Lim Chang Siang

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Education

National University of Singapore, Singapore 2017 - 2018
Graduate Diploma in System Analysis. CGPA: 4.58/5.00

University of Bradford, United Kingdom 2015
Bachelor of Science (Hons) in Biomedical Science. First Class Honours

Research Experience

Research Assistant at Saw Swee Hock School of Public Health (NUS) Aug 2018 - Present
Primary role as a full-stack developer, developed mobile and web application to support tele-health research projects. Conduct user interview to elicit requirements for application development and prepare requirement documentations. Performed statistical analysis on research data to infer user behaviour of health application prepare figures for publication. Participate in the write up and publication of research findings.

Research Officer at Institute of Molecular and Cell Biology (A*STAR) 2015 - 2017
My primary task is to conduct experiments on diabetes-related research project. Developed stem cell differentiation protocol to derive pancreatic beta cell from human induced-pluripotent stem cells. Spearheaded new technique in the lab, including: flow cytometry, con-focal microscopy and immunohistochemistry. Perform data analysis on Next Generation Sequencing data (ChIPSeq, RNASeq, Metabolomics and SC-Seq). Co-authored 3 research publications and 1 review article in the lab.

Research Publications

*(co-first authors)

- *Ng, N. H. J., *Joanita, B. J., **Lim, C. S.**, Lau, H. H., Vidhya, G. K., et al., (2019). **HNF4A haploinsufficiency in MODY1 abrogates liver and pancreas differentiation from patient-derived iPSCs.** iScience, 16(1). doi: 10.1016/j.isci.2019.05.032
- Teo, A. K., **Lim, C. S.**, Cheow, L. F., Kin, T., Shapiro, J. A., Kang, N.Y, Lau, H. H. (2018). **Single-cell analyses of human islet cells reveal de-differentiation signatures.** Cell Death Discovery, 4(1). doi:10.1038/s41420-017-0014-5

Other Publications (Reviews or Other Articles)

- Low, B. S., **Lim, C. S.** (2019). **Scientific and Technological Advancement in Diabetes Management** *Biotech-Connection Singapore*
- Loo, L. S., Lau, H. H., Jasmen, J. B., **Lim, C. S.**, and Teo, A. K. (2017). **An arduous journey from human pluripotent stem cells to functional pancreatic beta cells. Diabetes, Obesity and Metabolism**, 20(1), 3-13. doi:10.1111/dom.12996

Conference Presentation

- Charis Anna Lim, Pin Sym Foong, **Chang Siang Lim**, Gerald Choon-Huat Koh, Shih-Cheng Yen, Author Tay, and Simon Perrault (2019). **Supporting Remote Caregiver Input for Home Assessments** at *Workgroup on Interactive System in Health @ CHI*
- Nur Shabrina Amirrudin, Munirah Mohamad Santosa, **Chang Siang Lim**, Hwee Hui Lau, and Adrian Kee Keong Yeo (2016). **Differentiation and characterization of hiPSC-derived pancreatic beta-cells as a model to study diabetes.** at *Modelling Cell Fate and Development Conference*
- **Chang Siang Lim**, Hwee Hui Lau, Adrian Kee Keong Teo (2015). **Human Cellular Model to Study Diabetes Mechanisms.** at *Opportunities and Challenges in Stem Cell Medicine Conference*

Teaching / Mentorship

- Wang Liran, Grad Dip in System Analysis, NUS-ISS (2019 - 2020). *Develop a novel Augmented-Reality tool to enable Tele-Home Assesmsent by Occupational Therapist.* **Role: Technical Advisor**
- Tan Wei Shan, Grad Dip in System Analysis, NUS-ISS (2019 - 2020). *Develop a research platform to support the investigation on effective health communication in disease preventions.* **Role: Technical Advisor**

Technical Skills

- Biostatistic
- Programming Language: Python, R, Objective-C, C-sharp, Java, JavaScript, SQL
- Application Development: ASP .NET, iOS, Android, Angular
- Others: Design Thinking, Objective-Oriented Programming

Other Activities

iShine Befriender at Punngol Family Service Center Aug 2018-Present

As a befrinder, my role is to provide a positive role model to the kids, build confidence and help them to discover their inner talent and strength. In addition, I have also work with the team to develop thematic, hands-on exploratory learning activities for the program

Other Courses

- Statistical Analysis with R for Public Health Specialization (2019). Provider: Coursera (in collaboration with Imperial Collage London)
- The Data Scientist's Toolbox (2018). Provider: Coursera (in collaboration with Johns Hopkins University)
- Introductory Bioinformatics with Scientific Phone Apps Workshop (2017). Provider: Temasek Polytechnic (in collaboration with A*STAR)