

## **\*Outcomes for Pharmacology PhD graduates of Case Western Reserve University:**

\*Note: the Training Program that sets the standards for all Pharmacology PhD students has been supported in part by the National Institutes of Health for more than 30 years, Pharmacological Sciences training grant T32 GM008803. *This is a testament to the sustained quality of the Program.*

- **An important goal is for students to complete the Training Program in about 5 years.**  
The average time to degree for 61 graduates who completed training during the past 10 years is **5.8**  
1.4 years (56% completed studies in 6 years or less).
- Over the period 2004-2016, a total of 128 students enrolled; 76 have graduated, and 40 students are currently enrolled. Only 12 students left the program without completing the PhD. Thus, the **success rate** =  $116/128 = 91\%$ .
- The **student body is diverse** - current enrollment in the Pharmacology PhD program is comprised of 40 students, 6 of whom are underrepresented minorities (15%) and 3 are known to be students with disabilities (8%).
- All students are required to develop an annual **Individual development Plan**. To facilitate this the MTTP provides Pharmacology students with information about the broad range of career opportunities, including scientific writing, academia-industrial liaison, health and research policy, research commerce, legal consultation, investment consultation, administration of scientific peer review, and specialized roles in biotech companies.
- Most **Pharmacology PhD trainers have active collaborations** with investigators at other universities or industrial companies. Pharmacology students are broadened by these collaborations and expand their network of contacts for career development accordingly.
- As shown in the appended table of Pharmacology PhD graduates, a **majority of the graduates have continued engagement in research**, pursuing advanced training and developing careers in academic or industrial settings. Notable examples include funded professors, leaders of biotech companies, scientific advisors at investment firms or law offices, scientific writers, *etc.*

## CWRU Pharmacology PhD Graduates

| Name                           | TTD  | Admit Term  | Graduation Date | Program      | Mentor               | Thesis/Res.Proj   | Degree (s) | Year | Institution(s)                   | Degree Earned | MSTP | BSTP | Initial Position (Years)  | Current Position (Years)   |
|--------------------------------|------|-------------|-----------------|--------------|----------------------|---|------------|------|----------------------------------|---------------|------|------|---|--|
| Babino, Darwin                 | 5.59 | Summer 2010 | January 2016    | Pharmacology | von Lintig, Johannes | Biology and chemistry of carotenoid cleavage enzymes in vision  | BS/MS      | 2010 | Florida Intl Univ                | PhD           | N    | Y    | Post Doctoral Fellow - CWRU (2016)  | Post Doctoral Fellow - University of Washington-Seattle (2016-Present)   |
| Bayrer, James Robert           | 5.59 | Summer 1998 | January 2006    | Pharmacology | Weiss, Michael       | The doublesex transcription factor: structural and functional studies of a sex-determining factor               | BA         | 1998 | Claremont                        | PhD           | Y    | N    | Medical Student (2006-2007)   | Assistant Professor, University of California, San Francisco (2013-present)  |
| Bentle, Melissa Srougi         | 6    | Fall 2001   | August 2007     | Pharmacology | Boothman, David A    | Involvement of single- and double-strand break repair processes in beta-lapachone-induced cell death            | BS         | 2001 | U of Toledo                      | PHD           | N    | Y    | Adjunct Assistant Professor, Elon University (2010)                             | Assistant Professor, Biochemistry, High Point University (2014-present)  |
| Bernardo, Gina M               | 6.59 | Summer 2005 | January 2012    | Pharmacology | Keri, Ruth           | Discerning the Role of FOXA1 in Mammary Gland Development and Breast Cancer                                     | BS         | 2003 | Washington & Jefferson College   | PhD           | N    | Y    | Postdoc Scholar, CWRU (2011 – 2012)   | Postdoc Fellow, OSU (2013-present)   |
| Boyd-Tressler, Andrea Michelle | 6.75 | Fall 2009   | May 2016        | Pharmacology | Dubyak, George R     | Mechanisms of Extracellular Nucleotide Accumulation During Regulated Cell Death in Tumor Cells                  | BS         | 2009 | Spelman College                  | PhD           | N    | N    | Medical student, CWRU (2016-Present)  | Medical student, CWRU (2016-Present)   |
| Bury, Luke Andrew Dascenzo     | 6.25 | Summer 2009 | August 2015     | Pharmacology | Sabo, Shasta         | Examining Dynamic Aspects of Presynaptic Terminal Formation via Live Confocal Microscopy                        | BS         | 2009 | Clemson U                        | PhD           | N    | Y    | Postdoctoral Fellow - CWRU (2015-Present)                                       | Postdoctoral Fellow - CWRU (2015-Present)  |
| Charvet, Casey                 | 3.75 | Fall 2009   | May 2013        | Pharmacology | Pikuleva, Irina      | Post-Translational Modification By Isolevuglandins: Retinal Detection, Effects, and Prevention                  | BS         | 2005 | UT Austin                        | PHD           | N    | N    | CTO at Blastro (2013 – 2014)  | Managing Director at Gigcasters (2015 – Present)   |
| Chou, Yu-Ting                  | 6.25 | Summer 2000 | August 2006     | Pharmacology | Yang, Yu-Chung       | Cited2 is a novel transcriptional modulator in TGF-beta signaling pathway.                                      | MS         | 1996 | National Yang-Ming University    | PHD           | N    | N    | Postdoc Fellow, Johns Hopkins University  | Postdoc Fellow, National Health Res Institute, Taiwan  |
| Chung, Charlotte Yuk-Yan       | 5.59 | Summer 2007 | January 2015    | Pharmacology | Levine, Alan         | Tight Junctions - The Link Between HIV-Associated Intestinal Barrier Dysfunction and Loss of Immune Homeostasis | BS         | 2007 | Johns Hopkins                    | PhD           | Y    | N    | Medical Student (2015-2016)   | Resident General Surgery, Preliminary Brigham & Women's Hosp   |
| Cicero, Samantha Ann           | 7    | Summer 1999 | May 2006        | Pharmacology | Herrup, Karl         | The Roles of CDK5 in Neuronal Development and Neurodegeneration   | MS         | 1999 | Cleve State U New Mexico State U | PHD           | N    | Y    | Postdoctoral Research Fellow, St. Jude Children's Research Hospital (2006-2010) | Senior Medical Science Liaison (Movement Disorders, Psychiatry), Western US, Neurocrine Biosciences (2016-present) |
| Davis, Michael Charles         | 4.25 | Summer 2000 | August 2006     | Pharmacology | Distelhorst, Clark   | Investigations into the Generation and Regulation of Pro-Apoptotic Ca2t Signals in T Cells                      | BS         | 1999 | Iowa State U                     | PHD           | Y    | N    | Medical student, CWRU (2006-2008)   | Physician at Michael E. DeBaKey VA Medical Center  |

## CWRU Pharmacology PhD Graduates

| Name                          | TTD  | Admit Term  | Graduation Date | Program      | Mentor                              | Thesis/Res.Proj   | Degree (s) | Year | Institution(s)            | Degree Earned | MSTP | BSTP | Initial Position (Years)  | Current Position (Years)  |
|-------------------------------|------|-------------|-----------------|--------------|-------------------------------------|---|------------|------|---------------------------|---------------|------|------|---|---|
| Desai, Amar Bharat            | 5.75 | Fall 2008   | May 2014        | Pharmacology | Gerson, Stanton                     | The multifaceted role of exonuclease 1 in DNA repair and adult stem cell populations  | BS         | 2008 | Kenyon College            | PhD           | N    | N    | Postdoctoral Research Associate, CWRU (2014-Present)                            | Postdoctoral Research Associate, CWRU (2014-Present)                                |
| Ellison, Tara                 | 4.67 | Spring 2004 | August 2008     | Pharmacology | MacDonald, Paul                     | The vitamin D endocrine system in skin uncoupling the actions of the vitamin D receptor and its ligand keratinocytes  | BS         | 2001 | U of Chicago              | PHD           | N    | N    | Postdoc, David Mangelsdorf lab, U Texas Southwestern (2008 – 2013)              | Field Application Specialist at Bio-Rad Laboratories (2013 – Present)               |
| Eng, Kevin Tai-Pang           | 4.75 | Fall 2005   | May 2010        | Pharmacology | Berdis, Anthony                     | Non-Natural Nucleotides as Modulators of ATPases  | BS         | 2004 | UC Irvine                 | PHD           | N    | N    | Post Doc Fellow, Geron Pharmaceuticals, Palo Alto, CA (2010 – 2012)             | Senior Manager in Corporate Development at OncoMed Pharmaceuticals (2015 – Present) |
| Flatt, Justin                 | 2.75 | Fall 2011   | May 2014        | Pharmacology | Stewart, Phoebe                     | Structural Insights into Recognition of Adenovirus by Immunologic and Serum Factors   | BSCHE      | 2009 | U of Alabama              | PhD           | N    | N    | Postdoctoral position, Switzerland  | Postdoctoral position, Switzerland  |
| Fox, Tara Lynn                | 4.75 | Fall 2011   | May 2016        | Pharmacology | Stewart, Phoebe                     | Characterizing Environmentally Responsive Polymer-Based Nanoparticles for Drug Delivery   | BS         | 2007 | Abilene Christian College | PhD           | N    | N    | Postdoctoral Scholar, laboratory of Sriram Subramaniam, NCI, NIH (2016-Present) | Postdoctoral Scholar, laboratory of Sriram Subramaniam, NCI, NIH (2016-Present)     |
| Gallogly, Molly               | 6.25 | Summer 2001 | August 2009     | Pharmacology | Mieyal, John Joseph                 | Comparative Characterization of the Major Human Glutaredoxin Isozymes and Identification of a Mechanism by which Grx1 Regulates Apoptosis in Cardiomyocytes | BA         | 2000 | Grinnell College          | PHD           | Y    | N    | Medical Student (2009-2011)   | Fellow in hematology/oncology at University Hospitals (2014 – Present)              |
| Gama, Vivian                  | 4.34 | Fall 2004   | January 2009    | Pharmacology | Matsuyama, Shigemi                  | Regulation of the Anti-apoptotic Protein Ku70 and the Implications for Bax-Mediated Apoptosis   |            |      |                           | PHD           | N    | N    | Post Doctoral Fellow - UNC (2008 – 2015)  | Assistant Professor at Vanderbilt University (2015 – Present)                       |
| Gandhi, Payal Nikhil          | 6.59 | Summer 2001 | January 2008    | Pharmacology | Wilson-Delfosse, Amy                | Characterization of the Parkinson's disease associated protein, leucine-rich repeat kinase 2 (LRRK2), as a Ras-related GTPase                               | BA         |      | CWRU                      | PHD           | N    | N    | Postdoctoral scholar, Case Western Reserve University (2007-2008)               | Medical Director, ApotheCom: A Huntsworth Health Company (2016-present)             |
| Gatbonton-Schwager, Tonibelle | 8    | Summer 2006 | May 2014        | Pharmacology | Tochtrop, Gregory<br>Letterio, John | Biological and Chemical Analysis of Small Molecule Activators of Anti-inflammatory and Antioxidant Nrf2-Keap1 Signaling                                     | BS         | 2003 | Whitman College           | PhD           | N    | Y    | Postdoctoral fellow, Case Comprehensive Cancer Center                           | Greater Seattle Area Cancer Therapeutics Research Scientist                         |

## CWRU Pharmacology PhD Graduates

| Name                      | TTD  | Admit Term  | Graduation Date | Program      | Mentor                              | Thesis/Res.Proj   | Degree (s) | Year         | Institution(s)   | Degree Earned | MSTP | BSTP | Initial Position (Years)   | Current Position (Years)   |
|---------------------------|------|-------------|-----------------|--------------|-------------------------------------|---|------------|--------------|--|---------------|------|------|--|--|
| Gomez, Jose A             | 5.34 | Fall 2004   | January 2010    | Pharmacology | Matsuyama, Shigemi                  | Development of Cell Penetrating Box Inhibiting Peptides (BIP)   | BSc<br>MS  | 1995<br>2002 | Universidad Nacional de Colombia<br>Univ of WI - Madison | PHD           | N    | N    | Postdoc Fellow, Victor Dzau lab, Duke U  | Research Instructor, Division of Clinical Pharmacology, Vanderbilt University                              |
| Gray, Reginald Courtney   | 5.59 | Summer 2002 | January 2008    | Pharmacology | Harding, Clifford V.                | Regulation of Interferon Alpha Beta Induction and Dendritic Cell Function by CpG Oligodeoxynucleotides                | BA/BA      | 2002         | Xavier U   | PhD           | N    | Y    | Resident (MD program, Virginia Tech after CWRU)  | Postdoctoral Fellow, Department of Defense, Edgewood, MD   |
| Gupta, Meghana B          | 5.59 | Summer 2008 | January 2014    | Pharmacology | Manor, Danny                        | Regulation of Dbl Family Guanine Nucleotide Exchange Factors  | BA         | 2007         | Rutgers  | PhD           | N    | Y    | Postdoc Fellow, CWRU (2013-2014)   | Patent Agent at The Webb Law Firm (2015- Present)  |
| Hsieh, Yee-Hsee           | 6.67 | Spring 2001 | August 2007     | Pharmacology | Dick, Thomas Prabhakar, Nanduri     | Brainstem GABAA receptor shape the response and adaptation to hypoxia   | BS, MS     | 1999         | CWRU   | PHD           | N    | N    | Research Associate, Pulmonary and Critical Care Dept, UHCMC/Case Western Reserve University (2009-present) | Research Associate, Pulmonary and Critical Care Dept, UHCMC/Case Western Reserve University (2009-present) |
| Johnson, William Marshall | 4.34 | Fall 2011   | January 2016    | Pharmacology | Mieyal, John Joseph<br>Howe, Philip | The Role of Redox Enzymes in Parkinson's Disease  | BS<br>MS   | 2009<br>2011 | Ohio University<br>CWRU                                  | PhD           | N    | N    | Postdoctoral Fellow, Duke University (2016-Present)  | Postdoctoral Fellow, Duke University (2016-Present)  |
| Ketchart, Wannarasmi      | 5.25 | Summer 2007 | August 2012     | Pharmacology | Montano, Monica                     | HEXIM1 as a Therapeutic Target in Hormone Resistant and Metastatic Breast Cancer                                      | MD         | 2006         | Chulalongkorn U, Thailand                                | PhD           | N    | N    | Postdoctoral Fellow, Thailand  | Postdoctoral Fellow, Thailand  |
| Kiser, Philip David       | 4.75 | Fall 2005   | May 2010        | Pharmacology | Palczewski, Krzysztof               | Structural and Biochemical Studies of RPE65, the Retinoid Isomerase of the Visual Cycle                               | PharmD     | 2005         | St. Louis College of Pharmacy                            | PhD           | N    | N    | Postdoctoral Fellow, CWRU (2010-2011)  | Assistant Professor, Dept. Pharmacology CWRU (2011-Present)  |
| Lam, Eric Man-Ho          | 9    | Summer 2006 | May 2015        | Pharmacology | Letterio, John                      | Identification of Cyclin-Dependent Kinase 5 in T Cells and Its Role in Regulating T Cell Function and Differentiation | BS         | 2005         | Queen's University-Canada                                | PhD           | N    | N    | Postdoctoral Fellow - CWRU (2015)  | Associate Consultant at Hull Associates LLC (2015 – Present)   |
| Landis, Melissa Dawn      | 6.34 | Fall 1999   | January 2006    | Pharmacology | Keri, Ruth                          | Elucidating molecular mechanisms of ErbB2/Neu-induced mammary tumorigenesis   | BA<br>MS   | 1992<br>1997 | UT<br>Texas A&M  | PhD           | N    | Y    | Research Associate, Baylor College of Medicine (2007-2010)   | Medical Science Liaison, Oncology, Bayer Pharmaceuticals (2014-present)                                    |
| Leary, Dasha Hajkova      | 4    | Summer 2006 | May 2010        | Pharmacology | Miyagi, Masaru                      | Circadian Proteome Changes in Photoreceptor Outer Segments  | MSc        | 2003         | Institute of Chemical Technology, Prague, Czech Republic | PHD           | N    | N    | Living on Midway Island, researching on the birds on the island  | Research Biologist at Naval Research Laboratory (2013 – Present)   |

## CWRU Pharmacology PhD Graduates

| Name                           | TTD  | Admit Term  | Graduation Date | Program      | Mentor                | Thesis/Res.Proj  | Degree (s) | Year      | Institution(s)                                       | Degree Earned | MSTP | BSTP | Initial Position (Years)                           | Current Position (Years)  |
|--------------------------------|------|-------------|-----------------|--------------|-----------------------|--|------------|-----------|--|---------------|------|------|--|---|
| Miller, Timothy John           | 8    | Summer 2000 | May 2008        | Pharmacology | Davis, Pamela B.      | FXD5 modulates Na, K-ATPase activity and is increased in cystic fibrosis airway epithelia  | BS/MS      | 1997      | John Carroll U                                       | PHD           | N    | Y    | Acellerx Therapeutics at Cleveland Clinic          | President and Chief Executive Officer and Director, Abeona Therapeutics LLC (2015-present)  |
| Montanez-Wiscovich, Marjorie E | 6.59 | Summer 2001 | January 2010    | Pharmacology | Keri, Ruth            | Discerning the role of LMO4 as a global modulator of G2/M cell cycle progression and centrosome cycle in breast cancer cells   | BS         | 2001      | U of Puerto Rico, Mayaguez                           | PHD           | Y    | N    | Medical Student (2010- 2011)                       | Dermatologist, MetroHealth Medical Center   |
| Moomaw, Andrea S               | 8    | Summer 2003 | May 2011        | Pharmacology | Maguire, Michael      | Structure-Function Studies of the CorA Magnesium Channel   | BS         | 2003      | Heidelberg U, Germany                                | PhD           | N    | Y    | Postdoc Fellow, CWRU (2011)                        | Assistant Professor, Physiology at Ohio University (2015 – Present)                         |
| Mosley, Jonathan David         | 5.25 | Summer 2000 | August 2007     | Pharmacology | Keri, Ruth            | The analysis and utilization of global gene expression data for the study and treatment of breast cancer   | BS MS      | 1990 1998 | Dickinson Coll Johns Hopkins School of Public Health | PhD           | Y    | N    | Medical student (2008-2009)                        | Instructor of Medicine, Vanderbilt University Medical Center (2014-present)                 |
| Mumaw, Michele Marie           | 6.34 | Fall 2009   | January 2016    | Pharmacology | Nieman, Marvin        | A novel approach to anti-platelet therapy: Targeting Protease Activated Receptor 4   | BS         | 2009      | Rose-Hulman Institute of Tech, IN                    | PhD           | N    | N    | Postdoctoral fellow, Dermatology WRU (2015 – 2016) | Postdoctoral Scholar, Hematology (2016 – Present)   |
| Mustafi, Debarshi              | 4.25 | Summer 2007 | August 2013     | Pharmacology | Palczewski, Krzysztof | Genetic Signatures of the Retina in Health and Disease   | BS         | 2007      | U of Chicago   | PhD           | Y    | N    | Medical Student (2013-2015)                        | Resident Medicine, Preliminary Case Western/Univ Hosps Case Med Ctr (2015- Present)         |
| Nibbe, Rod K                   | 5    | Summer 2005 | May 2010        | Pharmacology | Chance, Mark          | Systems Biology of Human Colorectal Cancer   | MS         | 1985      | U Wisconsin  | PhD           | N    | Y    | Post Doctoral Fellow- CWRU (2010- 2012)            | Computational Biologist/Bioinformatician-Independent Consultant (2014 – Present)            |
| Ogba, Ndiya Nnena              | 6.34 | Fall 2003   | January 2010    | Pharmacology | Montano, Monica       | Transcriptional Regulation Of Estrogen Receptor Alpha Target Genes By Hexamethylene Bisacetamide-Inducible Gene 1 (HEXIM1) And Its Role In Mammary Gland Development And Breast Cancer | BS         | 2003      | Benedict College                                     | PhD           | N    | N    | Post Doctoral Fellow, CWRU (2009 – 2010)           | Oncology Scientist/Medical Writer at National Comprehensive Cancer Network (2016 – Present) |

## CWRU Pharmacology PhD Graduates

| Name                       | TTD  | Admit Term  | Graduation Date | Program      | Mentor              | Thesis/Res.Proj  | Degree (s) | Year      | Institution(s)      | Degree Earned | MSTP | BSTP | Initial Position (Years)  | Current Position (Years)  |
|----------------------------|------|-------------|-----------------|--------------|---------------------|--|------------|-----------|---------------------|---------------|------|------|---|---|
| Papp-Wallace, Krisztina M. | 7    | Summer 2001 | May 2008        | Pharmacology | Maguire, Michael    | Studies on the virulence properties and regulation of the CorA magnesium channel   | BS         | 2001      | Baldwin Wallace     | PHD           | N    | Y    | Postdoctoral Fellow, CWRU (2008-2011)   | Assistant Professor, Dept of Medicine, CWRU, Div of Infectious Diseases & HIV Medicine; Research Service, Louis Stokes Cleveland VA Medical Center (2011-Present) |
| Parakh, Tehnaz Nawzer      | 5.25 | Summer 1999 | August 2006     | Pharmacology | Nilson, John        | Transcriptional Regulation of Steroidogenesis by FSH Requires b-catenin  | BS         | 1998      | Davidson College    | PHD           | Y    | N    | Medical student, CWRU   | Physician & Assistant Professor, Pediatrics, Boston University  |
| Qu, Yan                    | 4.34 | Fall 2004   | January 2009    | Pharmacology | Dubyak, George R    | Regulation of Multiple Membrane Trafficking Pathways Stimulated by P2X7 Receptor Activation in Inflammatory Macrophages  | BS MS      | 1999 2004 | South China U CWRU  | PhD           | N    | N    | Post Doctoral Fellow - Genentech (2009 - 2013)  | Principal Scientist at Pfizer (2013 - Present)  |
| Rong, Yiping               | 5.59 | Summer 2003 | January 2009    | Pharmacology | Distelhorst, Clark  | Bcl-2 Regulates Proapoptotic Calcium Signals by Interacting with the Inositol 1, 4, 5-Trisphosphate Receptor   | BS MS      | 1999 2002 | East China U        | PHD           | N    | Y    | Sr Scientist, Roche Pharmaceuticals, Shanghai China (2008 - 2011)                               | Research Project Lead and Associate Director at Sanofi (2014 - Present)   |
| Ryder, Christopher         | 5    | Summer 2006 | May 2013        | Pharmacology | Distelhorst, Clark  | The effects of acidosis on survival pathways in lymphoid malignancies  | BS         | 2006      | Emory               | PHD           | Y    | N    | Medical Student (2013- 2014)  | Pathology Resident, Department of Pathology, University Hospitals Case Medical Center, Cleveland, OH (2014-Present)   |
| Rymut, Sharon Marie        | 5    | Fall 2010   | August 2015     | Pharmacology | Kelley, Thomas      | Microtubule Regulation in Cystic Fibrosis Pathophysiology  | BA         | 2010      | OH Wesleyan Univ    | PhD           | N    | N    | Post Doctoral Fellow - CWRU (2015-Present)  | Post Doctoral Fellow - CWRU (2015-Present)  |
| Sabens, Elizabeth Ann      | 6.34 | Fall 2004   | January 2011    | Pharmacology | Mieyal, John Joseph | Levodopa Drug-Induced Alteration of Thiol Homeostasis in Model Neurons Activates Apoptosis Signaling Kinase 1: Implications for the Treatment of Parkinson's Disease | BS         | 2004      | Spring Hill College | PHD           | N    | N    | Post Doctoral Fellow - Medical College of Wisconsin (2010 - 2013)                               | Laboratory Manager II, University of Wisconsin, Milwaukee (2013 - Present)  |
| Shelton, Melissa Deann     | 7.59 | Summer 2001 | January 2009    | Pharmacology | Mieyal, John Joseph | Glutaredoxin Regulation of Pro-Inflammatory Responses in a Model of Diabetic Retinopathy   | BA         | 2000      | Indiana U Southeast | PHD           | N    | N    | Postdoc Scholar, Pharmacology, CWRU (2009 - 2011)   | Research Associate at LSVAMC- CWRU (2016 - Present)   |
| Sripathy, Smitha           | 6.59 | Summer 2002 | January 2009    | Pharmacology | Montano, Monica     | Mechanisms Of Transcriptional Regulation: Gene Repression By Krab Zinc Finger Proteins And Gene Induction By Estrogen Receptor Beta                                  | BS/MS      | 2002      | Bangalore U, India  | PhD           | N    | Y    | Post Doc Fellowship, Valerie Vasiokhin's lab, Fred Hutch Cancer Center in Seattle (2008 - 2011) | Breast Cancer Postdoc Res Fellow, Univ Washington, Seattle, WA (2012 - Present)   |

## CWRU Pharmacology PhD Graduates

| Name                      | TTD  | Admit Term  | Graduation Date | Program      | Mentor                             | Thesis/Res.Proj  | Degree (s) | Year         | Institution(s)   | Degree Earned | MSTP | BSTP | Initial Position (Years)   | Current Position (Years)   |
|---------------------------|------|-------------|-----------------|--------------|------------------------------------|--|------------|--------------|--|---------------|------|------|--|--|
| Taylor, Molly Ann         | 2.59 | Summer 2010 | January 2013    | Pharmacology | Schiemann, William                 | Role of Extracellular Matrix Rigidity & Altered MicroRNA Expression on TGF- $\beta$ -mediated Breast Cancer Progression            | BA         | 2005         | U of Colorado  | PhD           | N    | N    | Post-doc, AstraZeneca, UK (2013 – 2015)  | Senior Scientist, AstraZeneca, United Kingdom (2015 – Present)                                       |
| Thomson, Jodi Michelle    | 4.25 | Summer 2001 | August 2007     | Pharmacology | Bonomo, Robert<br>Zimmerman, Peter | Overcoming Inhibitor Resistance In The Shv Beta-Lactamase  | BS         | 2001         | U of Wisconsin   | PHD           | Y    | N    | Medical student (2008-2009)  | Emergency Medicine Physician, Denver Colorado  |
| Veenstra, Alexander Ali   | 7.59 | Summer 2006 | January 2014    | Pharmacology | Kern, Timothy                      | Leukocytes and inflammation in the pathogenesis of the early stages of diabetic retinopathy  | BS         | 1993         | CWRU   | PhD           | N    | N    | Postdoctoral Scholar - CWRU (2014- Present)  | Postdoctoral Scholar - CWRU (2014- Present)  |
| Villarreal, Seth Andrew   | 5.34 | Fall 2009   | January 2015    | Pharmacology | Stewart, Phoebe                    | Examining Flexible Biological Structures   | BS         | 2009         | MIT  | PhD           | N    | N    | Post Doctoral Fellow- National Institute of Neurological Disorders and Stroke (NINDS) (2015-Present) | Post Doctoral Fellow- National Institute of Neurological Disorders and Stroke (NINDS) (2015-Present) |
| Vreeland, Amanda C        | 7.59 | Summer 2007 | January 2015    | Pharmacology | Noy, Noa                           | Cellular Retinoic Acid-Binding Protein 2 Cooperates with HuR to Stabilize RNA and Inhibit Tumor Growth                             | BS         | 2007         | SUNY-Stony Brook   | PhD           | N    | Y    | Postdoctoral Fellow - Cleveland Clinic (2014-Present)  | Postdoctoral Fellow - Cleveland Clinic (2014-Present)  |
| Wahdan, Reema S           | 6.25 | Summer 2005 | August 2011     | Pharmacology | Danielpour, David                  | Novel Insights Into Bone Morphogenetic Protein (BMP) And Mammalian Target Of Rapamycin (mTOR) Signaling Axis In Prostate Cancer    | BS<br>MS   | 2001<br>2003 | U of Denver  | PhD           | N    | Y    | Postdoc Fellow, University of Colorado- Denver (2011-present)  | Postdoc Fellow, University of Colorado- Denver (2011-present)  |
| Wang, Hui                 | 7.59 | Summer 2001 | January 2009    | Pharmacology | Danielpour, David                  | The Roles of a LIM Domain Protein, HIC-5/ARA55, in TGF- $\beta$ Signaling in Prostate Cancer Cells                                 | BS<br>MS   | 2001         | Nankai U, PRC<br>Chinese Acad of Sci                           | PHD           | N    | Y    | Pursued a Masters in Biostatistics at Rutgers (2008 – 2010)  | Biostatistician at Athenex (2015 – Present)  |
| White, Nicole Marie       | 4.59 | Summer 2002 | January 2007    | Pharmacology | Kelley, Thomas                     | Inherent flaw of cholesterol processing in cell culture and in vivo models of cystic fibrosis                                      | BA         | 2002         | Ithaca College   | PHD           | N    | Y    | Visiting Scientist, University of Cape Town (2007)   | Research Instructor, Washington University in St. Louis, MO (2015-present)                           |
| Wijerathna, Sanath Ranjan | 4.25 | Summer 2008 | August 2012     | Pharmacology | Dealwis, Chris                     | Structural And Biochemical Studies Of Ribonucleotide Reductase Inhibition By dATP And Sml1   | MD         | 1995         | U of Tennessee   | PHD           | N    | N    | Associate Lecturer, Biology, U Wisconsin Kenosha (2012 – 2015)                                       |  |
| Xie, Fang                 | 5.59 | Summer 2000 | January 2006    | Pharmacology | Siegel, Ruth                       | Neuregulin signaling and GABA-A receptor expression in cerebellar granule neurons  | BS<br>MS   | 1998         | Hunan Medical U<br>Shanghai Second U                           | PHD           | N    | Y    |  |  |
| Yeh, I-Ju                 | 6.59 | Summer 2008 | January 2015    | Pharmacology | Montano, Monica                    | Hexim1 Is an Inhibitor of Two Transcription Factors Critical in Cancer: The Androgen Receptor and Hypoxia Inducible Factor-1 Alpha | BS<br>MS   | 2000<br>2002 | National Tsing Hua University<br>National Cheng Kung U, Taiwan | PhD           | N    | N    | Postdoctoral Fellow - CWRU (2014 – 2015)   | Postdoctoral Fellow - CWRU (2016 – Present)  |

