Yusuke Ito

Ph.D. student, Department of Biology, Kyushu University, Fukuoka, Japan.
Research Fellowship for Young Scientist, DC2

: http://bio-math10.biology.kyushu-u.ac.jp/member/second.html#ito
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1. Education

Researcher, NEC Research & Development **(Apr 2021-)**

Ph.D. in Science. **(Apr 2018-Mar 2021)**
Kyushu university, Fukuoka, Japan
Superviser: Associated Professor Shingo Iwami (Mathematical Biology)

M.S. in Science. **(Apr 2016-Mar 2018)**
Kyushu university, Fukuoka, Japan
Superviser: Associated Professor Shingo Iwami (Mathematical Biology)

B.S. in Science. **(Apr 2012-Mar 2016)**
Kyushu university, Fukuoka, Japan
Superviser: Associated Professor Shingo Iwami (Mathematical Biology)

2. Appointment

Graduate Research Fellow. (Apr 2019-Mar 2021)
Research Fellowship for Young Scientist, DC2
Research Internship in Aso Iiduka hospital (Apr 2018-Mar 2020)
(Biggest corporate hospital in Japan).

3. Previous Project

- HIV-1 co-infection/ super-infection (publication [1,2])
- HCV drug-interaction (in prepare [4])
- SHIV pathogenesis (publication [3])
- SARS-CoV-2 treatment (pre-print [5-7])
- Clinical research using big-data

4. Publication

4-1. English

Published

[4] Takafumi Oda Kwang Su Kim, Yasuhisa Fujita, **Yusuke Ito**, Tomoyuki Miura and Shingo Iwami. Quantifying antiviral effects against simian/human immunodeficiency Virus induced by host immune response. ***Journal of Theoretical Biology***. Accepted.

[3] Hara A † , Iwanami S † , **Ito Y †** , Miura T, Nakaoka S, Iwami S. Revealing uninfected and infected target cell dynamics from peripheral blood data in highly and less pathogenic simian/human immunodeficiency virus infected Rhesus macaque ***Journal of Theoretical Biology***. Accepted. 2019. († Equal contribution). https://doi.org/10.1016/j.jtbi.2019.07.005

[2] **Ito Y**, Tauzin A, Remion A, Ejima K, Mammano F†, Iwami S†, Dynamics of HIV-1 coinfection in different susceptible target cell populations during cell-free infection in cell culture. ***Journal of Theoretical Biology***. 455:39-46. (2018). (†Equal contribution). https://doi.org/10.1016/j.jtbi.2018.06.025

[1] **Ito Y**‡, Remion A‡, Tauzin A, Ejima K, Nakaoka S, Iwasa Y, Iwami S†, Mammano F†. Number of infection events per cell during HIV-1 cell-free infection. ***Scientific Reports***. 7:6559. 2017. (‡,†Equal contribution). https://doi.org/10.1038/s41598-017-03954-9

Pre-print

[6] Hirofumi Ohashi, Koichi Watashi, Wakana Saso, Kaho Shionoya, Shoya Iwanami, Takatsugu Hirokawa, Tsuyoshi Shirai, Shigehiko Kanaya, **Yusuke Ito**, Kwang Su Kim, Kazane Nishioka, Shuji Ando, Keisuke Ejima, Yoshiki Koizumi, Tomohiro Tanaka, Shin Aoki, Kouji Kuramochi, Tadaki Suzuki, Katsumi Maenaka, Tetsuro Matano, Masamichi Muramatsu, Masayuki Saijo, Kazuyuki Aihara, Shingo Iwami, Makoto Takeda, Jane A. Mckeating, Takaji Wakita. **bioRxiv**. 2020. https://www.biorxiv.org/content/10.1101/2020.04.14.039925v1

[5] Kwang Su Kim, Keisuke Ejima, **Yusuke Ito**, Shoya Iwanami, Hirofumi Ohashi, Yoshiki Koizumi, Yusuke Asai, Shinji Nakaoka, Koichi Watashi, Robin N. Thompson, and Shingo Iwami. **medRxiv**. 2020. https://www.medrxiv.org/content/10.1101/2020.03.23.20040493v1#disqus_thread

Submitted

[7] Keisuke Ejima, Kwang Su Kim, Shoya Iwanami, Hirofumi Ohashi, Yoshiki Koizumi, **Yusuke Ito**, Koichi Watashi, Ana I. Bentoa, Kazuyuki Aihara and Shingo Iwami.

Submitted. 2020.

In-preparatoin Papers

[8] **Ito Y**, Koizumi Y, Watashi K, Iwami S.

4-2. Japanese

投稿済

[6] 伊藤悠介, 小泉吉輝, 渡士幸一, 岩見真吾. 薬剤間の相互作用を考慮した C 型肝炎治療薬の拮抗/相乗関係の推定　数理解析研究所講究録、京都大学数理解析研究所: 投稿受理（和文、査読なし）

[5] 土肥黛佳, 伊藤悠介, Fabrizio Mammano, 岩見 真吾. HIV-1 重複感染におけるウイルス感染率低下の定量的解析　数理解析研究所講究録、京都大学数理解析研究所: 投稿受理（和文、査読なし)

[4] 伊藤悠介. 細胞の感受性の不均一性を考慮した、HIV-1 多重感染の定量化に関する理論研究.日本数理生物学ニュースレター. 日本数理生物学会.2018

[3] 伊藤悠介, 岩見真吾. 培養細胞系を用いた cell-free 感染における細胞の感受性の不均一性を考慮した HIV-1 重感染現象の動態予測. 数理解析研究所講究録. 数理解析研究所. 投稿受理. 2018

[2] 伊藤悠介. HIV-1 感染における重感染の定量的解析 細胞の感受性の不均一性の影響. 日本数理生物学ニュースレター. 日本数理生物学会. 79:4. 2016.

[1] 伊藤悠介, 岩見真吾.HIV-1 感染における重感染の定量的解析-細胞の感受性の不均一性の影響-　数理解析研究所講究録、京都大学数理解析研究所:2016 1994:151-157（和文、査読なし）

投稿準備中

[1] 進 健司, 猪狩圭介, 古賀秀信, 伊藤悠介, 光安博志.

5. web app

[3] Estimate IC50 and m: https://yskito.shinyapps.io/Estimate_IC50_m/

[2] data visualization: https://yskito.shinyapps.io/data_visualization/

[1] About Yusuke Ito: https://yskito.shinyapps.io/WhoisYusukeIto/

6. Grant/Awards

[5] Repayment Exemption for Students with Excellent Grades, Japan Student Services Organization (JASSO) Type I (interest-free) scholarship, Jun 2019,
Certification: https://drive.google.com/file/d/1gojF4Zg24n8TxBghEJosYZuakF6jpjHC/view?usp=sharing
JASSO official; web: https://www.jasso.go.jp/shogakukin/taiyochu/gyosekimenjyo/index.html

[4] Research Fellowship for Young Scientist, DC2, applied, funded by Japan Society For The Promotion of Science, Apr 2019-Mar 2021, https://www.jsps.go.jp/english/e-pd/index.html

[3] Qudai-jump Research Program, ¥400,000, funded by Kyushu university, Apr 2018-Mar 2019 (shifted to DC2 from Apr 2019), https://airimaq.kyushu-u.ac.jp/html/app/teacher/page.php?lang=ja&code=8&side=04

[2] 博士後期課程奨学金, ¥500,000, funded by Kyushu university, Apr 2018-Mar 2019 (shifted to DC2 from Apr 2019), http://www.kyushu-u.ac.jp/ja/education/fees/scholarship/kyushu-u/

[1] 学生の独創的教育・研究・社会貢献活動支援, ¥500,000, funded by Kyushu university, Apr 2016-Mar 2017.

7. Teaching experience

[5] Teaching Assistant, Jun 1st 2016-Feb 28th 2017, Kyushu university
[4] Teaching Assistant, Jul 1st 2017 -Feb 28th 2017, Kyushu university
[3] Teaching Assistant, Apr 1st 2018-Sep 30th 2018, Kyushu university
[2] Research Assistant, Jul 1st 2018 -Mar 31th 2019, Kyushu university
[1] Research Assistant, Apr1st 2018 -Mar 31th 2019, Kyushu university

8. Languages

- Japanese
- English

9. Technical skills

- R
- Python
- Mathematica
- C
- LaTeX