

TRINA M. NORDEN-KRICHMAR

WORK ADDRESS

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EDUCATION

Fellowships:

- 10/2011-11/2014 Post-doctoral Researcher, The Scripps Research Institute, La Jolla, CA
- Bioinformatics analyses of next generation sequencing data for common and rare variant association studies in human diseases and aging.
 - Gene expression analysis of RNA-Seq data.
- 01/2010-09/2011 Post-doctoral Researcher, J. Craig Venter Institute, La Jolla, CA
- Bioinformatics analyses of next generation sequencing data for projects involving regulatory small RNAs and ChIP-Seq data
 - Metagenomics and metatranscriptomics
 - Gene expression analysis of RNA-Seq and Affymetrix microarray data.

Graduate School:

- 2004 – 2009 Doctor of Philosophy in Marine Biology
Scripps Institution of Oceanography
Dissertation Title: “Characterization of small RNA genes in the marine organisms *Ciona intestinalis* and *Thalassiosira pseudonana*”
Degree Conferred: December 12, 2009
University of California, San Diego, CA
- 1988-1990 Master’s of Science in Computer Science
George Washington University, Washington, DC

College:

- 1986-1988 Computer Science (34 credit hours, post-baccalaureate)
University of Maryland, College Park, MD
- 1981-1985 Bachelor’s of Science in Biochemistry
University of Maryland, College Park, MD

EMPLOYMENT

- 07/2022-present Associate Professor, University of California, Irvine, CA
Department of Epidemiology & Biostatistics, Program in Public Health (Primary Appointment)
Department of Pharmaceutical Science (Joint Appointment, July 2018-present)
Department of Computer Science (Joint Appointment, October 2019 – present)
Department of Biological Chemistry (Joint Appointment, November 2019 – present)
Veterans Affairs (VA) Long Beach Healthcare System (Without Compensation Appointment, August 2020 – present)
- Bioinformatics analyses of genomic sequencing data for identification of genetic factors in human disease.
- 2015-2022 Assistant Professor, University of California, Irvine, CA
Department of Epidemiology and Biostatistics, Program in Public Health
(July 2021-Present, Primary Appointment)
Department of Epidemiology, School of Medicine
(01/2015-07/2021, Primary Appointment)
- 2004-2009 Graduate Student Researcher, Scripps Institution of Oceanography, UCSD
- Computational prediction and validation of small RNA genes
- 1999-2010 Computer Programmer at Salk Institute, Vision Center Laboratory, on remote assignment from National Institutes of Health
- Lead programmer for the CORTEX data acquisition and experimental control program. Designed, coded, and tested in the C/C++ programming language.
 - Provided code modifications, troubleshooting, setup, and support to laboratory personnel and colleagues at extramural laboratories.
 - Supervised two junior programmers.
- 2000-2002 Instructor (part-time), UCSD Extension and Mechanical Engineering Department at University of California, San Diego
- Taught “C Programming – Hands On” for 4 quarters at UCSD Extension.
 - Taught “C/C++ Programming” for 1 quarter at UCSD Mechanical Engineering Department.
- 1994-1999 Computer Programmer, National Institutes of Health, Bethesda, MD
- Designed, coded, and tested electrophysiological data acquisition and analysis programs written in LabVIEW for the Laboratory of Neural Control, NINDS (1994-1997).
 - Lead programmer for CORTEX data acquisition and experimental control program for the Laboratory of Neuropsychology, NIMH (1997-1999).
- 1991-1994 Senior Associate Programmer, IBM Corporation, Bethesda, MD
- Developed software in C for ImagePlus/2 VisualInfo, a client/server image processing product for OS/2 LAN based workstations.
- 1990-1991 Software Engineer, Interactive Television Company, Arlington, VA
- Designed and developed software in C for video-based systems using interactive videodisc and CD-ROM technology for Unix and MS-DOS.
- 1988-1990 Graduate Teaching Assistant, George Washington University
- Instructor for Pascal and Fortran programming classes.

1985-1987 Scientist I, Geo-Centers, Inc. at Naval Research Laboratory, Washington, DC
- Developed procedures to prepare protein crystals suitable for x-ray diffraction analysis

TEACHING

Spring 2023 Instructor, University of California, Irvine
EPIDEM 275 and PUBHLTH 119. Special Topics in Epidemiology: Bioinformatics
4 credit mixed graduate and undergraduate class
Enrollment: 32 total: 15 graduate students and 17 undergraduate students

February 2023 “Introduction to Bioinformatics” Instructor, UCI Cancer Systems Biology Short Course.

Winter 2023 EPIDEM 282. Instructor, UCI, Department of Epidemiology Seminar Series
Enrollment: 22 graduate students

August 2021 “Introduction to Bioinformatics” Instructor, UCI Cancer Systems Biology Short Course.

Spring 2021 Instructor, University of California, Irvine
EPIDEM 275 and PUBHLTH 119. Special Topics in Epidemiology: Bioinformatics
4 credit mixed graduate and undergraduate class
Enrollment: 34 total: 19 graduate students and 15 undergraduate students

Fall 2020 and Winter 2021
- EPIDEM 282. Instructor, UCI, Department of Epidemiology Seminar Series
- Enrollment each quarter: 19 graduate students

September 2020 “Introduction to Bioinformatics” Instructor, UCI Cancer Systems Biology Short Course.

Spring 2020 Instructor, University of California, Irvine
EPIDEM 275 and PUBHLTH 119. Special Topics in Epidemiology: Bioinformatics
4 credit mixed graduate and undergraduate class
Enrollment: 40 total: 20 graduate students and 20 undergraduate students

Spring 2019 Instructor, University of California, Irvine
EPIDEM 275 (#91667) Special Topics in Epidemiology: Bioinformatics
4 credit graduate-level class
Enrollment: 12 graduate students

January 2019 “Introduction to Bioinformatics” Instructor, UCI Cancer Systems Biology Short Course.

October 12, 2018 Teaching Award: UCI, School of Medicine, “Excellence in Teaching Award”

Spring 2018 Instructor, University of California, Irvine
EPIDEM 275 (#91667) Special Topics in Epidemiology: Bioinformatics
4 credit graduate-level class
Enrollment: 18 graduate students

Winter 2018 EPIDEM 275 (#91651) Instructor, Department of Epidemiology Seminar Series
Enrollment: 15 graduate students

Winter 2016 EPIDEM 275 (#91667) Special Topics in Epidemiology: Bioinformatics
4 credit graduate-level class
Enrollment: 10 graduate students

Fall 2015 EPIDEM 275 (#91651) Co-instructor of Department of Epidemiology Seminar Series
Enrollment: 10 graduate students

2002 Instructor, University of California, San Diego
Mechanical and Aerospace Engineering Department
Courses taught (1 quarter): MAE 9: C/C++ Programming
Enrollment: approximately 190 students

2000-2002 Instructor, University of California, San Diego, UCSD Extension Program
Courses taught (4 quarters): C Programming I – Hands On
Enrollment: approximately 20 students/quarter

1988-1990 Graduate Teaching Assistant, George Washington University
Department of Electrical Engineering and Computer Science
Courses taught (4 semesters): Pascal Programming and Fortran Programming
Enrollment: approximately 30 students/semester

MENTORING

Doctoral Committees at University of California, Irvine (* Chair)

*Stanislav Listopad (Computer Science, 2018-2022; Advancement, Spring 2019; Thesis Defense, Fall 2022)
*Xiaochen Liu (Epidemiology, 2019-present; Advancement, Fall 2020; Thesis Defense, Spring 2023)
*Chloe Thangavelu (Biological Chemistry, 2020-present; Advancement, Winter 2021; Thesis Defense, Summer 2023)

Kun Yuan (Epidemiology & Biostats; Advancement comment member, Winter 2024)
Gregory Tong (Pharmaceutical Sciences; Advancement committee member, Summer 2023)
Alexis Gaines (Epidemiology & Biostats; Advancement committee member, Spring 2023)
D'Artagnan Robinson (Epidemiology & Biostats; Advancement committee member, Spring 2023)
Kalan Leaks (Biomedical Engineering; Advancement committee member, Summer 2022)
Ding Quan (Quinton) Ng (Pharmaceutical Sciences; Pre-Advancement member, Summer 2022; Advancement committee member, Spring 2023)
Leslie Spitalny (Pharmaceutical Sciences; member: Pre-Advancement 2021, Advancement Summer 2022)
Ana Caldaruse (Pharmaceutical Sciences; Pre-Advancement member, Summer 2022; Advancement committee member, Summer 2023)
Danielle Bergazin (Pharmaceutical Sciences; Thesis committee member, Spring 2022)
Yanwen Gong (Mathematical, Computational, & Systems Biology, Winter 2022; Advancement member)
Yingxin Cao (Mathematical, Computational, & Systems Biology, Summer 2021; Advancement member; Thesis Defense committee member, Summer 2023)
Wenjun Fan (Public Health, Summer 2021; Advancement committee member)
Lauren Urban (Microbiology and Molecular Genetic, Summer 2021; Advancement committee member; Thesis Defense committee member, Fall 2022)
Chris Young Zhang (Pharmaceutical Sciences, 2021; Advancement committee member)
Sloan Lewis (Molecular Biology, 2019; Advancement committee member)
Rachel M. Lucia (Epidemiology, 2018-present; Advancement committee member)
Daniel Nuyujukian (Epidemiology, 2015-2018; Advancement and Thesis committee member)
John Schomberg (Epidemiology, 2015-2018; Advancement and Thesis committee member)

MS Committees at University of California, Irvine

Kayleen Ports (Epidemiology, Spring 2022; MS Thesis committee member)

Ray Alexander (Social Ecology, Fall 2021; 2nd year project for MA Thesis committee member)

Valeria Elahy (Epidemiology, 2018; MS Thesis committee member)

Andrew Liem (Epidemiology, 2015-2017; MS Thesis committee member)

Fulbright-Nehru Visiting Scholar Mentoring

Mentor for Fulbright-Nehru Doctoral Research Scholar, Tulika Kakati (PhD graduate student, Computer Science, Tezpur University, India), visiting scholar in my lab for 2019-2020 academic year.

Graduate Directed Study Mentoring Courses

EPIDEM 297, 298, 299: Kun Yuan, Xiaochen Liu, Stanislav Listopad, Ray Alexander,
Rachel Lucia, John Schomberg

BIOCHEM 200, 202: Chloe Thangavelu

PHRMSCI 299: Gregory Tong

MOLBIO 200A: Daniel Tran

Undergraduate Directed Study Mentoring

Edgar Partida (Computer Science, EPIDEM 199 course, Winter and Spring 2019)

AWARDS AND HONORS

Oct. 2018	UCI School of Medicine, “Excellence in Teaching Award”
2006-2009	National Science Foundation Graduate Research Fellowship
2007	Student travel award for NIDDK Workshop on MicroRNA
1990	4.0 GPA at graduation from George Washington University
1988-1989	Junior Distinguished Graduate Teaching Assistant
1985	3.8 GPA, graduated Cum Laude from University of Maryland
1985	Provost Scholar Award
1985	Scholastic Achievement Award
1981-1985	Senatorial Scholarship
1981-1985	General Honors Scholarship
1981-1982	Bowie Women’s Club Scholarship

CONTRACTS, GRANTS, AND FELLOWSHIPS

Title: “Alcoholic Hepatitis Consortia: An intramural/extramural collaboration to unravel genetic determinants”

Grant Number: U01AA026264

Funding Agency: NIH, National Institute on Alcoholism and Alcohol Abuse (NIAAA)

Role: Co-Investigator (PIs: Laura Nagy and Ramon Bataller)

Dates: 9/01/2017 – 08/31/2023

Total costs: \$1,821,062

Title: “Single-cell RNA sequencing to investigate potential biomarkers in the progression from liver cirrhosis to hepatocellular carcinoma”

Funding Agency: Chao Family Comprehensive Cancer Center (CFCCC) UCI

Funding Call: Cancer Health Disparities Pilot Projects
Role: Co-Principal Investigator
Dates: 02/2021 – 12/2022
Total costs: \$40,000

Title: “Investigation of mediation and modifier effects connecting the clinical and genetic risk factors of alcohol-related liver cirrhosis”
Funding Agency: Department of Veteran Affairs
Funding Call: MVP Local Site Investigator Beta test MVP Projects in VA Data Commons
Role: Co-Investigator (PI: Timothy Morgan)
Dates: Awarded 09/2021 to be spent 01/2023 – 06/2023
Total costs: \$50,000

Title: “Transcriptomics of Liver in Alcoholic Hepatitis”
Grant Number: U01 AA021838
Funding Agency: NIH, National Institute on Alcoholism and Alcohol Abuse (NIAAA)
Role: Principal Investigator
Dates: 01/01/2013 – 12/31/2019
Total costs: \$1,283,370

Title: “Epigenetic markers for pesticide exposure and cancer risk”
Grant Number: 22UB-2311
Funding Agency: California Breast Cancer Research Program
Role: Co-Investigator (PI: Hannah Park)
Dates: 10/2016 – 9/30/2020
Total costs: \$1,000,000

Title: “Single-cell RNA sequencing to investigate potential biomarkers in the progression from liver cirrhosis to hepatocellular carcinoma”
Funding Agency: Chao Family Comprehensive Cancer Center (CFCCC) UCI
Funding Call: Single-cell RNA-seq Pilot and Feasibility Award, for reagents, library prep, and sequencing for 1 scRNA-seq sample (value \$3000)
Role: Principal Investigator
Awarded: October 11, 2018
Total costs: \$3000

Title: “Single-cell RNA sequencing to investigate potential biomarkers in the progression from liver cirrhosis to hepatocellular carcinoma”
Funding Agency: UC Irvine School of Medicine, and Veterans Administration Long Beach Healthcare System (Biumvirate Pilot Grant)
Role: Co-Principal Investigator
Period: 05/2019 – 08/31/2020
Total costs: \$25,000

2006-2009 National Science Foundation Graduate Research Fellowship

PUBLICATIONS

1. Ward, K.B., Perozzo, M.A., and **Norden, T.M.** (1986) "Precession photography of protein single crystals". National Synchrotron Light Source Annual Report, ed. by S. White-DePace and N. Gmur, BNL 52045 UC-13, Brookhaven National Laboratory, New York, p. 471-2.
2. Degtyarenko, A.M., Simon, E.S., **Norden-Krichmar, T.**, and Burke, R.E. (1998) "Modulation of oligosynaptic cutaneous and muscle afferent reflex pathways during fictive locomotion and scratching in the cat". *J. Neurophysiology*, 79(1), p. 447-463.
3. **Norden-Krichmar, T.M.**, Holtz, J., Pasquinelli, A.E., and Gaasterland, T. (2007) "Computational prediction and experimental validation of *Ciona intestinalis* microRNA genes" *BMC Genomics*, 8: 445.
4. **Norden-Krichmar, T.M.**, Allen, A.E., Gaasterland, T., and Hildebrand, M. (2011) "Characterization of the small RNA transcriptome of the diatom, *Thalassiosira pseudonana*" *PLoS ONE* 6(8): e22870, doi:10.1371/journal.pone.0022870.
5. Ishii, S., Suzuki, S., **Norden-Krichmar, T.M.**, Nealson, K.H., Sekiguchi, Y., Gorby, Y.A., Bretschger, O. (2012) "Functionally stable and phylogenetically diverse microbial enrichments from microbial fuel cells during wastewater treatment" *PLoS ONE* 7(2): e30495, doi:10.1371/journal.pone.0030495.
6. Bertrand, E.M., Allen, A.E., Dupont, C.L., **Norden-Krichmar, T.M.**, Bai, J., Valas, R.E. and Saito, M.A. (2012) "Influence of cobalamin scarcity on diatom molecular physiology and identification of a cobalamin acquisition protein" *PNAS*, doi:10.1073/pnas.1201731109.
7. Shrestha, R.P., Tesson, B., **Norden-Krichmar, T.M.**, Federowicz, S., Hildebrand, M. and Allen, A.E. (2012) "Whole transcriptome analysis of the silicon response of the diatom *Thalassiosira pseudonana*" *BMC Genomics*, 13:499, doi:10.1186/1471-2164-13-499.
8. Ishii, S., Suzuki, S., **Norden-Krichmar, T.M.**, Tenney, A., Chain P.S.G., Scholz, M., Nealson, K.H., and Bretschger, O. (2013) "A novel metatranscriptomic approach to identify gene expression dynamics during extracellular electron transfer", *Nature Communications* 4:1601, doi:10.1038/ncomms2615.
9. Ishii, S., Suzuki, S., **Norden-Krichmar, T.M.**, Wu, A., Yamanaka, Y., Nealson, K.H., and Bretschger, O. (2013) "Identifying the microbial communities and operational conditions for optimized wastewater treatment in microbial fuel cells", *Water Research Journal*, 47:7120-7130, doi:10.1016/j.watres.2013.07.048.
10. Ishii, S., Suzuki, S., **Norden-Krichmar, T.M.**, Phan, T., Wanger, G., Nealson, K.H., Sekiguchi, Y., Gorby, Y.A., and Bretschger, O. (2013) "Microbial population and functional dynamics associated with surface potential and carbon metabolism", *International Society of Microbial Ecology (ISME) Journal*, doi:10.1038/ismej.2013.217.
11. **Norden-Krichmar, T.M.**, Gizer, I.R., Libiger, O., Wilhelmsen, K.C., Ehlers, C.L., and Schork, N.J. (2014) "Correlation analysis of genetic admixture and social identification with body mass index in a Native American community", *American Journal of Human Biology*, doi:10.1002/ajhb.22521.
12. **Norden-Krichmar, T.M.**, Gizer, I.R., Wilhelmsen, K.C., Schork, N.J., and Ehlers, C.L. (2014) "Protective variant associated with alcohol dependence in a Mexican American cohort", *BMC Medical Genetics*, 15:136, doi:10.1186/s12881-014-0136-z.

13. Ishii, S., Suzuki, S., Tenney, A., **Norden-Krichmar, T.M.**, Nealson, K.H., and Bretschger, O. (2015) “Microbial metabolic networks in complex electrogenic biofilm recovered from a stimulus-induced metatranscriptomics approach”, *Scientific Reports*, 5:14840, doi: 10.1038/srep14840.
14. **Norden-Krichmar, T.M.**, Gizer, I.R., Wilhelmsen, K.C., Schork, N.J., and Ehlers, C.L. (2015) “Variants near CCK receptors are associated with electrophysiological responses to pre-pulse startle stimuli in a Mexican American cohort”, *Twin Research and Human Genetics*, doi:10.1017/thg.2015.77.
15. Schomberg, J., Ziogas, A., Anton-Culver, H., and **Norden-Krichmar, T.** (2018) “Identification of a gene expression signature predicting survival in oral cavity squamous cell carcinoma using Monte Carlo cross validation”, *Oral Oncology*, 78:72-79, doi:10.1016/j.oraloncology.2018.01.012.
16. Ryu, S., Han, J., **Norden-Krichmar, T.M.**, Schork, N.J., and Suh, Y. (2018) “Effective discovery of rare variants by pooled target capture sequencing: A comparative analysis with individually indexed target capture sequencing”, *Mutation Research Fundamental and Molecular Mechanisms of Mutagenesis*, 809:24-31, doi:10.1016/j.mrfmmm.2018.03.007.
17. Listopad, S.A. and **Norden-Krichmar, T.M.** (2019) “A-Lister: A tool for analysis of differentially expressed -omics entities across multiple pairwise comparisons”, *BMC Bioinformatics*, 20, 595, doi:10.1186/s12859-019-3121-x.
18. Willems, E.L., Wan, J.Y., **Norden-Krichmar, T.M.**, Edwards, K.L., and Santorico, S.A. (2019) “Trans-ethnic meta-analysis of metabolic syndrome in a multi-ethnic study”, *Genetic Epidemiology*, doi:10.1002/gepi.22267.
19. Wan, J.Y., Catabay, C., Liem, A., Jeffrey, E., **Norden-Krichmar, T.M.**, Goodman, D., Santorico, S.A., Edwards, K.L., and American Diabetes Association GENNID Study Group (2019) “Evidence for gene-smoking interactions for hearing loss and deafness in Japanese American families”, *Hearing Research*, 387, doi:10.1016/j.heares.2019.107875.
20. Lucia, R.M., Huang, W., Alvarez, A., Thampy, D., Elyasian, M., Hidajat, A., Yang, K., Forman, D., Pebdani, A., Masunaka, I., Brain, S., Heditsian, D., Lee, V., Goodman, D., **Norden-Krichmar, T.M.**, Odegaard, A., Ziogas, A., and Park, H.L (2020) “Rationale, Study Design, and Cohort Characteristics for the Markers for Environmental Exposures (MEE) Study”, *International Journal of Environmental Research and Public Health*, 17, 1174, doi:10.3390/ijerph17051774.
21. Widyastuti, H.P., **Norden-Krichmar, T.M.**, Grosberg, A., and Zaragoza, M.V. (2020) “Gene expression profiling of fibroblasts in a family with *LMNA*-related cardiomyopathy reveals molecular pathways implicated in disease pathogenesis”, *BMC Medical Genetics*, 21, 152, doi.org/10.1186/s12881-020-01088-w.
22. Ryu, S., Han, J., **Norden-Krichmar, T.**, Zhang, Q., Lee, S., Zhang, Z., Atzmon, G., Niedernhofer, L.J., Robbins, P.D., Barzilai, N., Schork, N.J., and Suh, Y. (2021) “Genetic signature of human longevity in PKC and NF- κ B signaling”, *Aging Cell*, doi: 10.1111/accel.13362.
23. Wan, J.Y., Goodman, D.L., Willems, E.L., Freedland, A.R., **Norden-Krichmar, T.M.** Santorico, S.A., and Edwards, K.L. (2021) “Genome-wide association analysis of metabolic syndrome quantitative traits in the GENNID multiethnic family study”, *Diabetology & Metabolic Syndrome*, <https://doi.org/10.1186/s13098-021-00670-3>.

24. Lucia, R.M., Huang, W., Alvarez, A., Masunaka, I., Ziogas, A., Goodman, D., Odegaard, A. O., **Norden-Krichmar, T.M.**, and Park, H.L. (2021) “Association of mammographic density with blood DNA methylation”, *Epigenetics*, DOI: 10.1080/15592294.2021.1928994.
25. Kakati, T., Bhattacharyya, D.K., Kalita, J.K., and **Norden-Krichmar, T.M.** (2022) “DEGNext: Classification of differentially expressed genes from RNA-seq data using a convolutional neural network with transfer learning” *BMC Bioinformatics*, 23:17, doi:10.1186/s12859-021-04527-4.
26. Lucia, R.M., Huang, W., Pathak, K.V., McGilvrey, M., David-Dirgo, V., Alvarez, A., Goodman, D., Masunaka, I., Odegaard, A. O., Ziogas, A., Pirrotte, P., **Norden-Krichmar, T.M.**, and Park, H.L. (2022) “Association of glyphosate exposure with blood DNA methylation”, *Environmental Health Perspectives*, doi:10.1289/EHP10174.
27. Listopad, S., Magnan, C., Asghar, A., Stolz, A., Tayek, J.A., Liu, Z.X., Morgan, T.R., **Norden-Krichmar, T.M.** (2022) “Differentiating between liver diseases by applying multiclass machine learning approaches to transcriptomics of liver tissue or blood-based samples”, *JHEP Reports*, doi: <https://doi.org/10.1016/j.jhepr.2022.100560>.
28. Argemi, J., Kedia, K., Gritsenko, M.A., Clemente-Sanchez, A., Asghar, A., Herranz, J.M., Liu, Z.X., Atkinson, S.R., Smith, R.D., **Norden-Krichmar, T.M.**, Day, L.Z., Stolz, A., Tayek, J.A., Bataller, R., Morgan, T.R., Jacobs, J.M., the Southern California Alcoholic Hepatitis Consortium and the InTeam Consortium. (2022) “Integrated Transcriptomic and Proteomic Analysis Identifies Plasma Biomarkers of Hepatocellular Failure in Alcohol-Associated Hepatitis”, *The American Journal of Pathology*, <https://doi.org/10.1016/j.ajpath.2022.08.009>.
29. Lucia, R.M., Liao, X., Huang, W.L., Forman, D., Kim, A., Ziogas, A., **Norden-Krichmar, T.M.**, Goodman, D., Alvarez, A., Masunaka, I., Pathak, K.V., McGilvrey, M., Hegde, A.M., Pirrotte, P., and Park, H.L. (2023). Urinary glyphosate and AMPA levels in a cross-sectional study of postmenopausal women: Associations with organic eating behavior and dietary intake. *International journal of hygiene and environmental health*, 252, 114211, doi.org/10.1016/j.ijheh.2023.114211.
30. Leaks, K., **Norden-Krichmar, T.** and Brody, J.P. (2023) Predicting moderate drinking behaviors in National Health and Nutrition Examination Survey participants using biochemical and demographical factors with machine learning. *Alcohol*, 113, pp.1-10, doi.org/10.1016/j.alcohol.2023.07.005.
31. Wan, J.Y., Goodman, D., Makhnoon, S., **Norden-Krichmar, T.M.**, Wu, B., and Edwards, K.L. (2023) Heterogeneity in familial clustering of metabolic syndrome components in the multiethnic GENNID study. *Obesity (Silver Spring)*, 1-11, doi:10.1002/oby.23914.
32. **Norden-Krichmar, T. M.**, Rotroff, D., Schwantes-An, T. H., Bataller, R., Goldman, D., Nagy, L. E., and Liangpunsakul, S. (2023) Genomic approaches to explore susceptibility and pathogenesis of alcohol use disorder and alcohol-associated liver disease. *Hepatology*, 10-1097, doi.org/10.1097/HEP.0000000000000617.
33. Thangavelu, C.S. and **Norden-Krichmar, T.M.** (2023) Integrative Meta-Analysis during Induced Pluripotent Stem Cell Reprogramming Reveals Conserved Networks and Chromatin Accessibility Signatures in Human and Mouse. *BioMedInformatics*, 3, 1015-1039, doi.org/10.3390/biomedinformatics3040061.

34. Liu, X., Liu, Z.X., Morgan, T.R., and **Norden-Krichmar, T.M.** (2023) Single-cell transcriptomics of peripheral blood mononuclear cells indicates impaired immune and inflammatory responses in alcohol-associated hepatitis. *Human Immunology*, doi.org/10.1016/j.humimm.2023.110735.
35. Listopad, S., Magnan, C., Day, L.Z., Asghar, A., Stolz, A., Tayek, J.A., Liu, Z.X., Jacobs, J.M., Morgan, T.R., **Norden-Krichmar, T.M.** (2024) "Identification of integrated proteomics and transcriptomics signature of alcohol-associated liver disease using machine learning", *PLOS Digital Health*, 3(2), doi.org/10.1371/journal.pdig.0000447.

ABSTRACTS AND CONFERENCE PROCEEDINGS PAPERS

1. **Norden, T.M.**, Ward, K.B., Kaiser, I.I., and Aird, S.B. (1986) "Crystals of Mojave toxin". Proceedings of the Second American Symposium of Plant, Animal, and Microbial Toxins, ed. by A.L. Bieber, International Society on Toxinology , American Section, Tempe, Arizona, p. 66.
2. Deschamps, J.R., **Norden, T.M.**, and Ward, K.B. (1987) "Protein hyperpurification and crystallization". *Toxicon*, 25(2), p. 138.
3. **Norden, T.M.** and Ward, K.B. (1987) "Effect of beta-D-octyl glucoside on protein crystal habit". *Toxicon*, 25(2), p. 150.
4. **Norden, T.M.** , Ward, K.B., Kaiser, I.I. and Aird, S.B. (1987) "Crystals of Mojave toxin". *Toxicon*, 25(2), p. 149-50.
5. Degtyarenko, A.M., Simon, E.S., **Norden-Krichmar, T.M.**, and Burke, R.E. (1996) "Reflex pathway modulation in FDL and EDL motoneurons differs during fictive scratching versus locomotion in the cat". *Soc. Neurosci. Abstr.*, 22 (Abstr. #543.9), p 1373.
6. Marks, W.B., **Norden-Krichmar, T.M.**, and Burke, R.E. (1997) "Fitting multichannel locomotion data to a vector function of step phase". *Soc. Neurosci. Abstr.*, 23 (Abstr #816.6), p. 2098.
7. Degtyarenko, A.M., Simon, E.S., **Norden-Krichmar, T.**, and Burke, R.E. (1997) "Modulation of oligosynaptic EPSPs produced by stimulating the mesencephalic region (MLR) during fictive locomotion". *Soc. Neurosci. Abstr.*, 23 (Abstr. #410.10), p. 1043.
8. Smith, S., Davis, A.K., Federowicz, S., **Norden-Krichmar, T.M.**, Trentacoste, E., Abbriano, R.M., Traller, J.C., Shrestha, R., Mandahar-Shrestha, K., Tesson, B., Allen, A.E., and Hildebrand, M. (2011) "Lipid induction and gene expression of *Thalassiosira pseudonana* during Silicon Starvation". First International Conference: The Molecular Life of Diatoms, p. 90.
9. Shrestha, R.P., Tesson, B., **Norden-Krichmar, T.**, Federowicz, S., Allen, A., and Hildebrand, M. (2011) "Whole genome expression analysis of the diatom cell cycle unveils the genes involved in frustule formation". First International Conference: The Molecular Life of Diatoms, p. 53.
10. **Norden-Krichmar, T.M.**, Gizer, I.R., Libiger, O., Wilhelmsen, K.C., Ehlers, C.L., and Schork, N.J. (2013) "Correlation of Native American ancestry with body mass index in an admixed community", poster presentation at 63rd Annual Meeting of the American Society of Human Genetics in Boston, MA, on October 22-26, 2013.

11. **Norden-Krichmar, T.M.**, Peng, Q., Gizer, I.R., Wilhelmsen, K.C., Schork, N.J., and Ehlers, C.L. (2014) “Protective variant associated with alcohol dependence in a Mexican American cohort”, poster presentation at the Research Society on Alcoholism conference in Bellevue, WA, on June 22-26, 2014.
12. **Norden-Krichmar, T.M.**, Gizer, I.R., Wilhelmsen, K.C., Schork, N.J., and Ehlers, C.L. (2014) “Variants near CCK receptors are associated with electrophysiological responses to pre-pulse startle stimuli in a Mexican American cohort”, poster presentation at 64th Annual Meeting of the American Society of Human Genetics in San Diego, CA, on October 19-22, 2014.
13. Edwards, K.L., Wan, J.Y., Ziadeh, C., Shridhar, N., **Norden-Krichmar, T.M.**, and Santorico, S. (2015) “Exploring interactions between genetic variation under linkage peaks and cigarette smoking on body weight in GENNID families”, poster at 65th Annual Meeting of the American Society of Human Genetics in Baltimore, MD, on October 6-10, 2015.
14. Catabay, C.J., Wan, J.Y., Jeffrey, E.S., **Norden-Krichmar, T.M.**, Santorico, S.A., and Edwards, K.L. (2015) “Evidence for gene-smoking interactions for hearing loss or deafness in Japanese American families”, at American Public Health Association 143rd Annual Meeting in Chicago, IL, on October 31-November 4, 2015.
15. K.L. Edwards, J.Y. Wan, **T.M. Norden-Krichmar**, S. A. Santorico (2016) “Identifying candidate genes under linkage peaks for metabolic syndrome traits in a Japanese American (JA) family”, poster accepted for presentation at 13th International Congress of Human Genetics in Kyoto, Japan on April 3-7, 2016.
16. **Norden-Krichmar, T.M.** and the Southern California Alcoholic Hepatitis Consortium (SCAHC) (2016) “Transcriptomics of liver tissue in alcoholic hepatitis”, poster presentation at ASHG 2016 in Vancouver, B.C., Canada on October 18-22, 2016.
17. **Norden-Krichmar, T.M.** and the Southern California Alcoholic Hepatitis Consortium (SCAHC) (2017) “Transcriptomics of PBMCs and monocytes in alcoholic hepatitis”, poster presentation at Gordon Research Conference entitled “Alcohol-induced End Organ Diseases” in Ventura, CA on March 26-31, 2017.
18. **Norden-Krichmar, T.M.**, Magnan, C., Liu, Z., Jacobs, J., Morgan, T., and Southern California Alcoholic Hepatitis Consortium (SCAHC). “Transcriptomics of liver tissue, PBMCs, and monocytes in alcoholic hepatitis”, poster presentation at European Association for the Study of Liver disease (EASL 2017, London, September 30, 2017), and American Association for the Study of Liver Disease (AASLD, Washington, DC, October 22, 2017).
19. Jacobs, J.M., Schepmoes, A.A., Kedia, K., Wendler, J., Liu, Z., **Norden-Krichmar, T.M.**, and Morgan, T. “Proteome characterization of alcoholic hepatitis”, poster presentation at European Association for the Study of Liver disease (EASL 2017, London, September 30, 2017), and American Association for the Study of Liver Disease (AASLD, Washington, DC, October 22, 2017).
20. Liu, Z., Stolz, A., Kaplowitz, N., **Norden-Krichmar, T.M.**, Jacobs, J., Morgan, T., and SCAHC. “Peripheral blood CD4+ T helper cells (Th1, Th2, Th17, Th22) are increased in severe alcoholic hepatitis”, poster presentation at European Association for the Study of Liver disease (EASL 2017, London, September 30, 2017), and American Association for the Study of Liver Disease (AASLD, Washington, DC, October 22, 2017).
21. Willems, E.L., Wan, J.Y., **Norden-Krichmar, T.M.**, Edwards, K.L., and Santorico, S.A. “Trans-ethnic meta-analysis of metabolic syndrome in a multi-ethnic study”, poster presentation (E. Willems) at the International Genetic Epidemiology Society (IGES) conference in San Diego, CA, October 14-16, 2018.

22. Wan, J.Y., Willems, E.L., **Norden-Krichmar, T.M.**, Santorico, S.A., and Edwards, K.L. “Family-specific genetic associations with metabolic syndrome in linkage regions”, poster presentation (J.Y. Wan) at the International Genetic Epidemiology Society (IGES) conference in San Diego, CA, October 14-16, 2018.
23. Siddiqui, N., Magnan, C., Liu, Z.X., Jacobs, J., Morgan, T., **Norden-Krichmar, T.M.** and the Southern California Alcoholic Hepatitis Consortium (SCAHC) “Gene expression profiling of liver tissue biopsies, PBMCs, and monocytes to predict treatment response for patients with alcoholic hepatitis”, poster presentation at the American Society of Human Genetics (ASHG) conference in San Diego, CA, October 16-20, 2018.
24. Listopad, S. and **Norden-Krichmar, T.M.** “A-Lister: A tool to identify the most important ‘-omics’ entities across multiple sample groups”, poster presentation at the American Society of Human Genetics (ASHG) conference in San Diego, CA, October 16-20, 2018.
25. Lucia, R.M., Alvarez, A., Masunka, I., Ziogas, A., Goodman, D., Odegaard, A., Lee, V., Brain, S., Heditsian, D., **Norden-Krichmar, T.M.**, and Park, H.L. “A pilot study of DNA methylation, epigenetic age, and breast cancer risk status”, poster presentation at the American Society of Human Genetics (ASHG) conference in San Diego, CA, October 16-20, 2018.
26. Wan, J.Y., Willems, E.L., **Norden-Krichmar, T.M.**, Santorico, S.A., Edwards, K.L., and the American Diabetes Association GENNID Study Group. “Multi-ethnic genotyping in the GENNID study: Elucidating metabolic syndrome etiology underlying linkage regions”, poster presentation at the American Society of Human Genetics (ASHG) conference in San Diego, CA, October 16-20, 2018.
27. **Norden-Krichmar, T.M.**, Listopad, S., Siddiqui, N., Magnan, C., Liu, Z.X., Jacobs, J., Morgan, T., and the Southern California Alcoholic Hepatitis Consortium. “Gene expression profiling of PBMCs in alcoholic and non-alcoholic liver diseases”, poster presentation at the American Association for the Study of Liver Diseases (AASLD) conference in San Francisco, CA, November 9-13, 2018.
28. Jacobs, J., Gritsenko, M., Kedia, K., Liu, Z.X., **Norden-Krichmar, T.M.**, Bataller, R., Morgan, T., and the Southern California Alcoholic Hepatitis Consortium. “Plasma proteomics reveals a unique signature of alcoholic hepatitis and identifies biomarkers of response to prednisolone”, poster presentation at the American Association for the Study of Liver Diseases (AASLD) conference in San Francisco, CA, November 9-13, 2018.
29. Liu, Z.X., Suda, J., **Norden-Krichmar, T.M.**, Jacobs, J., Stolz, N., Kaplowitz, N., Morgan, T. and the Southern California Alcoholic Hepatitis Consortium. “Characterizing the phenotypes and transcriptomic profiles of peripheral blood monocytes in severe alcoholic hepatitis”, poster presentation at the American Association for the Study of Liver Diseases (AASLD) conference in San Francisco, CA, November 9-13, 2018.
30. **Norden-Krichmar, T.M.**, Jacobs, J.M., Liu, Z.X., Stolz, A.A., Tayek, J.A., Morgan, T.R. “Integrated – omics approach to predict and monitor treatment response for patients with Alcoholic Hepatitis”, poster presentation at the Alcoholic and Nonalcoholic Steatohepatitis: Pathogenesis and Mechanisms of Liver Injury Joint NIAAA-NIDDK Research Workshop” on September 16-17, 2019.
31. Lucia, R.M., Huang, W., Pathak, K.V., McGilvrey, M., Alvarez, A., Ziogas, A., Goodman, D., Odegaard, A.O., Pirrotte, P., **Norden-Krichmar, T.M.**, Park, H.L. “Epigenome-wide association study of the herbicide glyphosate and DNA methylation”, poster presentation at the American Society of Human Genetics (ASHG) conference in Houston, TX, October 15-19, 2019.

32. Listopad, S. and **Norden-Krichmar, T.M.** “Machine learning models for classification of small sample size RNA sequencing data”, poster presentation at the American Society of Human Genetics (ASHG) conference in Houston, TX, October 15-19, 2019.
33. Liu, X., Magnan, C., Stolz, A., Tayek, J., Liu, Z.X., Jacobs, J., Morgan, T., **Norden-Krichmar, T.M.** “Gene expression profiling of PBMCs and liver tissue biopsies to distinguish between viral and alcohol-induced hepatitis”, poster presentation at the American Association for the Study of Liver Diseases (AASLD) conference in Boston, MA, November 8-12, 2019.
34. Kakati, T., Bhattacharyya, D.K., Kalita, J.K., and **Norden-Krichmar, T.M.** “Classification of Differentially Expressed Genes using a Convolutional Neural Network” poster presentation at the American Society of Human Genetics (ASHG) virtual conference, October 2020. (Note: Tulika Kakati also received an ASHG Developing Country Award for this abstract.)
35. Listopad, S. and **Norden-Krichmar, T.M.** “Comparison of Differential Expression, Information Gain, and Random Forest for Feature Selection with RNA sequencing data” poster presentation at the American Society of Human Genetics (ASHG) virtual conference, October 2020.
36. Liu, X., Liu, Z.-X., Morgan, T.R., and **Norden-Krichmar, T.M.** “Single-cell RNA sequencing reveals transcriptional heterogeneity of viral and alcohol-associated hepatitis” poster presentation at the American Society of Human Genetics (ASHG) virtual conference, October 2020.
37. Lucia, R.M., Huang, W.-L., Alvarez, A., Masunaka, I., Ziogas, A., Goodman, D., Odegaard, A.O., **Norden-Krichmar, T.M.**, and Park, H.L. “Epigenome-wide association study of mammographic density” poster presentation at the American Society of Human Genetics (ASHG) virtual conference, October 2020.
38. Thangavelu, C. and **Norden-Krichmar, T.M.** “Meta-analysis of ATAC-seq data to explore chromatin accessibility during iPSC reprogramming” poster presentation at the American Society of Human Genetics (ASHG) virtual conference, October 2020.
39. **Norden-Krichmar, T.M.** “Integration of multi-omics in alcoholic and non-alcoholic liver disease” in the program session “Big data in alcohol-associated liver disease: What can we learn?” for the Research Society on Alcoholism and International Society for Biomedical Research on Alcoholism (RSA/ISBRA) 2021 Joint Scientific Meeting (virtual) June 19-23, 2021. Abstract published in *Alcoholism Clinical & Experimental Research*, June 2021, vol 45 – Supplement 1, abstract #196, p. 58A.
40. Kakati, T., Liu, Z.-X., Bhattacharyya, D.K., Kalita, J.K., Morgan, T.R., and **Norden-Krichmar, T.M.** “Pathway analysis enhances characterization of cell types and sample groups in single-cell RNA sequencing”, abstract accepted for poster presentation at the American Society of Human Genetics (ASHG) conference, October 2021.
41. Listopad, S. and **Norden-Krichmar, T.M.** “Outlier gene detection to improve biological validation and classification performance in RNA sequencing”, abstract accepted for poster presentation at the American Society of Human Genetics (ASHG) conference, October 2021.
42. Liu, X., Liu, Z.-X., Morgan, T.R., and **Norden-Krichmar, T.M.** “Comparative analysis of bulk RNA versus single-cell RNA sequencing to profile gene expression in cellular subgroups within peripheral blood mononuclear cells”, abstract accepted for poster presentation at the American Society of Human Genetics (ASHG) conference, October 2021.

43. Thangavelu, C. and **Norden-Krichmar, T.M.** “Investigating conservation of chromatin accessibility signatures during iPSC reprogramming across human and mouse ATAC-seq data”, abstract accepted for poster presentation at the American Society of Human Genetics (ASHG) conference, October 2021. Chloe Thangavelu also presented this poster at the UCI School of Medicine Grad Day event on October 22, 2021.
44. Wan, J.Y., Simon, L., Robinson, D., Freedland, A.R., **Norden-Krichmar, T.**, Edwards, K.L., and the American Diabetes GENNID Study Group. “Constructing Metabolic Syndrome-related polygenic scores in the multiethnic GENNID family study”, abstract accepted for poster presentation at the American Society of Human Genetics (ASHG) conference, October 2021.
45. Liu, X., Morgan, T.R., and **Norden-Krichmar, T.M.** “Comparing the performance of dynamic liver function scoring systems for survival outcome in alcohol-associated hepatitis”, abstract accepted for poster presentation at the American Association for the Study of Liver Diseases (AASLD) conference, November 2021.
46. Listopad, S. and **Norden-Krichmar, T.M.** “Combination of annotation enrichment approaches for characterization of blood-based RNA sequencing biomarkers”, poster presentation at the American Society of Human Genetics (ASHG) conference in Los Angeles, CA, October 25-29, 2022.
47. Kakati, T., Bhattacharyya, D.K., Kalita, J.K., and **Norden-Krichmar, T.M.** “D-CoMEx: Differential co-expressed module extraction to identify phenotype-specific miRNA biomarkers related to diseases”, poster presentation at the American Society of Human Genetics (ASHG) conference in Los Angeles, CA, October 25-29, 2022.
48. Yuan, K., Lucia, R.M., Huang, W.-L., Forman, D., Goodman, D., Ziogas, A., Park, H.L., and **Norden-Krichmar, T.M.** “Differentially methylated probes and regions associated with the Healthy Eating Index”, poster presentation at the American Society of Human Genetics (ASHG) conference in Los Angeles, CA, October 25-29, 2022.
49. Liu, X. and **Norden-Krichmar, T.M.** “Evaluation of cell type annotation for peripheral blood mononuclear cells using single-cell RNA versus a deconvolution approach with bulk RNA sequencing”, poster presentation at the American Society of Human Genetics (ASHG) conference in Los Angeles, CA, October 25-29, 2022.
50. Thangavelu, C. and **Norden-Krichmar, T.M.** “Network analysis across cellular reprogramming states”, poster presentation at the American Society of Human Genetics (ASHG) conference in Los Angeles, CA, October 25-29, 2022.
51. Simon, L., Wan, J.Y., Edwards, K., Wu, B., **Norden-Krichmar, T.**, Freedland, A.R., Ferdos, S., Sohail, S., and the American Diabetes GENNID Study Group. ”Identifying Rare Variants Associated with Type 2 Diabetes Mellitus in GENNID: a Multiplex, Multiethnic, Family Study”, poster presentation at the American Society of Human Genetics (ASHG) conference in Los Angeles, CA, October 25-29, 2022.
52. Wan, J.Y., Wu, B., Simon, L., Freedland, A.R., **Norden-Krichmar, T.**, Edwards, K., and the American Diabetes GENNID Study Group. ”The interacting effects of environmental factors and polygenic risk scores on BMI: application to the multiethnic GENNID family study”, poster presentation at the American Society of Human Genetics (ASHG) conference in Los Angeles, CA, October 25-29, 2022.
53. Kaplan, D., Vujkovic, M., Dochterman, D., Wangenstein, K., Devineni, P., Schwantes-An, T., Sendamarai, A., Karnam, P., Sileo, E., Anglin, T., **Norden-Krichmar, T.**, Tsao, P., Morgan, T., Pyarajan, S., Lynch, J., Voight, B., Chang, K. “SAT596 - Germline genetic risk factors for the development of hepatocellular

carcinoma among patients with cirrhosis: a genome-wide association study of U.S. veterans”, *Journal of Hepatology*, Volume 77, Supplement 1, 2022, Page S936, ISSN 0168-8278, [https://doi.org/10.1016/S0168-8278\(22\)02153-5](https://doi.org/10.1016/S0168-8278(22)02153-5). Poster presentation at European Association for the Study of Liver disease (EASL International Liver Conference 2022, London, June 22-26, 2022).

54. Teerlink, C., Kaplan, D.E., Vujkovic, M., Voight, B., Chang, K., Lynch, J., Duvall, S., Anglin, T., Morgan, T., Schwantes-An, T., **Norden-Krichmar, T.**, Dochterman, D., Devineni, P., Tsao, P., Schneider, C.V. “OS027 - Linear slope of serial FIB-4 measurements predicts liver-related complications and correlates with cirrhosis-associated genetic variants among patients with ALT-based NAFLD phenotype, *Journal of Hepatology*, Volume 77, Supplement 1, 2022, Pages S30-S31, ISSN 0168-8278, [https://doi.org/10.1016/S0168-8278\(22\)00473-1](https://doi.org/10.1016/S0168-8278(22)00473-1). Oral platform presentation at European Association for the Study of Liver disease (EASL International Liver Conference 2022, London, June 22-26, 2022).
55. Kaplan, D., Vujkovic, M., Dochterman, D., Wangensteen, K., Devineni, P., Schwantes-An, T., Sendamarai, A., Karnam, P., Sileo, E., Anglin, T., **Norden-Krichmar, T.**, Tsao, P., Morgan, T., Pyarajan, S., Lynch, J., Voight, B., Chang, K. “Germline genetic risk factors for the development of hepatocellular carcinoma among patients with cirrhosis: a genome-wide association study of U.S. veterans”. Oral platform presentation at American Association for the Study of Liver Disease (AASLD) Conference 2022, Washington, DC, November 4-7, 2022)
56. Lucia, R.M., Liao, X., Huang, W.-L., Forman, D., Kim, A., Ziogas, A., **Norden-Krichmar, T.M.**, Goodman, D., Alvarez, A., Masunaka, I., Pathak, K.V., McGilvrey, M., David-Dirgo, V., Hegde, A.M., Pirrotte, P., Park, H.L. “Glyphosate and AMPA exposure: associations with dietary intake and other factors” Poster presentation at the American Association for Cancer Research (AACR). Abstract in: *Proceedings of the American Association for Cancer Research*; March 31, 2023. Abstract #4222.

SOFTWARE

1. Open source release of A-Lister software developed for the publication#17, available on Github website: <https://github.com/staslist/A-Lister>. Operating systems: Windows, Mac OS, Unix. Language: Python. (Publication#17: Listopad, S.A. and **Norden-Krichmar, T.M.** (2019) “A-Lister: A tool for analysis of differentially expressed -omics entities across multiple pairwise comparisons”, *BMC Bioinformatics*, 20, 595, doi:10.1186/s12859-019-3121-x)
2. Open source release of DEGnext software developed for the publication#25, available on Github website: <https://github.com/tulikakakati/DEGnext>. Operating systems: Windows, Mac OS, Unix. Language: Python. (Publication#25: Kakati, T., Bhattacharyya, D.K., Kalita, J.K., and **Norden-Krichmar, T.M.** (2022) “DEGNext: Classification of differentially expressed genes from RNA-seq data using a convolutional neural network with transfer learning” *BMC Bioinformatics*, 23:17, doi:10.1186/s12859-021-04527-4.)
3. Open source release of software developed for the publication#27, available on Github website: <https://github.com/staslist/Liver-Disease-Diagnostic>. Operating systems: Windows, Mac OS, Unix. Language: Python. (Publication#27: Listopad, S., Magnan, C., Asghar, A., Stolz, A., Tayek, J.A., Liu, Z.X., Morgan, T.R., **Norden-Krichmar, T.M.** (2022) “Differentiating between liver diseases by applying multiclass machine learning approaches to transcriptomics of liver tissue or blood-based samples”, *JHEP Reports*, doi: <https://doi.org/10.1016/j.jhepr.2022.100560>.)

INVITED TALKS

“Characterization of the small RNA transcriptome of the diatom, *Thalassiosira pseudonana*” at the “Plant and Animal Genomics XX” in San Diego, CA on January 14, 2012.

“Three approaches to studying the genetic factors in alcohol dependence and alcohol-induced disease” for Department of Biological Chemistry, UC Irvine on May 31, 2017, and for the Biostatistics Research Group at UC Irvine on June 8, 2017.

“Genetic factors in alcohol dependence and alcohol-induced disease” for Department of Pharmaceutical Sciences, UC Irvine on May 22, 2018.

“Integrated “-omics” approach for biomarker discovery in Alcoholic Hepatitis” for Gordon Research Conference on “Alcohol-induced End Organ Diseases” in Ventura, CA on March 24-29, 2019.

“Integration of multi-omics in alcoholic and non-alcoholic liver disease” in the Program Session “Big data in alcohol-associated liver disease: What can we learn?” for the Research Society on Alcoholism and International Society for Biomedical Research on Alcoholism (RSA/ISBRA) 2021 Joint Scientific Meeting (virtual) June 19-23, 2021.

“Teaching bioinformatics on the HPC” at the UCI Research Cyberinfrastructure Center (RCIC) Event on June 4, 2021.

“Genetic factors in alcohol dependence and alcohol-induced disease” for Department of Epidemiology and Biostatistics, UC Irvine on October 6, 2021.

CONFERENCE PRESENTATIONS

“Computational prediction and experimental validation of *Ciona intestinalis* microRNA genes and their mRNA targets” at the “National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) Workshop on MicroRNA in Cellular Development and Hematopoiesis” in Annapolis, MD on April 23-24, 2007.

“Diatom gene regulatory and manipulation mechanisms for biodiesel production” at the Air Force Office of Scientific Research (AFOSR) Biofuels Program Review in Arlington, VA on August 5-6, 2008.

“Characterization of the small RNA transcriptome of the diatom, *Thalassiosira pseudonana*” at the “First International Conference: The Molecular Life of Diatoms” in Atlanta, GA on June 5-9, 2011.

“Computational analysis of FOXO3 gene regulation” at the Longevity Consortium workshop entitled “FOXO3 and Related Transcription Factors in Development, Aging, and Exceptional Longevity” in San Francisco, CA on June 21, 2013.

UNIVERSITY AND PROFESSIONAL SERVICE

Department Level:

- Department of Epidemiology graduate admissions (participation in application evaluation every year 2015-present, in-person and/or zoom interviews, and organized Faculty Lightning Talks on grad student visit day in January 2020)
- Cancer Control Epidemiology FHLRE Faculty Search Committee member (Winter 2019)
- Department of Epidemiology representative of the Research Committee for Program in Public Health Senate committee (2020-present)

School Level:

- College of Health Sciences Representative Assembly, School of Medicine, Member, Elected (8/2015 – 8/2018)
- Program in Public Health Research Space Committee representative (Winter 2019)
- Epidemiology departmental representative to the Program in Public Health's Committee on Research, Computing, and Library Resources and Research Committee (11/2019 – present).
- Participation in all aspects of transition of Program of Public Health toward formation of a School: interviews with the founding dean candidates, attending planning meetings, reading/commenting on proposals, moving our offices from Irvine Hall to AIRB building during summer 2019.

University Level:

- Advisory Board Member for the UCI Genomics High Throughput Facility (GHTF) (5/2015 – Present)
- Advisory Board Member for the UCI Research Cyberinfrastructure Center (RCIC) (11/2017 – Present)
- Department of Pharmaceutical Sciences (grad application evaluations, interviews, and presented my research on their grad visit day)
- Conducted MD/PhD interviews for SOM's Medical Scientist Training Program (MSTP) every year
- Member of Cellular and Molecular Biosciences Program (CMB) for which I participated in grad application evaluations and interviews in January 2021.
- Biological Chemistry FHLRE Faculty Search Committee member (Winter 2022)
- DISCOVER Genetics/Genomics Initiative Committee member (Winter 2022). Organized by SOM to maximize research integration and clinical applications of genomics.
- Member of Chao Family Comprehensive Cancer Center (CFCCC)
- Member of Institute for Genomics and Bioinformatics (IGB)

External Level:

- Advisory Board Member for the California State University, Fullerton's "Big Data Discovery and Diversity – Research Education and Advancement (BD3-REAP)" NIH training grant (Oct 2016 – May 2020).

COMMUNITY SERVICE

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| 2012 | Better Education for Women in Science and Engineering (BE WiSE). Participated as an instructor in "The Introns and Exons of Genomic Research" Workshop held at The Scripps Research Institute on February 4 and December 8, 2012, for young women in the 10 th grade. |
| 2007-2012 | FIRST LEGO League Robotics. Project Judge for robotic competitions for 9 – 14 year old children in qualifying events in Irvine, CA, and at championship events at Legoland, CA. |
| 2003-2009 | Expanding Your Horizons (EYH) Conference at the University of California, San Diego (UCSD) and University of San Diego (USD). Ran workshops on robotics to encourage young women (grades 6 to 10) to become interested in science. |
| 2006 | California State 4-H Leadership Conference. Ran workshop on robotics. |