Yen-Chung Chen

Education

2018-Current **Doctoral student**, Henry M. MacCracken Fellow.

Desplan Lab, Biology, Graduate School of Arts & Science, New York University, U.S.A.

2007–2014 **Doctor of Medicine**.

National Taiwan University College of Medicine, Taiwan

Research Experience

June 2019 - PhD student, Dr. Claude Desplan Lab, New York University, NY, U.S.A..

Current The role of spatial and temporal regulators in fate-specification gene regulatory network in the neurogenesis of *Drosophila* visual system

August 2015 - Research Assistant, Dr. Jun-An Chen Lab, Academia Sinica, Taiwan.

August 2018 Modeling spinal muscular atrophy with patient-derived iPS cells and CRISPR-based disease

modeling and correction

LncRNA-regulation of rostrocaudal identity in spinal motor neuron development

January 2009 Undergraduate Research, Dr. Min-Chuan Huang Lab, Graduate Institute of Anatomy

August 2010 and Cell Biology, National Taiwan University College of Medicine, Taiwan.

Screening dysregulated glycosyltransferase expression in hepatic cancer Producing rabbit polyclonal antibody for glycosyltransferase of interest

Publication

Neuronal diversity and convergence in a visual system developmental atlas, *Nature*, 2020, 10.1038/s41586-020-2879-3.

Mehmet Neset Özel, Félix Simon, Shadi Jafari, Isabel Holguera, <u>Yen-Chung Chen</u>, Najate Benhra, Rana Naja El-Danaf, Katarina Kapuralin, Jennifer Amy Malin, Nikolaos Konstantinides, Claude Desplan

Gene regulatory networks during the development of the Drosophila visual system, *Curr Top Dev Biol*, 2020, 10.1016/bs.ctdb.2020.02.010.

Yen-Chung Chen, Claude Desplan

Mir-17~92 Confers Motor Neuron Subtype Differential Resistance to ALS-Associated Degeneration, *Cell Stem Cell*, 2019, 10.1016/j.stem.2019.04.016.

Kuan-Chih Peng, Ying-Tsen Tung, **Yen-Chung Chen**, Ya-Ping Yen, Ya-Lin Lu, Mien Chang, Sebastian Thams, and Jun-An Chen.

Dlk1-Dio3 Locus-Derived LncRNAs Perpetuate Postmitotic Motor Neuron Cell Fate and Subtype Identity, *eLife*, 2018, 10.7554/eLife.38080.

Ya-Ping Yen, Wen-Fu Hsieh, Ya-Yin Tsai, Ya-Lin Lu, Ee Shan Liau, Ho-Chiang Hsu, Yen-Chung Chen, Ting-Chun Liu, Mien Chang, Joye Li, Shau-Ping Lin, Jui-Hung Hung, and Jun-An Chen

Membership and Services

June 2018 – **preLighter**, *preLights*, The Company of Biologists.

Current Share, highlight, and comment preprints and advocate for open discussion between authors,

peers, and publishers to make scientific publication better and robust

June 2019 – **eLife Ambassador**, *eLife Community Ambassadors*, eLife.

June 2020 Advocate for better statistical practices, data reusability and reproduciblity, and join the

localization efforts of intersectionality guideline

Honors and Awards

2017 Best Paper Award — Poster Section, International Conference of Developmental

Biology, Stem Cells and Regenerative Medicine.

Taiwan Government Scholarship for Overseas Study, Ministry of Education, Taiwan.

Awarded but declined

Work Experience

July 2021 - Speaker, R Bootcamp for Summer Undergraduate Research Program, New York

August 2021 University.

A 10-session bootcamp for R in biology

February 2021 Graduate teaching assistant, Applied genomics, New York University.

- June 2021 Design and host recitation sessions for the use of modern genomic tools for alignment, variant

calling, RNA-Seq, and ChIP-seq

August 2019 - **Graduate teaching assistant**, *Principle of Biology I/II*, New York University.

June 2020 Manage recitation sections to help undergrads from a diverse field appreciate various aspects of

life sciences

August 2014 – Medical Substitute Services, Ministry of Health and Welfare and Shin Kong Hospital

July 2015 Medical Assistance Program to Palau, Taiwan.

Assisting 2014 Global Health Forum in Taiwan

Setup of nutrition consulting clinic in Palau National Hospital, Republic of Palau

Assisting Healthy School Lunch Project in Meyuns Elementary School, Republic of Palau

Technique

Tissue culture Mammalian cell line and stem cell culture, directed motor neuron differentiation, and

mouse embryonic fibroblast preparation

Animal Fly husbandry, fly adult and larvae dissection, whole-mount immunostaining

manipulation

Molecular biology

Molecular cloning, Western blotting, real-time QPCR, and CRISPR-based genome manip-

ulation

Antibody Peptide design and purification, antigen injection, antibody purification

Analysis R (Statistical analysis, visualization, and omics data exploration) and next-generation

sequencing pipeline setup on Linux