Yen-Chung Chen

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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 – Current	**PhD student**, *Dr. Claude Desplan Lab*, New York University, NY, U.S.A.. Molecular logic of neuronal specification in the fly visual system
August 2015 – August 2018	**Research Assistant**, *Dr. Jun-An Chen Lab*, Academia Sinica, Taiwan. 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 – August 2010	**Undergraduate Research**, *Dr. Min-Chuan Huang Lab*, Graduate Institute of Anatomy and Cell Biology, National Taiwan University College of Medicine, Taiwan.

Publication

Yen-Chung Chen* and Nikolaos Konstantinides*, *Integration of Spatial and Temporal Patterning in the Invertebrate and Vertebrate Nervous System*, Front. Neurosci., 2022. DOI: 10.3389/fnins.2022.854422

Ee Shan Liau*, Suoqin Jin*, Yen-Chung Chen, Wei-Szu Liu, Luok Wen Yong, Chang-Tai Tsai, Maëliss Calon, Jr-Kai Yu, Yi-Hsien Su, Stéphane Nedelec, Qing Nie, Jun-An Chen, *Single-cell transcriptomic analysis unveils spinal motor neuron subtype diversity underpinning the water-to-land transition in vertebrates*, bioRxiv, 2021. DOI: 10.1101/2021.09.29.462340

Nikolaos Konstantinides*, Isabel Holguera*, Anthony M. Rossi*, Aristides Escobar, Liébaut Dudragne, Yen-Chung Chen, Thinh Tran, Azalia Martinez Jaimes, Mehmet Neset Özel, Félix Simon, Zhiping Shao, Nadejda M. Tsankova, John F. Fullard, Uwe Walldorf, Panos Roussos, Claude Desplan, *A comprehensive series of temporal transcription factors in the fly visual system*, bioRxiv, 2021. DOI: 10.1101/2021.06.13.448242

Mehmet Neset Özel*, Félix Simon*, Shadi Jafari, Isabel Holguera, Yen-Chung Chen, Najate Benhra, Rana Naja El-Danaf, Katarina Kapuralin, Jennifer Amy Malin, Nikolaos Konstantinides, Claude Desplan, *Neuronal diversity and convergence in a visual system developmental atlas*, Nature, 2020. DOI: 10.1038/s41586-020-2879-3

Yen-Chung Chen, Claude Desplan, *Gene regulatory networks during the development of the Drosophila visual system*, Curr Top Dev Biol, 2020. DOI: 10.1016/bs.ctdb.2020.02.010

Kuan-Chih Peng*, Ying-Tsen Tung*, Yen-Chung Chen, Ya-Ping Yen, Ya-Lin Lu, Mien Chang, Sebastian Thams, and Jun-An Chen., *Mir-17~92 Confers Motor Neuron Subtype Differential Resistance to ALS-Associated Degeneration*, Cell Stem Cell, 2019. DOI: 10.1016/j.stem.2019.04.016

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

Membership and Services

June 2018 – Current
preLighter, *preLights*, The Company of Biologists.
Share, highlight, and comment on preprints and advocate for open discussion between authors, peers, and publishers to make scientific publication better and robust

June 2019 – June 2020
eLife Ambassador, *eLife Community Ambassadors*, eLife.
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*.

Teaching and Work

July 2021 – August 2021
Speaker, *R Bootcamp for Summer Undergraduate Research Program*, New York University.
A 10-session bootcamp for R in biology

February 2021 – June 2021
Graduate teaching assistant, *Applied genomics*, New York University.
Design and host recitation sessions for the use of modern genomic tools for alignment, variant calling, RNA-Seq, and ChIP-seq

August 2019 – June 2020
Graduate teaching assistant, *Principle of Biology I/II*, New York University.
Manage recitation sections to help undergrads from a diverse field appreciate various aspects of life sciences

Expertise

Tissue culture
Stem cell culture and directed differentiation

Animal model
Fly adult and larvae dissection and whole-mount inmmunostaining

Molecular biology
Molecular cloning, Western blotting, real-time QPCR, and gene editing

Analysis
R, Python, and next-generation sequencing pipeline setup