PELOTONIA FELLOWSHIP PROGRAM
2014 Annual Report

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The James

The Ohio State University
Comprehensive Cancer Center

http://go.osu.edu/pelotoniafellowships

welcome

Greetings, and welcome to the 2014 Pelotonia Fellowship Program Annual Report. It's been a remarkable year and we're excited to share data about program developments, accomplishments and future directions.

Cancer is a complicated disease and if we are to reach our goal of one day living in a cancer-free world, we need to develop cures by taking a multidisciplinary approach. The Pelotonia Fellowship Program funds cutting-edge cancer research performed by our best undergraduate, graduate, medical and postdoctoral students, regardless of their field of study. These students move the field of cancer research forward by making new discoveries while at the same time trainees develop their careers to become independent cancer researchers.

To date, 292 awards have been given to these trainees. Completion of their projects is moving us toward the goal of one day living in a cancer-free world. Our fellows have made discoveries that are being published in prestigious journals; have led to receiving additional research and scholarly awards; have culminated in large grant applications; have led them to a successful path into graduate and medical schools and into postdoctoral, industry and faculty positions.

We're very proud of the diversity and transparency of our program. If you look at the data in this report, you will see projects funded from 48 departments in 10 different colleges at The Ohio State University and Cincinnati Children's Hospital Medical Center. We understand that new discoveries occur when people look at problems from different points of view and with broad areas of expertise. We believe that funding talented student researchers in diverse disciplines like Engineering, Physics and Business to help in our fight against cancer will pay tremendous dividends.

snapshot from India exchange program

sincerely

Gustavo Leone, PhD
Klotz Chair in Cancer Research
Professor
Director of the Solid Tumor Biology Program
Associate Director of Basic Research
Comprehensive Cancer Center
The Ohio State University

Janice Kiecolt-Glaser, PhD
Director, Institute for Behavioral Medicine Research
Distinguished University Professor
S. Robert Davis Chair of Medicine
Professor of Psychiatry and Psychology
Institute for Behavioral Medicine Research
Ohio State University College of Medicine

To see all of the funded projects, including the name of each awardee, their mentor, the title of their project and a simplified project description, go to our website: go.osu.edu/pelotoniafellowships > Researchers and Physicians > Education > Pelotonia Fellowship Program. On this site, you can also view a list of our committee members, application deadlines, application scoring criteria and fellowship guidelines.

A program like this would not be successful if it weren't for the hard work of all of our 43 committee members who represent 19 different departments. These colleagues are incredibly dedicated to the success of this program and we want to thank each of them for their hard work and dedication. Special thanks to Amanda Simcox, PhD, for her work helping develop our undergraduate and international programs and Denis Guttridge, PhD, for helping develop our graduate program. We are also thankful to the Pelotonia participants (both traditional and virtual riders, volunteers and donors), OSU faculty, departments, colleges and especially the graduate school and Dean Osmer and Dr. Scott Herness for supporting and providing matching funds to this program.

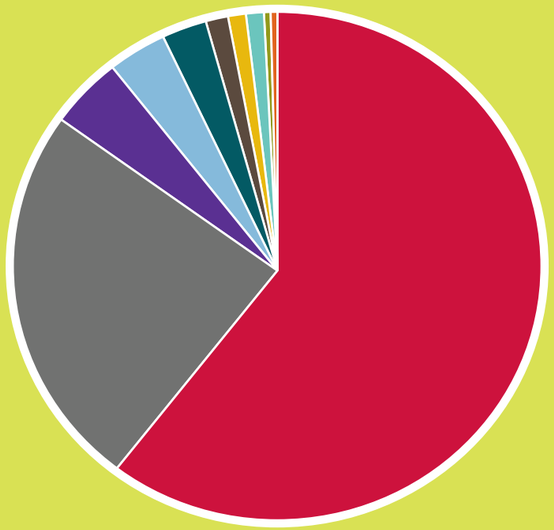
Even though this fellowship program has had some amazing accomplishments in a short period of time, moving forward, additional emphasis will be placed on increasing the metrics of incoming postdoctoral trainees; increasing diversity in all programs with a focus on undergraduate students; extending the medical student program to the colleges of Veterinary Medicine (DVMs), Pharmacy (PharmDs), Optometry (ODs) and Dentistry (DDSs); and increasing the pool of Population Science and Biomedical Informatics applicants. Accomplishment of these goals will help us train the next generation of scientists that will tackle the most difficult health related tasks that still lie ahead and will help our university in becoming one of the best training institutions in the nation.

Thank you for your support and interest.

The James
THE OHIO STATE UNIVERSITY
COMPREHENSIVE CANCER CENTER

The Pelotonia Fellowship Program is an interdisciplinary program that has funded 150 undergraduate/international, 81 graduate/medical student and 61 postdoctoral awards. Mentors come from 48 departments in 10 different colleges at The Ohio State University and Cincinnati Children's Hospital Medical Center.

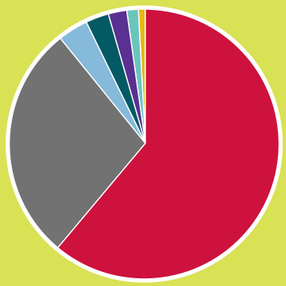
fellows funded



college affiliation (mentors)

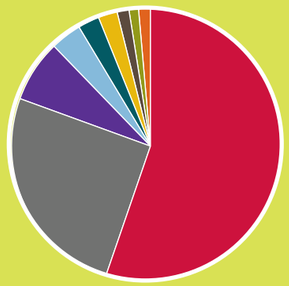
All Fellowships

182	Medicine
72	Arts and Sciences
13	Engineering
11	Pharmacy
8	Education and Human Ecology
4	Cincinnati Children's Hospital Medical Center
4	Veterinary Medicine
3	Dentistry
1	Food, Agricultural, and Environmental Sciences
1	Public Health



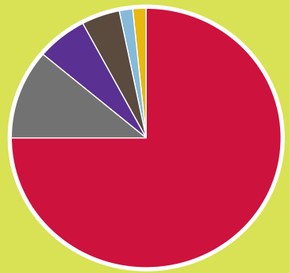
Undergraduate Fellowships

85	Medicine
39	Arts and Sciences
5	Pharmacy
4	Education and Human Ecology
3	Engineering
2	Dentistry
1	Veterinary Medicine



Graduate/Medical Fellowships

46	Medicine
21	Arts and Sciences
6	Engineering
3	Pharmacy
2	Education and Human Ecology
2	Veterinary Medicine
1	Cincinnati Children's Hospital Medical Center
1	Food, Agricultural, and Environmental Sciences
1	Public Health



Postdoctoral Fellowships

48	Medicine
7	Arts and Sciences
4	Engineering
3	Cincinnati Children's Hospital Medical Center
1	Pharmacy
1	Veterinary Medicine

Department of Mentors

59	Internal Medicine
56	Molecular Virology, Immunology and Medical Genetics
45	Molecular Genetics
20	Molecular and Cellular Biochemistry
9	Neurological Surgery
7	Behavioral Medicine Research (Institute for)
7	Medicinal Chemistry (Division)
7	Physics
6	Biomedical Informatics
6	Surgery
5	Biomedical Engineering
5	Pathology
4	Human Nutrition
4	Neuroscience
4	Pediatrics (Nationwide Children's Hospital)
4	Pharmaceutics (Division)
4	Physical Activity and Educational Services (PAES) School
4	Veterinary Biosciences
3	Chemical and Biomolecular Engineering
3	Chemistry
3	Computer Science and Engineering
3	Obstetrics and Gynecology
3	Radiology
2	Biochemistry
2	Chemistry and Biochemistry
2	Experimental Hematology and Cancer Biology (Cincinnati Children's Hospital)
2	Microbial Infection and Immunity
2	Oral Biology (Division)
2	Physiology and Cell Biology
2	Urology
1	Arts Administration, Education and Policy
1	Communication (School of)
1	Comparative Studies
1	Economics
1	Environmental Health Science
1	Food Science and Technology
1	History
1	Immunobiology (Cincinnati Children's Hospital)
1	Materials Science and Engineering
1	Mathematics
1	Mechanical Engineering
1	Oral Surgery, Pathology and Anesthesiology (Division)
1	Pediatrics (Cincinnati Children's Hospital)
1	Psychiatry
1	Psychology
1	Radiation Oncology
1	Speech and Hearing Science
1	Veterinary Clinical Sciences

Where are they now?

Undergraduates
- (42) Currently in program

Moved on to:
- (47) Medicine – University of Cincinnati, University of Toledo, University of Michigan,Wright State University, Duke University
- (21) Graduate – Johns Hopkins University, Massachusetts Institute of Technology, University of Michigan, Northwestern University, Rice University, University of Chicago, Yale University
- (16) Science related positions – Chemical Engineer at NexTech Materials, Genetic Counselor at Cincinnati Children's Hospital Medical Center, Research Assistant at Nationwide Children's Hospital, Teach for America
- (3) Other

Graduates
- (50) Currently in program

Moved on to:
- (21) Postdoc – National Cancer Institute, Harvard Medical School, Stanford University, University of Texas MD Anderson Cancer Center
- (4) Industry & Biotech – Genentech, Associate Scientist, Associate Editor at The American Ceramic Society
- (1) Academics (faculty) – Assistant Professor- Institute of Technology and Science, Pilani, India
- (1) Other

Medical Students
- (0) Currently in program

Moved on to:
- (3) PhD programs
- (1) Residency/Internship program

Postdoctoral
- (39) Currently in program

Moved on to:
- (8) Postdoc – Nationwide Children's Hospital, INRIA Rennes – Bretagne Atlantique Center, Harvard Medical School
- (3) Industry & Biotech
- (9) Academics (faculty) – Medical University of South Carolina, University of Prince Edward Island, Tufts University, Beihang University
- (2) Other

fellowship highlights

Featured Undergraduate Student

Shauna Collins

Shauna received an undergraduate fellowship to investigate the effects of Elotuzumab on multiple myeloma. Shauna has published two manuscripts including one first author in *Cancer Immunol Immunother*. Shauna is now a third-year medical student at The Ohio State University College of Medicine and recently received a prestigious Roessler Research Scholarship. Very importantly, her laboratory research contributed directly to the translational planning of two large clinical trials of Elotuzumab for patients with multiple myeloma.
(Mentor: Don Benson, MD, PhD)

Featured Graduate Student

Meera Govindaraghavan, PhD

Dr. Govindaraghavan received a graduate fellowship to study the relationship between mitotic protein phosphorylation and methylation as a basis for development of novel chemotherapies.
Dr. Govindaraghavan is currently a postdoctoral researcher at the University of Massachusetts Medical School. She has published four manuscripts including three first author in prestigious journals including *PloS Genetics*.
(Mentor: Stephen Osmani, PhD)

Featured Graduate Student

James Phelan, PhD

Dr. Phelan received a graduate fellowship to study how leukemia cells are destroyed when Gfi1 is eliminated. Dr. Phelan is currently a postdoctoral fellow at National Cancer Institute (NCI). He has published six manuscripts including three first author in prestigious journals including *Cancer Cell* and *PloS Genetics*.
(Mentor: H. Leighton Grimes, PhD)

Featured Postdoctoral Fellow

Ann-Kathrin Eisfeld, MD

Dr. Eisfeld received a postdoctoral fellowship to study how inherited genomic changes in the BAALC region might predispose Acute Myeloid Leukemia patients to fail their treatment. Dr. Eisfeld is currently a visiting scholar at OSU and is transitioning to an academic position as a physician/scientist. She has 16 manuscripts including six first author in prestigious journals including *Proceedings of the National Academy of Sciences of the United States of America*.
(Mentors: Clara Bloomfield, MD and Albert de la Chapelle, MD, PhD)

Featured Postdoctoral Fellow

Mumtaz Yaseen Balkhi, PhD

Dr. Balkhi received a postdoctoral fellowship to study the regulation of NF-κB activity and function in sarcomas by a microRNA - RNA binding protein network. Dr. Balkhi is currently an assistant professor of medicine at Tufts University School of Medicine. He has 16 manuscripts including eight first author in prestigious journals including *Blood* and a featured cover story in *Science Signaling*.
(Mentor: Denis Guttridge, PhD)

Undergraduates

1. Ulm EA, *et al*. Developmental functions for the Caenorhabditis elegans sp protein SPTF-3. *Mechanisms of Development* 2011.
2. Wittwer JA, *et al*. Enhancing Mitochondrial Respiration Suppresses Tumor Promoter TPA Induced PKM2 Expression and Cell Transformation in Skin Epidermal JB6 Cells. *Cancer Prev Res* 2011.
3. Dworkin M, *et al*. Dramatic reduction of dimensionality in large biochemical networks owing to strong pair correlations. *Journal of the Royal Society Interface* 2012.
4. Kauffman KJ, *et al*. Optimization of Rapamycin-Loaded Acetalated Dextran Microparticles for Immunosuppresion. *Int. J. Pharm* 2012.
5. Kauffman KJ, *et al*. Synthesis and Characterization of Acetalated Dextran Polymer and Microparticles with Ethanol as a Degradation Product. *ACS Appl. Mater. Interfaces* 2012.
6. Mitra K, *et al*. Indocyanine-green-loaded microballoons for biliary imaging in cholecystectomy. *J Biomed Opt* 2012.
7. Moore S, *et al*. Cardiac Involvement in Hereditary Ataxias. *Journal of Child Neurology* 2012.
8. Collins SM, *et al*. Elotuzumab directly enhances NK cell cytotoxicity against myeloma via CS1 ligation: evidence for augmented NK cell function complementing ADCC. *Cancer Immunol Immunother* 2013.

first author fellowship publications

(from a list of 503)

Graduates

1. Ge Z, *et al*. Nuclear Hat1p complex (NuB4) components participate in DNA repair-linked chromatin reassembly. *J Biol Chem* 2011.
2. Gonzalez-Escobedo G, *et al*. Chronic and Acute Infection of the Gallbladder by Salmonella. Understanding the Carrier State. *Nature Reviews of Microbiology* 2011.
3. Machemer K, *et al*. Interplay of MYB factors in differential cell expansion, and consequences for tomato fruit development. *The Plant Journal* 2011.
4. Riley M, *et al*. NOTCH1 missense alleles associated with left ventricular outflow tract defects exhibit impaired receptor processing and defective EMT. *Biophys Acta-Molecular Basis of Disease* 2011.
5. Wang B, *et al*. Role of cancer stem cells in hepatocarcinogenesis. *Genome Medicine* 2011.
6. Zhou C, *et al*. Design, synthesis of new lipid-like molecules for efficient small interfering RNA (siRNA) delivery and study of their cellular entry pathways. *The AAPS Journal* 2011.
7. Zhou C, *et al*. Synthesis and characterization of a lipoidal amine-based nanocarrier (LANC) formulation for small interfering RNA (siRNA) delivery. *The AAPS Journal* 2011.
8. Ahn-Jarvis JH, *et al*. Impact of Food Matrix on Isoflavone Metabolism and Cardiovascular Biomarkers in Adults with Hypercholesterolemia. *Food and Function* 2012.
9. Chen C, *et al*. Canonical and atypical E2Fs regulate the mammalian endocycle. *Nat Cell Biol* 2012.
10. Chen HZ, *et al*. Canonical and atypical E2Fs regulate the mammalian endocycle. *Nat Cell Biol* 2012.
11. Chuang HC, *et al*. Differential anti-proliferative activities of poly(ADP-ribose) polymerase (PARP) inhibitors in triple-negative breast cancer cells. *Breast Cancer Res Treat* 2012.
12. Dhungel N, *et al*. Beyond tRNA cleavage: novel essential function for yeast tRNA splicing endonuclease unrelated to tRNA processing. *Genes & Development* 2012.
13. Hankey W, *et al*. Human genetics of colorectal cancer. *Molecular Pathogenesis of Colorectal Cancer* 2012.
14. Lee I-J, *et al*. Contractile-ring assembly in fission yeast cytokinesis: Recent advances and new perspectives. *Cytoskeleton* 2012.
15. Liu HW, *et al*. Chromatin modification by SUMO-1 stimulates the promoters of translation machinery genes. *Nucleic acid research* 2012.
16. North JA, *et al*. Regulation of the Nucleosome Unwrapping Rate Controls DNA Accessibility. *Nucleic Acids Res* 2012.
17. Riley M, *et al*. The Many Faces of MDM2 Binding Partners. *Genes Cancer* 2012.
18. Wang B, *et al*. Stat3-mediated activation of miR-23a suppresses gluconeogenesis in hepatocellular carcinoma by downregulating G6PC and PGC-1α. *Hepatology* 2012.
19. Wu SM, *et al*. Factor Analytic and Item Response Theory Evaluation of the Penn State Worry Questionnaire with Female Cancer Patients. *Quality of Life Research* 2012.
20. Zhou C, *et al*. Novel lipoidal amine-based nanocarrier formulations for siRNA delivery. *Therapeutic delivery* 2012.
21. Zhou C, *et al*. SPANosomes as delivery vehicles for small interfering RNA (siRNA). *Molecular Pharmaceutics* 2012.
22. Zorko NA, *et al*. Mll-Partial Tandem Duplication and Flt3-Internal Tandem Duplication in a Double Knock-in Mouse Recapitulates Features of Counterpart Human Acute Myeloid Leukemias. *Blood* 2012.
23. Ahn-Jarvis JH, *et al*. Optimizing isoflavone-rich food delivery systems for human clinical trials, In Food and Nutritional Components in Focus. Isoflavones Chemistry, Analysis, Function and Effects. *Royal Society of Chemistry Publishing* 2013.
24. Ahn-Jarvis JH, *et al*. Design and selection of soy breads used for evaluating isoflavone bioavailability in clinical trials. *Journal of Agricultural and Food Chemistry* 2013.
25. Arango D, *et al*. Molecular bases for the action of a dietary flavonoid revealed by the comprehensive identification of apigenin human targets. *Proc Natl Acad Sci* 2013.
26. Chuang HC, *et al*. AMPK As A Potential Anticancer Target - Friend or Foe? *Curr Pharm Des* 2013.
27. Ge Z, *et al*. Sites of acetylation on newly synthesized histone H4 are required for chromatin assembly and DNA damage response signaling. *Mol Cell Biol* 2013.
28. Gocha ARS, et al. Alternative lengthening of telomeres: Permissive mutations, DNA repair proteins, and tumorigenic progression in mammalian cells. *Mut Res* 2013.
29. Gocha ARS, *et al*. Human sarcomas are mosaic for telomerase-dependent and –independent telomere maintenance mechanisms: Implications for telomere-based therapies. *Am J Pathol* 2013.
30. Gonzalez-Escobedo G, *et al*. Histopathological Analysis of Salmonella Chronic Carriage in the Mouse Hepatopancreatobiliary System. *PLoS One* 2013.
31. Gonzalez-Escobedo G, *et al*. Identification of Salmonella Factors Regulated during Biofilm Formation on Cholesterol Gallstone Surfaces. *Infection and Immunity* 2013.
32. Gonzalez-Escobedo G, *et al*. Gallbladder Epithelium as a Niche for Chronic Salmonella Carriage. *Infection and Immunity* 2013.
33. Grierson P, *et al*. Collaborating functions of the BLM helicase and DNA topoisomerase I in regulating human rDNA transcription. *Mutat. Res*. 2013.
34. Hankey W, *et al*. Familial Adenomatous Polyposis Coli and the APC Tumor Suppressor. *Encyclopedia of Cancer Therapeutic Targets* 2013.
35. Jacob AG, *et al*. Stress-induced isoforms of MDM2 and MDM4 correlate with high-grade disease and an altered splicing network in pediatric rhabdomyosarcoma. *Neoplasia* 2013.
36. Lucas CR, *et al*. Prohibitins and the Cytoplasmic Domain of CD86 Cooperate To Mediate CD86 Signaling in B Lymphocytes. *The Journal of Immunology* 2013.
37. North JA, *et al*. ATP-Dependent nucleosome unwrapping catalyzed by human RAD51. *Nucleic Acids Research* 2013.
38. Phelan JD, *et al*. Growth factor independence 1 (Gfi1) Antagonizes a p53-dependent DNA Damage Response Pathway in Lymphoblastic Leukemia. *Cancer Cell* 2013.
39. Phelan JD, *et al*. Growth factor independent-1 maintains Notch1-dependent transcriptional programming of lymphoid precursors. *PLoS Genet* 2013.
40. Phelan JD, *et al*. Gfi1 Inhibition and the Future of ALL Management. *The Journal of OncoPathology* 2013.
41. Rao SS, *et al*. Mimicking white matter tract topography using core-shell electrospun nanofibers to examine migration of malignant brain tumors. *Biomaterials* 2013.
42. Riley M, *et al*. mir-125a-5p mediated Regulation of Lfng is Essential for the Avian Segmentation Clock. *Dev Cell* 2013.
43. Shah KH, *et al*. Processing body and stress granule assembly occur by independent and differentially regulated pathways in Saccharomyces cerevisiae. *Genetics* 2013.
44. Wu SM, *et al*. Psychometric evaluation of the Perceived Stress Scale in Multiple Sclerosis. *ISRN Rehabilitation* 2013.
45. Zhao H, *et al*. N-terminal Slit2 inhibits HIV-1 replication by regulating the actin cytoskeleton. *Retrovirology* 2013.
46. Zielinski R, *et al*. Finite element analysis of traction force microscopy: Influence of cell mechanics, adhesion and morphology. *Journal of Biomechanical Engineering* 2013.
47. Zhou C, *et al*. Comparative cellular pharmacokinetics and pharmacodynamics of siRNA delivery by SPANosomes and by cationic liposomes. *Nanomedicine: Nanotechnology, Biology and Medicine* 2013.
48. Fenger JM, *et al*. Overexpression of miR-9 in mast cells is associated with invasive behavior and spontaneous metastasis. *BMC Cancer* 2014.
49. Fenger JM, *et al*. Canine osteosarcoma – a natural occurring disease to inform pediatric oncology. *ILAR* 2014.
50. Govindaraghavan M, *et al*. The Set1/COMPASS histone H3 methyltransferase helps regulate mitosis together with the CDK1 and NIMA mitotic kinases in Aspergillus nidulans. *Genetics* 2014
51. Govindaraghavan M, *et al*. Identification of Interphase Functions for the NIMA Kinase Involving Microtubules and the ESCRT Pathway. *PLoS Genet* 2014.
52. Govindaraghavan M, *et al*. The NIMA kinase is required to execute stage specific mitotic functions after initiation of mitosis. *Eukaryot Cell* 2014.
53. Hutzen B, et al. Treatment of medulloblastoma with oncolytic measles viruses expressing the angiogenesis inhibitors endostatin and angiostatin. *BMC cancer* 2014.
54. Jacob AG, *et al*. The splicing factor FUBP1 is required for the efficient splicing of oncogene MDM2 pre-mRNA. *Journal of Biological Chemistry* 2014.
55. Lee I-J, *et al*. Regulation of SPB-duplication and cytokinesis by centrin-binding protein Sfi1 in fission yeast. *Mol Biol Cell* 2014.
56. Maxwell BA, *et al*. Recent Insight into the Kinetic Mechanisms and Conformational Dynamics of Y-Family DNA Polymerases. *Biochemistry* 2014.
57. Maxwell BA, *et al*. Inter-domain conformational dynamics of a Y-family DNA polymerase during catalysis. *Biochemistry* 2014.
58. North JA, *et al*. Histone H3 phosphorylation near the nucleosome dyad alters chromatin structure. *Nucleic Acids Res* 2014.
59. Pringle D, *et al*. Follicular thyroid cancers demonstrate dual activation of PKA and mTOR as modeled by thyroid specific deletion of Prkar1a and Pten in mice. *Journal of Clinical Endocrinology and Metabolism* 2014.
60. Jennifer A. Woyach, M.D.*, Richard R. Furman, M.D.*, Ta-Ming Liu*, *et al*. Resistance Mechanisms for the Bruton's Tyrosine Kinase Inhibitor Ibrutinib. *The New England Journal of Medicine* 2014 *The four first authors contributed equally.
61. Wang B, *et al*. Reciprocal regulation of microRNA-122 and c-Myc in hepatocellular cancer: role of E2F1 and transcription factor dimerization partner 2. *Hepatology* 2014.
62. Wei K, *et al*. Electrical liquid lens driven by an annular membrane. *Optics Letters* 2014.
63. Wu J, et al. Healing for destruction: tRNA intron degradation in yeast is a two-step cytoplasmic process catalyzed by tRNA ligase Rlg1 and 5′-to-3′ exonuclease Xrn1. *Genes Dev* 2014.
64. Wu SM, *et al*. Association of the physiological stress response with depressive symptoms in breast cancer patients. *Psychosomatic Medicine* 2014.
65. Zhao H, *et al*. Slit2–Robo4 Pathway Modulates Lipopolysaccharide-Induced Endothelial Inflammation and Its Expression Is Dysregulated during Endotoxemia. *Journal of Immunology* 2014.

Postdoctoral

1. Bid HK, *et al*. Does angiotensin-converting enzyme polymorphism have association with symptomatic benign prostatic hyperplasia? *Indian J Urol* 2010.
2. Eisfeld AK, et al. Highly elevated serum hepcidin in patients with acute myeloid leukemia prior to and after allogeneic hematopoietic cell transplantation: Does this protect from excessive parenchymal iron loading? *Adv Hematol* 2011.
3. Hughes T, *et al*. Interleukin-1beta selectively expands and sustains interleukin-22+ immature human natural killer cells in secondary lymphoid tissue. *Immunity* 2010.
4. Lai IL, *et al*. HDAC10 relieves transcriptional repression by maintaining the deacetylation status of repressors. *J Bio Chem* 2010.
5. Senapati S, *et al*. Expression of intestinal MUC17 membrane-bound mucin in inflammatory and neoplastic diseases of the colon. *Journal of Clinical Pathology* 2010.
6. Ahirwar DK, *et al*. BCG response prediction with cytokine gene variants and bladder cancer: where we are? *J Cancer Res Clin Oncol* 2011.
7. Bid HK, *et al*. Targeting angiogenesis in childhood sarcomas. *Sarcoma* 2011.
8. Bid HK, *et al*. Potent Inhibition of Angiogenesis by the IGF-1 Receptor-Targeting Antibody SCH717454 is reversed by IGF-2. *Mol Cancer Ther* 2011.
9. Engelmann NJ, *et al*. Nutritional aspects of phytoene and phytofluene, carotenoid precursors to lycopene. *Adv Nutr* 2011.
10. Kiss DL, *et al*. The Exozyme Model: A Continuum of Functionally Distinct Complexes. *RNA* 2011.
11. Li J, *et al*. Applications of Vibrational Spectroscopy in the study of flavin-based photoactive protein. *Spectroscopy* 2011.
12. Mims A, *et al*. Epigenetic Priming: the target? *Blood* 2011.
13. Senapati S, *et al*. MUC4-NIDO domain plays a significant role in MUC4-mediated metastasis of pancreatic cancer cells. *Oncogene* 2011.
14. Senapati S, *et al*. Novel interaction of MUC4 and galectin: potential pathobiological implications for metastasis in lethal pancreatic cancer. *Clinical cancer research* 2011.
15. Balkhi MY, *et al*. IKKα-mediated signaling circuitry regulates early B lymphopoiesis during hematopoiesis. *Blood* 2012.
16. Bid HK, *et al*. Re: markers predicting response to bacillus calmette-guérin immunotherapy in high-risk bladder cancer patients: a systematic review. *Eur Urol* 2012.
17. C.K. Martin, *et al*. Characterization of Bone Resorption in Novel In Vitro and In Vivo Models of Oral Squamous Cell Carcinoma. *Oral Oncology* 2012.
18. Caserta E, *et al*. In Vivo and In Vitro Analysis of Regulation of the Pheromone-responsive prgQ Promoter by the PrgX Pheromone Receptor Protein. *J Bacteriol* 2012.
19. Chlon T, *et al*. Cofactor-mediated Restriction of GATA-1 Chromatin Occupancy Coordinates Lineage-specific GeneExpression. *Mol. Cell* 2012.
20. Chlon T, *et al*. Combinatorial regulation of tissue specification by GATA and FOG factors. *Development* 2012.
21. Eisfeld AK, *et al*. Kinetics of iron removal by phlebotomy in patients with iron overload after allogeneic hematopoietic cell transplantation. *Am J Blood Res* 2012.
22. Eisfeld AK, et al. Heritable polymorphism predisposes to high BAALC expression in acute myeloid leukemia. *Proc Natl Acad Sci USA* 2012.
23. Eisfeld AK, et al. miR-3151 interplays with its host gene BAALC and independently affects outcome of patients with cytogenetically normal acute myeloid leukemia. *Blood* 2012.
24. Haraldsdottir S, *et al*. A single institutional experience with panitumumab in metastatic colorectal cancer. *Journal of Cancer Therapy* 2012.
25. Kiss DL, *et al*. Dis3- and exosome subunit-responsive 3′ mRNA instability elements. *Biochem Biophys Res Commun* 2012.
26. Mims A, *et al*. Increased anti-leukemic activity of decitabine via AR-42-induced upregulation of miR-29b: A novel epigenetic-targeting approach in acute myeloid leukemia. *Leukemia* 2012.
27. Ranganathan P, *et al*. Preclinical activity of a novel CRM1 inhibitor in acute myeloid leukemia. *Blood* 2012.
28. Ranganathan P, *et al*. Regulation of acute graft-versus-host disease by microRNA-155. *Blood* 2012.
29. Senapati S, *et al*. Non- Human Prostate Cancer Cell Lines. *Oncology, Gastroenterology and Hepatology reports* 2012.
30. Wani NA, *et al*. Mechanism of intestinal folate transport during folate deficiency in rodent model. *Indian J Med Res* 2012.
31. Wani NA, *et al*. Decreased activity of folate transporters in lipid rafts resulted in reduced hepatic folate uptake in chronic alcoholism in rats. *Genes Nutr* 2012.
32. Wani NA, *et al*. Adaptive transport of folic acid across renal epithelia in folate-deficient rats. *J Physiol Sci* 2012.
33. Wani NA, *et al*. Alcohol associated folate disturbances results in altered methylation of folate regulating genes. *Mol Cell Biochem* 2012.
34. Bernardo GM, *et al*. FOXA1 actively represses the basal breast cancer molecular phenotype. *Oncogene* 2013.
35. Bid HK, *et al*. Dual Targeting of the Type 1 Insulin-like Growth Factor Receptor and its Ligands as an Effective Anti-angiogenic Strategy. *Clin Cancer Res* 2013.
36. Bid HK, *et al*. ΔNp63 promotes Childhood Cancers Neuroblastoma and Osteosarcoma by regulating tumor angiogenesis. *Cancer Research* 2013.
37. Bid HK, *et al*. RAC1: An Emerging Therapeutic Option for Targeting Cancer Angiogenesis and Metastasis. *Mol Can Ther* 2013.
38. DeFraia C, *et al*. The histone acetyltransferase activity of Elongator subunit 3 is essential for its role in plant immunity. *BMC Biology* 2013.
39. Dorrance AM, *et al*. The Rac GTPase effector p21-activated kinase is essential for hematopoietic stem/progenitor cell migration and engraftment. *Blood* 2013.
40. Galli R, *et al*. Toll-like receptor 3 (TLR3) activation induces microRNA-dependent reexpression of functional RARβ and tumor regression. *Proc Natl Acad Sci USA* 2013.
41. Haraldsdottir S, *et al*. Integrating anti-EGFR therapies in metastatic colorectal cancer. *Journal of Gastrointestinal Oncology* 2013.
42. Haraldsdottir S, *et al*. What is the optimal neo-adjuvant treatment for liver metastases? *Therapeutic Advances in Medical Oncology* 2013.
43. Haraldsdottir S, *et al*. A case of sorafenib-induced thyroid storm. *Journal of Clinical Oncology* 2013.
44. Haraldsdottir S, *et al*. Clinical Indications for ziv-Aflibercept in Colorectal Cancer. *International Journal of Targeted Therapies in Cancer* 2013.
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Medical Students

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The Pelotonia Fellowship Committee is chaired by Gustavo Leone, PhD, and co-chaired by Jan Kiecolt-Glaser, PhD. The committee is made up of some of Ohio State's most well-known cancer researchers. This committee meets several times per year to review all applications and make all major program decisions. They represent departments as diverse as Molecular Genetics and Internal Medicine to Psychology and Human Nutrition. Deborah Parris, PhD, moderates our postdoctoral reviews, assuring the reviews are fair, rigorous and unbiased.

fellowship committee

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Steven Clinton, MD, PhD, Molecular Carcinogenesis and Chemoprevention Research Program Leader

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Richard Goldberg, MD
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External Advisors: Symposia Speakers

2014 **Carlos Arteaga, MD**
Professor of Medicine & Cancer Biology
Director Breast Cancer Program
Vanderbilt-Ingram Cancer Center

David Beach, PhD, FRS
Professor of Stem Cell Research
Blizard Institute

Guillermina (Gigi) Lozano, PhD
Chair and Professor
Department of Genetics
University of Texas MD Anderson Cancer Center

2013 **Stephen Elledge, PhD**
Department of Genetics
Harvard Medical School

Michele Pagano, MD, PhD
New York University School of Medicine
Investigator, Howard Hughes
Medical Institute

Jon Aster, MD, PhD
Department of Pathology
Brigham and Women's Hospital
Harvard Medical School

2012 **Charles J. Sherr, MD, PhD**
St. Jude Children's Research Hospital Faculty
Chair, Tumor Cell Biology
Investigator, Howard Hughes Medical Institute

Martine F. Roussel, PhD
St. Jude Children's Research
Hospital Faculty
Endowed Chair in Molecular Oncogenesis
The University of Tennessee Memphis

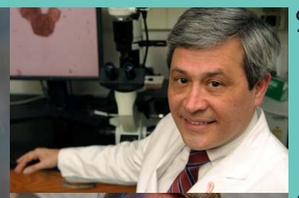
David E. Fisher, MD, PhD
Chief, Department of Dermatology
Massachusetts General Hospital
Harvard Medical School

2011 **Ross Levine, MD**
Geoffrey Beene Junior Faculty Chair
Memorial Sloan-Kettering Cancer Center

John H. J. Petrini, PhD
Paul A. Marks Chair of Molecular
Cell Biology
Head, Laboratory of Chromosome Biology
Memorial Sloan-Kettering Cancer Center

Judith Campisi, PhD
Professor, Buck Institute for Age Research
Sr Scientist, Lawrence Berkeley National Laboratory

Symposia 2014 (October 1st)



Carlos Arteaga, MD
"PI3K Pathway in Breast Cancer: Role in Tumor Progression and as a Therapeutic Target"

David Beach, PhD, FRS
"The Cell Cycle and Cancer: Back to the Future"

Guillermina (Gigi) Lozano, PhD
"Dissecting the p53 Pathway in Vivo"