

LUCY LU WANG

Curriculum vitae

850 Republican St., Building C, 477C
Seattle, WA 98109
lucylw@uw.edu

2408 Delmar Dr E.
Seattle, WA 98102
(443) 824-9725

EDUCATION

Ph.D. candidate in Biomedical Informatics and Medical Education exp. 2018

University of Washington, Seattle, WA

Committee: John H. Gennari, Neil F. Abernethy, Paul K. Crane, Ali Shojaie (GSR)

Preliminary examination in:

- (1) organization and ontology alignment of biological pathway knowledge bases;
- (2) network analysis and alignment techniques;
- (3) pathway enrichment analysis

M.S. in Applied Biomedical Engineering 2013

The Johns Hopkins University, Baltimore, MD

B.S. in Physics 2009

Massachusetts Institute of Technology, Cambridge, MA

PUBLICATIONS

Refereed Journal Articles

2017. Kaminsky D.A., **Wang L.L.**, Bates J.H.T., Thamrin C., Shade D.M., Dixon A.E., Wise R.A., Peters S., Irvin C.G. Fluctuation analysis of peak expiratory flow and its associations with treatment failure in asthma. *American Journal of Respiratory and Critical Care Medicine*, 195(8): 993-9. PMID: 27814453, DOI: 10.1164/rccm.201601-0076OC.

2015. Zaidman C.M., **Wang L.L.**, Connolly A.M., Florence J., Wong B.L., Parsons J.A. et al. Electrical impedance myography in Duchenne muscular dystrophy and health controls: a multi-center study of reliability and validity. *Muscle & Nerve*, 52(4): 592-7. PMID: 25702806, DOI: 10.1002/mus.24611.

2011. **Wang L.L.**, Spieker A.J., Li J. & Rutkove S.B. Electrical impedance myography for monitoring motor neuron loss in the SOD1 G93A amyotrophic lateral sclerosis rat. *Clinical Neurophysiology*, 122: 2505-11. PMID: 21612980, DOI: 10.1016/j.clinph.2011.04.021.

2011. **Wang L.L.**, Ahad M., McEwan A., Li J., Jafarpoor M. & Rutkove S.B. Assessment of alterations in the electrical impedance of muscle after experimental nerve injury via finite-element analysis. *IEEE Transactions on Biomedical Engineering*, 58(6): 1585-91. PMID: 21224171, DOI: 10.1109/TBME.2011.2104957.

Conference Proceedings

2017. **Wang L.L.**, Gennari J.H. Similarity metrics for determining overlap among biological pathways. *In press*. International Conference on Biomedical Ontology, 2017.

2016. Jung H., Law A.B., Grunblatt E., **Wang L.L.**, Kusano A., Mejino Jr. J.L.V., Whipple M.E. Development of a novel Markov chain model for the prediction of head and neck squamous cell carcinoma dissemination. *AMIA Annual Symposium Proceedings*, 2016: 1832-9. PMID: 28269942
2016. **Wang L.L.**, Gennari J.H., Abernethy N.F. An analysis of differences in biological pathway resources. *Proceedings of the Joint International Conference on Biological Ontology and BioCreative*, 2016.
2015. **Wang L.L.**, Grunblatt E., Jung H., Kalet I.J., Whipple M.E. Biological model development as an opportunity to provide content auditing for the foundational model of anatomy ontology. *AMIA Annual Symposium Proceedings*, 2015: 2111-20. PMID: 26958311

FELLOWSHIPS AND AWARDS

- 2014–2017. National Library of Medicine Informatics Training Fellowship
2017. UW Graduate School Fund for Excellence and Innovation Travel Award
2016. BioCreative/ICBO travel fellowship
2015. UW Graduate School Fund for Excellence and Innovation Travel Award
2014. UW Graduate School Top Scholar Top Off Fellowship

CONFERENCE ACTIVITY

Papers Presented

2017. **Wang L.L.**, Gennari J.H. Similarity metrics for determining overlap among biological pathways. Presented at the International Conference on Biomedical Ontology, September 15, 2017, Newcastle upon Tyne, UK.
2016. Jung H., Law A.B., Grunblatt E., **Wang L.L.**, Kusano A., Mejino Jr. J.L.V., Whipple M.E. Development of a novel Markov chain model for the prediction of head and neck squamous cell carcinoma dissemination. Presented at the American Medical Informatics Association Annual Symposium, November 16, 2016, Chicago, IL.
2016. **Wang L.L.**, Gennari J.H., Abernethy N.F. An analysis of differences in biological pathway resources. Presented at the International Conference on Biological Ontology, August 3, 2016, Corvallis, OR.
2015. **Wang L.L.**, Grunblatt E., Jung H., Kalet I.J., Whipple M.E. Biological model development as an opportunity to provide content auditing for the foundational model of anatomy ontology. Presented at the American Medical Informatics Association Annual Symposium, November 16, 2015, San Francisco, CA.

Podium Talks

2016. **Wang L.L.**, Gennari J.H., Abernethy N.F. Discovering representational differences between pathway knowledge bases for pathway resource merging. Presented at the American Medical Informatics Association Annual Symposium, November 15, 2016, Chicago, IL.

Posters Presented

2017. Hood T., **Wang L.L.**, Abernethy N.F. Detection and Functional Classification of Fusion Genes Using Pathway Expression Profiles. Presented at the American Medical Informatics Association Joint Summits on Translational Science, March 28, 2017, San Francisco, CA.
2016. **Wang L.L.**, Grunblatt E., Whipple M.E. Auditing tree-like organ systems in the FMA using network motifs. Presented at the American Medical Informatics Association Annual Symposium, November 15, 2016, Chicago, IL.
2016. **Wang L.L.**, Gennari J.H., Abernethy N.F. Identifying and resolving inconsistencies in biological pathway resources. Presented at the National Library of Medicine Informatics Training Conference, June 27, 2016, Columbus, OH.
2015. **Wang L.L.**, Choi Y. Development of a discharge ontology to support postanesthesia discharge decision making. Presented at the International Conference on Biomedical Ontology, July 27, 2015, Lisbon, Portugal.
2015. **Wang L.L.**, Grunblatt E., Whipple M., Kalet I.J. Ontological content auditing during model creation using the foundational model of anatomy. Presented at the National Library of Medicine Informatics Training Conference, June 23, 2015, Bethesda, MD.
2014. Kaminsky D.A., **Wang L.L.**, Shade D., Dixon A.E., Bates J.H.T., Irvin C.G. et al. Detrended fluctuation analysis of peak expiratory flow and its association with destabilization of asthma control. Presented at the International Conference of the American Thoracic Society, May 19, 2014, San Diego, CA.
2013. Zaidman C., Bohorquez J., **Wang L.L.**, Florence J., Connolly A.M., Escolar D.M. et al. Electrical impedance myography in DMD: a multi-center study of reliability and relationships to strength and function. Presented at the 18th International Congress of The World Muscle Society, October, 2013, Pacific Grove, CA.

TEACHING EXPERIENCE

Winter 2017 — Biological Pathway Analysis: Trends and Applications

BIME 591, Department of Biomedical Informatics and Medical Education, University of Washington

RESEARCH & WORK EXPERIENCE

2014—2017. NLM Graduate Trainee, Department of Biomedical Informatics and Medical Education, University of Washington

2017. Research Intern, Semantic Scholar Group, The Allen Institute for Artificial Intelligence

2013—2014. Software Engineer, Xcision Medical Systems, LLC.

2012—2014. Consulting Data Analyst, Skulpt Inc., formerly Convergence Medical Devices, Inc.

2011—2012. Research Data Coordinator, Asthma Clinical Research Center, Johns Hopkins Bloomberg School of Public Health

2009–2010. Research Assistant, Rutkove Lab, Department of Neurology, Beth Israel Deaconess Medical Center

SERVICE

2017–2018. Member, JAMIA Student Editorial Board

2017–2018. Manager, JAMIA Journal Club

2017–2019. Board Member, Nihon Ki-in Go Institute of the West (Seattle Go Center)

2017–2018. Graduate Mentor, University of Washington High Performance Computing Club

2017. Assistant Editor, MedInfo 2017

2017. Reviewer, AMIA Translational Bioinformatics Year in Review

2015–2016. Curriculum Committee, Department of Biomedical Informatics and Medical Education, University of Washington

Reviewer for AMIA Annual Symposium (2016, 2017), AMIA Translational Bioinformatics (2017), and JAMIA (2017)

PROFESSIONAL MEMBERSHIPS

2015–2017. American Medical Informatics Association (AMIA)

2015–2017. The International Association for Ontology and its Applications (IAOA)