Charité – Universitätsmedizin Berlin
Neuroscience Research Center (NWFZ)
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Hung Lo

Optical imaging, Ephys, Systems neurosciences

Education

2017 – Present

Charité – Universitätsmedizin Berlin - *Medical Neurosciences*, PhD.
With Freie Universität Berlin and Humboldt – Universität zu Berlin, Berlin Institute of Health, NeuroCure Cluster of Excellence
PhD Fellow of Einstein Center for Neurosciences Berlin
Metabolic dependency of cortical flavor representation.
Supervisors: PD Dr. Friedrich Johenning/Prof. Dr. Dietmar Schmitz

2010 – 2015

National Yang-Ming University - *Life Sciences & Genome Sciences*, BSc/MSc.
Scholar of Integrated 5-year MSc/BSc program
GPA: 4.0/4.0, Ranking: 2nd (MSc) | GPA: 3.84/4.0, Ranking: 2nd/37 (BSc)
Achieved 9/16 credits towards a minor in *Gender Studies*, NYMU
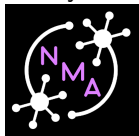*Cdk12 maintains normal hair regeneration by minimizing genome instability.*
Supervisor: *Dr. Ming-Ji Fann*

Scientific Experiences

July 2020

NeuroMatch Academy, On-line courses, Observer track.
A 3-week intense summer school of computational neurosciences in Python. Introduce traditional and emerging computational neuroscience tools, their complementarity, and what they can tell us about the brain. A main focus is on modeling choices, model creation, model evaluation and understanding how they relate to biological questions. *Info*

July 2019

Linear Algebra for Neuroscientists, *Radboud Summer School, Radboud University*, Nijmegen, the Netherlands.
Intense summer school of linear algebra, specifically for neuroscience data, lectured by Dr. Michael X Cohen. *Info*

2019 – 2020

eLife **Community Ambassadors**.
Involved in 1) statistical literacy team, compiling survey and statistical resources for biologists, 2) meta-research team, measuring image reporting quality in biomedical articles *eLife news*

2018 – 2019

Scientific Writer, *Charité NeuroScience (CNS) Newsletter*.
Scientific articles and news *CNS newsletter issues*

2017 – 2018

The Multi-scale Brain MOOC, *Human Brain Project*, EPFL, Switzerland.
This Massive Open Online Course (MOOC) gives a broad overview of the latest tools and techniques for neuroinformatics, analysis, modelling and simulation. It also includes tutorials on Allen Institute's available data sets. *Info*

2016 – 2017

Research Assistant, *Academia Sinica, Taiwan*.
Institute of Molecular Biology, Dr. Jun-An Chen's Lab *Lab website*
Topic: Stem Cell Culture and Genome-Wide Analysis (ChIRP-seq)
Contributed to Yen *et al.*, *eLife*, 2018.

2016 – 2018 **Scientific Writer**, *PanSci-Asia, Popular Science Media, Taipei, Taiwan*, Scientific articles and news, co-work with *Chi-Chieh Lee*, *Publications (Chinese)*.

Leadership, Organization & Other Experiences

2020 – Present **PhD representative**, *Medical Neurosciences PhD program*, Charité, *Info*.
2015 – 2016 **Medic**, *R.O.C Navy, Taiwan*, Mandatory military service.
2013 – 2014 **BSc representative**, Department of Life Sciences, Yang-Ming.

Publications

2020 **Circuit-specific dendritic development in the piriform cortex**, *eNeuro*,
Moreno-Velasquez L, **Lo H**, Lenzi S, Kaehne M, Breustedt J, Schmitz D, Rüdiger S and Johenning F.

Experimental and Computational Skills

Optical imaging *in vivo* Ca^{2+} imaging (endomicroscopy, freely moving), *in vitro* 2-Photon microscopy
Electrophysiology Patch clamp
Animal model Mouse handling, immunostaining, stereotaxic injection & GRIN lens implantation
Tissue culture Mouse ESC culture, Motor neuron differentiation
Molecular biology ChIRP-seq, RT-qPCR, Molecular cloning, Western blotting
Programming Python: visualization, Ca^{2+} imaging analysis (*CNMFe*), pose estimation (*DeepLabCut*)

Honors and Awards

2019 **Charité PhD Scholarship (Promotionsstipendium II)**, *declined*.
One-year doctoral scholarship from Charité – Universitätsmedizin Berlin *Scholarship info*

2018 - 2020 **Taiwanese Government Scholarship to Study Abroad**.
The Ministry of Education of Taiwan awards a 2-year PhD scholarship to prestige PhD students who study abroad. *Scholarship info (Chinese)*

2017 – 2019 **PhD Fellowship of Einstein Center for Neurosciences Berlin**.
The Einstein Center for Neurosciences Berlin awards top 15 outstanding candidates for a 2-year PhD fellowship. *ECN PhD fellows*

2015 **Member of The Phi Tau Phi Scholastic Honor Society**.
Honors for top 1% outstanding graduate students in Philosophy, Technology, and Physiology.

2014 – 2015 **Integrated 5-year MSc/BSc Program Scholarship**.
National Yang-Ming University selects and awards students who finish their MSc/BSc degrees within 5 years (typical 6 years), top 6 undergraduate students are selected in the whole university per year.

2014 **ApexBio Taiwan (BioTech firm) MSc Student Scholarship**.

2014 **Dean Award of Bachelor Thesis**, *National Yang-Ming University*.

2014 **First Prize Award, Poster Presentation**, *National Yang-Ming University*.

2013 **National Science Council College Student Research Fellowship**.

Languages

Mandarin/Chinese **Native**
English **Fluent** *TOEFL iBT 99 R28-L27-S22-W22*

Talks, Workshops and Conferences

August 2020 **Workshop on using *DeepLabCut* for pose estimation (invited talk)**, *Co-speak: Daniel Parthier, Winter Lab, Humboldt − Universität zu Berlin*, Berlin, Germany.

February 2020 **REWARD | EQUATOR Conference**, *Berlin*, Germany, Meta-Research, Reproducibility.

October 2019 **HeiNEC 3 - Heidelberg Neuronal Ensemble Conference**, *Heidelberg*, Germany.

September 2019 **I, Scientists**, *Berlin*, Germany, Gender equality, Career path and Networking in STEM fields.

June 2019 **Taiwan GPS X BioGroup (invited talk)**, *Taipei*, Taiwan.
Experience sharing for studying abroad in Germany

October 2018 **Berlin Neuroscience Meeting**, *Berlin*, Germany, Poster presentation.

July 2018 **FENS - Federation of European Neuroscience Societies 2018**, *Berlin*, Germany.