

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 Jochenning](#)/Prof. [Dr. Dietmar Schmitz](#)



2010 – 2015

National Yang-Ming University - Life Sciences & Genome Sciences, BSc/MSc.

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*

[Cdk12 maintains normal hair regeneration by minimizing genome instability.](#)

Supervisor: [Dr. Ming-Ji Fann](#)



Experiences

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 – Present

Scientific Writer, *PanSci-Asia*, *Popular Science Media*, Taipei, Taiwan, Scientific articles and news, co-work with *Chi-Chieh Lee*, [Publications \(Chinese\)](#).

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)

2015 – 2016

Medic, *R.O.C Navy*, Taiwan.

Mandatory military service

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 Jochenning F.

Experimental and Computational Skills

- Optical imaging *in vivo* Ca²⁺ 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, Ca²⁺ 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**.
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 and Conferences

- 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.