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## EDUCATION

**Ph.D., Pharmacy/Pharmaceutical and Biomedical Sciences**, College of Pharmacy, University of Georgia, Athens, Georgia, May 2016

**B.S., Chemistry** Sweet Briar College, Sweet Briar, Virginia, May 2010

## RESEARCH EXPERIENCE

*Post-doctoral Research:* Development of macrocyclic tetrapeptides as kappa opioid receptor antagonists and potential anti-cancer therapeutics, 2016-present

Advisor: Jane V. Aldrich, Ph.D.

- Design and synthesis of macrocyclic tetrapeptides
- Evaluation of anti-proliferative activity in cancer cells
- Target identification of lead macrocyclic tetrapeptides

*Graduate Research:* Cyclization Strategies to Stabilize Epidermal Growth Factor Receptor Dimerization Arm Mimics, 2010-2016

Advisor: Eileen J. Kennedy, Ph.D.

- Design and synthesis of constrained peptides mimicking the EGFR dimerization arm
- Evaluation of the stability and inhibitory activity of chemically modified peptides

*Undergraduate Honors Thesis:* The Synthesis and Photochemical Study of 3(2*H*)-Furanones, 2008-2010

Advisor: Abraham L. Yousef, Ph.D.

- Synthesis of natural product derivatives for *in vitro* studies
- Synthesis and photochemical evaluation of substituted furanones

## PUBLICATIONS

M.D. Fulton, **L.E. Hanold**, Z. Ruan, S. Patel, A.M. Beedle, N. Kannan, E.J. Kennedy. Design of allosteric peptide inhibitors targeting the kinase dimer interface of EGFR. *Bioorg. Med. Chem.* **2017**. Epub ahead of print. DOI: 10.1016/j.bmc.2017.08.051

A. Mukhopadhyay, **L.E. Hanold**, H. Thayele Purayil, S. Gisemba, S. Sanadheera, J.V. Aldrich. Macrocyclic peptides decrease c-Myc protein levels and reduce prostate cancer cell growth. *Cancer Biol Ther.* **2017**. 18(8): 571-583.

**L.E. Hanold**, M.D. Fulton, E.J. Kennedy. Targeting kinase signaling pathways with constrained peptide scaffolds. *Pharmacol. Ther.* **2017**. 173: 159-170.

S. Mohanty, K. Oruganty, A. Kwon, D. P. Byrne, S. Ferries, Z. Ruan, **L.E. Hanold**, S. Katiyar, E.J. Kennedy, P.A. Eyers, N. Kannan. Hydrophobic Core Variations Provide a Structural Framework for Tyrosine Kinase Evolution and Functional Specialization. *PLoS Genetics*. **2016**. 12(2), e1005885.

Y. Teng, A. Bahassan, D. Dong, **L.E. Hanold**, X. Ren, E.J. Kennedy, J.K. Cowell. Targeting the WASF3-CYFIP1 complex using stapled peptides suppresses cancer cell invasion. *Cancer Res.* **2016**. 76(4):965-973.

J.S. Hermann, P. Skroblin, D. Bertinetti, **L.E. Hanold**, E.K. von der Heide, E.M. Wagener, H.M. Zenn, E. Klussmann, E.J. Kennedy and F.W. Herberg. Neurochondrin is an atypical RII $\alpha$ -specific A-kinase anchoring protein. *Biochim. Biophys. Acta.* **2015**. 1854, 1667-1675.

Y. Wang, T.G. Ho, E. Franz, J.S. Hermann, F. D. Smith, H. Hehnly, J.L. Esseltine, **L.E. Hanold**, J.D. Scott, F.W. Herberg, E.J. Kennedy. PKA-type I Selective Constrained Peptide Disruptors of AKAP Complexes. *ACS Chem. Biol.* **2015**. 10(6), 1502-1510.

**L.E. Hanold**, C.P. Watkins, N.T. Ton, P. Liaw, A.M. Beedle, E.J. Kennedy. Design of a Selenylsulfide-Bridged EGFR Dimerization Arm Mimic. *Bioorg. Med. Chem.*, **2015**. 23(12), 2761-2766.

**L.E. Hanold**, K. Oruganty, N.T. Ton, A.M. Beedle, N. Kannan, E.J. Kennedy. Inhibiting EGFR Dimerization Using Triazolyl-Bridged Dimerization Arm Mimics. *PLoS ONE*, **2015**, 10(3), e0118796.

A.L. Yousef, A.B. Carpenter, R.C. Fyffe, **L.E. Hanold**, E.M. Schmelz, H. Zhou. Synthesis and Bioactivity Testing of 2-(*p*-Chlorobenzylidene)-5-Methyl-3(2H)-Furanone. *Journal of Undergraduate Chemistry Research*, **2011**, 10(3), 100-102.

## PRESENTATIONS

Exploring the Target Pathway of [D-Trp]CJ-15,208 in Prostate Cancer

- UFHCC Research Day, Gainesville, FL, November 2017

Derivatization of a Macrocyclic Tetrapeptide Kappa Opioid Receptor Antagonist to Improve Solubility and Physicochemical Properties

- 25<sup>th</sup> American Peptide Symposium, Whistler, British Columbia, June 2017

Cyclization Strategies for the Development of EGFR Dimerization Arm Mimics

- UGA Conference on Drug Discovery, GA, November 2015
- UGA Cancer Center Retreat, Athens, GA, October 2015
- 24<sup>th</sup> American Peptide Symposium, Orlando, FL, June 2015

Linking Arms: The Design of Triazolyl-Bridged Peptides as Inhibitors of Epidermal Growth Factor Receptor Dimerization

- International Chemical Biology Society Conference, San Francisco, CA, November 2014

Triazole-Containing Peptides as Inhibitors of Epidermal Growth Factor Receptor

- GSPS 5<sup>th</sup> Annual Scientific Research Day, Athens, GA, August 2013
- 23<sup>rd</sup> American Peptide Symposium, Waikaloa, HI, June 2013

#### Inhibiting EGFR: A Peptide Based Approach

- Sixth Peptide Engineering Meeting (PEM6), Atlanta, GA, October 2012
- Southern Translational Education and Research (STaR) Conference, Augusta, GA, September 2012
- GSPS 4<sup>th</sup> Annual Scientific Research Day, Athens, GA, May 2012
- UGA Conference on Drug Discovery, Athens, GA, November 2011

#### The Synthesis and Photochemical Study of 3(2H)-Furanones

- Mid-Atlantic Regional Conference of Undergraduate Scholarship, Sweet Briar, VA, October 2009
- National American Chemical Society Undergraduate Poster Session, Washington, DC, August 2009

#### 3(2H)-Furanones: The Synthesis and Photochemical Study of Potential COX-2 Inhibitors

- South Eastern Regional Meeting of the American Chemical Society Undergraduate Poster Session, Nashville, TN, November 2008
- Mid-Atlantic Regional Conference of Undergraduate Scholarship, Sweet Briar, VA, October 2008

### HONORS AND AWARDS

<i>Graduate Student Poster Award</i> , UGA Cancer Center Retreat	2015
<i>Joseph P. LaRocca Award</i> , University of Georgia	2015
<i>American Peptide Symposium Travel Award</i> , 24 <sup>th</sup> APS Symposium	2015
<i>Outstanding Teaching Assistant</i> , University of Georgia	2013
<i>STaR-2012 Travel Award</i> , Southern Translational Education and Research Conference, Cancer Center, Georgia Health Science University	2012
<i>Outstanding Graduate Student Poster</i> , GSPS 4 <sup>th</sup> Annual Scientific Research Day, University of Georgia	2012
<i>Graduate School Assistantship</i> , University of Georgia	2010
<i>Phi Beta Kappa</i>	2010
<i>James Lewis Howe Award</i> , Blue Ridge Chapter of ACS	2010
<i>Iota Sigma Pi</i>	2009

### TEACHING EXPERIENCE

<i>Teaching Assistant</i> , College of Pharmacy, University of Georgia, Athens, GA	
Drug Development Laboratory II	2015
Drug Development Laboratory I	2014
Pharmaceutical and Biomedical Sciences Seminar	2014
Pharmacology II	2014
Principles of Medicinal Chemistry II	2014
Quantitative Methods in Pharmacy	2014
Pharmacy Skills Laboratory III	2012, 2013
Pharmacy Skills Laboratory IV	2011, 2013
Anatomy Laboratory	2012
Human Physiology and Pathology	2010, 2011

*Invited Lecturer*, College of Pharmacy, University of Georgia, Athens, GA 2016  
“Protein and Peptide Therapeutic Development”

## **OTHER EXPERIENCE**

### **Leadership**

UF Postdoc Editors Association, University of Florida, Postdoc Editor 2017-present  
25<sup>th</sup> APS Symposium Student Activities Committee, Postdoc Member 2017  
24<sup>th</sup> APS Symposium Student Activities Committee, Graduate Student Member 2015  
College of Pharmacy Graduate Education Committee, Graduate Student Representative 2014-2015  
Graduate Students and Postdoctoral Associates in Science, Treasurer 2012-2014  
American Association of Pharmaceutical Scientists UGA Chapter, President 2013-2014  
American Association of Pharmaceutical Scientists UGA Chapter, Secretary 2012-2013

### **Volunteer**

Judge, 3 Minute Thesis Competition, University of Florida 2017  
Abstract Screener, AAPS Annual Meeting and Exposition 2012-2015  
UGA Relay for Life Fundraising Volunteer 2012-2015  
Georgia Science and Engineering Finals Junior Judge 2013-2014  
Young Dawg Summer Program Graduate Student Mentor 2012-2015

## **PROFESSIONAL MEMBERSHIPS**

American Peptide Society (APS) 2013-present  
American Association for the Advancement of Science (AAAS) 2012-present  
American Association of Pharmaceutical Scientists (AAPS) 2010-present  
American Chemical Society (ACS) 2009-present