

Jeffrey H. Kim

500 East 63rd Street Apartment 6B

New York, NY 10021

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Publications and Research:

- Kapitein L, Peterman E, Kwok B Kim JH, Kapoor TM, Schmidt C. “*The bipolar mitotic kinesin Eg5 moves on both microtubules that it crosslinks.*” **Nature**. 2005 May 5;435(7038):114-8.
- Kwok BH, Kapitein LC, Kim JH, Peterman EJ, Schmidt CF, Kapoor TM. “*Allosteric inhibition of kinesin-5 modulates its processive directional motility*” **Nature Chemical Biology**. 2006 Sep; 2(9):480-5
- Peters U, Cherian J, Kim JH, Kwok B, Kapoor TM “*Chemical inhibition reveals a role for polo kinase in spindle assembly and microtubule dynamics*” **Nature Chemical Biology**. 2006 Nov; (in press)

Rockefeller University, New York, NY

September, 2006 – Present

Metagenomics and Natural Products research with Dr. Sean Brady:

- Developed computational and biochemical profiling tools to phylogenetically characterize natural product encoding enzymes in environmental samples from uncultured bacteria.
- Discovered novel phytotoxic and antibiotic natural product biosynthetic pathways from uncultured bacteria.

Rockefeller University, New York, NY

June, 2003 – June, 2006

Chemical Biology Research with Dr. Tarun Kapoor:

- Designed and implemented a computational screen for small molecule inhibitors of the mitotic kinesin, MCAK
- Implemented a high-throughput cell-based phenotypic screen of BS-C-1 epithelial cells in search of potential kinase inhibitors using a synthesized library based on a privileged scaffold. (SAR).
- Gained expertise in research techniques including protein purification, live-cell imaging, fluorescent microscopy, high-throughput screening, and computational analysis.

Princeton University, Princeton, NJ

September, 2001 – June, 2003

Structure-based Drug Design Research:

- Computationally modeled a series of XIAP interacting peptidomimetics, a potential cancer therapeutic target, to test their relative binding affinities; assessed the viability of the computational approach by comparing the results to a solvchromatic fluorophore based readout of the same binding interaction in vitro with synthesized oxazole derivatives.

Marine Biology Laboratory, Woods Hole, MA

June, 2000 – September, 2000

Volunteer/Summer Intern:

- Created a series of bioinformatic analysis tools for the *Giardia Genomics Project* under Dr. Andrew McArthur and Dr. Mitch Sogin at the Marine Biology Laboratory;.

Education:

Princeton University A.B. Molecular Biology

September, 1999 – June, 2003

New York University, Graduate School of Arts and Science: Biochemistry

May, 2005 – July, 2005

Rockefeller University PhD candidate

September, 2006 – present

Patent:

Developed a navigational aid for the visually impaired. Provisional Patent U.S. Serial No. 60/505,826 entitled “Simple Navigational Aid for the Visually Impaired Utilizing Short-Range Radio Network and Programmable Audio Cues.” with William Morgan.

Computer Skills & Proficiency:

- *Statistics and Modeling:* MATLAB, R.
- *Graphic Design:* Photoshop, Quark, InDesign, and Illustrator.
- *Audio:* Digital Performer, Protools, MAX/MSP, Reaktor, PD, Live and Renoise.
- *Programming:* c++, java, perl
- *Biology:* FRED and full Openeye Scientific suite, AutoDock, Insight

Other Experience:

New Media Center, Princeton, NJ

September, 1999 – June, 2003

Manager and Instructor:

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- Provided instruction and support for members of the Princeton University community with projects that involved molecular modeling, graphic design, web design, programming, and digital video.

Design HCA, Princeton, NJ

September, 1999 – Present

Co-Founder, Project Manager

- Co-founded and managed a web design firm focusing on projects including 826nyc.org (revenge of the bookers benefit events and art auctions), safeclimbing.org, fluxartspace.org, and Rem Koolhaas' *Lagos: Project in the City* concept website.

PS1 MoMA Warmup, New York, NY

June, 2002 – September, 2002

Intern

- Designed and implemented a streaming server solution for the MoMA warmup summer music series with Williams Communications.

Musician, Composer, and Guitar Instructor, New York, NY

June, 2000 – September, 2004

- Princeton University Orchestra.
- Fidelis Quartet.
- Arshiles NYC.
- The Space (licspace.org).