Jeff Chen

500 Memorial Dr., #327 617-308-9901
Cambridge MA 02139 jfchen@mit.edu

Education

Massachusetts Institute of Technology **2015**

- Candidate for Bachelor of Science in Biological Engineering
- Coursework: Neuroscience (Minor), Genetics, Organic Chemistry, Thermodynamics, Bioengineering Design, Differential Equations, Multivariable Calculus

Cambridge Rindge and Latin School **2010**

- Graduated Valedictorian of a class of 358

Lab Skills

Immunofluorescence Staining; Western Blotting; ELISA/ELIDA; Tissue Culture; Cell-based Screening Assays; Transfection/siRNA Knockdown; Primer Design; PCR/qPCR; Recombinant DNA; Laboratory Automation (liquid handler programming)

Other Skills

Proficient with Python Programing and Microsoft Office

Experience

Immunology Research Intern at Biogen Idec **Jun - Aug 2012**

- Developed and carried out multiple cell-based assays for anti-inflammatory drug screening and evaluated the compounds' efficacy through IC_{50} analysis
- Assessed protein expression in NF-κB pathways via IHC and Western blotting
- Characterized BAFF (B-cell survival factor) effects in Antiphospholipid Syndrome through ELISA optimization
- Performed skin biopsy on humanized mice to study Cutaneous T Cell Lymphoma
- Gave three talks over the summer to diverse groups of audience, ranging from high school students to senior scientists

Undergrad Researcher at the Whitehead Institute, Sabatini Lab **Jan - June 2012**

- Constructed protein nucleases for knockout of tumor suppressor genes
- Characterized differential essentiality of human genes in the absence of selected tumor suppressors through haploid screening in KBM-7 cells

Summer Intern in Molecular Biology R&D at the Broad Institute **July - Aug 2010**

- Improved PCR conditions for amplicons of extremely high GC content and yielded more even sequencing readouts by testing combinations of factors
- Analyzed DNA enrichment levels via qPCR assays
- Created a scientific poster and presented to both the Institute's scientific community and non-scientists

Recognitions

Co-author of a journal paper in *Genome Biology* **2011**

- "Analyzing and Minimizing PCR Amplification Bias in Illumina Sequencing Libraries" | *Genome Biology* 2011, **12**:R18

$2,500 Scholarship from Harvard University's PBH Association **2010**

- For commitment to promote and sustain diversity in the Cambridge community

Activities

Theta Xi Fraternity, Delta Chapter: Representing delegate of the MIT chapter at the 2012 national convention "Rising Stars Academy"
Sports: Captain intramural volleyball, badminton and table tennis teams
Education: Mentor and tutor inner-city students from Boston Public Schools in math, reading and writing every Sunday morning with MIT's Amphibious Achievement.