

# Yen-Chung Chen

PHD CANDIDATE

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## Education

### New York University

DOCTOR OF PHILOSOPHY: BIOLOGY, GPA: 4.0/4.0

- Henry M. MacKracken Fellow
- NYSTEM Predoctoral Fellow

New York, NY, U.S.A.

Sep. 2018 – Present

### National Taiwan University

DOCTOR OF MEDICINE, GPA: 3.45/4.0, GRE: V160/Q170/AW4.5

Taipei, Taiwan

Sep. 2007 – Jun. 2014

## Research Experience

### Dr. Claude Desplan Lab, New York University

PHD CANDIDATE

- Molecular logic of neuronal specification in the fly visual system

NY, USA

June 2019 – Current

### Dr. Jun-An Chen Lab, Institute of Molecular Biology, Academia Sinica

RESEARCH ASSISTANT

- Studying the roles of non-coding RNAs in diseases and development with patient derived iPS cells

Taipei, Taiwan

August 2015 – August 2018

### Dr. Min-Chuan Huang Lab, Graduate Institute of Anatomy and Cell Biology, National Taiwan University College of Medicine

UNDERGRADUATE RESEARCH

- Screening dysregulated glycosyltransferase expression in hepatic cancer

Taipei, Taiwan

January 2009 – August 2010

## Publications

Tai-Heng Chen, Shih-Hsin Chang, Yu-Fu Wu, Ya-Ping Yen, Fang-Yu Hsu, **Yen-Chung Chen**, Yang Ming, Ho-Chiang Hsu, Yi-Ching Su, Sheng-Tang Wong, Jui-Hung Hung, Shih-Hwa Chiou, Yuh-Jyh Jong, Jun-An Chen. "MiR34 Contributes to Spinal Muscular Atrophy and AAV9-mediated Delivery of MiR34a Ameliorates the Motor Deficits in SMA Mice" *Molecular Therapy - Nucleic Acids*. S2162253123000641 (2023)

Ee Shan Liao, Suoqin Jin, **Yen-Chung Chen**, Wei-Szu Liu, Maëliiss Calon, Stéphane Nedelec, Qing Nie, Jun-An Chen. "Single-Cell Transcriptomic Analysis Reveals Diversity within Mammalian Spinal Motor Neurons" *Nature Communications* **14**(1), 46 (2023)

**Yen-Chung Chen**, Nikolaos Konstantinides. "Integration of Spatial and Temporal Patterning in the Invertebrate and Vertebrate Nervous System" *Frontiers in Neuroscience* **16**, 854422 (2022)

Brianne A. Kent, Constance Holman, Emmanuella Amoako, ..., **Yen-Chung Chen**, ..., Tracey L. Weissgerber. "Recommendations for Empowering Early Career Researchers to Improve Research Culture and Practice" *PLOS Biology* **20**(7), e3001680 (2022)

Nikolaos Konstantinides, Isabel Holguera, Anthony M. Rossi, Aristides Escobar, Liébaut Dudragne, **Yen-Chung Chen**, Thanh N. Tran, Azalia M. Martínez Jaimes, Mehmet Neset Özel, Félix Simon, Zhiping Shao, Nadejda M. Tsankova, John F. Fullard, Uwe Walldorf, Panos Roussos, Claude Desplan. "A Complete Temporal Transcription Factor Series in the Fly Visual System" *Nature* **604**(7905), 316–322 (2022)

Seungjae Lee, **Yen-Chung Chen**, FCA Consortium, Austin E. Gillen, J. Matthew Taliaferro, Bart Deplancke, Hongjie Li, Eric C. Lai. "Diverse Cell-Specific Patterns of Alternative Polyadenylation in *Drosophila*" *Nature Communications* **13**(1), 5372 (2022)

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* **589**(7840), 88–95 (2021)

**Yen-Chung Chen**, Claude Desplan. "Gene Regulatory Networks during the Development of the *Drosophila* Visual System" *Current Topics in Developmental Biology* **139**, 89–125 (2020)

Ying-Tsen Tung, Kuan-Chih Peng, **Yen-Chung Chen**, Ya-Ping Yen, Mien Chang, Sebastian Thams, Jun-An Chen. "Mir-17~92 Confers Motor Neuron Sub-type Differential Resistance to ALS-Associated Degeneration" *Cell Stem Cell* **25**(2), 193–209.e7 (2019)

## Honors & Awards

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2023	<b>Dean's Outstanding Graduate Student Teaching Award</b> , New York University	<i>NY, USA</i>
2022	<b>Training Program in Stem Cell and Regenerative Biology</b> , NYSTEM	<i>NY, USA</i>
2022	<b>Kopac Teaching Award II</b> , New York University	<i>NY, USA</i>
2022	<b>Chair's Graduate Fellowship</b> , New York University	<i>NY, USA</i>
2022	<b>Taiwanese Government Scholarship to Study Abroad</b> , Ministry of Education	<i>Taiwan</i>
2017	<b>Best Poster</b> , International Conference of Developmental Biology, Stem Cells and Regenerative Medicine	<i>Taiwan</i>

## Membership and Services

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### Mentor Program

*Project Tyra*

MENTOR

2022

Consulting graduate school applicants in biological sciences

### preLights

*Company of Biologists*

PRELIGHTER

*Sep. 2018 – Present*

Share and highlight preprints to advocate open discussion of scientific publications

### eLife Community Ambassadors

*eLife*

ELIFE COMMUNITY AMBASSADOR

*Apr 2019 – Jun 2020*

Advocating better statistical practices, data reusability and reproducibility

## Teaching and Work

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### Statistics in Biology

*New York University*

GRADUATE TEACHING ASSISTANT

*Fall 2022*

Recitation sessions of R and statistic methods

### R Bootcamp for Summer Undergraduate Research Program

*New York University*

SPEAKER

*Summer 2021 and 2022*

A 10-session bootcamp for R in biology

### Sophomore Scholars Seminar

*New York University*

GRADUATE TEACHING ASSISTANT

*Fall 2021 and Spring 2022*

Discussion panels about evo-devo, immunology, gene editing, and art

### Applied Genomics

*New York University*

GRADUATE TEACHING ASSISTANT

*Spring 2021*

Design and host recitation sessions for the use of modern genomic tools for alignment, variant calling, RNA-Seq, and ChIP-seq

### Principles of Biology I/II

*New York University*

GRADUATE TEACHING ASSISTANT

*Fall 2019 and Spring 2020*

Manage recitation sections to help undergrads from a diverse field appreciate various aspects of life sciences

## Techniques

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<b>Bioinformatics</b>	R, Python, C, and next-generation sequencing pipeline setup on Linux
<b>Tissue culture</b>	Stem cell culture and directed differentiation
<b>Animal model</b>	Fly dissection and whole-mount immunostaining
<b>Molecular biology</b>	Molecular cloning, Western blotting, real-time QPCR, and gene editing