ERINNE CHERISSE ONG, M.Sc.

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Education

Heidelberg University (Germany)
PhD in Biosciences Jun. 2024 – Present

- Fellow of the UNITE School of Neurooncology (Funded by the SFB1389 grant)

Georg-August-University Göttingen (Germany)
Master of Science in Neurosciences Oct. 2022 – Apr. 2024

- Awarded a stipend by the International Max Planck Research School

De La Salle University (Philippines)
Bachelor of Science in Biology Sep. 2017 – Feb. 2021

- Top 10% of graduating class with cumulative GPA of 3.787/4.0

St. Stephen's High School (Philippines)
Senior High School Diploma Jun. 2012 – Mar. 2017

- Salutatorian (2nd out of 140 students) with final year average of 96.53%

Research Experience

German Cancer Research Center/University Hospital Heidelberg (Germany)
PhD student Jun. 2024 – Present

- Supervisor: Prof. Dr. Frank Winkler (CCU Experimental Neurooncology)
- Evaluates combinatorial drug treatments for their anti-proliferative effects on glioblastoma to show preclinical results in parallel to a planned clinical trial
- Performs calcium imaging to investigate network communication in glioblastoma as influenced by neuronal mechanisms
- First in the lab to optimize a tissue clearing and light sheet microscopy protocol for visualization of 3D neuronal-tumor spheroid co-cultures

Max Planck Institute for Multidisciplinary Sciences (Germany)
Master's thesis student Oct. 2023 – Mar. 2024

- Supervisor: Prof. Dr. Klaus-Armin Nave (Neurogenetics Group)
- Examined the role of myelin damage in Alzheimer's disease pathologies using a combination of imaging, biochemical, and behavioral assays
- Played an active role in paper preparation, including the entire revision process

European Neuroscience Institute (Germany)
Research intern Jan. 2023 – Feb. 2023

- Supervisor: Dr. Brett Carter (Synaptic Physiology and Plasticity Group)
- Measured short-term plasticity responses of barrel cortex synapses at varying external calcium concentrations through slice electrophysiology techniques

DLSU Center for Natural Sciences and Environmental Research (Philippines)
Undergraduate thesis student Nov. 2019 – Oct. 2020

- Supervisor: Dr. Ma. Luisa Enriquez (Molecular Science Unit Laboratory)
- Assessed the cytotoxic and genotoxic effects of *Citrus microcarpa* juice and essential oil extracts on three cancer cell lines

Work Experience

Wildtype Media Group (Singapore)
Staff Writer Apr. 2021 – Oct. 2022

- Wrote and edited 500-word research highlights for flagship publication, *Asian Scientist Magazine*, and *A*STAR Research* based on STEM journal articles
- Produced 1500-word in-depth features bi-monthly on scientific advancements across Asia with interviews from academic researchers and industry leaders
- Steered content direction and collaborated with clients for multimedia projects across a diverse array of fields including biomedicine, engineering, and more

De La Salle University – Advanced Research Institute for Informatics, Computing and Networking (Philippines)
Project Assistant Jul. 2021 – Sep. 2022

- Selected as a Fellow for the inaugural Science Communication program by the Philippine government's Department of Science and Technology
- Produced written and audio-visual content on the institute's research projects involving data analytics, artificial intelligence, and natural language processing

National Medical Admission Test Review (Philippines)
Instructor (Self-employed) Nov. 2020 – May 2021

- Delivered online lectures to more than 300 students on cell biology, genetics, biochemistry, physiology, and psychology

Publications

Sasmita AO, **Ong EC**, …, Depp C, Nave K-A. 2024. Parental origin of transgene modulates amyloid-β plaque burden in the 5xFAD mouse model of Alzheimer's disease. *Neuron* **113**(6), P838-846.E4. doi: 10.1016/j.neuron.2024.12.025

Sasmita AO, Depp C, Nazarenko T, Sun T, Siems SB, **Ong EC**, …, Nave K-A. 2024. Oligodendrocytes and neurons contribute to amyloid-β deposition in Alzheimer's disease. *Nature Neuroscience* **27**, 1668–1674. doi: 10.1038/s41593-024-01730-3

Conference Contributions

Ong EC, .., Heuer S, Wick W, Winkler F. Co-inhibition of tumor intrinsic and extrinsic regulators of glioblastoma network activity and tumor proliferation [Poster]. EACR Cancer Neuroscience; 2025 Oct 13-15; Bilbao, Spain.

Ong EC, .., Heuer S, Wick W, Winkler F. In vitro targeting of neuronal input and tumor network calcium oscillations that underlie glioblastoma treatment resistance [Poster]. UNITE Conference; 2025 May 14-15; Heidelberg, Germany.

Sasmita AO, **Ong EC**, Nazarenko T, Depp C, Nave K-A. Transgenic inheritance modulates plaque burden in the 5xFAD model of Alzheimer's disease [Poster]. 6th Encephalon; 2023 Dec 7; Göttingen, Germany.

Sasmita AO, Nazarenko T, Sun T, Yu X, **Ong EC**, ..., Depp C, Nave K-A. Oligodendrocytes contribute to Aβ plaque burden primarily derived from excitatory neurons in vivo [Poster]. EuroGlia; 2023 Jul 8-11; Berlin, DE.

Ong EC, Co CJ, Mulingbayan IM, Oyong GG, Enriquez ML. Cytotoxicity of *Citrus microcarpa* peel-derived essential oil on small cell lung carcinoma, acute monocytic leukemia, and colon adenocarcinoma cell lines [Presentation]. Metro Manila Health Research and Development Consortium; 2021 Sep 24-25; Manila, Philippines.

- Won second place for solo presentation in the oral research paper competition

Skills

Lab techniques: immunohistochemistry, fluorescence microscopy, tissue clearing and light sheet microscopy, whole-cell patch clamp electrophysiology, mouse handling (FELASA certification), cell culture methods, cell viability assays, genotoxicity assays, Western blot, data analysis (GraphPad, AxoGraph, basic Python)

Communication: academic and technical writing, journalistic writing, editing and proofing, web copywriting, science communication, oral presentation, digital and print publishing, social media management, fluency in English (TOEFL iBT: 118/120)

Selected Science Communication Articles

Ong EC. 2021 Oct 24. Envisioning a digital approach to mental well-being. Asian Scientist Magazine. https://asianscientist.com/2021/10/features/digital-mental-health-data-analytics-singapore/

Ong EC. 2021 Sep 24. Delving into a spectrum of quantum capabilities. A*STAR Research. https://research.a-star.edu.sg/articles/features/delving-into-a-spectrum-of-quantum-capabilities/

Ong EC. 2021 Jul 17. Sweeping up space junk. Asian Scientist Magazine. https://asianscientist.com/2021/07/features/asias-changemakers-astroscale-ai-makino/

**For more samples, kindly refer to my online portfolio: erinneong.github.io/portfolio*
**Note: most of my work was not bylined due to the nature of the contracts with the clientele.*

Extracurricular Activities

Ologist Philippines (Volunteer-based Philippine science media organization)
Associate Editor Oct. 2024 – Present

- Performs structural and stylistic editing of longform explainers and social media slide decks to convey scientific concepts for a lay audience
- Trains writing associates to produce public-facing science communication outputs focused on Filipino researchers and geared towards the Filipino audience
- Developed a writing style guide for longform features and social media content and delineated workflow protocols from article conceptualization to publication

GradMAP Philippines (Volunteer-based STEM mentorship network)
President Apr. 2024 – May 2025
Mentor Aug. 2022 – Present

- Raised over 7,000 USD for grant program that awarded more than 15 Filipino students with funding for graduate school application-related expenses
- Established collaborations with academic and non-profit organizations to increase Filipinos' access to advanced education in STEM
- Provided one-on-one mentorship and delivered talks to support Filipino undergraduate students in pursuing global career opportunities in STEM

The LaSallian (University campus publication)
Editor in Chief Sep. 2019 – Oct. 2020
Menagerie Staffer Jun. 2018 – Aug. 2019

- Substantively edited over 300 articles on science and technology, society and the nation, sports, and arts for 11 monthly print issues
- Streamlined workflows by introducing consolidated trackers for event coverage schedules and article development timelines
- Spearheaded human resource development through hosting workshops and consultation sessions, establishing feedback channels, and developing SOPs