CURRICULUM VITAE
Daniela M. Witten, PhD
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1. Biographical Information

- Name: Daniela M. Witten
- Work Address:

Department of Statistics, University of Washington
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Seattle, WA 98195-4322

Department of Biostatistics, University of Washington
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2. Education

- Stanford University, Stanford CA, B.S., Mathematics and Biological Sciences
  with Departmental Honors (Highest) and University Distinction (Highest), 2005
- Stanford University, Stanford CA, M.S., Statistics, 2006
- Stanford University, Stanford CA, Ph.D., Statistics, 2010
  Advisor: Prof. Robert Tibshirani
  Dissertation Title: A Penalized Matrix Decomposition, and its Applications

3. Professional Positions

- Dorothy Gilford Endowed Chair in Mathematical Statistics, University of Washington, 2018-present
- Professor, Depts of Statistics & Biostatistics, University of Washington, 2018-present
  - Affiliate Faculty, Center for Statistics and Social Sciences
  - Affiliate Faculty, eScience Institute
  - Core Faculty, Statistical Genetics Program
  - Faculty, Institute for Public Health Genetics
  - Affiliate Investigator, Biostat/Biomath, Fred Hutchinson Cancer Research Center
- Associate Professor, Depts of Statistics & Biostatistics, University of Washington, 2014-2018
- Assistant Professor, Department of Biostatistics, University of Washington, 2010-2014
  - Genentech Endowed Professorship in Biostatistics

4. Honors, Awards, Scholarships

Professional Awards

- National Merit Scholar (2001)
- Presidential Scholar, Stanford University (2001-2005)

- National Advanced Placement Scholar (2001)
- Election to Cap and Gown Honor Society, Stanford University (2004)
- Undergraduate Research Organization Summer Fellowship, Stanford University (2004)
- Distinction (Highest), Stanford University (2005)
- Departmental Honors (Highest), Stanford University (2005)
- Firestone Medal for Excellence in Research, Stanford University (2005)
- Hertz Foundation Graduate Fellowship Finalist (2006)
- National Science Foundation Graduate Research Fellowship Honorable Mention (2006)
- National Defense Science and Engineering Graduate Fellowship (2006-2009)
- Gertrude Cox Scholarship, American Statistical Association (2008)
- WNAR Student Paper Award (2009)
- JSM Student Travel Award Honorable Mention, SF Bay Area ASA (2010)
- Genentech Endowed Professorship in Biostatistics, Univ. Washington (2010-2011)
- David P. Byar Young Investigator Award, American Statistical Association (2011)
- Best Faculty Presentation at Department Retreat, UW Biostat (2011)
- NIH Director's Early Independence Award (2011-2016)
- Asia Pacific Rim Travel Award, Institute for Mathematical Statistics (2012)
- Editor's Choice Article, *Journal of the American Medical Informatics Association* (2013)
- Alfred P. Sloan Research Fellowship (2013-2015)
- NSF CAREER Award (2013-2018)
- PopTech Science Fellow (2013)
- Technometrics Ziegel Award (2014)
- Raymond Carroll Young Investigator Award (2015)
- Simons Investigator in Mathematical Modeling of Living Systems, Simons Foundation (2018-2023)
- Dorothy Gilford Endowed Chair in Mathematical Statistics, University of Washington (2018 -)
- Medallion Lecturer, Institute for Mathematical Statistics (2020)

Popular Media Awards

- Forbes Magazine, featured scientist in "30 Under 30" (January 2012)
- Elle Magazine, "Genius Award" (July 2012)
- Forbes Magazine, featured in "30 under 30" (January 2013)
- Forbes Magazine, featured in "30 under 30" (January 2014)

[For complete press coverage and for web links: see faculty.washington.edu/dwitten/news.html]

5. Professional Activities (Outside of UW)

Editorial Service:

- Associate Editor, *Journal of Computational and Graphical Statistics.* (2011-2015)
- Associate Editor, *Biometrika*. (2012-present)
- Associate Editor, *Journal of the American Statistical Assoc.: Theory and Methods* (2014-2017)
- Interim Editor, *Journal of Computational and Graphical Statistics*. (Summer 2015)
- Action Editor, *Journal of Machine Learning Research.* (2018-present)

Invited Session Organizer:

- Eastern North American Region of International Biometric Society Meeting. (03/11)
- ICSA Applied Statistics Symposium. Organized 3 sessions. (06/12)
- ASA Statistical Learning and Data Mining Section Conference. (06/12)
- Joint Statistical Meetings. (08/12)

- Society for Advancement of Chicanos & Native Americans in Science Meeting. (10/12)
- Statistical Learning Data Mining / SISBIS Meeting. (06/14)
- ASA Symposium on Data Science and Statistics. (05/19)

Program Committees:

- ASA Statistical Learning and Data Mining Section Conference. (06/12)
- International Chinese Statistical Association Symposium. (06/12)
- Joint Statistical Meetings, IMS Contributed Papers Chair. (08/13)
- ENAR, Statistical Learning and Data Mining Chair. (03/14)
- Intelligent Systems for Molecular Biology (ISMB). (07/14)
- 5th Seattle Symposium in Biostatistics Co-Chair. (11/15)
- Co-Chair of Spatio-Temporal Data Science Program at IMA, U. Minnesota (02/18-04/18)
    - Co-Chair of Frontiers in Forecasting Workshop (02/18)
    - Co-Chair of Forecasting from Complexity Workshop (04/18)
- Graduate Statistics Education at a Crossroads (10/18)
- ACM-IMS Interdisciplinary Summit on the Foundations of Data Science (06/19)

Grant Review Panels:

- NSF Review Panel, Statistics Program, Arlington VA (2012)
- NSF Review Panel, Information & Intelligent Systems Program, Arlington VA (2012)
- NIH BMRD Review Panel (2013)
- NSA-AMS Mail Reviewer (2014)
- NIH MABS Review Panel (2015)
- Army Research Office Mail Reviewer (2015)
- NIH BMRD Review Panel (2016)
- NIH Special Emphasis Panel, Reviewer (2016)
- NIH MABS Review Panel (2017)
- NSF Review Panel, Statistics Program, Alexandria VA (2018)

Referee Service: Referee for most major statistics journals and many major biology journals

Professional Memberships:

- American Statistical Association, 2009-present
- Institute of Mathematical Statistics, 2009-present

Other:

- Visiting Fellow at Isaac Newton Institute (Summer 2010)
- Institute of Medicine, Committee for Translational Omics (2010-2012)
    - Issued 2012 report *Evolution of Translational Omics*
- Young Researchers Advisory Committee, STAT Journal of Statistics (2012)
- JASA Theory & Methods Co-Editor Nominating Committee (2019)

6. Bibliography

[* indicates joint first authorship.]
[+ indicates UW student author who DW supervised or co-supervised on this paper.]
[# indicates (possibly joint) senior authorship]

Refereed Research Articles: Statistical Methods

1. **Witten DM** and R Tibshirani (2008) Testing significance of features by lassoed principal components. *Annals of Applied Statistics* 2(3): 986-1012.

2. **Witten DM** and R Tibshirani (2009). Extensions of sparse canonical correlation analysis, with applications to genomic data. *Statistical Applications in Genetics and Molecular Biology* 8(1): Article 28.
   [Winner of WNAR Student Paper Competition.]

3. **Witten DM** and R Tibshirani (2009) Covariance-regularized regression and classification for high-dimensional problems. *Journal of the Royal Statistical Society, Series B* 71(3): 615-636.

4. **Witten DM**, Tibshirani R, and T Hastie (2009) A penalized matrix decomposition, with applications to canonical correlation analysis and principal components. *Biostatistics* 10(3): 515-534.

5. **Witten DM**, Hastie T, and R Tibshirani (2009) Discussion of "On consistency and sparsity of principal components analysis in high dimensions." *Journal of the American Statistical Association* 104(486): 698- 699.

6. **Witten DM** and R Tibshirani (2010) A framework for feature selection in clustering. *Journal of the American Statistical Association* 105(490): 713-726.

7. **Witten DM** and R Tibshirani (2010) Survival analysis with high-dimensional covariates. *Statistical Methods in Medical Research* 19(1): 29-51.

8. **Witten D**, Tibshirani R, Gu SS, Fire A, and WO Lui (2010) Ultra-high throughput sequencing-based small RNA discovery and discrete statistical biomarker analysis in a collection of cervical tumours and matched controls. *BMC Biology* 8(1): 58.

9. **Witten DM** and R Tibshirani (2011) Supervised multidimensional scaling for visualization, classification, and bipartite ranking. *Computational Statistics and Data Analysis* 55(1): 789-801.

10. **Witten DM** and R Tibshirani (2011) Penalized classification using Fisher's linear discriminant. *Journal of the Royal Statistical Society, Series B* 73(5): 753-772.
    [Winner of David P. Byar Young Investigator Award.]

11. **Witten DM**, Friedman JH, and N Simon (2011) New insights and faster computations for the graphical lasso. *Journal of Computational and Graphical Statistics* 20(4): 892-900.

12. **Witten DM** (2011) Classification and clustering of sequencing data using a Poisson model. *Annals of Applied Statistics* 5(4): 406-413.

13. Clemmensen L, Hastie T, **Witten DM**, and B Ersboll (2011) Sparse discriminant analysis. *Technometrics* 53(4): 406-413.

14. Li J, **Witten DM**, Johnstone I, and R Tibshirani (2011) Normalization, testing, and false discovery rate estimation for RNA-sequencing data. *Biostatistics* 13(3): 523-538.

15. **Witten DM** and WS Noble (2012) On the assessment of statistical significance of three-dimensional colocalization of sets of genomic elements. *Nucleic Acids Research* 40(9): 3849-3855.

16. **Witten DM** (2013) Penalized unsupervised learning with outliers. *Statistics and its Interface* 6(2): 211-221.

17. Danaher P+, Wang P#, and **D Witten#** (2014) The joint graphical lasso for inverse covariance estimation across multiple classes. *Journal of the Royal Statistical Society, Series B* 76(2): 373-397.

18. **Witten D**, Shojaie A, and F Zhang+ (2014) The cluster elastic net for high-dimensional regression with unknown variable grouping. *Technometrics* 56(1): 112-122.

19. Voorman A+, Shojaie A#, and **D Witten#** (2014) Graph estimation with joint additive models. *Biometrika* 101(1): 85-101.
[David P. Byar Young Investigator Travel Award to A. Voorman.]

20. Tan KM+ and **D Witten#** (2014) Sparse biclustering of transposable data. *Journal of Computational and Graphical Statistics* 23(4): 985-1008.

21. Mohan K+, London P+, Fazel M#, **Witten D#**, and S-I Lee# (2014) Node-based learning of multiple Gaussian graphical models. *Journal of Machine Learning Research* 15: 445-488.

22. Zare H, Wang J, Hu A, Weber K, Smith J, Nickerson D, Song C, **Witten D#**, Blau CA#, and WS Noble# (2014) Inferring clonal composition from multiple sections of a breast cancer. *PLOS Computational Biology* 10(7): e1003073.

23. Tan K-M+, London P, Mohan K, Lee S-I#, Fazel M#, and **D Witten#** (2014) Learning graphical models with hubs. *Journal of Machine Learning Research* 15: 3297-3331.

24. Chen S+, **Witten D#**, and A Shojaie# (2015) Selection and estimation in mixed graphical models. *Biometrika* 102(1): 47-64.

25. Tan K-M+, **Witten D#**, and A Shojaie# (2015) The cluster graphical lasso for improved estimation of Gaussian graphical models. *Computational Statistics and Data Analysis* 85: 23-36.

26. Tan K-M+ and **D Witten#** (2015) Statistical properties of convex clustering. *Electronic Journal of Statistics* 9: 2324-2327.

27. Petersen A+, **Witten D#**, and N Simon# (2016) Fused lasso additive model. *Journal of Computational and Graphical Statistics* 25(4): 1005-1025.
[A. Petersen was runner-up in 2014 WNAR Student Paper Competition, and winner of 2015 JSM Non-Parametrics Student Paper Competition. This paper was included in a "JCGS best paper showcase" session at the 2018 Symposium on Data Science and Statistics.]

28. Haris A+, **Witten D#**, and N Simon# (2016) Convex modeling of interactions with strong heredity. *Journal of Computational and Graphical Statistics* 25(4): 981-1004.

29. Sheng E+, **Witten D#**, and X-H Zhou# (2016) Hypothesis testing for differences in correlation. *Biostatistics* 17(4): 677-691.

30. Petersen A+, Simon N#, and **D Witten#** (2016) Convex regression with interpretable sharp partitions. *Journal of Machine Learning Research* 17(94): 1-31.

31. Tan KM+, Ning Y, **Witten D#**, and H Liu# (2016) Replicates in high dimensions, with applications to latent variable graphical models. *Biometrika* 103(4): 761-777.

32. Chen S+, **Witten D#**, and A Shojaie# (2017) Nearly assumptionless screening for the mutually-exciting multivariate Hawkes process. *Electronic Journal of Statistics* 11: 1207-1234.

33. Morrison J+, Simon N#, and **D Witten#** (2017) Simultaneous detection and estimation of trait associations with genomic phenotypes. *Biostatistics* 18(1): 147-164.

34. Chen S+, Shojaie A#, and **D Witten#** (2017) Network reconstruction from high-dimensional ordinary differential equations. *Journal of the American Statistical Association* 112(520): 1697-1707.

35. Petersen A+, Simon N, and **D Witten#** (2018) SCALPEL: Extracting neurons from calcium imaging data. *Annals of Applied Statistics* 12(4): 2430-2456.

36. Jewell S+ and **D Witten#** (2018) Exact spike train inference via l_0 optimization. *Annals of Applied Statistics* 12(4): 2457-2482.

37. Petersen A+ and **D Witten#** (2018) Flexible and Interpretable Additive Modeling. *Statistics in Medicine* 38(4): 583-600.

38. Jewell S+ and **D Witten**# (2019) Discussion of "Gene hunting with hidden Markov model knockoffs". *Biometrika* 106(1): 23-26.

39. Yu G, Bien J, and **D Witten#** (2019) Discussion of "Covariate-assisted ranking and screening for large-scale two-sample inference." Journal of the Royal Statistical Society, Series B 81(2): 229-231.

40. Jewell S+, Hocking T, Fearnhead P, and **D Witten#** (2019) Fast non-convex deconvolution of calcium imaging data. To appear in *Biostatistics*.

41. Gao L+, Bien J, and **D Witten#** (2019) Are clusterings of multiple data views independent? To appear in *Biostatistics*.
    [L. Gao received a David Byar Travel Award from the Biometrics Section of the American Statistical Association for this paper.]

42. Wu J+ and **D Witten# (**2019) Flexible and interpretable models for survival data. To appear in *Journal of Computational and Graphical Statistics*.

Refereed Research Articles: Applications

43. Macpherson JM, Gonzalez J, **Witten DM**, Davis JC, Singh ND, Hirsh AE, and DA Petrov (2008) High error rate in detecting partial selective sweeps in Drosophila under assumptions of panmixis. *Molecular Biology and Evolution* 25(6): 1025-1042.

44. Chou LB, Wagner D, **Witten DM**, Martinez-Diaz G, Brook N, and M Toussaint (2008) Postoperative pain in orthopaedic surgery: a prospective study. *Foot and Ankle International* 29(11): 1064-1069.

45. Huang Y*, Krasnitz M*, Rabadan R*, **Witten DM***, Song T, Levine AJ, Ho DD, and H Robins (2008) A recoding method to improve the humoral immune response to an HIV DNA vaccine. *PLoS ONE* 3(9): e3214.

46. Brar R, West R, **Witten D**, Raman B, Jacobs C, and K Ganjoo (2009) Breast angiosarcoma: case series and expression of vascular endothelial growth factor. *Case Reports in Oncology* 2: 242-250.

47. Jockers M, **Witten DM**, and C Criddle (2009) Reassessing the authorship of the Book of Mormon using delta and nearest shrunken centroid classification. *Literary and Linguistic Computing* 23(4): 465-491.

48. Somervaille TCP, Matheny CJ, Spencer GJ, Iwasaki M, Rinn JL, **Witten DM**, Chang HY, Shurtleff SA, Downing JR, and Cleary ML (2009) Hierarchical maintenance of MLL myeloid leukemia stem cells employs a transcriptional program shared with embryonic rather than adult stem cells. *Cell Stem Cell* 4(2): 129-140.

49. Beck AH, Weng Z, **Witten DM**, Zhu S, Foley JW, Lacroute P, Smith C, Tibshirani R, van de Rijn M, Sidow A, and West RB (2010) 3'-end sequencing for expression quantification (3SEQ) from archival tumor samples. *PLoS ONE* 5(1): e8768.

50. Beck AH, Lee CH, **Witten DM**, Gleason BC, Edris B, Espinosa I, Zhu S, Li R, Montgomery KD, Marinelli RJ, Tibshirani R, Hastie T, Jablons DM, Rubin BP, Fletcher CD, West RB, and M Van de Rijn (2010) Discovery of molecular subtypes in leiomyosarcoma through integrative molecular profiling. *Oncogene* 29: 845-854.

51. Jockers, ML and **DM Witten** (2010) A comparative study of machine learning methods for authorship attribution. *Literary and Linguistic Computing* 25(2): 215-223.

52. Caramuta R, Egyhazi S, Rodolfo M, **Witten D**, Hansson J, Larsson C, and WO Lui (2010) MicroRNA expression profiles associated with mutational status and survival in malignant melanoma. *Journal of Investigative Dermatology* 130: 2062-2070.

53. Ganjoo K, **Witten D**, Patel M, Espinosa I, La T, Tibshirani R, van de Rijn M, Jacobs C, and R West (2011) The prognostic value of tumor associated macrophages in leiomyosarcoma: A single institution study. *American Journal of Clinical Oncology* 34(1): 82-86.

54. Wu J, Beck A, Pate L, **Witten D**, Zhu S, Montgomery K, Allison K, van de Rijn M, and R West (2011) Endogenous versus tumor-specific host response to breast carcinoma: a study of stromal response in synchronous breast primaries and biopsy site changes. *Clinical Cancer Research* 17(3): 437-446.

55. Patwardhan RP, Hiatt JB, **Witten DM**, Kim MJ, Smith RP, May D, Lee C, Andrie JM, Lee SI, Cooper GM, Ahituv N, Pennacchio LA, and J Shendure (2012) Massively parallel functional dissection of mammalian enhancers in vivo. *Nature Biotechnology* 30(3): 265-270.

56. Sung J, Wang Y, Chandrasekaran S, **Witten DM#**, and ND Price# (2012) Molecular signatures from omics data: from chaos to consensus. *Biotechnology Journal* 7(8): 946-957.

57. Maldonado JR, Dubois HC, David EE, Sher Y, Lolak S, Dyal J, and **DM Witten** (2012) The Stanford Integrated Psychosocial Assessment for Transplantation (SIPAT): A New Tool for the Psychosocial Evaluation of Pre-Transplant Candidates. *Psychosomatics* 53(2): 123-132.

58. Williams AA, **Witten DM**, Duester R, and Chou LB (2012) The benefits of hardware removal from the foot and ankle. *Journal of Bone and Joint Surgery* 94(14): 1316-1320.

59. Brunner AL, Beach AH, Edris B, Sweeney RT, Zhu SX, Li R, Montgomery K, Varma S, Gilks T, Guo X, Foley JW, **Witten DM**, Giacomini CP, Flynn RA, Pollack JR, Tibshirani R, Chang HY, van de Rijn M, and RB West (2012) Transcriptional profiling of lncRNAs and novel transcribed region across a diverse panel of archived human cancers. *Genome Biology* 13(8):R75.

60. **Witten D** and R Tibshirani (2013) Scientific research in the era of omics: the good, the bad, and the sloppy. *Journal of the American Medical Informatics Association* 20(1): 125-127. [Editor's Choice Article.]

61. Zhao L, Antic T, **Witten D**, Paner GP, Taxy JB, Husain A, Gwin K, Mirza MK, Lingen M, and M Tretiakova (2013) Is Gata3 expression maintained in regional metastases? A study of paired primary and metastatic urothelial carcinomas. *The American Journal of Surgical Pathology* 37(12): 1876-1881.

62. Kircher M*, **Witten DM***, Jain P, O'Roak BJ, Cooper GM, and J Shendure (2014) A general framework for estimating the relative pathogenicity of human genetic variants. *Nature Genetics* 46: 310-315.

63. Tay-Sontheimer J, Shireman LM, Beyer RP, Senn T, **Witten D**, Pearce RE, Gaedigk A, Fomban CLG, Lutz JD, Isoherranen N, Thummel KE, Fiehn O, Leeder JS, and YS Lin (2014) Detection of an endogenous urinary biomarker associated with CYP2D6 activity using global metabolomics. *Pharmacogenomics* 15(16): 1947-1962.

64. Inoue F, Kircher M, Martin B, Cooper GM, **Witten DM**, McManus MT, Ahituv N, and J Shendure (2017) A systematic comparison reveals substantial differences in chromosomal versus episomal encoding of enhancer activity. *Genome Research* 27(1): 38-52.

65. Rentzsch P, **Witten D**, Cooper GM, Shendure J, and M Kircher (2019) CADD: Predicting the deleteriousness of variants throughout the human genome. *Nucleic Acids Research* 47(D1): D886-D894.

66. Farrer L, Bis J, Jian X, …., **Witten D**, …. and M Fornage (2018) Whole exome sequencing study identifies novel rare and common Alzheimer's-associated variants involved in immune response and transcriptional regulation. To appear in *Molecular Psychiatry*.

Publications in Peer-Reviewed Conferences

67. Mohan K, Han S, Chung M, **Witten D#**, Lee S-I#, and M Fazel# (2012) Structured sparse learning of Gaussian graphical models. Advances in Neural Information Processing Systems (NIPS).

68. Grechkin M, Fazel M#, **Witten D#**, and S-I Lee# (2014) Pathway Graphical Lasso. Twenty-Ninth AAAI Conference on Artificial Intelligence (AAAI-15).

69. **Witten D**, Fertig E, Anandkumar A, and Jeff Dean (2018) What's in a name? It's time to nip NIPS. NeurIPS Workshop on Critiquing and Correcting Trends in Machine Learning.
[Spotlight Talk.]

Refereed Book Chapters

70. Tan K-M+*, Petersen A+*, and **D Witten#** (2014) Classification of RNA-Seq Data. *Statistical Analysis of Next Generation Sequencing Data*. Springer. Editors: Daniel Nettleton and Somnath Data.

71. Bien J and **D Witten** (2016) Penalized Estimation in Complex Models. *Handbook of Big Data*. CRC Press. Editors: Peter Buhlmann, Michael Kane, Petros Drineas, and Mark van der Laan.

Other Refereed Scholarly Publications

72. Micheel C, Nass SJ, and GS Omenn, Editors; Committee on the Review of Omics-Based Tests for Predicting Patient Outcomes in Clinical Trials; Board on Health Care Services; Board on Health Sciences Policy; Institute of Medicine (2012) Evolution of Translational Omics: Lessons Learned and the Path Forward. National Academy of Sciences Press. 300 pages.
[Consensus Report From Institute of Medicine Committee, 2010-2012.]

Books

73. James G, **Witten DM**, Hastie T, and R Tibshirani (2013) Introduction to Statistical Learning. Springer Series in Statistics. 426 pages.
[Winner of 2014 Ziegel Award from *Technometrics*.]

Other Non-Refereed Published Scholarly Publications

74. **Witten DM** (2005) Power of tests of neutrality for DNA polymorphisms. The Stanford Biologist 7: 21-25.

75. **Witten DM** (2010) A penalized matrix decomposition, and its applications. PhD Dissertation, Department of Statistics, Stanford University.

Software: See http://faculty.washington.edu/dwitten/software.html

7. Funding History

Funded Projects As Principal Investigator: Ongoing

NSF CAREER Award; Role: PI; Award Number 1252624
Title: "CAREER: Flexible Network Estimation from High-Dimensional Data"
07/01/2013 – 06/30/2018; $400,000 in total costs
[Currently in No-Cost Extension]

NIH T32 Award; Role: PI (multiple PI with W. Noble, A. Fairhall, T. Daniel); 1 T32 CA206089
Title: "University of Washington PhD Training in Big Data for Genomics and Neuroscience"
9/23/2015 – 8/31/2020; approximately $260,000/year in direct costs

NIH R01 Award; Role: contact PI (multiple PI with J. Bien); 1 R01 GM123993

Title: “A Modeling Framework for Multi-View Data, with Applications to the Pioneer 100 Study and Protein Interaction Networks”
8/01/2017 – 6/30/2021; approximately $330,000/year in total costs

Simons Foundation Investigator in Math’l Modeling of Living Systems; Role: PI; Award No. 560585
8/1/2018 - 7/31/2023; $660,000 in total costs

NIH R01 Award; Role: contact PI (multiple PI with I. Witten); 1 R01 DA047869
Title: “CRCNS: Theory and Experiments to Elucidate Neural Coding in the Reward Circuit”
09/15/2018 – 07/31/2022; $1,049,961 in total costs

NIH R01 Award; Role: contact PI (multiple PI with M. Buice); 1 R01 EB026908
Title: “Models and Methods for Calcium Imaging Data, with Application to the Allen Brain Observatory”
09/20/2018 - 06/30/2021; $1,057,786 in total costs

Funded Projects as Co-Investigator: Ongoing

NIH R01 Award; Role: Co-I (PIs: J. Elmore and L. Shapiro); 1R01 CA200690
Title: “Improving Melanoma Pathology Accuracy Through Computer Vision Techniques”
8/1/2016 – 7/31/2021

NIH R01 Award; Role: Co-I (PIs: P. Stayton and D Chiu and H. Gamill); 1R01 HD089679
Title: “Placentomics Using a Novel Method to Isolate Circulating Placental Derivatives”
9/20/2016-7/31/2021

Funded Projects As Principal Investigator: Completed

Royalty Research Fellowship from U. Washington; Role: PI; Co-PIs: Maryam Fazel, Su-In Lee
Title: “Structured Graphical Lasso: Models, Optimization, and Applications”
03/15/2013 – 03/13/2014; $35,338

Alfred P. Sloan Research Fellowship; Role: PI
Area: Computational and Evolutionary Molecular Biology
09/15/2013 – 09/15/2015; $50,000

NIH R25 Award; Role: PI (multiple PI with Ali Shojaie); 1 R25 EB020380
Title: “Summer Institute for Statistics of Big Data”
9/29/2014 - 5/31/2017; approximately $150,000/year in direct costs

NIH Director's Early Independence Award; Role: PI; 5 DP5 OD009145
Title: "High-Dimensional Unsupervised Learning, with Applications to Genomics"
9/20/2011 – 8/31/2016; $250,000/year in direct costs

8. Oral Presentations

Invited Oral Presentations at Conferences and Symposia

1. German meeting of the International Biometric Society. Hannover, Germany. (03/09)
2. Workshop on High-Dimensional Biomedical Data. Freiburg, Germany. (03/09)
3. Advances in Bioinformatics and Genomics. Menlo Park, CA. (02/10)
4. Joint Statistical Meetings. Vancouver, BC. (08/10)
5. University of Washington Department of Biostatistics Retreat. Pack Forest, WA. (09/10)
6. International Biometric Conference. Florianopolis, Brazil. (12/10)
7. ENAR Annual Meeting. Miami, FL. (03/11)
8. 4th Lehmann Symposium at Rice University. Houston, TX. (05/11)
9. IMS-China Meeting. Xi'An, China. (07/11)
10. Joint Statistical Meetings. Miami Beach, FL. (08/11)
11. University of Washington Department of Biostatistics Retreat. Leavenworth, WA. (09/11)
12. NIH Director's Early Independence Award Symposium. Bethesda, MD. (12/11)
13. Achievement Rewards for College Scientists Foundation Event. Yarrow Point, WA. (02/12)
14. American Association for Cancer Research Annual Meeting. Chicago, IL. (04/12)
15. Workshop on Large Scale Inference and Learning, Univ Minnesota. Minneapolis, MN. (04/12)
16. DNA Day, Institute for Public Health Genetics, University of Washington. Seattle, WA. (04/12)
17. TEDx at University of Washington. Seattle, WA. (04/12)
18. Interface: Future of Statistical Computing, Rice University. Houston, TX. (06/12)
19. VIDD Faculty Retreat, Fred Hutchinson Cancer Research Center. Snoqualmie, WA. (06/12)
20. 8th Purdue Symposium on Statistics, Purdue University. West Lafayette, IN. (06/12)
21. Statistical Learning and Data Mining Conference, Univ Michigan. Ann Arbor, MI. (06/12)
22. International Chinese Statistical Association Symposium. Boston, MA. (06/12)
23. American Society for Clinical Oncology Annual Meeting. Chicago, IL. (06/12)
24. IMS Asia Pacific Rim Meeting. Tsukuba, Japan. (07/12)
25. Bioconductor Conference, Fred Hutchinson Cancer Research Center. Seattle, WA. (07/12)
26. Joint Statistical Meetings. San Diego, CA. (08/12)
27. Omics Workshop, Institute of Translational Health Sci, Univ Washington. Seattle, WA. (11/12)
28. NIH Director's Early Independence Award Symposium. Bethesda, MD. (12/12)
29. Computational Neuroscience Symposium. Seattle, WA. (09/13)
30. University of Washington Department of Biostatistics Retreat. Leavenworth, WA. (09/13)
31. Simply Statistics Unconference. (10/13)
32. Modern Large Scale Statistical Learning Workshop. Manhattan Beach, CA. (11/13)
33. Achievement Rewards for College Scientists Foundation Event. Seattle, WA. (12/13)
34. New Faculty Orientation, School of Public Health. Seattle, WA. (02/14)
35. American Statistical Association Puget Sound Chapter Meeting. Seattle, WA. (04/14)
36. Joint Statistical Meetings. Boston, MA. (08/14)
37. Statistics in Applications Symposium, Michigan State University. (10/14)
    [Keynote Speaker.]
38. CIFAR Genetic Networks Program Meeting. Seattle, WA. (11/14)
39. Workshop on Inference in High-Dimensional Regression. Palo Alto, CA. (01/15)
40. University of Washington / Microsoft Research Machine Learning Day. Redmond, WA. (02/15)
41. Data Sense to Data Science Conference, Fred Hutchinson. Seattle, WA. (05/15)
42. Next Course Dinner Series. Seattle, WA. (05/15)
    [Featured speaker at an event organized by UW Advancement.]
43. Model-Based Clustering Working Group Meeting. Seattle, WA. (07/15)
44. Caucus of Academic Representatives of ASA. Seattle, WA. (08/15)
45. Joint Statistical Meetings. Seattle, WA. (08/15)
46. Public Health Genetics Symposium. Seattle, WA. (02/16)
47. Big Data in Biomedicine Conference. Stanford, CA. (05/16)

48. UseR! Conference. Stanford, CA. (06/16*)*
[Keynote Speaker.]
49. Workshop on Algorithms for Modern Massive Data Sets. Berkeley, CA. (06/16)
50. National Academies of Sciences Workshop on "Refining the Concept of Scientific Inference When Working With Big Data." Washington, DC. (06/16)
51. International Biometric Conference. Victoria, BC. (07/16)
52. NHLBI Biostatistics Workshop on "Recent Advances and Challenges in Statistical Methods." Bethesda, MD. (09/16)
53. The Data Science Conference. Seattle, WA. (10/16)
54. Workshop on Methods and Applications in Health Care Analytics. Seattle, WA. (10/16)
[Keynote Speaker.]
55. NIH BD2K All Hands Meeting. Bethesda, MD. (11/16)
56. NIH High-Risk High-Reward Meeting. Bethesda, MD. (12/16)
57. NIH Early Independence Award Symposium. Bethesda, MD. (12/16)
58. Neural Computation and Engineering Connection. Seattle, WA. (01/17)
59. University of Washington Business Advisory Council. Seattle, WA. (02/17)
60. Grossman Workshop on Quantifying Structure in Large Neural Datasets, Columbia University. New York, NY. (04/17)
61. Joint Statistical Meetings. Baltimore, MD. (08/17)
62. Michigan Institute for Data Science Symposium, Univ of Michigan. Ann Arbor, MI. (10/17)
[Keynote Speaker.]
63. Panel with NPR's Richard Harris, University of Washington Health Sciences. (01/18)
64. Beckman Symposium, Stanford University. Stanford, CA. (02/18)
65. Women in Data Science Conference, Stanford University. Stanford, CA. (03/18)
66. Women in Data Science Conference, University of Washington. Seattle, WA. (03/18)
67. Forecasting from Complexity, Institute for Math and its Applications. Minneapolis, MN. (04/18)
68. BRANDS Workshop, University of Southern California. Los Angeles, CA. (04/18)
69. BRANDS Workshop Panel, University of Southern California. Los Angeles, CA. (04/18)
70. Joint Statistical Meetings, Introductory Overview Lecture. Vancouver, BC. (08/18)
71. Joint Statistical Meetings. Vancouver, BC. (08/18)
72. Statistics at a Crossroads. NSF Webinar. (09/18)
73. Grossman Workshop on Quantifying Structure in Large Neural Datasets. Aspen, CO. (09/18)
74. Math Across Campus Talk, University of Washington. Seattle, WA. (02/19)
75. ASA Symposium on Data Science and Statistics. Bellevue, WA. (05/19) [upcoming]
[Keynote Speaker.]
76. Statistical World Congress, IMS Medallion Lecture. Seoul, South Kore. (08/20) [upcoming]
[IMS Medallion Lecture.]

Invited Seminars and Colloquia

77. Stanford University, Workshop in Biostatistics. Stanford, CA. (05/08)
78. Stanford University, Molecular Profiling Colloquium. Stanford, CA. (07/08)
79. Stanford University, Molecular Profiling Colloquium. Stanford, CA. (11/08)
80. Stanford University, Molecular Profiling Colloquium. Stanford, CA. (06/09)
81. University of Southern California, Statistics Seminar. Los Angeles, CA. (10/09)
82. Stanford University, Workshop in Biostatistics. Stanford, CA. (10/09)
83. Rice University, Department of Statistics. Houston, TX. (10/09)
84. Stanford University, Integrative Cancer Biology Program. Stanford, CA. (10/09)
85. Harvard University, Department of Biostatistics. Boston, MA. (12/09)
86. Johns Hopkins University, Department of Biostatistics. Baltimore, MD. (12/09)

87. Yale University, Department of Statistics. New Haven, CT. (01/10)
88. University of British Columbia, Department of Statistics. Vancouver, Canada. (01/10)
89. University of Michigan, Depts of Statistics & Biostatistics. Ann Arbor, MI. (01/10)
90. University of California at Davis, Department of Statistics. Davis, CA. (01/10)
91. University of Pennsylvania, Department of Statistics. Philadelphia, PA. (01/10)
92. University of Washington, Department of Biostatistics. Seattle, WA. (01/10)
93. Harvard University, Department of Statistics. Boston, MA. (02/10)
94. Stanford University, Computational Biology. Stanford, CA. (03/10)
95. Fred Hutchinson Cancer Research Center, Biostatistics. Seattle, WA. (10/10)
96. University of Washington, Department of Statistics. Seattle, WA. (10/10)
97. University of Washington, Machine Learning Lunch. Seattle, WA. (01/11)
98. University of Washington, Dept of Genome Sciences COMBI. Seattle, WA. (02/11)
99. University of Southern California, Statistics. Los Angeles, CA. (03/11)
100. University of Wisconsin, Dept of Biostat and Med Informatics. Madison, WI. (03/11)
101. Purdue University, Statistics Bioinformatics. West Lafayette, IN. (09/11)
102. University of Washington, Metabolomics User Group Workshop. Seattle, WA. (11/11)
103. Cal State Fullerton, Department of Biological Sciences Seminar. Fullerton, CA. (02/12)
[Invited by the students in the NIH-funded Minority Access to Research Careers program.]
104. University of Washington, Dept of Genome Sciences COMBI. Seattle, WA. (03/12)
105. UCLA, Department of Statistics. Los Angeles, CA. (05/12)
106. University of Washington, Biomedical Research Integrity Program. Seattle, WA. (07/12)
107. Fred Hutchinson Cancer Center, Biomedical Research Integrity Program. Seattle, WA. (07/12)
108. Stanford University, Workshop in Biostatistics. Stanford, CA. (11/12)
109. UC Berkeley, Neyman Seminar, Department of Statistics. Berkeley, CA. (11/12)
110. Carnegie Mellon University, Department of Statistics. Pittsburgh, PA. (11/12)
111. Cornell University, Department of Statistics. Ithaca, NY. (11/12)
112. Oregon State University, Department of Statistics. Corvallis, OR. (01/13)
113. McGill University, Department of Statistics. Montreal, Quebec. (02/13)
114. Univ North Carolina, Department of Biostatistics. Chapel Hill, North Carolina. (02/13)
115. NC State, Department of Statistics. Raleigh, North Carolina. (02/13)
116. U Washington, College of the Environment, Meet Greet Teach Panel. Seattle, WA. (02/13)
117. Univ Washington, Laboratory Medicine (Grand Rounds). Seattle, WA. (03/13)
118. Univ Washington, Astro Lunch. Seattle, WA. (04/13)
119. Univ Washington, Institute of Health Metrics and Evaluation. Seattle, WA. (05/13)
120. Univ Minnesota, Biostatistics Seminar. Minneapolis, MN. (10/13)
121. Institute for Systems Biology Seminar. Seattle, WA. (10/13)
122. Univ Washington, Office of Sponsored Programs. Seattle, WA. (11/13)
123. Princeton University, ORFE Colloquium. Princeton, NJ. (12/13)
124. University of Wisconsin, Statistics Seminar. Madison, WI. (12/13)
125. Fred Hutchinson Cancer Research Center, Comp Biology Seminar. Seattle, WA. (09/14)
126. Univ Washington, Center for Statistics and the Social Sciences. Seattle, WA. (11/14)
127. University of Washington, Trends in Optimization Seminar. Seattle, WA. (11/14)
128. University of Washington, Biostatistics Seminar. Seattle, WA. (03/15)
129. UW Center for Ecogenetics & Environmental Health Breakfast Club. Seattle, WA. (03/15)
130. Fred Hutch Cancer Center, Biomedical Research Integrity Program. Seattle, WA. (06/15)
131. University of Washington, Biomedical Research Integrity Program. Seattle, WA. (06/15)
132. Fred Hutchinson Cancer Research Center, Epidemiology Seminar. Seattle, WA. (06/15)
133. UC Berkeley, Neyman Seminar, Department of Statistics. Berkeley, CA. (02/16)
134. Harvard University, Biostatistics Colloquium. Boston, MA. (03/16)

135. Princeton Univ, Center for Stat & Machine Learning Colloquium. Princeton, NJ. (03/16)
136. Texas A&M University, Statistics Seminar. College Station, TX. (03/16)
[Seminar associated with receipt of Raymond Carroll Young Investigator Award.]
137. Data Science and Experimentation Platform, Microsoft. Bellevue, WA. (08/16)
138. UCLA, Statistics Seminar. Los Angeles, CA. (01/17)
139. Yale University, Biostatistics Seminar. New Haven, CT. (02/17)
140. Brown University, Biostatistics Seminar. Providence, RI. (02/17)
141. Princeton University, ORFE Colloqium. Princeton, NJ. (02/17)
142. Allen Institute for Brain Sciences. Seattle, WA. (03/17)
143. University of Washington, Genome Sciences Seminar. Seattle, WA. (04/17)
[Invited by UW Women in Genome Sciences Organization.]
144. U. Chicago, Booth School of Business, Statistics and Econometrics Seminar. Chicago, IL. (11/17)
145. Columbia University, Systems Biology. New York, NY. (12/17)
146. Caltech, Computing + Mathematical Sciences, Keller Colloquium. Pasadena, CA. (01/18)
147. Columbia University, Department of Statistics Seminar. New York, NY. (02/18)
148. Stanford University, Department of Statistics Seminar. Stanford, CA. (03/18)
149. University of Minnesota, Department of Statistics Seminar. Minneapolis, MN. (04/18)
150. Harvard University, Department of Statistics Colloquium. Cambridge, MA. (11/18)

9. University Service

Department of Statistics, Stanford University

- M.S. Admissions Committee (2008, 2009, 2010)

School, College, or University Service, University of Washington

- Reviewer for Royalty Research Fund (2010, 2016)
- School of Public Health Endowed Fellowship Selection Committee (2013)
- School of Public Health Biostatistics Chair Search Committee (2013-2014)
- Co-Director of UW Summer Institute in Statistics for Big Data (2015 - present)
- Co-Director of UW Training Grant in Big Data for Genomics and Neuroscience (2015 – present)
- Co-Chair of Data Science Interdisciplinary Committee (2014-2015)
- Data Science Interdisciplinary Group (2015 – present)
- Admissions Committee for Data Science Master's of Science (2016)
- Department of Mathematics Chair Search Committee (2018)

Department of Statistics, University of Washington

- Chair of Stat/CSE Faculty Search Committee (2014-2015)
- Methodology Prelim Committee (2015, 2017)
- PhD Admissions Committee (2017-2018, 2018-2019)

Department of Biostatistics, University of Washington

- Seminar Committee (2010-2011)
- Emergency Preparedness Committee (2010-2011)
- Computing Committee (2010-2011, 2012-2013, 2013-2014, 2014-2015)
- Admissions Committee (2011-2012, 2013-2014)
- M.S. Theory Exam Committee (2012, 2013, 2017, chair in 2018)
- Faculty Search Committee (2012-2013)
- PhD Review Committee (2013-2014)
- Diversity Committee (2014-2015)

- Applied Exam Committee (2015, 2016)

10. Professionally-Related Community Service

- SACNAS (Advancement of Chicanos & Native Americans in Science) Meeting. Seattle, WA. (10/12)
    - Organizer and Chair of a Scientific Session: "How Statistics Can Change Your Life"
    - Invited Speaker in a Scientific Session: "Random Matrix Theory"
    - Participant in "Conversation With Scientists" Panel
    - Judge of Undergraduate Research Posters
- Presentation at UW Stat Day (a program for Seattle-area AP Statistics students). Seattle, WA. (05/16)
- Q&A for Women in Biostatistics and Statistics, UW. Seattle, WA. (01/19)
- Q&A with Math Undergrads, UW. Seattle, WA. (02/19)
- Women in STEM Panel Hosted by UW Statistics and Probability Association. Seattle, WA. (02/19)

11. Teaching History

Formal Courses at University of Washington

- Biostatistics/Statistics 533, Theory of Linear Models (Spring 2011)
  Enrollment: 12; Median evaluation: 4.6/5.0
- Biostatistics/Statistics 533, Theory of Linear Models (Spring 2012)
  Enrollment: 22; Median evaluation: 4.5/5.0
- Biostatistics/Statistics 533, Theory of Linear Models (Spring 2013)
  Enrollment: 24; Median evaluation: 4.5/5.0
- Biostatistics/Statistics 527, Nonparametric Regression (Spring 2015)
  Enrollment: 32; Median evaluation: 4.7/5.0
- Biostatistics/Statistics 572, Advanced Regression Methods (Spring 2015)
  Enrollment: 19; Median evaluation: 4.0/5.0
- Statistics 435, Introduction to Statistical Machine Learning (Spring 2016)
  Enrollment: 37; Median evaluation: 4.2/5.0
- Statistics 435, Introduction to Statistical Machine Learning (Spring 2017)
  Enrollment: 32; Median evaluation: 4.9/5.0
- Statistics 435, Introduction to Statistical Machine Learning (Spring 2018)
  Enrollment: 43; Median evaluation: 4.7/5.0
- Biostatistics 546, Introduction to Machine Learning for Public Health Data (Spring 2018)
  Enrollment: 41; Median evaluation: 4.6/5.0

Guest Lectures

- Biostatistics 578B, Ethical Issues for Biostatisticians (Spring 2013 and Spring 2016)
  Instructor: Lianne Sheppard
- General Studies 391D, Research Exposed! Approaches to Inquiry (Fall 2013)
  Instructor: Jennifer Harris
- Statistics 593B, Unsupervised Learning (Spring 2014; two lectures)
  Instructor: Werner Stuetzle
- Upward Bound (Summer 2014), a UW summer program for high school students
  Instructors: Tory Brundage and Sara Mackenzie
- Mathematics 498, Undergraduate Mathematical Sciences Seminar (Winter 2015)
  Instructor: Tom Duchamp

Other Teaching

- "High Dimensional Omics Data": a 3-day course at Summer Institute in Statistical Genetics, Seattle WA (July 2012, 2013, 2014). Co-taught with Ali Shojaie

- "Statistical Machine Learning for Real-World Problems": a 2.5-hour special lecture at Summer Institute for Math at University of Washington, a summer program for high school students, Seattle WA (July 2012, 2013, 2014)
- "Introduction to Statistical Learning": a 1-day course at JSM in Montreal (August 2013)
- "Supervised Machine Learning": a 3-day course at Summer Institute in Statistics for Big Data, Seattle WA (July 2015, 2017). Co-taught with Noah Simon
- "Machine Learning Methods for Big Data": a 1-day course at Albert Einstein College of Medicine (March 2016) *[Awarded the Mildred Morehead Visiting Professorship.]*
- "Unsupervised Learning": NIH BD2K Webinar (February 2017)
- "Statistical Methods for Calcium Imaging Data": Summer Workshop on the Dynamic Brain, Friday Harbor WA (August 2017, 2018)

12. Advising and Formal Mentoring

PhD Committees as Chair

Completed:

- Arend Voorman (co-chair with Ali Shojaie), PhD 2014
  - Dissertation: "Estimation & Conditional Inference in High-Dimensional Statistical Models"
  - Winner of 2013 Byar Travel Award from American Statistical Association for Voorman, Shojaie, Witten (2014) "Graph estimation with joint additive models", *Biometrika*
  - Winner of Donovan Thompson Award from UW Biostat (2011)
  - Winner of Outstanding PhD Student Award from UW Biostat (2014)
  - First position after graduation: Statistician at Gates Foundation
- Kean Ming Tan, PhD 2015
  - Dissertation: "Graph Estimation and Cluster Analysis in High Dimensions"
  - Runner-up for 2014 WNAR Oral Student Paper Competition for Tan, Simon, Witten (2014) "Selection Bias Estimation and Effect Size Correction Under Dependence"
  - Winner of Senior PhD Student Award from UW Biostat (2015)
  - As of Summer 2017: Assistant Professor at University of Minnesota, School of Statistics
- Shizhe Chen (co-chair with Ali Shojaie), PhD 2016
  - Dissertation: "Flexible Modeling and Estimation for High-Dimensional Graphs"
  - As of Summer 2018: Assistant Professor at UC Davis, Department of Statistics
- Ashley Petersen (co-chair with Noah Simon), PhD 2016
  - Dissertation: "Data-Adaptive Modeling Using Convex Regression"
  - Winner of Donovan Thompson Award from UW Biostat (2013)
  - Runner-up for 2014 WNAR Written Student Paper Competition for Petersen, Witten, Simon (2015) "Fused Lasso Additive Model"
  - Winner of 2015 JSM Section on Non-Parametric Statistics Student Paper Competition for Petersen, Witten, Simon (2015) "Fused Lasso Additive Model"
  - Winner of Outstanding PhD Student Award from UW Biostat (2016)
  - "JCGS best paper showcase" session at the 2018 Symposium on Data Science and Statistics.
  - As of Summer 2017: Assistant Professor at Univ of Minnesota, Division of Biostatistics

Ongoing:

- Lucy Gao, Biostatistics PhD student, entered Fall 2015
  - Completed General Exam in Winter 2019
  - Winner of 2019 David Byar Travel Award from Biometrics Section of Amer. Stat. Association
- Sean Jewell, Statistics PhD student, entered Fall 2015
  - Completed General Exam in Winter 2019
- Bryan Martin, Statistics PhD student, entered Fall 2015

- Yandi Shen, Statistics PhD student, entered Fall 2016
- Yiqun Chen, Biostatistics PhD student, entered Fall 2017

Mentored Scientists and Post-Docs

- Mentorship Committee for Ferhat Ay, Genome Sciences Postdoc (2012 - 2015)
    - Primary Advisor: Bill Noble
- Mentorship Committee for Tychele Turner, Genome Sciences Postdoc (2014 to present)
    - Primary Advisor: Evan Eichler
- NSF IGERT Secondary Mentor for Serena Liu, Genome Sciences PhD Student (2015 to present)
    - Primary Advisor: Cole Trapnell
- NIH K Award Mentor for Elaine Nsoesie, Assistant Professor in Global Health (2016 to present)
- Post-Doctoral Research Supervisor for Ashley Petersen (September 2016 – May 2017)
- Agnes Nielsen, visiting PhD student from Technical University of Denmark (January - June 2017)
- Post-Doctoral Research Supervisor for Hugo (Guo) Yu (July 2018 to present)

MS and PhD Committees in Non-Chair Role

Completed:

- Sergey Feldman, Electrical Engineering PhD student (defended Autumn 2012)
- Patrick Danaher, Biostatistics PhD student (defended Winter 2013)
- Hristina Pashova, Biostatistics PhD student (defended Spring 2013)
- Niklas Krumm, Genome Sciences PhD student (defended Spring 2014)
- Max Libbrecht, Computer Science PhD student (defended Spring 2016)
- Jean Morrison, Biostatistics PhD student (defended Summer 2016)
- Sen Zhao, Biostatistics PhD student (defended Winter 2017)
- Yali Wan, Statistics PhD student (defended Summer 2017)
- Travis Scholl, Mathematics PhD student (defended Spring 2018)
- Maryclare Griffin, Statistics PhD student (defended Summer 2018)
- Sidney Bell, Molecular and Cellular Biology PhD student (defended Fall 2018)
- Hannah Pliner, Genome Sciences PhD student (defended Winter 2019)

Ongoing:

- Daniel Chee, Genome Sciences PhD student (2014 to present)
- Serena Liu, Genome Sciences PhD student (2015 to present)
- Manar Riman, Mathematics PhD student (2016 to present)
- John Lazar, Genome Sciences PhD student (2016 to present)
- John Earls, Computer Science PhD student (2017 to present)
- April Lo, Genome Sciences PhD student (2018 to present)
- Mitchell Vollger, Genome Sciences PhD student (2018 to present)
- Anthony Valente, Genome Sciences PhD student (2018 to present)