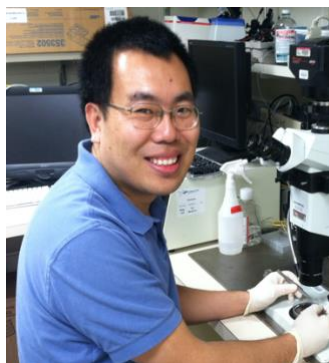


## Meet your Alumni



**Jianjian Zhu, Ph.D.** has been working as a staff scientist at the Cancer and Developmental Biology Lab for 9 years, after being a postdoc and research fellow in the same lab. His study focuses on anterior-posterior patterning formation during limb bud development using mouse genetic approaches. He successfully applied for the Staff Scientist/Staff Clinician Technology Enrichment Program (STEP) during May 2019 to May 2020. He proposed to use single-cell RNA sequencing in early mouse limb buds to decipher the direct and indirect gene regulatory networks by Sonic Hedgehog signaling. Dr. Zhu is going to share his experience in the STEP application and learning new technology.



**Dr. Shannon Doyle** received her B.S. in Microbiology at Michigan State University. She then attended the University of Connecticut where she completed her Ph.D. in Biochemistry with a focus on the folding and assembly of large, multimeric proteins, including SecA and the P22 bacteriophage coat protein, in the lab of Dr. Carolyn M. Teschke. In the Teschke lab, she learned to use biophysical and biochemical techniques including stopped-flow fluorescence and CD and analytical ultracentrifugation velocity and equilibrium sedimentation. She continued her work on protein folding as a CRTA fellow and then research fellow with Dr. Sue Wickner in the Laboratory of Molecular Biology in the National Cancer Institute prior to becoming the lab staff scientist. Specifically, Shannon studied the mechanisms of ATP-

dependent molecular chaperones and the roles they play in maintaining protein homeostasis. During her postdoc she investigated the collaboration between the bacterial and yeast Hsp70 chaperone system, comprised of Hsp70, and two co-chaperones, Hsp40 and a nucleotide-exchange factor, and ClpB, an ATP-dependent protein disaggregase. During her time as staff scientist, she focused on the collaboration between the Hsp70 system and Hsp90, another ATP-dependent chaperone, which is important for the proper folding of many proteins, including kinases and oncogenic proteins. She utilized her biochemical and biophysical skills to determine the sites and affinities of direct protein interactions between these essential components of this protein remodeling system.

In March of 2020, Shannon transitioned to the NCI Division of Extramural Activities (DEA), where she began her new role as a Health Scientist Administrator in the Program Coordination and Referrals Branch (PCRB). Currently, she is acting as a Referral Officer and assigning new grant applications that come through NCI to their appropriate Cancer Activity Areas. She will also be acting as a Scientific Review Officer for specific grants that PCRB manages. She has been into her new office for 1 day, was given a laptop and has been learning from home ever since.



**Michael Difilippantonio, Ph.D.**, received a B.S. in Molecular and Cellular Biology, and a Certificate in Cytogenetics from the University of Connecticut. He joined the laboratory of Dr. David C. Ward at Yale University as a Clinical Cytogenetic Technologist, acquiring proficiency in the emerging field of fluorescence in situ hybridization for gene mapping in the initial days of the Human Genome Project. He subsequently pursued his Ph.D. in Genetics at Yale University under the mentorship of Dr. David G. Schatz, where he studied the role of the RAG1 & RAG2 proteins in V(D)J recombination of T-cell receptor and immunoglobulin gene loci in developing lymphocytes. His career at NIH began in 1998 as a post-doctoral fellow in the intramural laboratory of Dr. Thomas Ried. There he applied cutting-edge molecular cytogenetic techniques, such as Spectral Karyotyping (SKY) and Comparative Genomic Hybridization (CGH), to the study of colorectal cancer, chromosome missegregation and the role of aberrant DNA damage repair in tumorigenesis. Dr. Difilippantonio became a Staff Scientist in Dr. Ried's lab in 2001, continuing to pursue the same research interests while taking on additional supervisory and leadership roles, including the mentoring 5 students through the Eleanor Roosevelt Science and Technology High School year-long Internship program, 6 post-doctoral fellows and several technicians. He has co-authored more than 60 peer-reviewed scientific articles and book chapters, and is an inventor on one patent for the use of gene expression signatures in biopsies from patients with rectal adenocarcinomas to identify those tumors that are likely to be responsive to pre-operative radiochemotherapy. In 2010 Dr. Difilippantonio transitioned to the Division of Cancer Treatment and Diagnosis (DCTD), an extramural division of NCI, where he is a Program Manager for Therapeutic and Diagnostic Initiatives. In addition to the many administrative, budgetary and contracting roles for which he is responsible within the Office of the Director for the Division, he was involved in the initial implementation of the NCI Experimental Therapeutics (NExT) Program, including the Chemical Biology Consortium (CBC) that serves as the NExT drug discovery engine. He is currently the Project Lead for one drug discovery project and one drug development project which currently has two agents in Phase I trials in the DCTD Developmental Therapeutics Clinic in the NIH Clinical Center.



**Christophe Marchand, Ph.D.**, obtained his PhD in Molecular Pharmacology in 1997 from the University of Paris, Pierre & Marie Curie, in the area of gene therapy via DNA triple helix formation. In 1998, he joined the Laboratory of Molecular Pharmacology at the NCI as a Visiting Fellow where he was appointed Staff Scientist in 2006. In 2014, he was promoted to Senior Staff Scientist (NIH Associate Scientist) in the Developmental Therapeutics Branch. In 2016, Dr. Marchand became a Health Scientist Administrator at the Center for Research Strategy within the Office of the Director at the NCI. During his 25 years of bench work, Dr. Marchand has co-authored over 100 peer-reviewed publications and holds 23 patents. He is a recipient of three NCI Director's Innovation Awards and 14 Federal Technology Transfer Awards for the development of new classes of antiviral and anticancer drugs. He is also the recipient of a competitive NIH R03 grant for a trans-NIH high-throughput screening effort. Dr. Marchand has been leading the Professional Development Committee of the NCI Staff Scientists and Staff Clinicians Organization from 2011 to 2016 and has been involved in capacity building at the institute level ever since.



**Romina Goldszmid, Ph.D.**, NIH Stadtman Investigator, received her Ph.D. working on dendritic cell-based vaccines for melanoma immunotherapy from the University of Buenos Aires, Argentina, part of which was performed as a visiting scholar in the laboratory of Dr. Ralph Steinman at the Rockefeller University. She then did her postdoctoral training in infectious disease immunology with Dr. Alan Sher in the Laboratory of Parasitic Diseases (LPD) at the National Institute of Allergy and Infectious Diseases (NIAID), NIH. Dr. Goldszmid then returned to tumor immunology, joining Dr. Giorgio Trinchieri's laboratory at CCR, NCI, as a Staff Scientist. She is now an NIH Earl Stadtman Investigator in the Laboratory of Integrative Cancer Immunology and an Adjunct Investigator in LPD, NIAID.



**Craig Thomas, Ph.D.** received his B.S. from the University of Indianapolis in 1995 and his Ph.D. from Syracuse University in 2000. He then completed postdoctoral work in the laboratories of Sidney Hecht, where he earned a fellowship through the American Cancer Society. In 2003, Thomas joined NIH as director of the chemical biology core at the National Institute of Diabetes and Digestive and Kidney Diseases. In 2007, he moved to the NIH Chemical Genomics Center, which was supported by the National Human Genome Research Institute. (The center now is supported by NCATS and called the [NCATS Chemical Genomics Center](#).) Currently, he serves as the leader of chemistry technologies experts at NCATS. He is an adjunct member of the National Cancer Institute's Chemical Biology Laboratory and an adjunct associate professor at the Georgetown University School of Medicine and the Temple University School of Medicine. Thomas is an editor of *Current Protocols in Chemical Biology* and a member of the SciFinder (Chemical Abstracts Service) advisory board. He has published more than 100 peer-reviewed manuscripts, is an inventor on more than 15 patents and has given numerous invited lectures.



**Anjali Shukla, Ph.D.** serves as a product quality assessor in the Office of Biotechnology Products, Center for Drug Evaluation and Research, FDA with a focus on chemistry, manufacturing and control programs of biotherapeutics at all stages of drug development. She participates in policy development, serves as subject matter expert, and leads product quality assessment teams for biologic products, including biosimilars. She also performs FDA pre-approval inspections of drug manufacturing facilities. Anjali has been the recipient of several awards at the FDA, including the 2019 CDER Recognition Honor Award. Prior to the FDA, Dr. Shukla served as a Staff Scientist in the Laboratory of Cancer Biology and Genetics, CCR, NCI. She received her postdoctoral training also at the LCBG, NCI.



**Even Walseng, Ph.D.** is currently working on bi-specific antibodies in the Antigen Discovery and Protein Engineering department in AstraZeneca. Previously he worked as a staff scientist in the Experimental Immunology Branch at the National Institutes of Health, where his focus was MHC-II antigen processing and presentation. Prior to joining the NIH, Even was a Sr. Research Associate at Scripps Research Institute, where he spent his time studying and developing a new platform of programmable bi-specific antibodies used to redirect T cells to target cancer cells. Earlier, he held a postdoc position at the University Hospital of Oslo; here, he worked to isolate and develop therapeutic T-cell receptors, publishing a novel method of creating soluble TCRs. Even holds a Ph.D. in molecular biology from the University of Oslo.



**Dona Love, PhD** is a program officer at the National Institute of Allergy and Infectious Diseases and manages research grants related to medical mycology. This portfolio encompasses the genetics, genomics, biochemistry, host-pathogen interactions and preclinical animal studies of the major human fungal pathogens. Before joining the institute, she served as a scientific review officer at the National Cancer Institute. Dr. Love received her Ph.D. in microbiology and immunology from Temple University School of Medicine and did postdoctoral research in glycobiology and genetics at NIH's National Institute for Diabetes and Digestive and Kidney Diseases. Dr. Love's research has covered a variety of topics including host-pathogen interactions, nutrient sensing, and chromatin remodeling.