Cindy M. Nguyen

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EDUCATION

PhDStanford UniversityElectrical EngineeringSept 2019 - PresentMSStanford UniversityElectrical EngineeringSept 2019 - PresentBSStanford UniversityBioengineeringSept 2015 - June 2019

Relevant Coursework: Convex Optimization, Computational Imaging, Linear Dynamical Systems, Convolutional Neural Networks, Machine Learning, Artificial Intelligence, Decision Making under Uncertainty, Natural Language Processing, Geometric and Topological Data Analysis, Fourier Transforms

Programming: Python, MATLAB

Languages: English (native), Vietnamese (native)

RESEARCH EXPERIENCE

Stanford Computational Imaging Lab | Stanford University, Stanford, CA

January 2020 - Present

Graduate Researcher

Advised by Gordon Wetzstein. Research interests include end-to-end optical element design and image reconstruction.

Brian Feldman Lab | Stanford University, Stanford, CA (moved to UCSF)

Sept 2017 - Mar 2019

Research Assistant

Used RNA-Seq to study mature adipocytes as in vivo nutrient biosensors and identify metabolic systemic cues.

Markus Schwaninger Lab | Universität zu Lübeck, Lübeck, Germany

July 2018 - Sept 2018

German Academic Exchange Service RISE Fellow

Investigated leptin transport mechanisms across the blood-brain barrier in porcine cortical endothelial in vitro models.

Stanley Qi Lab | Stanford University, Stanford, CA

Mar 2016 - Feb 2018

Research Assistant

Developed chemically-inducible CRISPR/dCas9-based dimerization systems for human chromatin 3D organization and spatiotemporal gene dynamics tracking through live cell imaging.

Sean Wu Lab | Stanford University, Stanford, CA

Research Assistant June 2015 – Aug 2015

Research Assistant June 2014 – Aug 2014

Developed CRISPR/Cas9 and Cas9 nickase systems targeting human cardiomyocyte loci in induced pluripotent stem cells.

PUBLICATIONS AND PREPRINTS

- 1. Wang, H., Nakamura, M., Abbott, T.R., Zhao, D., Luo, K., Yu, C., <u>Nguyen, C.M.</u>, Lo, A., Daley, T., La Russa, M., Liu, Y., Qi, L.S. (2019). CRISPR-Mediated Live Imaging of Genome Editing and Transcription. *Science*.
- 2. Wang, H., Nakamura, M., Zhao, D., <u>Nguyen, C.M.,</u> Yu, C., Lo, A., Daley, T., La Russa, M., Liu, Y., Qi, L.S. (2019). Temporal-Spatial Visualization of Endogenous Chromosome Rearrangements in Living Cells. *bioRxiv*.
- 3. Wang, H., Xu, X., Nguyen, C.M., Liu, Y., Gao, Y., Lin, X., Daley, T., Kipniss. N.H., La Russa, M., Qi, L.S. (2018). CRISPR-Mediated Programmable 3D Genome Positioning and Nuclear Organization. *Cell. Press: Stanford Medicine, Stanford Daily, Quanta, Science*

FELLOWSHIPS AND GRANTS

National Science Foundation Graduate Research Fellowship

2019

Three-year fellowship awarded to ~15% of applicants nationally (USD 34,000/year)

Stanford NeuroTech Fellowship

2019

Declined early acceptance to three-year fellowship due to changing research areas

German Academic Exchange Service Scholarship

2018

Scholarship for conducting research abroad at the Universität zu Lübeck (EUR 1,250/month)

Stanford Bio-X Undergraduate Research Fellowship

2017

Fellowship for conducting summer research (USD 7,000)

Google igniteCS Grant

2017

Grant to direct and organize computer science educational workshop series in low-income communities (USD 4,000)

National Science Foundation Undergraduate Research Fellowship

2016

Fellowship for conducting summer research (USD 6,400)

Stanford Haas Education Partnerships Grant

2016, 2017

Grant to direct and organize educational outreach programs in low-income communities (USD 2,000)

PRESENTATIONS

- 1. <u>Nguyen, C.M.</u>, Wang, H., Qi, L.S. Annual Biomedical Research Conference for Minority Students, Phoenix, AZ, Nov. 2017. *selected for outstanding poster presentation in Engineering, Mathematics & Physics
- 2. Nguyen, C.M., Wang, H., Qi, L.S. Symposia of Undergraduate Research and Public Service, Stanford, CA, Oct. 2017.
- 3. Nguyen, C.M., Wang, H., Qi, L.S. Stanford Bio-X, Stanford, CA, Aug. 2017.
- 4. Nguyen, C.M., Wang, H., Qi, L.S. NSF Research Experiences for Undergraduates, Stanford, CA, Aug. 2016.
- 5. Nguyen, C.M., Plonowska, K., Sturzu, A.C., Wu, S.M. CIRM Creativity Awards, San Francisco, CA, Aug. 2014.
- 6. Nguyen, C.M., Plonowska, K., Sturzu, A.C., Wu, S.M. Stanford Institutes of Medicine Research Program, Stanford, CA, Jul. 2014. *selected for best oral presentation

TEACHING EXPERIENCE

Oral Communication Tutor for Hume Center for Reading and Writing

March 2018 - December 2019

Tutored undergraduates and graduate students on oral presentations and thesis defenses.

TA for Stanford Institutes of Medicine Research Program

June 2019 – September 2019

Mentored high school students in creating biomedical prototypes.

Course Grader for Systems Physiology, BIOE 103

March 2019 - June 2019

Hosted weekly office hours and graded assignments.

OUTREACH

Program Director for Stanford STEM to SHTEM February 2019 – Present Press: <u>Stanford Electrical Engineering</u>, <u>Stanford News</u> Programs Officer for Future Advancers of Science and Technology February 2017 - Present February 2017 – May 2017

Project Lead for Google igniteCS at Stanford

Co-Founder of Catalist at Stanford

January 2016 – May 2017