ERINNE CHERISSE ONG, MSc

ongerinne@gmail.com | erinnecherisse.ong@dkfz-heidelberg.de | erinneong.github.io

Education

University Hospital Heidelberg / German Cancer Research Center (Germany)

PhD student Jun. 2024 – Present

- Fellow of the UNITE School of Neurooncology (SFB 1389)
- Thesis (ongoing): Understanding tumor network communication to overcome therapeutic resistance in glioma (Prof. Dr. Frank Winkler)

University of Göttingen (Germany)

Master of Science in Neurosciences

Oct. 2022 – Apr. 2024

- Awarded a stipend by the International Max Planck Research School
- Thesis: Investigating the contribution of dysfunctional myelin to tau pathology

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
- Consistent recipient of the Jose Rizal Honors Certificate (term GPA >3.4/4.0)

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%
- Graduated with High Honors for STEM (grades in science subjects >95%)

Research Experience

Max Planck Institute for Multidisciplinary Sciences (Germany)

Master's thesis student

Oct. 2023 - Mar. 2024

Research intern

May 2023 – Jun. 2023

- Supervisors: Andrew Sasmita, Prof. Klaus-Armin Nave (Neurogenetics Group)
- Investigated the role of myelin damage in Alzheimer's disease pathologies by combining imaging, biochemical, and behavioral assays

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)
- Evaluated 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 – Aug. 2022

- Wrote multiple 500-word research highlights weekly for flagship publication, *Asian Scientist Magazine*, based on STEM journal articles
- Produced 1500-word in-depth features on scientific advancements across Asia with interviews from academic researchers and industry leaders
- Steered content direction and collaborated with clients for projects on diverse fields, including cancer, neuroscience, public health, machine learning

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, psychology, and ecology
- Developed a virtual assessment platform with over 100 practice test questions

Research Publications

Sasmita AO, Depp C, ..., **Ong EC**, ..., Nave K-A. 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

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, DE.

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* (Calamansi) 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 5th International Symposium and 12th Annual Scientific Conference; 2021 Sep 24-25; Manila, PH.

• Won second place for solo presentation in the oral paper competition

Selected Science Communication Articles

Ong EC. 2022 Oct 10. Decoding signals from space. *Asian Scientist Magazine*. https://www.asianscientist.com/2022/10/print/decoding-signals-from-space/

Ong EC. 2021 Sep 21. Posits: Coming soon to hardware near you. *Supercomputing Asia*. https://www.asianscientist.com/2021/09/print/supercomputing-asia-singapore-supercomputers-posit-arithmetic/

Ong EC. 2021 Jul 21. How China beat malaria. *Asian Scientist Magazine*. http://www.asianscientist.com/2021/07/features/how-china-beat-malaria/

Extracurricular Activities

GradMAP Philippines (STEM mentorship network)

President
Director for Partnerships
Mentor

Apr. 2024 – Present Apr. 2023 – Apr. 2024 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 global opportunities in STEM
- Provided one-on-one mentorship and delivered online talks to support Filipino undergraduate students in pursuing global career opportunities in STEM

The LaSallian (University campus publication)

Editor in Chief Menagerie Staffer Sep. 2019 – Oct. 2020 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