

# Curriculum Vitae

## PAUL SHERIDAN

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Date of Birth: 1979 (Halifax, Canada)  
Date of CV: April 2017

### Education/Employment

- 2016 – Assistant Professor, Hirosaki University, Social Medicine (lab head: Shigeyuki Nakaji)
- 2011 – 2016 Systems Cancer Postdoc, The University of Tokyo, Cancer Bioinformatics and Topics in Complex Networks (lab head: Satoru Miyano)
- 2011 Ph.D. Tokyo Institute of Technology, Probability and Statistics (advisor: Hidetoshi Shimodaira)
- 2007 – 2011 Global COE Scholar (Teaching Assistant), Tokyo Institute of Technology
- 2006 – 2007 MEXT Scholar, Tokyo Institute of Technology
- 2006 M.Sc. Dalhousie University, Probability and Statistics (advisor: Edward Susko)
- 2004 – 2006 Teaching Assistant, Dalhousie University
- 2003 B.Sc. Dalhousie University, Mathematics with Honours (advisor: Keith Johnson)
- 2002 – 2002 NSERC Scholar, Dalhousie University, Elliptic Curves (advisor: Keith Johnson)
- 2001 – 2001 NSERC Scholar, Dalhousie University, Topics in Cryptography (advisor: Karl Dilcher)
- 2000 – 2000 NSERC Scholar, Dalhousie University, Bernoulli Numbers (advisor: Karl Dilcher)

### Research interests

I'm currently an Assistant Professor in the Department of Social Medicine at Hirosaki University. Feel free to check my homepage (<http://paulsheridan.net>) to find out about my main research interests.

### References

Upon request.

**Publications**

## Peer-reviewed articles

- working 13. (with Taku Onodera, and Georg Tremmel) *A Preferential Attachment Paradox Explained: How Preferential Attachment Gives Rise to Log-normal Degree Distributions.*
- working 12. (with Georg Tremmel, Atsushi Niida, Rui Yamaguchi, and Seiya Imoto) *Geneset Landscapes with Clustered Voronoi Treemaps.*
- submitted 11. (with Daichi Inoue, Takeshi Fujino, Yao-Zong Zhang, Reina Nagase, Zaomin Li, Hirotaka Matsui, Akinori Kanai, Makoto Saika, Rui Yamaguchi, Hiroko-Kozuka Hata, Masaaki Oyama, Susumu Goyama, Toshiya Inaba, Seiya Imoto, Satoru Miyano, Feng-Chun Yang, and Toshio Kitamura) *A novel ASXL1-OGT axis plays roles in H3K4 methylation and splicing regulation*
- 2016 10. (with Hideto Koso, Hungtsung Yi, Satoru Miyano, Yasushi Ino, Tomoki Todo, and Sumiko Watanabe) *Identification of RNA-Binding Protein LARP4B as a Tumor Suppressor in Glioma*, Cancer Research. doi: 10.1158/0008-5472.CAN-15-2308
- 2015 9. (with Pham Thong, and Hidetoshi Shimodaira) *PAFit: A Statistical Method for Measuring Preferential Attachment in Temporal Complex Networks*, PLoS ONE. doi.org/10.1371/journal.pone.0137796
8. (with Pham Thong, and Hidetoshi Shimodaira) *Nonparametric estimation of the preferential attachment function in complex networks: evidence of deviations from log linearity*, Proceedings of ECCS'14: European Conference on Complex Systems.
7. (with Y. Takahashi, A. Niida, G. Sawada, R. Uchi, H. Mizuno, J. Kurashige, K. Sugimachi, S. Sasaki, Y. Shimada, K. Hase, M. Kusunoki, S. Kudo, M. Watanabe, K. Yamada, K. Sugihara, H. Yamamoto, A. Suzuki, Y. Doki, S. Miyano, M. Mori, and K. Mimori) *The AURKA/TPX2 axis drives colon tumorigenesis cooperatively with MYC*, Annals of Oncology. doi:10.1093/annonc/mdv034
- 2014 6. (with Taku Onodera) *Maximum likelihood estimation of preferential attachment in growing networks*, Topologica.
5. (with E.O. Balogun, J.B. Balogun, S. Yusuf, H.M. Inuwa, I.S. Ndams, Paul Sheridan, D.K. Inaoka, T. Shiba, S. Harada, K. Kita, K.A.N. Esievo, and A.J. Nok) *Anemia Amelioration by Lactose Infusion During Trypanosomosis Could be Associated with Erythrocytes Membrane De-galactosylation*, Veterinary Parasitology. doi:10.1016/j.vetpar.2013.10.013
- 2012 4. (with Yuichi Yagahara, and Hidetoshi Shimodaira) *Measuring preferential attachment in growing networks with missing-timeline using Markov chain Monte Carlo*, Physica A. doi:10.1016/j.physa.2012.05.041
- 2010 3. (with Takeshi Kamimura, and Hidetoshi Shimodaira) *A scale-free structure prior for graphical models with applications in functional genomics*, PLoS ONE. doi:10.1371/journal.pone.0013580
- 2009 2. (with Takeshi Kamimura, and Hidetoshi Shimodaira) *On scale-free priors and their applicability in large-scale network inference with graphical models*, Complex Sciences: Lecture Notes of the Institute of Computer Sciences, Social Informatics and Telecommunications Engineering Volume 4. doi:10.1007/978-3-642-02466-5-9
- 2008 1. (with Yuichi Yagahara, and Hidetoshi Shimodaira) *A preferential attachment model with Poisson growth for scale-free networks*, Annals of the Institute of Statistical Mathematics. doi:10.1007/s10463-008-0181-5

**Posters**

- 2015 4. (with Georg Tremmel, Atsushi Niida, Rui Yamaguchi, Seiya Imoto, and Satoru Miyano) *Headache-free geneset analysis for the working molecular biologist*, 42nd IMSUT Founding Commemorative Symposium.  
[http://paulsheridan.net/files/IMSUT\\_symposium\\_2015\\_poster.pdf](http://paulsheridan.net/files/IMSUT_symposium_2015_poster.pdf)

- 2013 3. (with Y. Takahashi, A. Niida, G. Sawada, R. Uchi, H. Mizuno, J. Kurashige, K. Sugimachi, S. Sasaki, Y. Shimada, K. Hase, M. Kusunoki, S. Kudo, M. Watanabe, K. Yamada, K. Sugihara, H. Yamamoto, A. Suzuki, Y. Doki, S. Miyano, M. Mori, and K. Mimori) *Genomic co-amplification of TPX2 and AURKA with MYC cooperatively promote MYC-driven carcinogenesis*, Systems Cancer Project Workshop.  
[http://paulsheridan.net/files/Systems\\_Cancer\\_2013\\_poster.pdf](http://paulsheridan.net/files/Systems_Cancer_2013_poster.pdf)
2. (with Taku Onodera) *The Resolution of a Minor Preferential Attachment Paradox Makes Major Confusions Plain*, International Workshop on Phase Transition, Critical Phenomena and Related Topics in Complex Networks.  
[http://paulsheridan.net/files/Hokudai2013\\_poster.pdf](http://paulsheridan.net/files/Hokudai2013_poster.pdf)
- 2007 1. (with Takeshi Kamimura, and Hidetoshi Shimodaira) *Comparing Scale-free Priors over Graph Structures for Bayesian Inference of Gene Networks*, Pacific Symposium on Biocomputing (PSB) 2007.  
[http://paulsheridan.net/files/PSB2007\\_poster.pdf](http://paulsheridan.net/files/PSB2007_poster.pdf)

### Software

- 2014 2. (with Pham Thong, and Hidetoshi Shimodaira) *PAFit R package*,  
<http://cran.r-project.org/web/packages/PAFit/index.html>.
- 2010 1. (with Takeshi Kamimura, and Hidetoshi Shimodaira) *Gene network estimation with scale-free structure prior software*.  
[http://paulsheridan.net/files/MH-sampler\\_code.zip](http://paulsheridan.net/files/MH-sampler_code.zip)

**Editorial activities**

2015 – Guest Editor, BioMed Research International

**Referee and review activities**

## Journals refereed

International Journal of Molecular Sciences  
Journal of Bioinformatics and Computational Biology  
IEEE Transactions on Computational Biology and Bioinformatics  
Microarrays  
PLoS Computational Biology

## Conferences refereed

The 2016 IEEE International Conference on Bioinformatics and Biomedicine (BIBM 2016)  
24rd Annual International Conference on Intelligent Systems for Molecular Biology (ISMB 2016)  
20th Annual International Conference on Research in Computational Molecular Biology (RECOMB 2016)  
The Fourteenth Asia Pacific Bioinformatics Conference (APBC 2016)  
The 2015 IEEE International Conference on Bioinformatics and Biomedicine (BIBM 2015)  
23rd Annual International Conference on Intelligent Systems for Molecular Biology (ISMB 2015)  
19th Annual International Conference on Research in Computational Molecular Biology (RECOMB 2015)  
The Thirteenth Asia Pacific Bioinformatics Conference (APBC 2015)  
1st International Conference on Algorithms for Computational Biology (AlCoB 2014)  
18th Annual International Conference on Research in Computational Molecular Biology (RECOMB 2014)  
The Twelfth Asia Pacific Bioinformatics Conference (APBC 2014)  
The 2013 IEEE International Conference on Bioinformatics and Biomedicine (BIBM 2013)  
Sixth Annual RECOMB/ISCB conference on Regulatory and Systems Genomics,  
with DREAM Challenges (RECOMB DREAM 2013)  
17th Annual International Conference on Research in Computational Molecular Biology (RECOMB 2012)  
1st International Conference on the Theory and Practice of Natural Computing (TPNC 2012)

## Workshops refereed

15th Workshop on Algorithms in Bioinformatics (WABI 2015)  
14th Workshop on Algorithms in Bioinformatics (WABI 2014)  
13th Workshop on Algorithms in Bioinformatics (WABI 2013)