transplantation  
**Mentored by:** Margaret Kasner, MD, MSc  

**Impact:** This study seeks to improve the effectiveness of chemotherapy for acute myeloid leukemia (AML) patients by adding 2 drugs that patients by keep DNA in an “open” formation, allowing standard chemotherapy drugs to reach the DNA better and attack cancer cells more efficiently. Previously tested in mouse models, they will conduct a clinical trial to test this approach in human patients with AML that have not responded to prior chemotherapy or recurred after responding to chemotherapy.

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**Julia McGuinness, MD**

**Award Institution:** Columbia University  
**Project Title:** “Use of a novel artificial intelligence-based mammographic evaluation to assess response to adjuvant endocrine therapy among women with operable breast cancer”  
**Research Area:** Breast Cancer  
**Mentored by:** Katherine Crew, MD, MS  

**Impact:** This project explores the relationship between mammographic density (MD) and recurrence in breast cancer patients undergoing endocrine therapy. Dr. McGuinness and team have developed a computer-based artificial intelligence (AI) tool that reads features of mammograms beyond those visible to the human eye, does not require visual interpretation, and automatically provides a predicted risk of breast cancer recurrence. Dr. McGuinness’ team will conduct a large multi-site clinical trial to validate this tool and better understand how factors such as hormone levels and adherence to endocrine treatment affect the predictive value of this AI tool.
Victoria Wang, MD, PhD
Award Institution: University of California, San Francisco
Project Title: “High-Dimensional Spatial Profiling to Dissect Resistance to CAR-T Cells”
Research Area: CAR-T
Mentored by: Charalambos Andreadis, MD, MS

Impact: This study will elucidate the molecular determinants of response to CAR-T therapy and examine differences in epigenome, transcriptome, and the tumor microenvironment between responders and non-responders. The team have consented 48 patients and collected over 150 samples for analysis. This study will lead to the identification of biomarker of response for stratifying patients that may benefit from CAR-T therapy and better treatments for CAR-T patients.

Where they are now: Dr. Wang is an Assistant Professor at the University of California, San Francisco.

Stephanie Dixon, MD, MPH
Award Institution: St. Jude Children’s Research Hospital
Project Title: “PreDM: A single-arm, open-label, pilot intervention trial for diabetes prevention among prediabetic survivors of childhood cancer”
Research Area: Patient and Survivor Care
Mentored by: Gregory Armstrong, MD and Melissa Hudson, MD

Impact: This is a first-in survivor, single-arm pilot study with the goal of establishing evidence of feasibility and safety of a combined pharmacologic (metformin) and lifestyle intervention (using an existing digital platform) to prevent diabetes in prediabetic adult survivors of childhood cancer. The trial is studying a combined treatment to prevent diabetes using daily metformin and a lifestyle change program that will be delivered using an app-based platform in adult survivors of childhood cancer with prediabetes. This study will determine if this combined intervention is possible, safe, and works to improve blood sugar control in this population. The study is currently enrolling participants (NCT04742751).

Where they are now: Dr. Dixon is an assistant member in the Cancer Survivorship and Leukemia/Lymphoma Divisions at St. Jude Children’s Research Hospital.

The CDA was very meaningful to me as an early career clinician-scientist. It allowed me to continue on a career path focused on improving outcomes for survivors of childhood cancer through research focused on better understanding of and intervention to prevent or mitigate late effects of cancer treatment.”
Elysia Alvarez, MD, MPH

Award Institution: University of California, Davis
Project Title: “Adolescent and Young Adult Oncology in Low-and-Middle Income Countries: Developing models of care”
Research Area: Pediatric Oncology
Mentored by: Marcio Malogolowkin, MD and Paola Friedrich, MD, MPH

Impact: This study is identifying barriers to care of adolescent and young adult patients and strategies to overcome these barriers in Latin America. This is accomplished through interviews and focus groups of physicians, non-physician providers and stakeholders and survivors of cancer. This work will help to identify strategies to improve care for adolescents and young adults with cancer in Latin America.

Where they are now: Dr. Alvarez is an Associate Professor in the Department of Pediatrics at the University of California, Davis. She co-leads a Pediatric, Adolescent, and Young Adult Comprehensive Sarcoma Clinic at the UC Davis Comprehensive Cancer Center.

Sahaja Acharya, MD

Award Institution: St. Jude Children's Research Hospital
Project Title: “Shifting the radiation planning paradigm to preserve neurocognition in children with brain tumors”
Research Area: Radiation Oncology
Mentored by: Heather Conklin, PhD, and Thomas Merchant, DO, PhD

Impact: This study is investigating the relation between brain substructure doses and specific neurocognitive outcomes using the data from SJMB03, a phase III study of children with medulloblastoma who underwent neurocognitive testing at baseline, before completion of radiation therapy (RT), and yearly thereafter for five years. They will continue to enroll patients for the study and data collected so far highlights the importance of informed RT planning for obtaining the best neurocognitive outcomes. The team plans to determine the molecular mechanisms of neurocognitive decline after radiation using preclinical models.

Where they are now: Dr. Acharya is an Assistant Professor of Radiation Oncology and Molecular Radiation Sciences, Assistant Professor of Oncology, and Director of Pediatric Radiation Oncology at the Johns Hopkins School of Medicine.

Receiving this award signified to me that Conquer Cancer values improving the care of adolescents and young adults, not just in the United States but globally.”
2019 Women Who Conquer Cancer Career Development Award

Emily E. Johnston, MD, MS
Award Institution: University of Alabama at Birmingham
Research Project Title: "Hospice Use at the End-of-Life in Children with Cancer"
Research Area: Pediatric Oncology
Mentored by: Joanne Wolfe, MD and Smitha Bhathia, MD, MPH
Impact: This project studied the disparities in end-of-life (EOL) care for children with cancer. The study found the duration of hospice enrollment was short with a median of 2 days, and only 40% of children with cancer die at home. The EOL care varies significantly with insurance. It is important to determine if these patterns and disparities represent EOL preferences, provider biases, or differences in quality or availability of hospice. The results were published in Pediatric Blood and Cancer. 2022, 69(8): e29521, which is the first national work to show disparities in hospice enrollment for children with cancer. The data suggest that more work is needed to get earlier hospice enrollment and address disparities in care.

Where they are now: Dr. Johnston is an Assistant Professor at the University of Alabama at Birmingham, Member of the Institute for Cancer Outcomes & Survivorship and an Associate Scientist at the O’Neal Comprehensive Cancer Center.

2020 Women Who Conquer Cancer Career Development Award

Amanda Robinson Kirane, MD, FACS
Award Institution: University of California, Davis
Project Title: "Biomarker analysis of neoadjuvant intralesional therapy in high risk primary melanoma"
Research Area: Melanoma/Skin Cancers
Mentored by: Robert Canter, MD
Impact: The goal of this study is to perform a novel bedside-to-bench evaluation of an established and efficacious immunotherapy, with oncolytic virus Talmogene Laherparepvec (T-VEC), with in-depth mechanistic analysis of molecular and immunologic signatures. This study would be the first in kind to target high risk earlier stage melanoma in the neoadjuvant setting. The objective of this study is to assess the safety and clinical efficacy of neoadjuvant T-VEC as measured by histologic response and to identify immunologic and molecular predictors of response in the primary tumor and the draining sentinel lymph node. To date, 6 of 62 patients have enrolled and been treated and biomarker analysis is underway. All patients have completed standard of care surgeries and have been without significant adverse events or relapse in the follow up period. 1 of 6 patients demonstrated positive sentinel lymph node and has initiated adjuvant immunotherapy, per standard treatment approach. Of note, 3/6 patients were presented with acral melanoma, a type of skin melanoma that forms on the palms, soles of feet, and under finger or toenails. While all patients demonstrate significant immune response to T-VEC injection, the non-acral cutaneous lesions demonstrate more profound regression/pathologic response of tumor. Additionally, given that acral melanoma is a unique population, more refractory to modern systemic immunotherapies, response to TVEC (oncolytic viral therapy) would suggest a viable new treatment approach in a population with even poorer outcomes.

Where they are now: Dr. Kirane is an Assistant Professor of Surgery at Stanford University School of Medicine.
It is incredibly rewarding to see patients thrive in spite of their diagnosis. I want to underscore that the Conquer Cancer Career Development Award was the reason the work was able to be done.

Dr. Kim Reiss Binder
YOUNG INVESTIGATOR AWARDS (YIA)

The YIA provides research funding to promising young physicians during the final years of training to support the transition to a faculty appointment and to encourage quality research in clinical oncology.
Elizabeth Carstens, MD

**Award Institution:** Dana-Farber Cancer Institute  
**Project Title:** “Targeted DNA origami delivery of mRNA for in situ CAR-T cell generation”  
**Research Area:** Developmental Therapeutics - Experimental Therapeutics  
**Mentored by:** Eric Smith, MD, PhD and William Shih, PhD  

**Impact:** The project aims to explore mRNA as a way to reprogram T cells, with the ultimate goal of generating chimeric antigen receptor T cells (CAR-T) in patients, bypassing the need to first extract, expand and modify a patient's T cells. This would make CAR-T therapy more efficient and accessible multiple myeloma (MM) patients.

Madhulika Eluri, MD

**Award Institution:** The University of Texas MD Anderson Cancer Center  
**Project Title:** “Adaptive mutability in colorectal cancers treated with epidermal growth factor receptor inhibition”  
**Research Area:** Gastrointestinal (Colorectal) Cancer  
**Mentored by:** Scott Kopetz, MD, PhD and Christine Parseghian, MD  

**Impact:** The study aims to understand why metastatic Colorectal Cancer (mCRC) becomes resistant to anti-EGFR therapies by studying tumor biopsy samples of patients who previously received anti-EGFR therapy. The investigator will also evaluate liquid biopsies (a non-invasive blood test) for mutational changes in circulating tumor DNA (ctDNA) to see if "mutational signatures" emerge to potentially uncover specific patterns of mutations that could predict anti-EGFR therapy response and improve treatment opportunities.
2023 Tomasello Family Women Who Conquer Cancer Young Investigator Award

Kathryn Gessner, MD, PhD

Award Institution: University of North Carolina, Chapel Hill
Project Title: “Geospatial transcriptomic characterization of urothelial carcinoma in situ (CIS) to decipher cancer biology and enhance therapy”
Research Area: Genitourinary Cancer
Mentored by: William Kim, MD

Impact: The study explores Urothelial Carcinoma in situ (CIS), a lesion that can develop into invasive bladder cancer and has poor treatment outcomes, using a recent technology, spatial transcriptomic profiling, which molecularly profiles and maps human tissue within the surface layer of the bladder. The molecular analysis will determine how CIS develops and responds to treatment.

2023 Women Who Conquer Cancer—Franci Blassberg & Joe Rice Young Investigator Award in honor of Dr. Anne Moore

Marla Lipsyc-Sharf, MD

Award Institution: Dana-Farber Cancer Institute
Project Title: “Understanding Circulating Tumor DNA at Critical Clinical Timepoints in Early-Stage Hormone Receptor-Positive Breast Cancer (CaTCH)”
Research Area: Breast Cancer
Mentored by: Ann Partridge, MD, MPH and Heather Parsons, MD, MPH

Impact: The overall goal of this project is to determine how well MAESTRO, a highly sensitive test for circulating tumor DNA (ctDNA), predicts recurrences in hormone receptor-positive breast cancer (HR + BC), and if MAESTRO can detect ctDNA in patients with HR+ BC after surgery and while on hormonal therapy. If MAESTRO can detect ctDNA at these important times, future clinical trials can study whether changing treatment after a positive or negative ctDNA test can improve patients’ cancer outcomes.
Elizabeth Sakach, MD  
**Award Institution:** Emory University  
**Project Title:** "Phase I Trial Evaluating the Safety and Efficacy of ProAgio, an anti-αvβ3 Integrin Cytotoxin, in Combination with Gemcitabine in Patients with Metastatic Triple Negative Breast Cancer"  
**Research Area:** Breast Cancer  
**Mentored by:** Kevin Kalinsky, MD, MS and Zhi-ren Liu, PhD  

**Impact:** The study aims to test the combination of ProAgio, a drug that affects the tumor environment, and gemcitabine to treat patients with metastatic Triple Negative Breast Cancer in a clinical trial. Dr. Sakach will study the safety and effectiveness of this combination for patients with TNBC, hoping to offer patients with metastatic TNBC a new and effective treatment option.

Patricia Mae Santos, MD  
**Award Institution:** Memorial Sloan Kettering Cancer Center  
**Project Title:** "Leveraging Emergency Medicaid data to understand disease burden, resource utilization, and health-related expenditures among undocumented immigrants with cancer in New York"  
**Research Area:** Health Services Research  
**Mentored by:** Fumiko Chino, MD and K. Robin Yabroff, PhD, MBA  

**Impact:** The proposed study uses claims data to compare New York State Medicaid beneficiaries with "emergency-only" coverage (EM) versus other coverage types (non-EM) to investigate cancer burden and cancer care among undocumented immigrants in New York. The findings will provide insights into cancer burden and access to care among undocumented immigrants and will have important implications for Medicaid financing and government policies.
Kara Schenk, MD

Award Institution: Johns Hopkins University
Project Title: "Immune checkpoint blockade for kidney transplant recipients with selected unresectable or metastatic cutaneous cancers"
Research Area: Melanoma/Skin Cancers
Mentored by: Evan Lipson, MD and Janis Taube, MD, MS

Impact: Dr. Schenk and team are studying how to improve cancer treatment options for kidney transplant recipients (KTR) in a clinical trial testing low-dose immunosuppression (sirolimus and prednisone) and a combination of immunotherapy agents (nivolumab and ipilimumab) in kidney transplant recipients (KTR) with advanced skin cancers. The goal of this study is to allow KTR patients to control their cancer without loss of their transplanted kidney.

Anupriya Singhal, MD, PhD

Award Institution: Memorial Sloan Kettering Cancer Center
Project Title: "Uncovering Pancreatic Cancer Cell States Driving Resistance to KRAS Inhibition"
Research Area: Gastrointestinal (Noncolorectal) Cancer
Mentored by: Tuomas Tammela, MD, PhD

Impact: This project investigates pancreatic cancer cells in genetically engineered mouse models (GEMM) to study the role of a subset of pancreatic cancer cells, called basal cells, in cancer progression and resistance to therapy. By longitudinally tracking basal cells in response to therapy, this work may reveal novel vulnerabilities and lead to transformative new pancreatic cancer treatments.
Pavlina Spiliopoulou, MD, PhD

Award Institution: University Health Network
Project Title: "Prospective Analysis of INteStinal Microbiome and Autoimmune PanElas as PredicTsors of Toxicity in ImmunOncology Patients (INSPECT-IO)"
Research Area: Developmental Therapeutics - Clinical Pharmacology and Immunotherapy
Mentored by: Anna Spreatifico, MD, PhD, and Bryan Coburn, MD, PhD

Impact: This study proposes a non-interventional way to leverage the gut microbiome and blood autoantibodies to predict which patients will develop side-effects from immunotherapy. This is through the collection of blood and stool samples while patients have their standard treatment and assessing their microbiome and auto-antibodies in relation to adverse side-effects.

Lynn Symonds, MD

Award Institution: University of Washington
Project Title: “Evaluation of genomic risk scores and the presence of metastasis initiating cells in early-stage estrogen receptor positive breast cancer”
Research Area: Breast Cancer
Mentored by: Cyrus Ghajar, PhD and Jennifer Specht, MD

Impact: Dr. Symonds is studying the relationship between genomic risk scores (a clinical tool to predict the risk of developing metastasis and disseminated tumor cells (DTC)) in breast cancer patients, and how this can be used to predict which patients are at risk for disease recurrence. Using a novel approach to purify DTC from patients, they will determine if there is a correlation between genomic risk score and the presence of DTCs, and how the genes driving the score may change between the primary tumor and DTCs.
**Merve Hasanov, MD**

**Award Institution:** The University of Texas MD Anderson Cancer Center  
**Project Title:** “Clinicopathological and Molecular Predictors of Brain Metastases in Clinically Localized Melanoma”  
**Research Area:** Melanoma/Skin Cancers  
**Mentored by:** Michael Davies, MD, PhD  

**Impact:** Dr. Hasanov’s team identified and validated clinicopathological factors associated with brain metastasis in clinically localized early-stage melanoma and developed a calculator that clinicians can use to risk-stratify patients. Research is currently underway to identify molecular risk factors associated with the risk of brain metastasis. These molecular associations will eventually result in drug development for prevention and treatment strategies.

**Where they are now:** Dr. Hasanov is a fellow at The University of Texas MD Anderson Cancer Center.

> As a YIA recipient, I would like to continue the legacy of my mentors by mentoring future Conquer Cancer trainees.

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**Katherine Knorr, MD, PhD**

**Award Institution:** The Rockefeller University  
**Project Title:** “Developing & Optimizing Acute Myeloid Leukemia Specific Therapeutic Antibodies”  
**Research Area:** Leukemia, Myelodysplasia, and Transplantation  
**Mentored by:** Omar Abdel-Wahab, MD and Jeffrey Ravetch, MD, PhD  

**Impact:** Dr. Knorr’s team is developing new and effective therapies for the treatment of Acute Myeloid Leukemia (AML). They have taken a unique approach where they engineer antibodies not only to recognize AML cells but also engage the immune cells to help kill the AML cells. This antibody will target the protein CD47, which has begun to demonstrate promising results in early phase clinical trials, as well as a very new protein called the “U5 snRP200.” Their preclinical data demonstrates this latter protein is uniquely present on the surface of AML cells while being absent from normal blood cells. They have determined that an antibody targeting this protein in combination with additional modifications to engage and activate the immune system have the best anti-leukemic activity (in mouse models of AML). The team is working to modify the dosing strategies of these antibodies to maximize the killing of AML cells and minimize killing of normal blood cells.

**Where they are now:** Dr. Knorr is a fellow at Memorial Sloan Kettering Cancer Center.
Nayan Lamba, MD
Award Institution: Brigham and Women’s Hospital
Project Title: “Genomic predictors of local control and radiation-related toxicity following radiotherapeutic management of brain metastases”
Research Area: Radiation Oncology
Mentored by: Daphne Haas-Kogan, MD

Impact: This study is evaluating mutations in target genes from 570 patients with 1,487 distinct brain metastases managed with brain-directed radiation therapy and will predict role of these genetic alterations in cancer development and its correlation with a patient’s response to radiation therapy. Preliminary data from analysis of 84 genes identified genetic alterations in 11 genes to be protective from local recurrence and two genes to increase a patient’s risk of local recurrence. This data was used to build a quantitative model (the “Brain-Radiation Prediction Score”, or Brain-RPS) to quantify an individual patient’s risk for local recurrence and prediction of local failure following radiation therapy. After further validation in another dataset, Brain-RPS has the potential to facilitate clinical trials aimed at gene-based personalization of radiation treatment among patients with brain metastases.

Where they are now: Dr. Lamba is a Clinical Fellow in Radiation Oncology at the Dana-Farber Brigham Cancer Center.

Wen-Hsuan Wendy Lin, MD, PhD
Award Institution: Columbia University Medical Center
Project Title: “Targeting the Tumor Microenvironment by Duvelisib in Peripheral T-cell lymphomas”
Research Area: Lymphoma and Plasma Cell Disorders
Mentored by: Adolfo Ferrando, MD, PhD and Teresa Palomero, PhD

Impact: The study aims to characterize the tumor microenvironment associated with different genetic driver mutations in peripheral T-cell lymphoma patient specimens and two novel mouse models. Currently, the team is analyzing data from single-cell RNAseq experiments to characterize the transcriptomic signatures of peripheral T-cell lymphomas. Data generated from this project will help to understand potential vulnerabilities and essential mechanisms of lymphoma/tumor microenvironment interaction specific to peripheral T-cell lymphomas that can be targeted and functionally validated in preclinical models. In addition, the presence of specific tumor microenvironment components could improve the stratification of patients, eventually identifying those most likely to benefit from targeted therapies.

Where they are now: Dr. Lin is an Instructor in Pathology and Cell Biology at Columbia University Medical Center.

It is a tremendous honor to have received the YIA. This grant helped to jump-start my research project and allowed me to acquire the critical skills and experience needed to become an independent investigator at the intersection of hematopathology and translational lymphoma research.”
This award has given me the chance to focus on my research. I have gained new skills that I hope to utilize in the future in translational research. The protected time has been invaluable in helping my research progress.

Ana Velázquez Mañana, MD, MS
Award Institution: University of California, San Francisco
Project Title: "Longitudinal Evaluation of Health-Related Social Needs in Advanced Lung Cancer"
Research Area: Health Services Research
Mentored by: Niharika Dixit, MD and Matthew Banegas, PhD, MPH
Impact: This is a mixed-methods study evaluating social needs in patients with advanced lung cancer during their treatment course. The overall goal is to decrease barriers to clinical trial participation, improve the quality of care delivered to underserved and racial minority patients with cancer, and evaluate the unmet social and supportive care needs of patients with lung cancer from vulnerable backgrounds. This is the first study longitudinally evaluating social needs during cancer therapy in patients with lung cancer. This study will fill a vital knowledge gap and inform interventions focused on identifying and supporting patients at risk of social adversity during cancer treatment.

Where they are now: Dr. Velázquez Mañana is an Assistant Professor of Medicine in the UCSF Division of Hematology/Oncology at Zuckerberg San Francisco General and a thoracic oncologist at the UCSF Helen Diller Family Comprehensive Cancer Center.

Chengwei Peng, MD
Award Institution: New York University (NYU) School of Medicine
Project Title: "Characterizing the Contribution of Microbiome to Racial Disparities in Colorectal Cancer"
Research Area: Gastrointestinal (Colorectal) Cancer
Mentored by: Paul Oberstein, MD, MS and Jiyongg Ahn, PhD
Impact: This YIA project will be one of the first studies focused on identifying differences in the gut microbiome and subsequent immunological changes that may explain racial disparities in colorectal cancer (CRC). The study is currently recruiting and collecting samples from patients for sequencing to identify a potential correlation between the microbiome with the immune system through analysis of blood and tumor tissue. By understanding microbial differences between patients and its role in disease recurrence, this study hopes to improve CRC disparities through interventions aimed at changing the microbiome for disease prevention and overall survival.

Where they are now: Dr. Peng is a clinical fellow at NYU Grossman School of Medicine.
The YIA has provided opportunities for me to grow as a clinical investigator and develop expertise in the use of targeted therapies for lung cancer. Moreover, I have been able to disseminate our research through conferences, presentations, and multi-institutional collaborations.”
Jasmine Sukumar, MD

**Award Institution:** The Ohio State University  
**Project Title:** "Episodic Future Thinking: A Behavioral Intervention to Promote Weight Loss in Breast Cancer Survivors"  
**Research Area:** Breast Cancer  
**Mentored by:** Sagar Sardesai, MD, MPH and Maryam Lustberg, MD, MPH

**Impact:** This phase II clinical trial is investigating a new behavioral intervention that works through a smartphone app called Episodic Future Thinking (EFT) to address an unmet need of adherence and scalability of weight loss interventions in breast cancer survivors. The use of EFT will help the patient to promote healthier choices (diet/exercise) in daily life to improve health and reduce weight. The data generated from this study will help to pursue larger scale energy balance interventional projects.

**Where they are now:** Dr. Sukumar is an Assistant Professor in the Department of Breast Medical Oncology at The University of Texas MD Anderson Cancer Center.

Esther Berko, MD, PhD

**Award Institution:** The Children's Hospital of Philadelphia  
**Project Title:** "Defining the genetic mechanisms of lorlatinib resistance in ALK-mutated high-risk neuroblastoma"  
**Research Area:** Pediatric Oncology  
**Mentored by:** Yael Mosse, MD

**Impact:** The study determined a novel mechanism of resistance to lorlatinib (anti-cancer drug) in ALK (gene)-mutated high-risk neuroblastoma using serial liquid biopsy samples obtained from patients treated on the Phase I/IIb trial of lorlatinib. The effect of ALK mutations were validated utilizing in-vitro and biochemical functional assays. The results demonstrate the importance of serial liquid biopsies in pediatric oncology and as a clinical tool to understand disease response and as a research tool to discover new mechanisms of genetic resistance. The research work has been accepted for publication in Nature Communications.

**Where they are now:** Dr. Berko is a fellow with the Cancer Center at Children's Hospital of Philadelphia.
Kelly Burke, MD, PhD

**Award Institution:** Dana-Farber Cancer Institute  
**Project Title:** “Decoupling CTLA-4 and PD-1 pathway blockade in immune-related adverse events”  
**Research Area:** Developmental Therapeutics - Clinical Pharmacology and Immunotherapy  
**Mentored by:** Arlene Sharpe, MD, PhD and F. Stephen Hodi, MD

**Impact:** This study focuses on the pathogenesis of immunotherapy-related toxicity using conditional genetic mouse models of CTLA-4 (protein that suppresses T cell proliferation) and PD-1 (immune checkpoint protein) deletion. The team found that the dual deletion of these proteins leads to greater propensity, both in terms of severity and time of onset due to increase in Th1-like and Th17-like immune cells. This study has implications for managing future immune-related toxicity by identifying targets or pathways that could be used to selectively promote desired anti-tumor immunity while minimizing the undesired toxicity. This study will help to identify targets as biomarkers for immune-related toxicity.

**Where they are now:** Dr. Burke is an Instructor in Medicine at Harvard Medical School and Physician at Dana-Farber Cancer Institute.

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Grace Blitzer, MD

**Award Institution:** University of Wisconsin - Madison  
**Project Title:** “A phase I Dose Escalation Trial of Mesenchymal Stem Cells in patients with Xerostomia after Radiation Therapy for Head and Neck Cancer”  
**Research Area:** Patient and Survivor Care  
**Mentored by:** Randall Kimple, MD, PhD

**Impact:** This trial aims to determine the safety and tolerability of mesenchymal stromal cells in patients with xerostomia after undergoing radiation therapy for head and neck cancer. Preliminary data suggest that the oral microbiome differs between healthy control participants and participants who underwent radiation for head and neck cancer, even years after treatment. There was significantly less diversity in the bacteria of the participants who underwent. This suggests that bacteria may be another marker of dry mouth and could be incorporated in future clinical trials.

**Where they are now:** Dr. Blitzer is an assistant professor in the Department of Human Oncology at the University of Wisconsin. She serves as the primary radiation oncologist at the UW Cancer Center in Johnson Creek.

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**Receiving the YIA enables me to further my research career while protecting my time and paying my salary. Basic science research takes time, and the award enables me to do this research.”**
Marcella Kaddoura, MD

Award Institution: Mayo Clinic, Minnesota
Project Title: “Characterization of Post-Treatment Mutational and Phenotypic landscape of Residual Clonal Plasma Cells in Newly Diagnosed Multiple Myeloma”
Research Area: Lymphoma and Plasma Cell Disorders
Mentored by: Shaji Kumar, MD

Impact: The study is characterizing the genotypic properties of myeloma cells at first relapse and correlate it with the treatment response and survival outcomes to identify early drivers of disease relapse and drug resistance. Patient samples have been collected for DNA analysis. The data generated from this study will enable the development of a prognostic model for melanoma patients that is more accurate than the ones currently used. Thus, leading to more individualized medical decision-making for longer patient survival and less toxicity from therapy.

Where they are now: Dr. Kaddoura is an Assistant Professor at the University of Miami Leonard M. Miller School of Medicine.

Patrizia Mondello, MD, PhD, MSc

Award Institution: Memorial Sloan Kettering Cancer Center
Project Title: “Genomic landscape and tumor microenvironment of High-Grade Follicular Lymphoma 3B”
Research Area: Lymphoma and Plasma Cell Disorders
Mentored by: Andrew Zelenetz, MD, PhD

Impact: Follicular lymphoma (FL) grade 3B represents a patient population with a distinctly adverse prognosis. This study is exploring the molecular mechanisms responsible for FL3B to develop rationally designed clinical trials for patients with this aggressive subset of lymphoma. RNA sequencing including other genomic and tissue microarray studies are currently underway to identify signaling pathways altered in FL3B. This study will allow the development of novel mechanism-based treatment strategies.

Where they are now: Dr. Mondello is an Assistant Professor at the Mayo Clinic in Rochester, MN.
Jennifer Morgan, MD

**Award Institution:** The University of North Carolina at Chapel Hill  
**Project Title:** “Implementing a Breast Cancer Early Detection and Ultrasound Intervention for Cervical Cancer Screening Providers in Malawi”  
**Research Area:** Breast Cancer  
**Mentored by:** Katherine Reeder-Hayes, MD, MBA and Jennifer Leeman, DRPH, MPH, MDIV

**Impact:** The aim of this proposal is to implement a breast cancer early detection and ultrasound intervention among cervical cancer screening providers in district hospitals in Malawi. All pre-study activities such as curriculum development and pilot testing are complete for initiation of the study. Data generated in this study will help guide early detection strategies in the region where incidence and mortality rates of cervical and breast cancer are high. This award has allowed the team to conduct breast cancer screening intervention in Malawi to explore optimal screening techniques with the aim of detecting breast cancer early and preventing breast cancer deaths in Malawi and the region.

**Where they are now:** Dr. Morgan is an Assistant Professor of Clinical Medicine and William C. Jr. and Kim L. Lansford Scholar in Global Oncology at the Indiana University School of Medicine.

Rebecca Shulman, MD

**Award Institution:** Fox Chase Cancer Center  
**Project Title:** “Genotyping of BRCA1 mutations predicts radiosensitivity in breast cancers and in cultured breast cancer cells”  
**Research Area:** Breast Cancer  
**Mentored by:** Joshua Meyer, MD and Neil Johnson, PhD

**Impact:** This project is studying mutations in BRCA gene, which are largely responsible for the familial form of breast cancer. Understanding the association between mutations in BRCA gene and tumor recurrence, toxicity to radiotherapy or survival will help to develop a model to predict sensitivity to radiation therapy. The initial data demonstrated that cells with BRCA1 mutations showed a trend towards an increase in sensitivity to radiation therapy compared to cells without BRCA1 mutations. This study will help to develop new treatment approaches that will reduce treatment toxicity and improve clinical outcomes for patients with breast cancer.

**Where they are now:** Dr. Schulman is a radiation oncology resident at Fox Chase Cancer Center.
**2021 Women Leaders in Oncology Women Who Conquer Cancer Young Investigator Award**

**Elizabeth Zhang-Velten, MD, PhD**

**Award Institution:** UT Southwestern Medical Center  
**Project Title:** "Metabolic Imaging for Early Detection of Radiation-Induced Cardiomyopathy"  
**Research Area:** Patient and Survivor Care  
**Mentored by:** Prasanna Alluri, MD, PhD and Craig Malloy, PhD

**Impact:** There is currently no standardized program for follow-up of radiation-induced heart disease (RIHD) in cancer survivors. The team has developed a preclinical model of radiation-induced cardiotoxicity and demonstrated feasibility of metabolic imaging to detect radiation-induced myocardial mitochondrial metabolic changes in this model and in a pilot study in human patients. This project has the potential for early detection and mitigation of radiation-induced cardiac injury in hundreds of thousands of patients receiving thoracic radiation annually. An ongoing clinical trial will further validate the use of metabolic imaging in patients receiving thoracic radiation.

**Where they are now:** Dr. Zhang-Velten is a radiation oncologist at Southern California Kaiser Permanente.

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**2020 Debra Lesavoy Women Who Conquer Cancer Young Investigator Award**

**Katharine Collier, MD, MS**

**Award Institution:** The Ohio State University  
**Project Title:** "Changes in circulating tumor DNA after treatment with PARP inhibitors or platinum-containing chemotherapy in BRCA-mutated metastatic breast cancer"  
**Research Area:** Breast Cancer  
**Mentored by:** Amir Mortazavi, MD, and Daniel Stover, MD

**Impact:** The study found a low incidence of BRCA reversion mutations and concluded that they are unlikely to be the primary driver of resistance to PARP (enzyme that helps repair DNA damage) inhibitors or platinum chemotherapy for treatment of breast cancer. The team is further exploring the impact of therapies that interfere with DNA damage repair pathway to better understand how these drugs work and how resistance develop. The data from this study has been presented at multiple national meetings and manuscript preparation is currently underway.

**Where they are now:** Dr. Collier is an Assistant Professor in the Division of Medical Oncology at The Ohio State University.

"The YIA was a very important accomplishment during my fellowship and was very valuable when I interviewed for jobs in academic oncology. Now as I am applying for more grants, it is important to have this early success to establish a track record of external funding."
Deborah Catherine Marshall, MD

**Award Institution:** Icahn School of Medicine at Mount Sinai  
**Project Title:** “A multidisciplinary approach to defining predictors of sexual dysfunction in female cancer patients following pelvic radiation”  
**Research Area:** Radiation Oncology  
**Mentored by:** Barry Rosenstein, PhD and Julie Schnur, PhD  

**Impact:** The goal of the study is to determine how often sexual problems are reported as an adverse event in clinical trials of women with pelvic cancers, then to closely evaluate female sexual anatomy to ensure inclusion of all sexual organs when deciding what to protect during radiation. The team established that re-optimizing radiotherapy plans to reduce the dose to the erectile tissues is feasible in female low rectal cancer patients. This novel approach substantially reduces the amount of radiation that passes through these tissues by half. This was accomplished without changing the radiation dose that treats the cancer or to other organs that cause side effects. This study will allow development of new solutions for sexual toxicity in female patients after radiotherapy to improve quality of life in women.

**Where they are now:** Dr. Marshall is an Assistant Professor in the Department of Radiation Oncology and in the Blavatnik Family Women’s health Research Institute at the Icahn School of Medicine at Mount Sinai. She is also a member of the Cancer Prevention and Control Program of the Tisch Cancer Institute.

Alana TH Nguyen, MD, PhD

**Award Institution:** Columbia University Medical Center  
**Project Title:** “A reverse-engineering approach to investigate drivers of therapy resistance in a co-clinical study of bladder cancer using patient-derived organoids.”  
**Research Area:** Genitourinary Cancer  
**Mentored by:** Andrea Califano, PhD and Michael Shen, PhD

**Impact:** The team developed a method to grow tumors derived from bladder cancer patients in 3-dimensional culture in vitro called “organoids”. They are investigating the use of these patient derived organoids lines to identify treatment response and critical molecular mechanisms that drive therapeutic resistance and disease progression. To predict treatment response, organoids were treated with cisplatin (drug) and sequenced for 500 most common mutations. It was found that mutations in two genes, EPHA5 and AADACL3 were lost in cisplatin treated organoids indicating sensitivity of these mutations to cisplatin. The team is now in the process of performing studies to investigate the function of these mutations. The study will allow the identification of key drivers of therapeutic resistance in bladder cancer.

**Where they are now:** Dr. Nguyen is an Assistant Professor in the Division of Hematology and Oncology at Weill Cornell Medicine/NewYork-Presbyterian Hospital.
April Ann Nicole Rose, MD, PhD

**Award Institution:** University Health Network  
**Project Title:** “Optimizing targeted therapy strategies for cancers with BRAF nonV600E mutations”  
**Research Area:** Developmental Therapeutics - Experimental Therapeutics  
**Mentored by:** Anna Spreafico, MD, PhD and David Cescon, MD

**Impact:** The YIA funded correlative analysis for an on-going clinical trial. The team was able to establish preclinical models of tumors with nonV600 BRAF (protein) mutations and perform next gen sequencing of patient’s tumors. By analyzing the sequencing data the team was able to identify a novel treatment strategy and test it in these highly relevant preclinical models. There are about 22 patients enrolled with metastatic cancer on an investigator initiated clinical trial funded in part through YIA. Several of these patients experienced significant clinical benefit from the study medication.

**Where they are now:** Dr. Rose is an Assistant Professor of Oncology at McGill University, Medical Oncologist at the Segal Cancer Centre of the Jewish General Hospital (CIUSSS West-Central Montreal) and a Principal Investigator at the Lady Davis Institute for Medical Research.

It was a great honor to receive this award. It was important to receive recognition from our peers that the work we are doing is valuable and impactful. I believe this award was a critical factor that allowed me to get my dream job of being a clinician scientist and medical oncologist researching important questions in translational oncology.”

Molly R. Taylor, MD, MS

**Award Institution:** Seattle Children’s Hospital  
**Project Title:** “Biobehavioral Model of Stress and Resilience in Adolescents and Young Adults with Cancer”  
**Research Area:** Pediatric Oncology  
**Mentored by:** Abby Rosenberg, MD, MS and Kevin Baker, MD, MS

**Impact:** This study will help provide targeted supportive care for adolescents and young adults with cancer. It is possible to collect biomarkers of stress and resilience in adolescent and young adult patients with cancer to help risk stratify patients and develop targeted multi modal therapies. Receiving this award provided support to continue research as well as the confidence and validation that this research could make a difference in patients’ lives. Dr. Taylor has published her research work in the *Journal of Pain and Symptom Management* and *Brain, Behavior & Immunity Health*.

**Where they are now:** Dr. Taylor is an Assistant Professor of Pediatrics at the University of Washington School of Medicine and Fred Hutch and Attending Physician at Seattle Children’s.

Receiving this award gave me both the practical support I needed to continue my research as well as the confidence and validation that my research could make a difference in patients’ lives.”
Natalie Vokes, MD, Mphil

**Award Institution:** Dana-Farber Cancer Institute  
**Project Title:** “Dissecting the tumor-intrinsic and immune drivers of selective response to combination therapies in NSCLC”  
**Research Area:** Lung Cancer  
**Mentored by:** Eliezer Van Allen, MD and Mark Award, MD, PhD  

**Impact:** The study aims to understand the tumor intrinsic and extrinsic determinants of resistance to immunotherapy. The team has assembled a large cohort of 864 patients with whole exome sequencing from pre-immunotherapy-treated tumors, with largest sub-cohorts consisting of melanoma, renal cell carcinoma (RCC), and non-small cell lung cancer (NSCLC). Analysis of tumors specimens demonstrated that chromatin modifier genes are associated with response to immune checkpoint inhibitors. Tumor specific genomic predictors were identified in lung cancer responders compared to other tumor types, indicating that tumor intrinsic properties and tumor immune environment cooperate to determine clinical response. These findings are being validated in mouse models and following up correlative analyses to better understand the basis of this association. These findings will be integrated with biologically informed machine learning models to identify significant predictive features to uncover the mechanisms of resistance to immune checkpoint inhibitors. The team hopes that these signatures will help guide patient therapy and form the basis for rational, personalized immunotherapy clinical trials. The data generated from this study contributed to the publications in journals including Nature Cancer (Reardon et al., 2021) and Journal of Thoracic Oncology (Vokes et al., 2022).  

**Where they are now:** Dr. Vokes is an Assistant Professor at The University of Texas MD Anderson Cancer Center.

Kelly Sharon Chien, MD

**Award Institution:** The University of Texas MD Anderson Cancer Center  
**Research Project Title:** “Prevention of Therapy-Related Myeloid Neoplasms Associated with Clonal Hematopoiesis of Indeterminate Potential”  
**Research Area:** Leukemia, Myelodysplasia, and Transplantation  
**Mentored by:** Guillermo Garcia-Manero, MD and Simona Colla, PhD  

**Impact:** The study found that hematopoietic stem cells in elderly individuals have upregulation of pathways involved in inflammation and stress responses compared to normal healthy young and old donors indicating that clonal hematopoiesis is associated with aging. The team further plans to better understand patients with clonal hematopoiesis on the stem cell level. This will allow to target high risk patients for leukemic transformation and develop early therapeutic interventions to prevent progression.  

**Where they are now:** Dr. Chien is an Assistant Professor of Medicine at The University of Texas MD Anderson Cancer Center. She co-leads the Clonal Hematopoiesis/Leukemia Prevention Clinic and works closely with basic science and hematopathology colleagues in this field.

“This award was fundamental in my transition from a hematology/medical oncology fellow to junior faculty member. In the process, I was able to learn the basics of grant writing. It also opened the doors for other career opportunities.”
Lauren Elizabeth Colbert, MD

**Award Institution:** The University of Texas MD Anderson Cancer Center  
**Project Title:** “Use of Radiomic Characteristics associated with Decreased T-Cell Response to predict In-Field Failure after Definitive Chemoradiation for Anal Squamous Cell Carcinoma”  
**Research Area:** Radiation Oncology  
**Mentored by:** Cullen Taniguchi, MD, PhD

**Impact:** The team demonstrated that Human papillomavirus (HPV)-specific T-cell expansion was associated with patient outcomes. It was determined that dynamics in the tumor microenvironment T-cell repertoire were more consequential to patient outcomes than the peripheral blood T-cell repertoire, which is significant since most cancer studies follow the peripheral blood T-cell repertoire. The study validate that the related ongoing studies should focus on the tumor microenvironment T-cell repertoire. The research work was published in Cancer Immunology Research (Colbert et al., 2022).

**Where they are now:** Dr. Colbert is an Assistant Professor of Radiation Oncology at The University of Texas MD Anderson Cancer Center. Her lab conducts clinical and translational research in human papillomavirus (HPV) related cancers.

"It was monumental to be recognized as an outstanding young investigator. Having someone believe in your work and stand behind that is a great encouragement in continuing to pursue the work!"

Pippa Froukje Cosper, MD, PhD

**Award Institution:** University of Wisconsin  
**Research Project Title:** “Chromosomal instability as a potential mechanism and marker of radiation sensitivity in head and neck cancer”  
**Research Area:** Head and Neck Cancer  
**Mentored by:** Beth Weaver, PhD and Randall Kimple, MD, PhD

**Impact:** The study found that a head and neck cancer cell's baseline chromosomal instability (CIN), or rate of chromosome missegregation, is correlated to its radiation sensitivity. The cancer cells with higher levels of CIN are more sensitive to radiation and this was true in engineered isogenic cell lines, patient-derived xenografts, and laryngeal tumor cells from patients treated with radiation. The patients whose tumor cells had higher levels of CIN had a very low local recurrence rate after definitive radiation compared to patients with tumor cells with low CIN.

**Where they are now:** Dr. Cosper is an Assistant Professor in the Department of Human Oncology at the University of Wisconsin School of Medicine and Public Health.

"This award was incredible in many ways. It gave me the confidence to continue a research career. It allowed me to perform important studies that became the focus of my own independent laboratory. I think it helped greatly in securing an Assistant Professor position as well."
Angela Kellen Green, MD, MSc
Award Institution: Memorial Sloan Kettering Cancer Center
Project Title: “Utility of a Population-Based Data Source to Examine National Cancer Clinical Trial Participation”
Research Area: Health Services Research
Mentored by: Peter Bach, MD, MAPP and Roisin O’Cearbhaill, MD

Impact: The YIA was critical for developing a novel database for studying national clinical trial enrollment and examining costs, outcomes, and disparities associated with clinical trial enrollment. It has enhanced the understanding of trial enrollment and sources for under enrollment and disparities which has further informed the development of interventions to bolster clinical trial accrual among underrepresented groups. This knowledge is critical for testing and advancing new therapies for patients with cancer. The award provided her with the initial funding support necessary to launch her research career. The research results from the YIA was published in the journals of JAMA Network Open and JAMA Oncology (Green et al., XX).

Where they are now: Dr. Green is an Assistant Attending Physician and Medical Oncologist at Memorial Sloan Kettering Cancer Center who cares for people with gynecologic cancers.

Jessica Elizabeth Hawley, MD
Award Institution: Columbia University Medical Center
Project Title: “Augmenting the ADT-induced immune infiltrate in metastatic hormone-sensitive prostate cancer with PD-1 blockade and docetaxel”
Research Area: Genitourinary Cancer
Mentored by: Charles Drake, MD, PhD and Mark Stein, MD

Impact: This clinical study represents the first attempt to characterize both the baseline and the dynamic changes occurring in the tumor microenvironment (TME) of metastatic, castration-sensitive prostate cancer (mCSPC) patients treated with ADT and anti-PD-1. The data revealed key immune characteristics conserved across multiple patients and metastatic sites (bone, lymph node, liver, and lung) and its correlation with response to treatment. Subsequent investigational clinical trials are under development build on these findings. Additionally, the single-cell RNA-sequencing data generated from this study using fresh untreated metastatic, castration-sensitive prostate cancer across several metastatic sites provides a rich dataset for ongoing investigations and as well as a resource for the broader prostate cancer research community.

Where they are now: Dr. Hawley is an Assistant Professor at the University of Washington School of Medicine, Associate Professor of Clinical Research and Physician at Fred Hutch, and Physician at the University of Washington Medical Center.

"Receiving the YIA was an incredible honor that helped galvanize my interest and focus in cancer research and ultimately served as a springboard for subsequent grant funding and awards.”
Aimee Marie Merino, MD, PhD

Award Institution: University of Minnesota
Project Title: "Enhancing the ability of natural killer cells to kill renal cell carcinoma"
Research Area: Genitourinary Cancer
Mentored by: Jeffrey Miller, MD

Impact: The YIA studied migration of Natural Killer (NK) cell, a type of cytotoxic lymphocyte, in kidney cancer. The results from this grant were used in developing subsequent grant support (K08), which is focused to study the tumor microenvironment in multiple myeloma and how it impacts NK cell function and migration. The study will determine factors that influence migration in the tumor and bone marrow using clinical samples from a trial of NK cells. These results will be used to improve NK cellular therapy to treat patients.

Where they are now: Dr. Merino is an Assistant Professor of Medicine at the University of Minnesota.

"This award really launched my career and provided the funding and credibility to do the preliminary work that ultimately helped me to get a K08 and get my own research lab started."

Soo Jin Park, MD

Award Institution: University of California, San Diego
Project Title: "DNA Methylation Patterns in Response to Hypomethylating Agents in Myelodysplastic Syndromes"
Research Area: Leukemia, Myelodysplasia, and Transplantation
Mentored by: Rafael Bejar, MD, PhD

Impact: The team determined if measurement of DNA methylation (DNAm) profile at baseline and early during treatment with hypomethylating agents can improve the ability to predict clinical response in patients with myelodysplastic syndromes (MDS) and related disorders. The DNAm profiles were examined in samples from patients with higher-risk MDS (HR-MDS), chronic myelomonocytic leukemia (CMML), and low-blast count acute myeloid leukemia (LB-AML). It was found that DNAm patterns correlates with eventual response, with complete response associated with the greatest degree of demethylation. The study validated that DNAm profile can be used as a biomarker of HMA response for treatment of MDS and related disorders.

Where they are now: Dr. Park is an Assistant Professor at UC San Diego School of Medicine.
Ana Christina Garrido-Castro, MD

**Award Institution:** Dana-Farber Cancer Institute  
**Project Title:** "Evaluating the immune landscape of metastatic triple-negative breast cancer and identifying predictive biomarkers of response to PD-1 inhibition"  
**Research Area:** Breast Cancer  
**Mentored by:** Nancy Lin, MD and Sara Tolaney, MD, MPH

**Impact:** The goal of the study is to characterize the molecular landscape of early-stage triple-negative breast cancer (TNBC) in patients treated with neoadjuvant therapy with residual disease (RD) at the time of surgery. The breast cancer patients are treated as part of a phase II clinical trial (NCT03414684. This trial is studying a drug called Carboplatin with or without another study drug, Nivolumab as a possible treatment for triple-negative breast cancer that has spread to other parts of the body. Samples from patients participating in this trial will be analyzed to determine molecular biomarkers that are correlated with clinic-pathologic factors and patient outcomes.

**Where they are now:** Dr. Garrido-Castro is an Assistant Professor of Medicine at Harvard Medical School.

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Jennifer Crombie, MD

**Award Institution:** Dana-Farber Cancer Institute  
**Project Title:** "A Phase II Study of Duvelisib and Venetoclax in Patients with Relapsed or Refractory Chronic Lymphocytic Leukemia or Small Lymphocytic Lymphoma"  
**Research Area:** Leukemia, Myelodysplasia, and Transplantation  
**Mentored by:** Matthew Davids, MD

**Impact:** This is an ongoing investigator-initiated phase I/II trial (NCT03534323) assessing the safety of a new drug, duvelisib (DUV), in combination with a drug that is already FDA approved, venetoclax (VEN), as a possible treatment for patients with Relapsed/Refractory Chronic Lymphocytic Leukemia (R/R CLL) or those with Richter's Syndrome. The results presented at the 2021 ASH Meeting showed DUV + VEN has a manageable safety profile to date and is active for patients with R/R CLL/SLL, including those who have relapsed after BTK inhibitors.

**Where they are now:** Dr. Crombie is an Assistant Professor of Medicine at Harvard Medical School and a lymphoma physician in Dana-Farber’s Adult Lymphoma Program.

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"This was a very important award for me at an important time in my career. It helped me during the hiring process as a lymphoma investigator at DFCI and allowed me protected time to help launch this trial and others."
Maliha Nusrat, MD, MS

Award Institution: The University of Texas MD Anderson Cancer Center

Project Title: "Modulation of anti-tumor immune response in colorectal cancer through PI3K-AKT pathway inhibition"

Research Area: Gastrointestinal (Colorectal) Cancer

Mentored by: Scott Kopetz, MD, PhD and Jennifer Wargo, MD

Impact: The study determined the impact of MK2206 (AKT protein inhibitor) in regulation of various immune markers and signaling pathways that influence anti-tumor immune response using protein arrays, patient derived xenograft, cell lines and tumor biopsies from a clinical trial of MK2206 in PI3K (signaling pathway)-altered metastatic colorectal cancers (CRC). The results of the study highlight potential targeted therapy and immuno-oncology combinations for immunologically distinct subgroup of PI3K-altered CRC patients.

Where they are now: Dr. Nusrat is an Assistant Attending Physician and Medical Oncologist at Memorial Sloan Kettering Cancer Center.
Jessica Yang, MD

Award Institution: Columbia University Medical Center
Project Title: “Efficacy of Bromodomain and Extra-Terminal (BET) Protein Inhibition in Advanced Uveal Melanoma”
Research Area: Uveal melanoma
Mentored by: Richard Carvajal, MD

Impact: Bromodomain and Extra-Terminal (BET) proteins are known epigenetic regulators of cancer growth, which regulate the expression of key genes involved in the development of uveal melanoma. PLX51107, an oral small molecule BET inhibitor was investigated by the team in a phase Ib dose escalation study in patients with advanced malignancies. Furthermore, they also performed high-throughput screening of existing drugs and the preclinical data suggested that NF-kB inhibition may enhance the efficacy of BET inhibition in UM and may also overcome the development of secondary resistance to BET inhibition. These findings contributed to the data published in the journal of Cancer Research (Ambrosini G et al., 2019). A phase I/II study evaluating combined NF-kB and BET inhibition in advanced UM was presented at the 2018 ASCO Annual Meeting.

Where they are now: Dr. Yang is an Assistant Attending Physician and Medical Oncologist at Memorial Sloan Kettering Cancer Center who cares for people with gastrointestinal cancers.

Rachael Turner, MD, PhD

Award Institution: University of Rochester
Project Title: “The Role of HE4 in Ovarian Cancer Immune Suppression and its Potential as a Therapeutic Target”
Research Area: Gynecologic Cancer
Mentored by: Richard Moore, MD

Impact: The study investigated the expression of co-regulating immune markers in tumor microenvironment of epithelial ovarian cancer (EOC) to understand the effect of neoadjuvant chemotherapy (NACT) on these markers and their association with disease outcome. They analyzed tumor samples from 98 patients with EOC treated with NACT to identify biomarkers of response. Although TIM3 (immune marker) is the most abundant co-inhibitory molecule in OC and may represent an attractive target there were other markers found to be regulated in OC supporting the notion of using combinatorial immune checkpoint inhibition approaches for targeting EOC.

Where they are now: Dr. Turner is an Associate Professor of Medicine and Obstetrics and Gynecology at the University of Rochester/Wilmot Cancer Institute.
Erin Gillespie, MD  
**Award Institution:** Memorial Sloan Kettering Cancer Center  
**Project Title:** “Closing the quality of care gap in radiation oncology”  
**Research Area:** Practice Management and Information Technology  
**Mentored by:** Arno Mundt, MD

**Impact:** The study focused to understand US physicians’ needs and preferences for contouring quality assurance and training in a national mixed methods study. The research allowed the development of a web-based simulation tool. This award also provided additional funding to run a large-scale simulation-based trial targeting the quality gap among head and neck providers. The benefit of this larger grant is that the team will be able to fully develop the outcome-based feedback component of the simulation tool, which plays an important part in the proposed trial.

**Where they are now:** Dr. Gillespie is an Associate Professor in the Department of Radiation Oncology at the University of Washington School of Medicine and physician at Fred Hutch Cancer Center.

Ciara M. Kelly, MD, MBBCh  
**Award Institution:** Memorial Sloan Kettering Cancer Center  
**Project Title:** “Sequenced cell free DNA (cfDNA) in the management of patients with advanced Gastrointestinal Stromal Tumor (GIST)”  
**Research Area:** Sarcoma/Bone and Soft Tissue Cancers  
**Mentored by:** Ping Chi, MD, PhD and William Tap, MD

**Impact:** The goal of this phase Ib study (NCT02257541) was to test the safety of drugs BGJ398 with imatinib mesylate for treatment of advanced gastrointestinal stromal (GIST) tumor. Although BGJ398 has been given to patients safely on its own, it has never been given together with imatinib mesylate. The investigators closely monitored side effects in patients by performing laboratory studies, on physical examination, or by asking the patient. Toxicity was encountered with the combination therapy of BGJ398 and imatinib in patients who were enrolled in this study. A larger study is required to evaluate the true clinical activity of this combination therapy in patients with advanced GIST.

**Where they are now:** Dr. Kelly is an Assistant Attending Physician at Memorial Sloan Kettering Cancer Center.
2017 Tomasello Family Women Who Conquer Cancer Young Investigator Award

Samantha Vogt, MD, MPH

Award Institution: Johns Hopkins University
Project Title: "Multicenter Study of Pomalidomide Monotherapy in HIV-Infected Individuals with Kaposi Sarcoma (KS) in Sub-Saharan Africa (SSA)"
Research Area: General Oncology
Mentored by: Richard Ambinder, MD, PhD

Impact: The YIA helped to support the development of a phase 2 clinical trial to study the effect of pomalidomide in treating patients with Kaposi sarcoma in sub-Saharan Africa. Cancer clinical trials in Africa are rare. This trial has directly influenced the care of cancer patients by providing access to Pomalidomide, a recently FDA approved therapy for Kaposi Sarcoma, that otherwise would not be available to this patient population in Africa. Pomalidomide is a cancer fighting drug that stops the growth of blood vessels, stimulates the immune system, and may kill cancer cells. The trial is still ongoing and recruiting patients (NCT04577755).

Where they are now: Dr. Vogt is an Assistant Professor at the Johns Hopkins School of Medicine. She serves as the International Vice Chair of the Kaposi Sarcoma Working Group in the AIDS Malignancy Consortium.

"The YIA helped to support my research portfolio on the African continent where I have been developing a research program focused on improving the diagnosis of HIV-associated lymphoma. It also allowed me to take a leadership on the African Pomalidomide clinical trial through the AIDS Malignancy Consortium."

2017 Bristol Myers Squibb Women Who Conquer Cancer Young Investigator Award

Catherine Handy Marshall, MD, MPH

Award Institution: Johns Hopkins University
Project Title: "Pre-diagnostic Cardiorespiratory Fitness Testing and Cancer Incidence in Men and Women: The FIT-Cancer Cohort"
Research Area: Cancer Prevention/Epidemiology
Mentored by: Kala Visvanathan, MD, MHS

Impact: The goal of this study was to assess the relationship between cardiorespiratory fitness (CRF) and lung and colon cancer in a large, multi-ethnic clinical cohort. In the largest study of its kind, CRF measured during exercise testing was determined to be a strong predictor of future cancer risk. The study found that CRF is independently associated with a lower risk of lung and colon cancer and a higher risk of prostate cancer. There was no relationship with cardiorespiratory fitness and incident breast cancer. This study provides another important reason for optimizing CRF.

Where they are now: Dr. Marshall is an Assistant Professor at the Johns Hopkins School of Medicine.
Melisa L. Wong, MD

**Award Institution:** University of California, San Francisco  
**Project Title:** “Characterization of chemotherapy-induced peripheral neuropathy in older cancer survivors”  
**Research Area:** Geriatric Oncology  
**Mentored by:** Christine Miaskowski, PhD, MS

**Impact:** While older adults with cancer are more likely to develop chemotherapy-induced peripheral neuropathy (CIPN), the study aimed to determine if patient-reported and objective measures of CIPN differ by age among cancer survivors. This was the first study to compare the multidimensional symptom experience of CIPN in older and young cancer survivors using both detailed patient-reported and objective measures. Data generated from 465 cancer survivors showed that the most common location for CIPN was in both the hands and feet (63.6% among older survivors, 70.8% among younger survivors). Despite having worse light touch, cold, and vibration sensations, older cancer survivors with CIPN reported less severe pain and interference with activities. This discordance highlights the importance of including both patient-reported and objective measures to assess CIPN in cancer survivors to better evaluate this clinical condition. This work was presented at the 2018 ASCO Annual Meeting and later published by Wong et al., in the *Journal of Supportive Care in Cancer* in 2019.

**Where they are now:** Dr. Wong is an Associate Professor of Medicine at the University of California, San Francisco.

Amanda J. Redig, MD, PhD

**Award Institution:** Dana-Farber Cancer Institute  
**Project Title:** “Genomic complexity and resistance mechanisms in non-small cell lung cancer”  
**Research Area:** Lung Cancer  
**Mentored by:** Pasi Janne, MD, PhD

**Impact:** The study identified a large cohort of advanced EGFR mutant non-small cell lung cancer patients treated with an EGFR inhibitor in whom we can perform targeted NGS from their pre-treatment tumor specimens. We anticipate that findings from our studies will uncover mutational patterns/signatures that will impact the efficacy (as measured by PFS) of EGFR inhibitors. This work was published in 2016 in *Clinical Cancer Research*.

**Where they are now:** Dr. Redig is the Senior Vice President and Head of Clinical Development at HotSpot Therapeutics, Inc.
Alexandra Synder, MD

**Award Institution:** Memorial Sloan Kettering Cancer Center  
**Project Title:** "Tumor Neoantigens and the Response to Checkpoint Blockade in Metastatic Melanoma"  
**Research Area:** Developmental Therapeutics - Clinical Pharmacology and Immunotherapy  
**Mentored by:** Timothy Chan, MD, PhD

**Impact:** This study determined the tumor characteristics and patient response rates associated with FDA approved immunotherapeutic drugs ipilimumab (it blocks CTLA-4 immune checkpoint protein) and pembrolizumab (it inhibits PD-1 protein in patients with metastatic melanoma). The publications from this YIA laid the foundation for getting Merck the approval from FDA for treatment of patients with advance cancer with high prevalence of tumor mutation.

**Where they are now:** Dr. Snyder is the Chief Medical Officer at Generate Biomedicines. She is currently a voluntary faculty member at Bellevue Hospital and New York University.

"The YIA laid the foundation for me to become a researcher as my career. Although I am now in industry, my entire job is to translate scientific findings into effective therapies."

Yanyan Lou, MD, PhD

**Award Institution:** The University of Texas MD Anderson Cancer Center  
**Project Title:** "Investigating tumor microenvironment immune phenotypes in epithelial-mesenchymal transition and EGFR tyrosine kinase inhibitor-resistant NSCLC: implication for immunotherapy"  
**Research Area:** Lung Cancer  
**Mentored by:** Patrick Hwu, MD and John Heymach, MD, PhD

**Impact:** The study determined that epithelial-mesenchymal transition (a key process that derives cancer metastasis) is highly associated with an inflammatory tumor microenvironment in lung adenocarcinoma. The immune activation co-existent with elevation of multiple targetable immune checkpoint molecules, including PD-L1, PD-L2, PD-1 along with increase in tumor infiltration by regulatory T cells. Results from this study will lead to the identification of prognostic biomarkers that will help predict clinical benefit of therapeutic agents targeting immune checkpoints and will guide selection of patients that would likely benefit from immune checkpoint blockade agents in lung cancer and possibly a range of other cancers. The work was later published in *Clin Cancer Res; 22*(14); 3630–42.

**Where they are now:** Dr. Lou is an Associate Professor at the Mayo Clinic College of Medicine and Science and serves as the Associate Director of the Early Cancer Therapeutics Program at Mayo Clinic, FL.
MERIT AWARDS

Awarded to eligible students and trainees who are first authors on high-scoring abstracts selected for presentation at the ASCO Annual Meeting.

Darla C. Ellis Endowed Women Who Conquer Cancer Merit Award

2023
Yael Bar, MD, PhD
Massachusetts General Hospital

2022
Aranzazu Fernandez-Martinez, MD, PhD
UNC Lineberger Comprehensive Cancer Center

2021
Lisa Katharina Richters, MD
University Hospital Cologne

2020
Nikesha Gilmore, PhD
University of Rochester Medical Center

2019
Evthkia Hobbs, MD
The University of Texas MD Anderson Cancer Center

2018
Nina Prabha Tamirisa, MD, MS
Duke University Medical Center

Gabrielle B. Rocque, MD, MSvPH, Endowed Women Who Conquer Cancer Merit Award

2022
Regina Barragan-Carrillo, MD
Joven Ferte: Programa para la Atencion e Investigacion de Mujeres Jovenes con Cancer de Mama, Mexico City
ASCO and the Association for Clinical Oncology are proud of the women volunteers leading our efforts.

Every year more than 1,700 women who conquer cancer help advance the missions of our organizations through volunteer service.

Thank you to the ASCO volunteers and mentors who give their time, talent, and expertise to supporting women in oncology and their professional development needs, especially those that support our Women in Oncology Initiatives.

The ASCO Women in Oncology Working Group
The ASCO Women in Oncology Working Group seeks to support the unique professional development and mentoring needs of women in oncology through the ASCO Women’s Networking Center at the ASCO Annual Meeting and virtual professional development sessions.

- Ishwaria Subbiah, MD, MS, Chair, University of Texas MD Anderson Cancer Center
- Suzanne Cole, MD, UT Southwestern Medical Center
- Megan Emmich, DO, University of Connecticut
- Shikha Jain, MD, FACP, University of Illinois
- Tricia Kalwar, MD, Broward Health Medical Center
- Anne LaCasce, MD, MMSc, Dana-Farber Cancer Institute
- Nina Shah, MD, AstraZeneca
- Rachna Shroff, MD, MS, University of Arizona
- Cynthia Villarreal-Garza, MD, DSc, Hospital Zambrano Hellion, Tecnológico de Monterrey, Mexico
- Katherine Van Loon, MD, MPH, University of California San Francisco

Women in Oncology Community Champions
The Women in Oncology Community Champions focus on developing meaningful engagement, networking, discussion, and resource sharing in the Women in Oncology networking community on ASCO myConnection.

- Inas Abuali, MD, FACP, Massachusetts General Hospital
- Mercy Chinemerem Anyanwu, MD, Pennsylvania Hospital
- Adriana Kahn, MD, Yale University
- Maitri Kalra, MD, LifeBridge Health
- Amany Keraukos, MD, MS, Georgia Cancer Center, Augusta University
- Carolyn Presley, MD, Ohio State University
- Hely Shah, MD, Ottawa Hospital
- Ramila Shilpakar, MD, DM, National Academy of Medical Sciences, Bir Hospital, Nepal
- Danielle Zimmerman, MD, The Ohio State University James Cancer Center
Leadership Programme for Women in Oncology Mentors
In March 2022, ASCO and City Cancer Challenge Foundation (C/Can) announced their Leadership Programme for Women in Oncology, which seeks to address the specific challenges and barriers faced by women leaders in oncology and aims to strengthen leadership mindsets and skills of women working to improve access to equitable, quality care in C/Can cities. This initiative helps prepare mid-career women oncologists in Low- and Middle-Income Countries (LMICs) to lead change in the cancer care sector by increasing their leadership impact and creating lasting personal and professional change. In September 2022, the inaugural class of 10 participants were announced. As part of this program, ASCO mentors were paired through the Virtual Mentorship Program (VMP) for a one-year virtual program to support continued growth and development.

LPWO Mentorship Pairs:
- Ana Maria Lopez, MD, MPH, Sidney Kimmel Cancer Center & Livia Martinez, MD, EsSalud
- Anees Chagpar, MD, MBA, MPH, FACS, FRSC(C), Yale School of Medicine & Suniza Jamaris, MBBS, MSurg, International University of Malaya
- Ann H. Partridge, MD, MPH, FASCO, Dana-Farber Cancer Institute & Helena Musau, MBChB, MD, Kenyatta University Teaching, Referral & Research Hospital
- Jessica Bauman, MD, Fox Chase Cancer Center & Carolina López Ordóñez, MD, Hematooncologos
- Judith Paice, PhD, RN, Northwestern Cancer Center & Diane Andrea Ndoli, MD, Rwanda Military Hospital
- Julia Glade Bender, MD, Memorial Sloan Kettering Cancer Center & Jazmin Servin Brizuela, MD, Hospital de Clínicas
- Margo Hoover-Regan, MD, University of Wisconsin & Vivien Paintsil, MD, Kwame Nkrumah University
- Sarah Temkin, MD, National Cancer Institute & Fernanda Casarotto, MD, Hospital Moinhos de Vento
- Susan Lerner Cohn, MD, FASCO, University of Chicago & Karina Senyase Zamarripa Martinez, MD, Hospital Regional de Leon
- Susana Campos, MD, MPH, Dana-Farber Cancer Institute & Marina Maglakelidze, MD, Todua Medical Center

Scan the QR code to support Women Who Conquer Cancer
The Women Who Conquer Cancer Committee serves a crucial role in advising the board of directors and staff of Conquer Cancer on the development, implementation, and evaluation of the fundraising goals and activities that support the Women Who Conquer Cancer program and its various initiatives.

- Sandra M. Swain, MD, FACP, FASCO, Chair, Georgetown University Medical Center and MedStar Health
- Linda Bosserman, MD, PhD, FASCO, FACP, City of Hope
- Jennifer Perry, PharmD, Bicycle Therapeutics
- Gladys Rodriguez, MD, South Texas Oncology and Hematology
- Deanna van Gestel, Vaniam Group LLC and Women Leaders in Oncology
- Jennifer Perry, PharmD, Bicycle Therapeutics
- Julie Vose, MD, MBA, FASCO, Nebraska Medical Center
- Robin Zon, MD, FACP, FASCO
- Mariana Chavez Mac Gregor, MD, MSC, FASCO, University of Texas MD Anderson Cancer Center - Subcommittee Member
- Christine Luckscheiter – Subcommittee Member
- Karen Winkfield, MD, PhD, FASCO, Vanderbilt University - Mentorship Award Selection Committee

Thank you to all those who have served on the Women Who Conquer Cancer committee, hosted fundraising events, raised money, donated, and volunteered their time to advance women in cancer research in the past 10 years.
Since it's founding in 2013, WWCC has raised nearly $8M to fund over 80 grants and awards for women in oncology.