

July 21

Nathan D. Seligson, PharmD

Contact Information

Office Address: Department of Pharmacotherapy and Translational Research
University of Florida, College of Pharmacy
580 8th St W, Box T-5, First Floor
Jacksonville, FL 32209

E-mail: nseligson@cop.ufl.edu

Telephone: 904-244-9590

Fax: 904-244-9591

Education

2011 – 2015 *Doctor of Pharmacy*
University of South Florida College of Pharmacy; Tampa, FL

2007 – 2011 *Bachelor of Science in Molecular Biology and Microbiology*
University of Central Florida; Orlando, FL

Post-Doctoral Training

2016 – 2019 *Post-doctoral Fellowship – Hematology/Oncology Translational Research*
The Ohio State University Comprehensive Cancer Center; Columbus, OH

2015 – 2016 *Residency – Internal Medicine*
Baptist Memorial Hospital; Memphis, TN

Professional Licenses

2016 – Present Licensed Pharmacist – State of Florida Board of Pharmacy

2016 – 2019 Licensed Pharmacist – State of Ohio Board of Pharmacy

2015 – 2017 Licensed Pharmacist – State of Tennessee Board of Pharmacy

Professional Appointments

06/2019 – Present *Clinical Assistant Professor*
Department of Pharmacotherapy and Translational Research
Division of Translational Research
University of Florida College of Pharmacy; Jacksonville, FL

07/2019 – Present *Clinical Pharmacogenomics Specialist*
Center for Pharmacogenomics and Translational Research
Nemours Children's Specialty Care; Jacksonville, FL

07/2016 – 06/2019 *Outpatient Clinical Trial Unit Clinical Pharmacy Specialist*
Inpatient Clinical Pharmacy Oncology Generalist
The Ohio State University Comprehensive Cancer Center; Columbus, OH

Courtesy Appointments

02/2021 – Present *Adjunct Assistant Professor – Department of Internal Medicine*
The Ohio State University College of Medicine; Columbus, OH

07/2019 – Present *Research Scientist – Department of Hematology and Oncology*
Nemours Children's Specialty Care; Jacksonville, FL

Clinical Service Development

07/2019 – Present Clinical Pharmacogenomics Specialist, Clinical Pharmacogenomics Service
The Clinical Pharmacogenomics Service is a comprehensive genomic consult service supported by the Nemours Children's Health System designed to: 1) develop in-house pharmacogenomics testing and provide a coordinated approach to the clinical implementation of pharmacogenomics within the health system; 2) provide comprehensive precision medicine services to include: genome guided therapy selection for cancer patients, research support to internal investigators, implementation of multi-site clinical research studies throughout the health system. In addition to collaborative clinical services related to the use of germline pharmacogenomics throughout the health system, I serve as coordinator of the Nemours Children's Specialty Care Molecular Tumor Board.

Research Grants

Current

Source: GlaxoSmithKline

Title: "Phase II Study of Niraparib for Leiomyosarcoma (LMS) with Alterations in the Homologous Recombination DNA Repair (HR) Pathway"

Amount: \$513,200.38; Role: co-PI (PIs: James Chen, Nathan Seligson)

Source: Foundation Medicine Incorporated

Title: "Phase II Study of Niraparib for Leiomyosarcoma (LMS) with Alterations in the Homologous Recombination DNA Repair (HR) Pathway"

Amount: \$125,000.00; Role: co-PI (PIs: James Chen, Nathan Seligson)

Completed

Source: Pelotonia Idea Grant

Title: "Personalizing Multiple Myeloma Treatment"

Amount: \$50,000.00; Role: co-investigator (PIs: Mitch Phelps, Ming Poi, Susan Geyer)

Additional Coursework

Coursera – Johns Hopkins University (Genomic Data Science Certificate Program)

Fall 2020 Python for Genomic Data Science

Fall 2020 Genomic Data Science with Galaxy

Fall 2020 Introduction to Genomic Technologies

American Association for Cancer Research (AACR)/American Society of Clinical Oncology (ASCO)

Summer 2020 Workshop on Methods in Clinical Cancer Research

American Association for Cancer Research (AACR)/European Organization for Research and Treatment of Cancer (EORTC)/European Society for Medical Oncology (ESMO)

Summer 2020 Workshop on Methods in Clinical Cancer Research

The Ohio State University

Spring 2017 BMI 8150 - Rigorous and Reproducible Design and Data Analysis

Fall 2016 BIOETHC 6010 - Biomedical Research Ethics

Fall 2016 PUBHBIO 6210 - Design and Analysis of Studies in the Health Sciences

University of Tennessee

2015 – 2016 Teaching and Learning Certificate

Publications - Original Research

* Co-first author ‡ Corresponding Author

1. **Seligson ND**, Maradiaga RD, Stets CM, Katzenstein HM, Millis SZ, Hays JL, Chen JL. Multiscale -omic assessment of *EWSR1-NFATc2* fusion positive sarcomas identifies the mTOR pathway as a potential therapeutic target. *NPJ Precis Oncol*. 2021 May 21;5(1):43. doi: 10.1038/s41698-021-00177-0.
2. Turner SC*, **Seligson ND***, Parag B, Shea KM, Hobbs ALV. Evaluation of the Timing of an MRSA PCR Nasal Screen Assay: How Long Can a Negative Assay be Used to Rule Out MRSA Pneumonia? *Am J Health Syst Pharm*. Am J Health Syst Pharm. 2021 Mar 31:zxab109. doi: 10.1093/ajhp/zxab109. Online ahead of print.
3. Li J, **Seligson ND**, Zhang X, Zemanek MC, Johnson JA, Van Gundy Z, Wang D, Phelps MA, Roddy J, Hofmeister CC, Devine SM, Sadee W, Poi MJ. Polymorphism in *ANRIL* was associated with overall survival in adult patients with hematologic malignancies after allogeneic hematopoietic stem cell transplantation. *Anticancer Res*. 2020 Oct;40(10):5707-5713. doi: 10.21873/anticancer.14585.
4. **Seligson ND**, Awasthi A, Millis SZ, Turpin BK, Meyer CF, Grand'Maison A, Liebner DA, Hays JL, Chen JL. Common Secondary Genomic Variants Associated with Advanced Epithelioid Hemangioendothelioma. *JAMA Network Open*. 2019; 2(10):e1912416. doi:10.1001/jamanetworkopen.2019.12416.
5. **Seligson ND***, Stets C*, Demoret B, Awasthi A, Grosebacher N, Shakya R, Hays J, Chen J. Targeting MDM2 expression through inhibition of histone deacetylase 2 reduces tumor growth in dedifferentiated liposarcoma. *Oncotarget*. 2019 Oct 1;10(55):5671-5679. doi: 10.18632/oncotarget.27144. eCollection 2019 Oct 1.
6. Persaud AK, Li J, Johnson JA, **Seligson N**, Sborov DW, Duah E, Cho YK, Wang D, Phelps MA, Hofmeister CC, Poi MJ. *XRCC1*-mediated DNA repair is associated with progression-free survival of multiple myeloma patients after autologous stem cell transplant. *Mol Carcinog*. 2019 Dec;58(12):2327-2339. doi: 10.1002/mc.23121. Epub 2019 Sep 22.
7. Bill KLJ*, **Seligson ND***, Hays J, Demoret B, Stets C, Duggan M, Bupathi M, Shakya R, Timmers C, Wakely P, Pollock R, Chen J. Degree of *MDM2* amplification affects clinical outcomes in dedifferentiated liposarcoma. *Oncologist*. 2019 Jul;24(7):989-996. doi: 10.1634/theoncologist.2019-0047. Epub 2019 Apr 24.
8. **Seligson ND**, Kautto E, Passen E, Stets C, Toland A, Millis S, Meyer C, Hays J, Chen J. *BRCA1/2* functional loss defines a targetable subset in leiomyosarcoma. *Oncologist*. 2019 Jul;24(7):973-979. doi: 10.1634/theoncologist.2018-0448. Epub 2018 Dec 12.
9. **Seligson ND**‡, Hobbs A, Leonard J, Mills E, Evans A, Goorha S. Evaluating the impact of the addition of cladribine to standard acute myeloid leukemia induction therapy. *Ann Pharmacother*. 2018 May; 52(5):439-445. doi: 10.1177/1060028017749214. Epub 2017 Dec 14.

Publications - Perspective and Review Articles

* Co-first author ‡ Corresponding Author

1. Cook KJ, Duong BQ, **Seligson ND**, Arn P, Vicky L, Funanage VL, Karen W, Gripp KW, Kirwin SM, Lawless ST, Lee MM, Robbins KM, West D, Blake KV. Selecting a Genomic Decision Support Platform for Implementing Pharmacogenomics at a Multi-State Pediatric Health System. *Clin Pharmacol Ther.* [In Press]
2. Nelson RS, **Seligson ND**, Del Cueto A, Parker A, Tillman EM, Hicks JK. *UGT1A1* Guided Cancer Therapy: Review of the Evidence and Considerations for Clinical Implementation. *Cancers* 2021, 13(7), 1566; <https://doi.org/10.3390/cancers13071566>
3. Apple JM, Guerci JC, **Seligson ND**, Curtis SD. Adding the second 'T': Elevating STAR to START for Behavioral Interviewing. *Am J Health Syst Pharm.* 2020 Nov 6. doi: 10.1093/ajhp/zxaa356. Online ahead of print.
4. Seligson JM, Patron AM, Berger MJ, Harvey RD, **Seligson ND**[‡]. Sacituzumab Govitecan-hziy: an Antibody-Drug Conjugate for the Treatment of Refractory, Metastatic, Triple Negative Breast Cancer. *Ann Pharmacother.* 2020 Oct 17. doi: 10.1177/1060028020966548. Online ahead of print.
5. **Seligson ND**, Warner JL, Dalton WS, Martin D, Miller RS, Patt D, Kehl KL, Palchuk MB, Alterovitz G, Wiley LK, Huang M, Shen F, Wang Y, Nguyen KA, Wong AF, Meric-Bernstam F, Bernstam EV, Chen JL. Recommendations for Patient Similarity Classes: Results of the AMIA 2019 Workshop on Defining Patient Similarity. *J Am Med Inform Assoc.* 2020 Nov 1;27(11):1808-1812. doi: 10.1093/jamia/ocaa159.
6. Faheem MMF, **Seligson ND**, Ahmad SM, Rasool RU, Gandhi SG, Bhagat M, Goswam A. Convergence of Therapy Induced Senescence (TIS) and EMT in multistep carcinogenesis: current opinions and emerging perspectives. *Cell Death Discov.* 6, 51 (2020). <https://doi.org/10.1038/s41420-020-0286-z>.
7. **Seligson ND**[‡], Knepper TC, Ragg S, Walko CM. Developing drugs for tissue agnostic indications: a paradigm shift in leveraging cancer biology for precision medicine. *Clin Pharmacol Ther.* 2020 Jun 14. doi: 10.1002/cpt.1946. [Online ahead of print]
8. Chakraborty S, Mir KB, **Seligson ND**, Nayak D, Kumar R, Goswam A. Integration of EMT and Cellular Survival Instincts in Reprogramming of Programmed Cell Death to Anastasis. *Cancer Metastasis Rev.* 2020 Jun;39(2):553-566. doi: 10.1007/s10555-020-09866-x.

Published Abstracts

1. **Seligson ND**, Maradiaga R, Stets C, Katzenstein H, Millis S, Hays J, Chen J. Multiscale omic assessment of *EWSR1-NFATc2* fusion positive sarcomas to identify conserved fusion breakpoint and activation of the mTOR pathway. *Journal of Clinical Oncology.* 2020. 38, no. 15_suppl. doi: 10.1200/JCO.2020.38.15_suppl.e23536
2. **Seligson ND**, Awasthi A, Millis S, Liebner D, Hays J, Chen J. Determinants of secondary alterations in *WWTR1-CAMTA1* fusion epithelioid hemangioendothelioma. *Journal of Clinical Oncology.* 2019. 37:15_suppl, 11045-11045.

3. Awasthi A, **Seligson ND**, Millis S, Hays J, Chen J. Histone H3 modifying genes may serve as a predictive marker for metastasis in synovial sarcoma. *Journal of Clinical Oncology*. 2019. 37:15_suppl, 11058-11058.
4. **Seligson ND**, Kautto E, Passen E, Stets C, Toland A, Meyer C, Hays J, Chen J. Genomic alterations in the homologous recombination pathway in soft-tissue sarcomas. *Journal of Clinical Oncology*. 2018. 36:15_suppl, 11549-11549.
5. Demoret B, Rogers A, **Seligson ND**, Kautto E, Hays J, Chen J. Genomic amplification of *CDK4* in dedifferentiated liposarcomas is a predictive biomarker for microtubule disrupting agents. *Journal of Clinical Oncology*. 2018 36:15_suppl, 11581-11581.
6. Stets C, Demoret B, **Seligson ND**, Grosenbacher N, Hays J, Chen J. Identification of *histone deacetylase 2 (HDAC2)* as a novel target for *MDM2* directed therapies in dedifferentiated liposarcoma. *Journal of Clinical Oncology*. 2018 36:15_suppl, 11583-11583.

Book Chapters

1. Dell K, Wantuch G, **Seligson ND**. Topical preparations: calcineurin inhibitors. In: Mackay I, Rose N, Ledford D, Lockey R. *Encyclopedia of Medical Immunology*. New York, NY: Springer; 2014: 651-654.

Oral Presentation

- 03/2021 **Seligson ND**, Kolesar JM, Salahudeen A, Hicks JK. Reimagining precision oncology by incorporating germline and somatic genomics into clinical care and research. American Society for Clinical Pharmacology and Therapeutics Annual Meeting. *Virtual Event*.
- 01/2021 **Seligson ND**, Chen JL. Understanding the genomic landscape of epithelioid hemangioendothelioma. Epithelioid Hemangioendothelioma International Scientific Conference. *Virtual Event*.
- 11/2020 **Seligson ND**, Millis SZ, Jin DX, Grosenbacher N, Bennett MP, Litvintchouk AM, Stets CW, Elvin JA, Hays JL, Chen JL. Homologous recombination DNA repair and loss of heterozygosity in leiomyosarcoma. Connective Tissue Oncology Society Annual Meeting. *Virtual Event*.
- 11/2019 **Seligson ND**, Miller R, Dalton W, Patt D, Kehl K, Wagner A, Martin D, Palchuk M, Alterovitz G, Warner J, Chen JL. Workshop 26: What Defines a Patient Like Mine? A Collaborative Effort to Provide Clarity into the Computational Nomenclature of Patient Similarity, Their Requisite Data Categories, and Associated Algorithms. American Medical Informatics Association Annual Symposium. Washington, DC.
- 11/2019 **Seligson ND**, Maradiaga R, Hays JL, Millis SZ, Chen JL. Comprehensive genomic analysis of *EWSR1-NFATC2* fusion sarcomas identify distinctive genomic alterations and upregulation of the mTOR pathway. Connective Tissue Oncology Society Annual Meeting. Tokyo, Japan.
- 03/2019 **Seligson ND**, Stets C, Demoret B, Awasthi A, Grosenbacher N, Shakya R, Hays J, Chen J. Targeting MDM2 expression through inhibition of histone deacetylase 2 reduces tumor growth in dedifferentiated liposarcoma. University of Florida Precision Medicine Conference. Orlando, FL.

Poster Presentations

- 10/2021 A. Cera, H. Naik, R. M. Wasserman, B. Duong, A. Owusu Obeng, K. J. Cook, N. Seligson, N. Cody, V. F. Funanage, K. V. Blake, S. A. Scott. Clinical pharmacogenomic test reporting preferences among adult and pediatric providers. ASHG Virtual Meeting. *Virtual Event*.
- 12/2020 Shepard E, Awasthi A, Millis S, Hays J, Chen J, **Seligson ND**. Alterations in Histone H3 Modifying Genes in Synovial Sarcoma. UF Health Cancer Center Annual Symposium. *Virtual Event*.
- 12/2020 Litvintchouk A, Bennett M, Millis S, Jin D, Grosenbacher N, Stets C, Elvin J, Hays J, Chen J., **Seligson ND**. Homologous Recombination: DNA Repair and Loss of Heterozygosity in Leiomyosarcoma. UF Health Cancer Center Annual Symposium. *Virtual Event*.
- 12/2020 **Seligson ND**, Maradiaga R, Stets C, Katzenstein H, Millis S, Hays J, Chen J. Multiscale omic assessment of EWSR1-NFATc2 fusion positive sarcomas identifies conserved fusion breakpoint and activation of the mTOR pathway. UF Health Cancer Center Annual Symposium. *Virtual Event*.
- 11/2019 Passen E, **Seligson ND**, Stets C, Demoret B, Awasthi A, Hays J, Chen J. Cell cycle checkpoint inhibition synergizes with mitotic spindle inhibition in leiomyosarcoma. Connective Tissue Oncology Society. Tokyo, Japan.
- 06/2019 **Seligson ND**, Awasthi A, Millis S, Liebner D, Hays J, Chen J. Determinants of secondary alterations in *WWTR1-CAMTA1* fusion epithelioid hemangioendothelioma. American Society of Clinical Oncology. Chicago, IL.
- 06/2019 Awasthi A, **Seligson ND**, Hays J, Chen J. Histone H3 modifying genes may serve as a predictive marker for metastasis in synovial sarcoma. American Society of Clinical Oncology. Chicago, IL.
- 03/2019 Seligson ND, Stets C, Demoret B, Awasthi A, Grosenbacher N, Shakya R, Hays J, Chen J. Targeting MDM2 expression through inhibition of histone deacetylase 2 reduces tumor growth in dedifferentiated liposarcoma. University of Florida Precision Medicine Conference. Orlando, FL.
- 04/2019 Maradiaga R, Millis S, **Seligson ND**, Chen J. Examining the Genomic and Treatment Landscape of *EWSR1-NFATc2* Fusion Sarcomas. Ohio State University Comprehensive Cancer Center (OSUCCC) Annual Scientific Meeting. Columbus, OH.
- 03/2019 **Seligson ND**, Bill K, Hays J, Demoret B, Stets C, Duggan M, Bupathi M, Shakya R, Timmers C, Wakely P, Pollock R, Chen J. Degree of *MDM2* amplification affects clinical outcomes in dedifferentiated liposarcoma. American Society for Clinical Pharmacology and Therapeutics. Washington D.C.
- 12/2018 Zhang X, **Seligson ND**, Phelps M, Roddy J, Poi M. Risk factors of acute kidney injury in allogeneic hematopoietic stem cell transplant patients receiving oral tacrolimus during the inpatient phase of care. American Society of Health-System Pharmacists. Anaheim, CA.

- 06/2018 **Seligson ND**, Kautto E, Passen E, Stets C, Toland A, Meyer C, Hays J, Chen J. Genomic alterations in the homologous recombination pathway in soft-tissue sarcomas. American Society of Clinical Oncology. Chicago, IL.
- 06/2018 Demoret B, Rogers A, **Seligson ND**, Kautto E, Hays J, Chen J. Genomic amplification of *CDK4* in dedifferentiated liposarcomas is a predictive biomarker for microtubule disrupting agents. American Society of Clinical Oncology. Chicago, IL.
- 06/2018 Stets C, Demoret B, **Seligson ND**, Grosenbacher N, Hays J, Chen J. Identification of *histone deacetylase 2 (HDAC2)* as a novel target for *MDM2* directed therapies in dedifferentiated liposarcoma. American Society of Clinical Oncology. Chicago, IL.
- 04/2018 **Seligson ND**, Duah E, Persaud A, VanGundy Z, Li J, Hofmeister C, Poi M. Combination of poly (ADP-ribose) polymerase inhibition to melphalan conditioning therapy prior to autologous hematopoietic stem cell transplant in multiple myeloma. Ohio State University Comprehensive Cancer Center (OSUCCC) Annual Scientific Meeting. Columbus, OH.
- 04/2018 Persaud A, **Seligson ND**, Johnson J, Kuo C, Li J, Sborov D, Cho Y, Lamprecht M, Phelps M, Hofmeister C, Poi M. Genetic variants of DNA repair genes associated with differential response to high-dose melphalan autologous hematopoietic stem cell transplant in multiple myeloma patients. OSUCCC Annual Scientific Meeting. Columbus, OH.
- 04/2018 Duah E, Eisenman E, **Seligson ND**, Persaud A, Li J, Poi M. Enhancing therapeutic efficacy of the CDK4/6 inhibitor, abemaciclib, by blocking autophagy in human head and neck squamous cell carcinomas. OSUCCC Annual Scientific Meeting. Columbus, OH.
- 04/2018 Zhang X, **Seligson ND**, Zemanek M, VanGundy Z, Li J, Phelps M, Hofmeister C, Poi M. Body weight based tacrolimus dosing and other factors influencing tacrolimus dose in autologous stem hematopoietic stem cell transplant. College of Pharmacy Research Day. Columbus, OH.
- 03/2018 Passen E, **Seligson ND**, Stets C, Demoret B, Hays J, Chen J. Predicting response to mitotic spindle inhibition in leiomyosarcoma. NCCN 23rd Annual Conference. Orlando, FL.
- 12/2014 **Seligson ND**, Pirani S, Williams K, Sneed K, Hill A. Implementation of a four pronged approach to develop a personalized medicine training program for pharmacy students in an inter-professional setting. American Society of Health-Systems Pharmacists Midyear Clinical Meeting. Anaheim, CA.

Select Professional Presentations

- 10/2020 A Pathway-Based Approach to Targeted Therapy in Cancer: Rationalizing Outcomes with Molecular Pharmacology. Northeast Regional Hematology Oncology Pharmacists Symposium. Virtual.
- 02/2020 Cancer Genetics and Evolution in Prostate Cancer. University of Florida Health Science Center Jacksonville. Department of Urology Grand Rounds. Jacksonville, FL.
- 11/2019 Cancer Genetics and Evolution in Gynecologic Malignancies. University of Florida Health Science Center Jacksonville. Department of Obstetrics and Gynecology Grand Rounds. Jacksonville, FL.
- 02/2019 Clinically Relevant Genomic Subtypes in Soft-tissue Sarcomas: Searching for a Needle in a Haystack Made of Haystacks. Ohio State University Wexner Medical Center. Department of Pharmacy Grand Rounds. Columbus, OH.
- 01/2016 Post-racial Medicine: Are We There Yet? Ethnicity, Race, and Pharmacogenomics in Clinical Trials. Memphis Area Pharmacists Society. ACPE CE Presentation. Memphis, TN.
- 11/2015 Monoclonal Antibodies in Oncology: An Update for “Non”-cologists. Memphis Area Pharmacists Society. ACPE CE Presentation. Memphis, TN.
- 07/2013 Transforming Pharmacy Practice through Motivational Interviewing. Florida Pharmacy Association Annual Meeting and Convention. ACPE CE Presentation Orlando, Florida.

Service to the College and University

College of Pharmacy, University of Florida

- Faculty Advisor: Bioinformatics Interest Group - Jacksonville; 2020-Present
- Member: Pathways to Career Advancement Task Force; 2019-Present
- Faculty Advisor: ASHP-SSHP Jacksonville Chapter; 2019-Present
- Faculty Advisor: Kappa Epsilon Beta-Alpha Chapter; 2019-Present
- Judge: Graduate Student Posters, College of Pharmacy Annual Research Showcase; 2020
- Member: Exemplary Clinician Award Committee; 2020

Service to the Profession

JCO Clinical Cancer Informatics, Journal

- Reviewer; 2020-Present

Annals of Pharmacotherapy, Journal

- Reviewer; 2020-Present

American Medical Informatics Association

- Annual meeting content reviewer; 2020-Present

American Society for Clinical Pharmacology and Therapeutics

- Oncology community steering committee member; 2020-Present
- Annual meeting content reviewer; 2020-Present

M2Gen Oncology Research Information Exchange Network (ORIEN)

- Sarcoma landscape analysis committee member; 2020-Present

American Association of Colleges of Pharmacy

- Annual meeting content reviewer; 2021-Present

Teaching Experience

01/2020 – Present

University of Florida; Jacksonville, FL

PHA 5901: Pharmacy Research Elective

- Summer 2021: 1 credit
- Spring 2021: 2 credits
- Fall 2020: 5 credit hours
- Summer 2020: 4 credit hours

Putting Families First:

- Spring 2021: Small Group Leader
- Fall 2020: Small Group Leader

PHA 5012: Clinical Applications of Personalized Medicine

- Spring 2021 Lecture: Precision Medicine in Cancer (2hr)
- Spring 2021 Workshop: Precision Medicine in Cancer (2hr)
- Spring 2020 Workshop: Precision Medicine in Cancer (2hr)

PHA 5759 Advanced Pharmacy Practice Experience Readiness

- Spring 2021 Campus Course Coordinator
- Spring 2020 Campus Course Coordinator

PHA 6935 Clinical Applications of Precision Medicine: Oncology

- Spring 2021 Course Coordinator
- Spring 2021 Lecture: Course Introduction (1hr)
- Spring 2021 Lecture: Germline and Somatic Testing (1hr)
- Spring 2021 Lecture: A Pathway-Based Approach to Targeted Therapy in Cancer (1hr)
- Spring 2021 Lecture: Tissue Agnostic Therapy (1hr)
- Spring 2021 Lecture: Molecular Tumor Boards (1hr)
- Spring 2021 Lecture: Capstone Lecture (3hr)
- Spring 2020 Course Co-coordinator

PHA 5956: Foundations of Clinical Pharmacy Practice

- Summer 2020 Small Group Leader

PHA5165L: Professional Practice Skills Labs V

- Fall 2019: Various

07/2016 – 05/2019

Ohio State University; Columbus, OH

PHR 6302 Concepts in Patient Care 2

- Spring 2019 Lecture: Introduction to Clinical Pharmacogenomics

PHR 7604 Integrated Pharmacotherapy 4

- Spring 2019 Lecture: Precision Medicine in Oncology
- Spring 2019 Workshop: Molecular Tumor Board

PHR 7603 Integrated Pharmacotherapy 3

- Fall 2018 Lecture: Clinical Pharmacogenomics
- Fall 2018 Lecture: Pharmacogenomics in Neuropsychology

PHR 7601 Integrated Pharmacotherapy 1

- Fall 2018 Lecture: Clinical Cardiovascular Pharmacogenomics

CBG 5700 Personalized Therapeutics and Pharmacogenomics

- Spring 2017 Lecture: Targeted Cancer Therapy

- 08/2015 – 05/2016 University of Tennessee; Memphis, TN
PHCY 223 Applied Therapeutics I
- Spring 2016 Longitudinal Workshop: Clinical Case Discussions
PHCY 321 Landmark Clinical Trials
 - Spring 2016 Lecture: Clinical Trial Design
PHCY 313 Applied Therapeutics II
 - Fall 2015 Longitudinal Workshop: Clinical Case Discussions

Honors and Awards

- 2020 Member - Leiomyosarcoma International Research Roundtable
 2020 Flims Alumni Club
 2018 Sarcoma Central Science Spotlight Winner (twice)
 2018 Top Poster Presentation – Ohio State University Comprehensive Cancer Center Annual Scientific Meeting
 2018 First Place Poster Presentation (Residents and Fellows Division) – Ohio State University College of Pharmacy Research Day
 2018 Second Place Poster Presentation (Graduate Student Division) – Ohio State University College of Pharmacy Research Day
 2015 Inducted into Phi Lambda Sigma (Honorary Pharmacy Leadership Fraternity)

Professional Memberships

- 2020 – Present American Association of Colleges of Pharmacy (AACP)
 2020 – Present Hematology/Oncology Pharmacy Association (HOPA)
 2019 – Present Connective Tissue Oncology Society (CTOS)
 2019 – Present American Medical Informatics Association (AMIA)
 2017 – Present American Society for Clinical Pharmacology and Therapeutics (ASCPT)

Additional Skills

- Proficient in *Phoenix WinNonlin 64* for non-compartmental analysis (NCA)
 Proficient in *R* for statistical and bioinformatic analysis
 Proficient in *R* for genomic analysis
 Working knowledge in *Python* and *Galaxy* for genomic analysis
 Proficient in *Stata* for statistical analysis
 Working knowledge in clinical trial design
 Proficient in basic and translational pharmacology

Community Service

- 2020 – Present Take Stock in Children
 2017 – 2019 Hope Presbyterian Church – Children’s Nursery Staff
 2015 New Hope Christian Academy – Volunteer Groundskeeper
 2012 – 2015 Holy Trinity Presbyterian Church - Sound Engineer
 2012 Dover Boys & Girls Club - Youth flag football coach, mentor