Pace University
DigitalCommons@Pace

Dyson College- Seidenberg School of CSIS : Collaborative Projects and Presentations

Dyson College of Arts & Sciences

3-27-2009

Light-regulated Sampling of Protein Kinase Activity (II)

Collaborative Project
Pace University

Follow this and additional works at: http://digitalcommons.pace.edu/dysonpr

 Part of the Biochemistry Commons, and the Organic Chemistry Commons

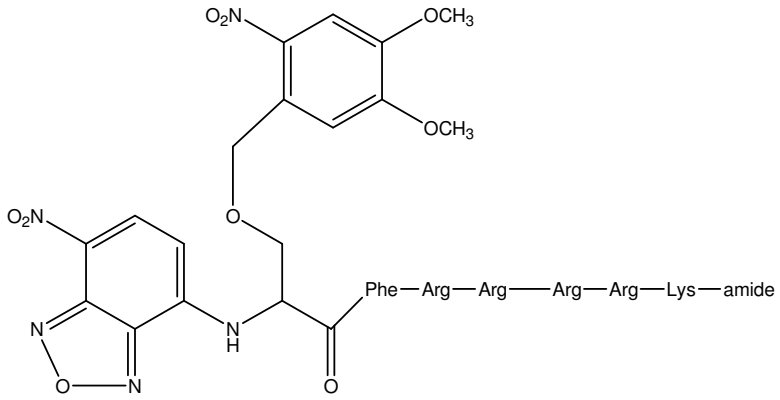
Recommended Citation
Project, Collaborative, "Light-regulated Sampling of Protein Kinase Activity (II)" (2009). *Dyson College- Seidenberg School of CSIS : Collaborative Projects and Presentations.* Paper 21.
http://digitalcommons.pace.edu/dysonpr/21

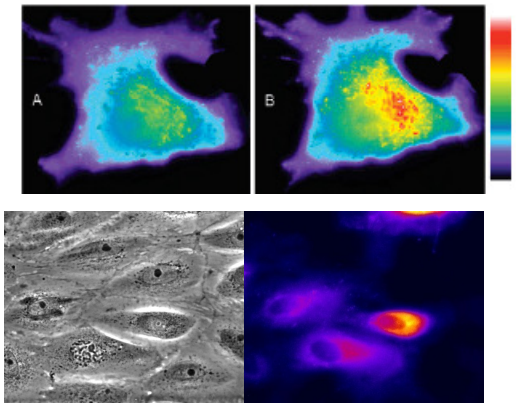
This Article is brought to you for free and open access by the Dyson College of Arts & Sciences at DigitalCommons@Pace. It has been accepted for inclusion in Dyson College- Seidenberg School of CSIS : Collaborative Projects and Presentations by an authorized administrator of DigitalCommons@Pace. For more information, please contact rracelis@pace.edu.

Light-regulated Sampling of Protein Kinase Activity

Participants

Zhaohua Dai, Dyson
Frank Marchese, Seidenberg





Dai, Z.; Dulyaninova, N. G.; Kumar, S.; Bresnick, A. R.; Lawrence, D. S. *Chem. & Biol.* **2007**, *14*, 1254-1260.
Wang, Q.; **Dai, Z.;** Cahill, S. M.; Blumenstein, M.; Lawrence, D. S. *J. Am. Chem. Soc.* **2006**, *128*, 14016-14017.

Overall Goals/Purpose

To develop sensors for protein kinase activities with controllable sensing capabilities in terms of time, location and environmental stimuli.
To investigate the role of certain kinases in cancer.

Pace Scholarly Research Award

Specific Research Aimes

- Develop reporters that can fluorescently sense protein kinase activity in real time and under conditions that are consistent with living cells. Caged sensors are employed so that that report power can be temporally and spatially unleashed by photo-uncaging.
- Use these sensors to investigate the protein kinase activity in different cell lines and at different phases of cycles to sort out their role in cellular signal transduction and to identify inhibitors and promoters of kinase activity.