

Ha Pham

CONTACT

INFORMATION

Department of Chemistry
The University of Illinois at Chicago
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EDUCATION

PhD in Chemistry, University of Illinois at Chicago

2014-2020

- Advisor Dr. Lawrence Miller
- Thesis: High Dynamic-Range Lanthanide-Based Biosensors for Live-Cell Imaging and High Throughput Screening

B.S in Chemistry, Vietnam National University

2009-2014

- Advisor: Dr. Anh Le
- Senior thesis: Synthesis and cytotoxicity of (γ -arylpyridino)-dibenzoaza-14-crown-4-ether

RESEARCH INTERESTS

I am interested in Biochemistry; specifically Cholesterol signaling, Time-gated luminescence microscopy, FRET-based biosensors, TR-FRET assay, Gene manipulation,

RESEARCH EXPERIENCES

Postdoctoral researcher in Dr. Cho's lab at UIC

2020-

- Design and conduct biochemistry and chemical biology experiment to study quantitative imaging of signaling lipids and cell signaling processes.

Graduate Researcher in Dr. Miller's lab at UIC

2014-2020

- Design and conduct biochemistry and chemical biology experiments for developing high dynamic-range Lanthanide-based FRET biosensors of Rac1.

Intern in Dr. Young-Tae Chang's lab at National University of Singapore

Spring 2014

- Synthesize potassium-ion sensors and characterize their chemical properties by spectroscopy assay.

Intern in Dr. Martin Gruebele's lab at UIUC

Summer 2013

- Understand the complex undulatory swimming patterns of Zebrafish by analyzing quantitatively the fish swimming and developing the fish locomotion models using NEURON software.

**Undergraduate Research Assistant in Dr. Anh Le's lab at Vietnam National University
Summer 2009-2013**

- Apply multi-component reaction in the synthesis of azacrown ethers containing both crown ether pigments and six-member heterocycles of nitrogen and characterize their chemical and biological properties.

PUBLICATIONS AND
PREPRINTS

1. Pawanthi Buwaneka, Arthur Ralko, Sukhamoy Gorai, Ha Pham, and Wonhwa Cho, Phosphoinositide binding activity of Smad2 is essential for its function in TGF signaling (under the second round review at Journal of Biological Chemistry).
2. Ha Pham, Mona Hoseini Soflaee, Andrei V Karginov, Lawrence W Miller FRET and LRET Biosensors for Cell-based Imaging and Screening of Rac1 Activation, preprint available at <https://www.biorxiv.org/content/10.1101/2021.06.25.449998v1>
3. Ha T Pham, Lawrence W Miller, Lanthanide-based resonance energy transfer biosensors for live-cell applications, Methods in Enzymology; 2020, In Press.
4. Ting Chen, Ha T Pham, Ali Mohamadi, Lawrence W Miller, Single-chain lanthanide luminescence biosensors for cell-based imaging and screening of protein-protein interactions, iScience, Volume 23, Issue 9, 2020.
5. Rosenhouse-Dantsker A., Pham H. T., Papadantonakis G. A. Chem 100 Laboratory Manual. Chicago: Hayden-McNeil, 2018. Print.
6. Le A. T., Truong H. H., Nguyen P. T., Dao N. T., To T. H., Pham H. T., Soldatenkov A. T., Synthesis and biological activity of (γ -arylpyridino)-dibenzoaza-14-crown-4 ethers, Mendeleev Communications, 25(3), 224-225, 2015.
7. Le A. T., Truong H. H., Nguyen P. T., Pham H. T., Kotsuba V. E., Soldatenkov A. T., Khrustalev V. N., Wodajo A. T., Synthesis and Molecular Structure of Dibenzo [4-(α -Thienyl- and α -Pyrrolyl) pyrido]aza-14-crown-4 Ethers, Macrocyclics, 7(4), 386-390, 2014.
8. Girdhar K., Benitez-Jones M., Pham H. T., Nelson M., Gruebele M., Chemla Y., The behavioral space of zebrafish locomotion and its neural network model, Bulletin of the American Physical Society, 2014.

PATENTS

1. Le A., Soldatenkov T., Nguyen P., To T., Truong H., Pham H., 2013. Synthesis of (γ -arylpyridino)-dibenzoaza-14-crown-4 ether derivatives and their cytotoxicity on four cancer cell lines. Patent No. VN 19514.

TEACHING AND
SERVICES

- Volunteer for Boys and Girls club of Chicago** **2016 - 2017**
- Every week, we helped young students do hands-on experiments and activities. The main goal of this program is to motivate them to study science. Click [here](#) to learn more about this wonderful program.
- Laboratory Coordinator for CHEM 100 at UIC** **2016-2020**
- Coordinated activities in the chemistry lab; procured materials, services and facilities necessary for science instruction.
- Volunteer for Action Center for City Development, Hanoi,** **2011-2012**
- President of Chemistry English Club at VNU University of Science,** **2011-2013**

HONORS AND
AWARDS

- Postdoctoral Small Scholarship Award, UIC, 2020.
- Travel award to attend and give a talk at the ACS 2020 meeting, UIC, 2020 (very unfortunately, the event was canceled due to the pandemic).
- Teaching Assistant of the year, Department of Chemistry, UIC, 2016.
- POSCO scholarship, Posco T.J.Park Fund Foundation, 2011 - 2013.
- 2nd prize, Student Research Workshop, VNU University of Science, 2013
- The prominent young students of Vietnam National University, 2013
- 1st team prize, Chemistry Olympiad Contest, VNU University of Science, 2011

COMPUTER SKILLS • Python • RStudio