Alexander B. Bloom <u>abbloom@bu.edu</u> 45 Harvard Ave. #3 Brookline, MA 02446-6230 Phone: 617-835-3972

PUBLICATIONS:

- Bloom, A. B. & Zaman, M. H. (2014). Influence of the microenvironment on cell fate. *Physiological Genomics*, 46, 309-314.
- Makkinje, A., Near, R. I., Infusini, G., Vanden Borre, P., Bloom, A., Cai, D., Costello, C., & Lerner, A. (2009). AND-34/BCAR3 regulates adhesion-dependent p130Cas serine phosphorylation and breast cancer cell growth pattern. *Cellular Signalling*, 21(9), 1423–1435.
- Near, R. I., Smith, R. S., Toselli, P. A., Freddo, T. F., Bloom, A. B., Vanden Borre, P., Seldin, D., & Lerner, A. (2009). Loss of AND-34/BCAR3 expression in mice results in rupture of the adult lens. *Molecular Vision*, 15, 685–99.
- Garron, M. L., Arsenieva, D., Zhong, J., Bloom, A. B., Lerner, A., O'Neill, G. M., & Arold, S. T. (2009). Structural insights into the association between BCAR3 and Cas family members, an atypical complex implicated in anti-oestrogen resistance.

EDUCATION:

Fall 2012 – Present

Boston University, Boston, MA

- Candidate for PhD in Molecular and Cell Biology, and Biochemistry (MCBB)
- Member of Dr. Muhammad Zaman Lab

Brandeis University, Waltham, MA

- Bachelor of Science May 2006
- Major: Biochemistry

RESEARCH EXPERIENCE:

July 2009 – August 2012

Fall 2002 – Spring 2006

Lab Technician, Massachusetts General Hospital, Cambridge MA

• Designed and optimized a high throughput genome wide siRNA screen to look for human proteins

	 that influence the cell to cell spread of <i>Shigella Flexneri</i> Designed biochemical assay to identify possible host targets for the <i>Shigella Flexneri</i> secreted protein SepA
January 2007 – June 2009	 Lab Technician, Boston Medical Center, Boston MA Worked to understand the interaction between p130cas and BCAR3 in terms of kinase activity and binding affinity
Fall 2002 – Spring 2006	 Lab Assistant, Brandeis University, Waltham MA Maintained, transfected, and harvested protein from tissue culture cell lines Created point mutants of proteins using PCR mutagenesis Ran western blots to analyze protein Maintained lab animals
TEACHING EXPERIENCE :	
Spring 2013	 <i>Teaching Fellow</i>, Boston University, Boston MA Biology lab teaching fellow Lectured prior to lab and oversaw students perform the assigned lab
Fall 2012	 <i>Teaching Fellow</i>, Boston University, Boston, MA Biology lab teaching fellow Lectured prior to lab and oversaw students perform the assigned lab
Fall 2005 – Spring 2006	 <i>Teaching Assistant</i>, Brandeis University, Waltham MA Teaching assistant for undergraduate general biology lab

- Oversaw students perform assigned experimentsGraded exams