Heajin Lee

Education

- 2018 University of Miami, Ph.D.
- 2013 Kangwon National University, B.S.

Focal Points

- Heajin Lee's academic interests are in chemistry education, bio-organic chemistry and fluorescence spectroscopy.

Research Pixels

- Heajin Lee's research has focused on developing 'Turn-On' fluorescent molecular probes 'Lighting-Up' the HER2 receptor tyrosine kinase in breast cancer cells as a novel tool kit for construction of live cancer biology.
  Fluorescent kinase inhibitors (FKIs) reported in Lee's recent publications are capable of elucidating alive biochemical facets of HER2 (+) breast cancer cells, which were not accessible through traditional immunohistochemistry assays.
  FKIs are capable of identifying HER2 status of breast cancer cells as well as tracking rapid biochemical processes of receptor tyrosine kinase including dynamic shifts of kinase activation states, internalization in real time at the single cell levels with accounting the heterogeneity of individual HER2(+) breast cancer cells.
- Heajin Lee is a member of American Chemical Society (ACS).
- 254th ACS National Meeting, Washington, DC, August 2017. *Poster Presentation* ORGN 416: Fluorescent kinase inhibitors: Novel modality for HER2 status of breast cancer cells.
- Chemistry Graduate Student Symposium, University at Buffalo, New York, May 2017. *Oral Presentation*.
- William Mary Graduate Research Symposium, William and Mary College, Virginia, March 2017. *Poster presentation.*
- Sylvester Comprehensive Cancer Center Annual Session, Florida, March 2017. *Poster presentation.*
- UM Research Showcase, Miller School of Medicine, University of Miami, Florida February 2017. *Poster presentation*: Winner of presentation.

Publications

- H. Lee, W. Liu, A. S. Brown, R. Landgraf and J. N. Wilson.
  Fluorescent Kinase Probes Enabling Identification and Dynamic Imaging of HER2(+) Cells. *Anal. Chem.* 2016, *88*, 11310-11313.
- H. Lee, R. Landgraf, J. N. Wilson.
  Synthesis and Photophysical Properties of a Fluorescent Cyanoquinoline Probe for Profiling ERBB2 Kinase Inhibitor Response. *Bioorg. Med. Chem*. 2017, *25*(21), 6016-6023.