CHENGXI (TRACY) TAN

Research Interests: Neurodevelopmental disorders and neural progenitor specification

EDUCATION / TRAINING

2016-Present Ottawa-Shanghai Joint School of Medicine

University of Ottawa, Ontario, Canada

Exchange Student, GPA 4.0/4.0 (All A+) [transcript]

Highlighted Course: Psychology (97)

Clinical rotations in Forensic Psychiatry at the Royal Ottawa Mental Care & Research and Medical Genetics at Children's Hospital of Eastern Ontario

2015-Present Shanghai Jiao Tong University School of Medicine, China

Joint Program with uOttawa, M.D. Candidate expected in 2020, Academic Distinction Highlighted Courses: Biochemistry (100), Cell Biology (98)

Clerkship rotations as group leader

- Shanghai Mental Health Center
 - Child, Adolescent and Geriatric Psychiatry, Mood Disorders
- Shanghai Children's Medical Center
 - Developmental and Behavioral Pediatrics, Neonatal Intensive Care Unit and Pediatric Neurosurgery
 - Clinical management of patients with Autism Spectrum Disorder, Attention
 Deficit Hyperactivity Disorder and language delay
- Shanghai Renji Hospital
 - Obstetrics and Gynecology Specialty

RELEVANT RESEARCH EXPERIENCE

2019-Present Undergraduate Research at Institute of Neuroscience, Chinese Academy of Science

- Supervisor: <u>Jie He, Ph.D. [lab website]</u>
- Neuronal fate determination and asymmetrical cell division in the retina
- Mastered techniques of virus-mediated neural circuit tracing, plasmid construction, microinjection of zebrafish embryos and confocal imaging of the retina.

2018-Present Undergraduate Thesis at Institute of Embryo-Fetal Original Adult Disease

The International Peace Maternity and Child Health Hospital, Shanghai

- Project 1: Molecular mechanisms of cognition anomalies of offspring exposed to adverse intrauterine environment
- Project 2: Transgenerational (F1 and F2) impact of circadian disruption on the neurodevelopment of mouse offspring (embryo and gamete origin of adult psychiatric disorders)
- Bioinformatics, neuron culture from fetal mouse hippocampus and open field test.

Summer 2018 University of Nebraska Medical Center (UNMC) Summer Research Omaha, NE

- Advisors: Gurudutt Pendyala, Ph.D., Sowmya Yelamanchili, Ph.D.
- Project 1: *In utero* and post-partum impact of narcotic drugs on the synaptogenesis of newborns rats
- Project 2: Role of extracellular vesicles in methamphetamine induced neurotoxicity
- Mass spectrometry, molecular assay, primary neuron culture from rat prefrontal cortices, immunocytochemistry, exosome isolation and marble burying assay.
- Mentored undergraduate students.

2017-2019 SJTU Undergraduate Research Training Program in Neuroscience

- Advisor: Weifang Rong, Ph.D., Department of Physiology, SJTU School of Medicine
- Project: G Protein-coupled Estrogen Receptor GPER1: Its Effect on Pilocarpine Induced Epilepsy.
- Performed immunohistochemistry and Nissl staining of brain slices.

FELLOWSHIPS / AWARDS

2016-2019 Academic Excellence at SJTU2016/10 Merit Student Award of SJTU

Top 5%

2016/08 US Medical College Admission Test (MCAT)

PUBLICATIONS / PRESENTATION / POSTER

- Lee S, Tan C (2018) Transvaginal Natural Orifice Transluminal Endoscopic Surgery (vNOTES)
 Ovarian Cystectomy. CA-AMIGO (Conference Abstract)
- Hysteroscopy in Recurrent Spontaneous Abortion: A Large-Scale Retrospective Cohort Study. The
 3rd Pujiang International Summit of Reproductive Immunology, Shanghai, China, November, 2018
- **Tan C,** et al. Oxycodone Dependency and Neurodevelopment, UNMC, Omaha, NE, September, 2018 (Selected Presenter)
- Intergenerational effect on the cognition of male offspring exposed to intrauterine hyperglycemia (In Preparation)
- Chen Q*, **Tan C***, Gui Y*, Hu W*, Wu M*, Gao P, Rong W Estrogen and Estrogen Receptors: Their Effects on Epilepsy (In Preparation)
- The Role of Cervical Cerclage in Recurrent Spontaneous Abortion Patients with Cervical Incompetence (In Preparation)

EXTRACURRICULAR ACTIVITIES

Thesis defense secretary at Renji Hospital, for SJTU Class of 2019
 International Federation of Fertility Societies World Congress
 Rare Aware" Rare Disease Innovation Workshop

 Collaborated with news editors and undergraduate students majoring in media from Fudan University

2018/07 Forum of Rainbow (Genetic Conference)

Boston, MA

Boston Children's Hospital and Brigham and Women's Hospital

2015-Present Clinical electives

 Reproductive genetic counselling sessions, prenatal diagnosis consults and pediatric endocrine, genetic and metabolic clinics

2015-Present Volunteer at Hongkou District Disabled Person's Federation, Shanghai

Teach baking skills and Ping-Pong to residents with intellectual disabilities

2015-Present Editor-in-Chief for Murmurs

Medical humanities journal jointly run by students from uOttawa and SJTUSM