

## Richard Yan-Do

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[Pubmed](#), [Google Scholar](#), [Scopus](#), & [GitHub](#)

### EDUCATION

- 2013/09 – 2018/11 Ph.D. in Pharmacology  
University of Alberta, CAN  
[Patrick MacDonald](#) Lab
- 2009/09 – 2013/04 Bachelor of Science, Specialization in Pharmacology,  
University of Alberta, CAN  
Matthias Braun Lab

### WORK EXPERIENCE

- 2021/08 – present COCHE postdoctoral fellow  
City University Hong Kong, HK  
Hong Kong Centre for Cerebro-Cardiovascular Health Engineering  
[Peng Shi](#) Lab
- 2019/01 – 2021/04 [Novo Nordisk – Oxford Postdoctoral Fellow](#)  
University of Oxford, UK  
[Cecilia Lindgren](#) Lab

### AWARDS & RECOGNITIONS

2023	City University HKTECH 300	100 000 HKD
2022	HKSTP IDEATION	100 000 HKD
2019-2021	Novo Nordisk Postdoctoral Research Fellow in Diabetes and Metabolism	199 760 GBP
2018	Dr. Edwin Daniel Graduate Scholarship in Pharmacology	3 000 CAD
2017	Faculty of Medicine and Dentistry Med Star Award	1 000 CAD
2016	EASD Travel Grant	1 200 EUR
2015 – 2016	Alberta Diabetes Institute Graduate Studentship	25 000 CAD
2015	University of Alberta Doctoral Recruitment Scholarship	10 000 CAD
2015	FoMD 75 <sup>th</sup> Anniversary Award	7 000 CAD
2014 – 2015	Alberta Diabetes Institute Graduate Studentship	25 000 CAD

### CERTIFICATION

2019/07 NVidia Fundamentals of  
Deep Learning for  
Computer Vision  
workshop

### LANGUAGES

English	Fluent
Cantonese	Basic
Mandarin	Basic
Python	Fluent

## PUBLICATIONS

\* = Co-first author

### Manuscripts

1. Xianglin Ji\*, Peilin Fang\*, Xi Zhao, Chuanyin Xiong, Qi Yang, Youyang Wan, Zixun Wang, Lin Qi, Linfeng Huang, Wenjun Zhang, Xin Wang, **Richard Yan-Do**, Jia Ke, Chenjie Xu, Peng Shi. Sequencing-free Tissue-wide Spatial Profiling of Post-transcriptional Regulations. *Submitted to Nat Biomed Eng*.
2. Youyang Wan\*, Xianglin Ji\*, **Richard Yan-Do**, Hailiang Sun, Chuanyin Xiong, Peilin Fang, Zhongping Li, Wei Li, Peng Shi. Colorimetric Sensing of microRNAs in Whole Blood for Early Diagnosing Heart Failure. *Submitted to ACS Sens*.
3. **Richard Yan-Do**\*, Matthew Chamberlin\*, Jacky Cheuk Yin Li, Lei Lei, Chuxiao Xiong, Xingdao He, Xi Zhao, Linfeng Huang, Jin Qu, Yong Yang, Becki Yi Kuang, Peng Shi. Pathologically triggered mRNA expression by omni-gene handcuffing for combinatory precision cancer therapy. *In progress*.

### Journal articles

1. Guo F\*, Ji X\*, Xiong C, Sun H, Liang Z, **Yan-Do R**, Gai B, Gao F, Huang L, Li Z, Kuang BY, Shi P. Single-cell encoded gene silencing for high-throughput combinatorial siRNA screening. *Nat Commun*. 2024 Nov 19;15(1):9985.
2. Liu Z\*, Luo X\*, **Yan-Do R**, Wang Y, Xie X, Li Z, Cheng SH, Shi P. Vertebrates on a Chip: Noninvasive Electrical and Optical Mapping of Whole Brain Activity Associated with Pharmacological Treatments. *ACS Chem Neurosci*. 2024 Jun 5;15(11):2121-2131.
3. Fang P\*, Ji X\*, Zhao X, **Yan-Do R**, Wan Y, Wang Y, Zhang Y, Shi P. Self-Healing Electronics for Prognostic Monitoring of Methylated Circulating Tumor DNAs. *Adv Mater*. 2023 Feb;35(5):e2207282.
4. Gosak M\*, **Yan-Do R**\*, Lin H, MacDonald PE, Stožer A. Ca<sup>2+</sup> Oscillations, Waves, and Networks in Islets From Human Donors With and Without Type 2 Diabetes. *Diabetes*. 2022 Dec 1;71(12):2584-2596.
5. Lin X, Sun T, Tang M, Yang A, **Yan-Do R**, Chen D, Gao Y, Duan X, Kai JJ, Wang F, Shi P. 3D Upconversion Barcodes for Combinatory Wireless Neuromodulation in Behaving Animals. *Adv Healthc Mater*. 2022 Jul;11(13):e2200304.
6. Pepper AR, Pawlick R, Bruni A, Wink J, Rafiei Y, O'Gorman D, **Yan-Do R**, Gala-Lopez B, Kin T, MacDonald PE, Shapiro AMJ. Transplantation of Human Pancreatic Endoderm Cells Reverses Diabetes Post Transplantation in a Prevascularized Subcutaneous Site. *Stem Cell Reports*. 2017 Jun 6;8(6):1689-1700.
7. **Yan-Do R**, MacDonald PE. Impaired "Glycine"-mia in Type 2 Diabetes and Potential Mechanisms Contributing to Glucose Homeostasis. *Endocrinology*. 2017 May 1;158(5):1064-1073.
8. **Yan-Do R**, Duong E, Manning Fox JE, Dai X, Suzuki K, Khan S, Bautista A, Ferdaoussi M, Lyon J, Wu X, Cheley S, MacDonald PE, Braun M. A Glycine-Insulin Autocrine Feedback Loop Enhances Insulin Secretion From Human  $\beta$ -Cells and Is Impaired in Type 2 Diabetes. *Diabetes*. 2016 Aug;65(8):2311-21.
9. Khan S\*, **Yan-Do R**\*, Duong E, Wu X, Bautista A, Cheley S, MacDonald PE, Braun M. Autocrine activation of P2Y<sub>1</sub> receptors couples Ca (2+) influx to Ca (2+) release in human pancreatic beta cells. *Diabetologia*. 2014 Dec;57(12):2535-45.

### Patent

1. US Patent Application. No.63/716,325. Highly Sensitive Micropore Assay for Rapid and Amplification Free Detection of COVID-19 mRNA. Filed on 5 November 2024.