CHENGXI (TRACY) TAN

Research Interests: Epigenetics, cell type diversity and neurodevelopmental diseases

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: <u>Gurudutt Pendyala, Ph.D.</u>, 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

- Ye T, Tan C, Wang H, Bai W, Zhao A, Zhu J (2020) Role of the hysteroscopy in management of the female recurrent spontaneous abortion and infertility, Journal of Shanghai Jiaotong University Medical Science (Under Review)
- Identification of Novel Starburst Amacrine Types in Zebrafish Retina, Institute of Neuroscience, Chinese Academy of Science 2019 Annual Meeting, Shanghai, China, December, 2019 (Conference Presentation)
- 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

2019/05 Thesis defense secretary at Renji Hospital, for SJTU Class of 2019 2019/04 23rd International Federation of Fertility Societies World Congress

2018/10 "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