

Stanford



Laura Symul

Postdoctoral Scholar, Statistics

Bio

BIO

Laura Symul has obtained her PhD in computational biology from the École Polytechnique Fédérale de Lausanne (EPFL), in Switzerland, where she has worked on the molecular regulation of the circadian clock. In particular she explored the regulation of rhythmic gene expression and protein translation combining analyses of -omics data with mathematical models describing the regulatory dynamics to infer quantities otherwise not measurable.

Laura Symul has also specialized in the visualization of data and, during her industry experience, has helped companies to take data-driven decisions.

As a postdoctoral fellow, her research focuses on women's health and menstrual health in particular. This includes research on fertility, on cycle-related symptoms and on drivers of changes in vaginal microbiome communities. She uses a combination of self-tracked data from mobile phone apps and devices and clinical multi-omics data.

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Ecole Polytechnique Federale de Lausanne (2013)
- Bachelor of Engineering, Universite De L'Etat A Liege (2007)
- Master of Engineering, Universite De L'Etat A Liege (2009)

STANFORD ADVISORS

- Susan Holmes, Postdoctoral Faculty Sponsor
- Susan Holmes, Postdoctoral Research Mentor

LINKS

- Google scholar profile: https://scholar.google.com/citations?user=Qi_sA3AAAAAJ&hl=en
- Personal site: <https://lasy.github.io>

Research & Scholarship

LAB AFFILIATIONS

- Susan Holmes (8/1/2018)

Teaching

COURSES

2022-23

- Statistical Methods in Engineering and the Physical Sciences: STATS 110 (Aut)

Publications

PUBLICATIONS

- **Assessment of menstrual health status and evolution through mobile apps for fertility awareness.** *NPJ digital medicine*
Symul, L., Wac, K., Hillard, P., Salathe, M.
2019; 2: 64
- **Predicting pregnancy using large-scale data from a women's health tracking mobile application**
Liu, B., Shi, S., Wu, Y., Thomas, D., Symul, L., Pierson, E., Leskovec, J., Assoc Comp Machinery
ASSOC COMPUTING MACHINERY.2019: 2999–3005
- **FoodRepo: An Open Food Repository of Barcoded Food Products** *FRONTIERS IN NUTRITION*
Lazzari, G., Jaquet, Y., Kebaili, D. J., Symul, L., Salathe, M.
2018; 5: 57
- **Circadian clock-dependent and -independent posttranscriptional regulation underlies temporal mRNA accumulation in mouse liver.** *Proceedings of the National Academy of Sciences of the United States of America*
Wang, J. n., Symul, L. n., Yeung, J. n., Gobet, C. n., Sobel, J. n., Lück, S. n., Westermark, P. O., Molina, N. n., Naef, F. n.
2018; 115 (8): E1916–E1925
- **Non-Circadian Expression Masking Clock-Driven Weak Transcription Rhythms in U2OS Cells** *PLOS ONE*
Hoffmann, J., Symul, L., Shostak, A., Fischer, T., Naef, F., Brunner, M.
2014; 9 (7): e102238
- **The Circadian Clock Coordinates Ribosome Biogenesis** *PLOS BIOLOGY*
Jouffe, C., Cretenet, G., Symul, L., Martin, E., Atger, F., Naef, F., Gachon, F.
2013; 11 (1): e1001455
- **Genome-Wide RNA Polymerase II Profiles and RNA Accumulation Reveal Kinetics of Transcription and Associated Epigenetic Changes During Diurnal Cycles** *PLOS BIOLOGY*
Le Martelot, G., Canella, D., Symul, L., Migliavacca, E., Gilardi, F., Liechti, R., Martin, O., Harshman, K., Delorenzi, M., Desvergne, B., Herr, W., Deplancke, B., Schibler, et al
2012; 10 (11): e1001442