

Louis Taylor Rodgers

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EDUCATION

B.S. Chemistry	Centre College Danville, KY Cumulative GPA: 3.83 Math/Science GPA: 3.93 <i>Magna Cum Laude</i>	May 2015
Ph.D. Candidate	University of Kentucky College of Pharmacy Department of Pharmaceutical Sciences Lexington, KY Cumulative GPA: 4.00	Aug 2019 - Present
M.D. Candidate	University of Kentucky College of Medicine Lexington, KY Cumulative Average: 91.4 <i>Promoted with distinction (2017-2018)</i> <i>Promoted with distinction (2018-2019)</i>	Aug 2017 – Present

RESEARCH EXPERIENCE

University of Kentucky; Lexington, KY Graduate Program in Pharmaceutical Sciences

Graduate Research Assistant **July 2019 – Present**
Supervisor: Bjoern Bauer, Ph.D.

- Project: “Repurposing FDA-approved PI3K/Akt Inhibitors to Improve Anti-Cancer Drug Brain Uptake in GBM Resection Models”

Kentucky Clinical Trials Network (NCTN) Coordinating Center Lexington, KY

Administrative Research Assistant **Dec 2017 – August 2018**
Supervisors: Kristine Damron & Mindy Dowden-Kruger

- Supported studies, operations and site study teams conducting clinical trials across the state.

University of Kentucky; Lexington, KY Molecular & Cellular Biochemistry

MD/PhD Summer Research Rotation **April 2018 – August 2018**
Supervisor: Jessica Blackburn, Ph.D.

- Studied the role of non-VEGF angiogenesis in tumor progression, with the goal of identifying new therapeutic agents that may work with current angiogenic therapies to produce a more durable and effective anti-tumor response in patients.

University of Kentucky; Lexington, KY
Sanders-Brown Center on Aging

MD/PhD Summer Research Rotation

June 2017 – March 2017

Supervisors: Bjoern Bauer, Ph.D. & Anika Hartz, Ph.D.

- Optimized the X-CLARITY™ tissue clearing system for use in the lab.
- Successfully cleared mouse whole brain, brain slices, and spinal cord.
- Labeled brain slices with anti-collagen IV antibody and imaged blood-brain barrier vasculature.

National Cancer Institute, National Institute of Health; Bethesda, MD
Clinical Pharmacology Program, Neuro-Oncology Branch

Postbaccalaureate CRTA Fellow

July 2015 – May 2017

Supervisors: Katherine Warren, M.D. & William Figg, Pharm.D.

- Conducted pharmacokinetic (PK) studies in an effort to develop new therapeutic strategies for the treatment of cancers in children with tumors of the central nervous system.
- Validated uHPLC-MS/MS methods for drug quantification.
- Attend weekly lab meetings with Figg lab (clinical pharmacology/genitourinary malignancies) and Warren lab (pediatric neuro-oncology).

Centre College, Danville, KY

Chemistry Research Student

June 2013 – May 2015

Supervisor: Kerry Paumi, Ph.D.

- Project: “Synthesis, characterization, and evaluation of peptide-linked metal chelators for the treatment of Alzheimer’s disease”
- Synthesized small peptide fragments and linked to metal chelating ligands to be used in fluorescence assays to determine efficacy in preventing/reversing amyloid-beta plaque formation.

The Johns Hopkins University School of Medicine; Baltimore, MD
Department of Pharmacology & Molecular Sciences

Pharmacology Research Intern

June 2014 – August 2014

Supervisor: Philip A. Cole, M.D./Ph.D.

- Project: “Regulation of substrate selectivity of p300/CBP acetyltransferase”
- Utilized protein expression, protein purification, and radioactive enzyme and protein microarray assays to screen for novel substrates of p300/CBP acetyltransferase and to determine the effect of the inhibitor SGC112 on the degree of protein acetylation.

PUBLICATIONS – PUBLISHED (Impact Factor (IF) of year of publication)

Lester McCully C, Rodgers LT, Cruz R, Thomas ML, Peer CJ, Figg WD, Barnard D, Warren KE. Cerebrospinal fluid flow rate and apparent volume in rhesus macaques (*Macaca mulatta*) as determined by the pharmacokinetics of intrathecally administered inulin. *Comp Med*. 2020. doi: 10.30802/AALAS-CM-99-990010 (IF: 0.800)

Hipp S, Goldman S, Kaushal A, Krauze A, Citrin D, Glod J, Walker K, Shih JH, Sethumadhavan H, O’Neill K, Garvin JH, Glade-Bender J, Karajannis MA, Atlas MP, **Rodgers LT**, Peer CJ, Savage J, Camphausen KA, Brunson N, Packer R, Streicher H, Figg WD, Warren KE. A Phase I Trial of Lenalidomide and Radiotherapy in Children with Diffuse Intrinsic Pontine Gliomas or High-Grade Gliomas. *J Neurooncol*. 2020. doi: 10.1007/s11060-020-03627-0 (IF: 3.267)

Vyas KS, DeCoster RC, Burns JC, **Rodgers LT**, Shroul MA, Mercer JP, Coquillard C, Dugan AJ, Rinker BD, Vasconez HC. Autologous Fat Grafting Does Not Increase Risk of Oncologic Recurrence in the Reconstructed Breast. *Ann Plast Surg*. 2020. doi: 10.1097/SAP.0000000000002285 (IF: 1.448)

McCully CM, **Rodgers LT**, Cruz R, Thomas ML, Peer CJ, Figg WD, Warren KE. Plasma and Cerebrospinal Fluid Pharmacokinetics of the DNA methyltransferase inhibitor, 5-azacytidine, Alone and in Combination with Inulin in Non-human Primate CSF Models. *Neuro-Oncology Advances*. 2020. doi: 10.1093/oaajnl/vdaa005

Rodgers LT, McCully CM, Odabas A, Cruz R, Peer CJ, Figg WD, Warren KE. Characterizing the Pharmacokinetics of Panobinostat in a Non-human Primate Model for the Treatment of Diffuse Intrinsic Pontine Glioma. *Cancer Chemother Pharmacol*. 2020; 85(4): 827-830. doi:10.1007/s00280-019-04021-y (IF: 3.008)

Peer CJ, Jung-Min L, Roth J, **Rodgers L**, Nguyen J, Annunziata CM, Minasian L, Kohn EC, Figg WD. Population pharmacokinetic analyses of the effect of carboplatin pretreatment on olaparib in recurrent or refractory women's cancers. *Cancer Chemother Pharmacol*. 2017; 80(1): 165-175. doi: 10.1007/s00280-017-3346-1 (IF: 2.808)

Rodgers L, Peer CJ, Figg WD. Diagnosis, staging, and risk stratification in prostate cancer: utilizing diagnostic tools to avoid unnecessary therapies and side effects. *Cancer Biol Ther*. 2017; 18(7): 470-472. doi: 10.1080/15384047.2017.1323600 (IF: 3.373) (Review)

Miyahara H, Yadavilli S, Natsumeda M, Rubens J, **Rodgers L**, Kambhampati M, Taylor I, Kaur H, Asnaghi L, Eberhart CG, Warren KE, Nazarian J, Raabe EH. The dual mTOR kinase inhibitor TAK 228 inhibits tumorigenicity and enhances radiosensitization in diffuse intrinsic pontine glioma. *Cancer Lett*. 2017; 400: 110-116. doi: 10.1016/j.canlet.2017.04.019 (IF: 6.491)

League-Pascual JC, McCully CM, Shandilya S, Ronner L, **Rodgers L**, Cruz R, Peer CJ, Figg WD, Warren KE. Plasma and cerebrospinal fluid pharmacokinetics of select chemotherapeutic agents following intranasal delivery in a non-human primate model. *J Neurooncol*. 2017; 132(3): 401-407. doi: 10.1007/s11060-017-2388-x (IF: 3.060)

Peer CJ, Ronner L, **Rodgers L**, McCully CM, Warren KE, Figg WD. Quantification of temozolomide in nonhuman primate fluids by isocratic ultra-high performance liquid chromatography-tandem mass spectrometry to study brain tissue penetration following intranasal or intravenous delivery. *Separations*. 2016; 3(1), 4. doi: 10.3390/chromatography3010004 (IF: 2.690)

NATIONAL, INTERNATIONAL POSTERS & ABSTRACTS

Rodgers L, McCully CM, Peer CJ, Figg WD, Warren KE. (2016, June). *Plasma and cerebrospinal fluid (CSF) pharmacokinetics of panobinostat following oral administration to nonhuman primates*. Poster presented at the 17th International Symposium on Pediatric Neuro-Oncology, Liverpool, ENG. *Neuro. Oncol*. 2016; 18 (suppl. 3), iii55. doi: 10.1093/neuonc/now073.33

REGIONAL, LOCAL, INSTITUTIONAL POSTERS & ABSTRACTS

Rodgers LT, Schulz JA, Hartz AMS, Bauer B. 2021, Mar. Repurposing FDA-approved PI3K/Akt Inhibitors to Improve Anti-Cancer Drug Brain Uptake in GBM Resection Models. Poster presented at the University of Kentucky College of Pharmacy Rho Chi Research Day, Lexington, KY. *Virtual*.

Rodgers LT, Schulz JA, Hartz AMS, Bauer B. 2021, Mar. Repurposing FDA-approved PI3K/Akt Inhibitors to Improve Anti-Cancer Drug Brain Uptake in GBM Resection Models. Poster presented at the 26th Annual Blood-Brain Barrier Consortium Meeting, Lexington, KY. *Virtual*.

Rodgers LT, Schulz JA, Hartz AMS, Bauer B. 2021, Mar. Repurposing FDA-approved PI3K/Akt Inhibitors to Improve Anti-Cancer Drug Brain Uptake in GBM Resection Models. Poster presented at the 15th Annual AOA Groves Memorial Student Research Symposium, Lexington, KY. *Virtual*.

Rodgers L, Schulz JA, Hartz AMS, Bauer B. 2020, Feb. Picking up Brain Penetration through PI3K/Akt Inhibition: A Novel Approach to Increase Drug Brain Concentrations for the Treatment of Glioblastoma. Poster presented at the 14th Annual AOA Groves Memorial Student Research Symposium, Lexington, KY.

Rodgers L, Hartz AMS, Wilkop TE, Bauer B. 2019, Apr. “See blue. See through.” CLARITY for 3-D in vivo imaging of the neurovascular unit. Poster presented at the 14th Annual CCTS Spring Conference, Lexington, KY.

Rodgers L, Hartz AMS, Wilkop TE, Bauer B. 2018, Apr. “See blue. See through.” CLARITY for 3-D in vivo imaging of the neurovascular unit. Poster presented at the 13th Annual CCTS Spring Conference, Lexington, KY.

Rodgers L, McCully CM, Peer CJ, Figg WD, Warren KE. 2016, Apr. Plasma and cerebrospinal fluid (CSF) pharmacokinetics of panobinostat following oral administration to nonhuman primates. Poster presented at the NIH Postbac Poster Day, Bethesda, MD.

Zucconi B, **Rodgers L**, Cole PA. 2015, Apr. Regulation of substrate selectivity of p300/CBP acetyltransferase. Poster presented at the 8th Centre College Rice Symposium, Danville, KY.

Rodgers L*, Hart M*, Parekh M, Paumi KP. 2015, Apr. Synthesis of peptide-linked metal chelators as a potential treatment for alzheimer’s disease. Poster presented at the 8th Centre College Rice Symposium, Danville, KY.

*authors contributed equally to poster

Theodore E*, **Rodgers L***, Bloom J, Fieberg J. 2015, Apr. Identifying ancient glass: the role of x-ray fluorescence (XRF) spectroscopy in art historical research. Poster presented at the 8th Centre College Rice Symposium, Danville, KY.

*authors contributed equally to poster

Rodgers L*, Hart M*, Parekh M, Paumi KP. 2015, Apr. Synthesis of peptide-linked metal chelators as a potential treatment for alzheimer’s disease. Poster presented at the University of Kentucky Undergraduate Research in Chemistry Regional Poster Competition, Lexington, KY.

*authors contributed equally to poster

Rodgers L, Parekh M, Paumi KP. 2014, Apr. Synthesis of peptide-linked metal chelators as a potential treatment for alzheimer’s disease. Poster presented at the 7th Centre College Rice Symposium, Danville, KY.

RESEARCH ORAL PRESENTATIONS

Rodgers L, Hart M, Parekh M, Paumi KP. 2015, Apr. Synthesis of peptide-linked metal chelators as a possible treatment for alzheimer’s disease. Oral presentation at the Centre College Rice Symposium, Danville KY.

Rodgers L, Parekh M, Paumi KP. 2013, Nov. Synthesis of peptide-linked metal chelators as a possible treatment for alzheimer’s disease. Oral presentation at the Kentucky Academy of Science (KAS) 99th Annual Meeting, Morehead, KY.

LECTURES AND ACADEMIC PRESENTATIONS

Neurological Examination, Human Neuropsychology course, Centre College, 2017

FUNDING

2017 – Present	University of Kentucky MD/PhD Fellowship
2021	Pharmaceutical Sciences Graduate Program Student Travel Award (\$75)
2020	Northern KY/Greater Cincinnati UK Alumni Fellowship
2020	Pharmaceutical Sciences Graduate Program Student Travel Award (\$1,000)
2018 – 2019	University of Kentucky Professional Student Mentored Research Fellowship Program (PSMRF)
2015 – 2017	NIH Intramural Research Training Award (IRTA)

HONORS & AWARDS

2016	Commended poster in high grade gliomas and DIPG category, <i>International Symposium on Pediatric Neuro-Oncology</i>
2015	Inorganic Chemistry Department Award, <i>Centre College</i>
2014	Junior Marshal, <i>Centre College</i>
2013	2nd Place Presentation in Organic/Inorganic Chemistry Division, <i>Kentucky Academy of Science</i>
2013	Organic Chemistry Department Award, <i>Centre College</i>

WORK EXPERIENCE

2019 – Present	Graduate Research Assistant, <i>University of Kentucky</i>
2015 - 2017	Postbac CRTA Fellow, <i>National Cancer Institute</i>
2013 - 2014	House Manager, <i>Norton Center for the Arts</i>
2012 - 2014	Chemistry Laboratory Teaching Assistant, <i>Centre College</i>
2012 - 2013	Head Usher, <i>Norton Center for the Arts</i>
2011 - 2012	Usher, <i>Norton Center for the Arts</i>

SCHOLARLY AND PROFESSIONAL MEMBERSHIPS

Clubs and Organizations:

2020 – Present	UK MD/PhD Internal Advisory Steering Committee
2017 – 2019	Curriculum Committee, <i>UKCOM</i>
2018 – 2019	Big Sib/Lil Sib Program Co-Director, <i>UKCOM</i>
2017 – 2018	LCME Independent Student Analysis Committee: M1 Liaison, <i>UKCOM</i>
2015	Phi Beta Kappa – <i>Beta Chapter, Centre College</i>
2014 – 2015	President of American Chemical Society, <i>Centre College</i>
2013 - 2015	Chemistry Department Representative, <i>Centre College</i>
2013 - 2015	Gamma Sigma Alpha Greek Honorary Society, <i>Centre College</i>
2013 - 2014	Science and Math Representative – SGA Student Senate, <i>Centre College</i>

Athletics:

2011 - 2015	Swim & Dive Team, <i>Centre College</i>
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MEMBERSHIP

- American Association for Cancer Research (AACR)
- American Association of Pharmaceutical Sciences (AAPS)
- American Society of Clinical Oncology (ASCO)
- Society of Neuro-Oncology (SNO)