Kyle A. Sullivan, Ph.D.

sullivanka@ornl.gov

ORCID: <u>http://bit.ly/KS-ORC</u> ResearchGate: <u>http://bit.ly/KS-RG</u> Google Scholar: <u>https://bit.ly/KS-GS</u> LinkedIn: <u>http://bit.ly/KS-Linked</u>

Education

| 2015 - 2020 | The Ohio State University , Columbus, OH M.S., Ph.D., Neuroscience |
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| 2011 - 2015 | University of Virginia , Charlottesville, VA B.A. with High Distinction, Neuroscience and Computer Science |

Research Interests

- Multi-omics and systems biology analyses of psychiatric conditions
- Immunological and neuroimmunological responses to human disease
- Integration of multi-omic analysis for knowledge transfer among humans and model organisms

Research Experience

| 2020 – Present | Dr. Daniel Jacobson, Oak Ridge National Laboratory, Oak Ridge, TN Postdoctoral Research Associate, Computational and Predictive Biology |
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| 2015 – 2020 | Drs. Leah Pyter and Karl Obrietan (co-mentors) , The Ohio State University, Columbus, OH Pelotonia Graduate Fellow and Ph.D. Candidate Project: Investigate effects of mammary tumors and chemotherapy in mouse models of breast cancer and breast cancer survivors on circadian rhythms in behavior and physiology |
| 2012 - 2015 | Dr. Edward Perez-Reyes , University of Virginia, Charlottesville, VA Undergraduate Research Assistant Project: Determine the utility of AAV viral vectors delivering a potassium leak channel to combat rat models of temporal lobe epilepsy |
| Honors and Award | <u>s</u> |
| 2019 - 2020 | Pelotonia Graduate Fellowship , Pelotonia Foundation (\$48,360 total award; award rate ~20% of applicants) |
| 2019 | Outstanding Poster Presentation, 2019 Ohio State Life Sciences Interdisciplinary Graduate Programs Symposium (\$50 award) |
| | Explorations in Neuroscience Travel Award, OSU Dept. of Neuroscience (\$300) |
| 2018 | Explorations in Neuroscience Travel Award, OSU Dept. of Neuroscience (\$1000) |
| 2014 | Undergraduate Student Travel Award, Central Virginia Chapter of the Society for Neuroscience (\$400 award) |

First Place Undergraduate Poster Presentation, Central Virginia Chapter of the Society for Neuroscience Meeting

First Place Presentation, UVA Fozdar Symposium for Undergraduate Neuroscience Research (\$100 award)

Publications

- Levin, M.G., Huffman, J.E., Verma, A., Sullivan, K.A., Rodriguez, A.A., Kainer, D., Garvin, M.R., Lane, M., Miller, J.I., Cashman, M., Won, H., Li, B., Luo, Y., Jarvik, G.P., Hakonarson, H., Jasper, E.A., Bick, A.G., Ritchie, M.D., Tsao, P., Jacobson, D.A., Madduri, R.K., Damrauer, S.M. (2023). Genetics of varicose veins reveals polygenic architecture and genetic overlap with arterial and venous disease. *Nature Cardiovascular Research* (online). <u>https://doi.org/10.1038/s44161-022-00196-5</u>
- Grant, C.V.⁺, Sullivan, K.A.⁺, Wentworth, K., Otto, L.D., Strehle, L.D., Otero, J.J., Pyter, L.M. (2023). Microglia are implicated in the development of paclitaxel chemotherapy-associated cognitive impairment in female mice. *Brain, Behavior, and Immunity*, 108, 221-232. <u>https://doi.org/10.1016/j.bbi.2022.12.004</u>
 ⁺ These authors contributed equally
- Kimbrel, N.A., Ashley-Koch, A.E., Qin, X.J, Lindquist, J.H, Garrett, M.E., Dennis, M.F., Hair, L.P, Huffman, J.E., Jacobson, D.A., Madduri, R.K., Trafton, J.A., Coon, H., Docherty, A.R., Mullins, N., Ruderfer, D.M., Harvey, P.D., McMahon, B.H., Oslin, D.W, Beckham, J.C., Hauser, E.R., Hauser, M.A., Million Veteran Program Suicide Exemplar Workgroup*, International Suicide Genetics Consortium, Veterans Affairs Mid-Atlantic Mental Illness Research, Education, and Clinical Center Workgroup, Veterans Affairs Million Veteran Program. (2022). Identification of novel, replicable genetic risk loci for suicidal thoughts and behaviors among US Military Veterans. *JAMA psychiatry, online ahead of print*. https://doi.org/10.1001/jamapsychiatry.2022.3896

*Included in list of members of Million Veteran Program Suicide Exemplar Workgroup

- 4. Cope, K.R., Prates, E.T., Miller, J.I., Demerdash, O.N.A., Shah, M., Kainer, D., Cliff, A., Sullivan, K.A., Cashman, M., Lane, M., Matthiadis, A., Labbé, J., Tschaplinski, T.J., Jacobson, D.A., Kalluri, U.C. (2023). Exploring the role of plant lysin motif receptor-like kinases in regulating plant-microbe interactions in the bioenergy crop *Populus*. *Computational and Structural Biotechnology Journal, online ahead of print*. <u>https://doi.org/10.1016/j.csbj.2022.12.052</u>
- Sullivan, K.A., Lane, M., Cashman, M., Miller, J.I., Pavicic, M., Walker, A.M., Cliff, A., Romero, J., Qin, X., Lindquist, J., Mullins, N., Docherty, A., Coon, H., Ruderfer, D.M., International Suicide Genetics Consortium, VA Million Veteran Program, MVP Suicide Exemplar Workgroup, Garvin, M.R., Pestian, J.P., Ashley-Koch, A.E., Beckham, J.C., McMahon, B., Oslin, D.W., Kimbrel, N.A., Jacobson, D, Kainer, D. (2022). Digging deeper into GWAS signal using GRIN implicates additional genes contributing to suicidal behavior. *medRxiv*. <u>https://doi.org/10.1101/2022.04.20.22273895</u>
- Pavicic, M., Walker, A.M., Sullivan, K.A., Lagergren, J., Cliff, A., Romero, J., Streich, J., Garvin, M.R., MVP Suicide Exemplar Workgroup, VA Million Veteran Program, Pestian, J., McMahon, B., Oslin, D.W., Beckham, J.C., Kimbrel, N.A., Jacobson, D.A. (2022). Using Explainable-AI to Find Geospatial Environmental and Sociodemographic Predictors of Suicide Attempts. *medRxiv*. <u>https://doi.org/10.1101/2022.04.26.22274333</u>
- Sullivan, K. A., Grant, C. V., Jordan, K. R., Obrietan, K., & Pyter, L. M. (2022). Paclitaxel chemotherapy disrupts behavioral and molecular circadian clocks in mice. *Brain, behavior, and immunity*, 99, 106-118. <u>https://doi.org/10.1016/j.bbi.2021.09.011</u>

 Kimbrel, N.A., Ashley-Koch, A.E., Qin, X.J., Lindquist, J.H., Garrett, M.E., Dennis, M.F., Hair, L.P., Huffman, J.E., Jacobson, D.A., Madduri, R.K., Trafton, J.A., Coon, H., Docherty, A.R., Kang., J., Mullins, N., Ruderfer, D.B., VA Million Veteran Program, **MVP Suicide Exemplar Workgroup***, International Suicide Genetics Consortium, Harvey, P.D., McMahon, B.H., Oslin, D.W., Hauser, E.R., Hauser, M.A., Beckham, J.C. (2022). A genome-wide association study of suicide attempts in the Million Veterans Program identifies evidence of pan-ancestry and ancestry-specific risk loci. *Molecular psychiatry*, 1-9. <u>https://doi.org/10.1038/s41380-022-01472-3</u>

*Included in list of members of MVP Suicide Exemplar Workgroup

- Prates, E.T., Garvin, M.R., Jones, P., Miller, J.I., Sullivan, K.A., Cliff, A., Gazolla, J.G.F.M., Shah, M., Walker, A.M., Lane, M., Rentsch, C.T., Justice, A., Pavicic, M., Romero, J., Jacobson, D. (2022). Antiviral Strategies Against SARS-CoV-2: A Systems Biology Approach. *Methods in Molecular Biology (Clifton, NJ)*, 2452, 317-351. <u>https://doi.org/10.1007/978-1-0716-2111-0_19</u>
- Sullivan, K. A., Grant, C. V., Jordan, K. R., Vickery, S. S., & Pyter, L. M. (2021). Voluntary wheel running ameliorates select paclitaxel chemotherapy-induced sickness behaviors and associated melanocortin signaling. *Behavioural Brain Research*, 399, 113041. <u>https://doi.org/10.1016/j.bbr.2020.113041</u>
- Sullivan, K.A., Bever, S. R., McKim, D. B., Godbout, J. P., Sheridan, J. F., Obrietan, K., Pyter, L. M. (2019). Mammary tumors compromise time-of-day differences in hypothalamic gene expression and circadian behavior and physiology in mice. *Brain, Behavior, and Immunity*, vol. 80, 805-817. <u>https://doi.org/10.1016/j.bbi.2019.05.028</u>
- Santos, J.C., Bever, S.R., Sullivan, K.A., Pyter, L.M. (2019). Cancer and cancer survival modulates brain and behavior in a time-of-day-dependent manner in mice. *Scientific Reports*, 9(1), 6497. <u>https://doi.org/10.1038/s41598-019-42880-w</u>
- Wheaton, K. L., Hansen, K. F., Aten, S., Sullivan, K. A., Yoon, H., Hoyt, K. R., Obrietan, K. (2018). The Phosphorylation of CREB at Serine 133 Is a Key Event for Circadian Clock Timing and Entrainment in the Suprachiasmatic Nucleus. *Journal of Biological Rhythms*, 33(5), 497-514. <u>https://doi.org/10.1177/0748730418791713</u>
- Snider, K. H., Sullivan, K. A., Obrietan, K. (2018). Circadian Regulation of Hippocampal-Dependent Memory: Circuits, Synapses, and Molecular Mechanisms. *Neural Plasticity*, vol. 2018, Article ID 7292540, 13 pages. <u>https://doi.org/10.1155/2018/7292540</u>
- Wheaton, K., Aten, S., Queiroz, L. S., Sullivan, K., Oberdick, J., Hoyt, K. R., Obrietan, K. (2018). Circadian expression and functional characterization of PEA-15 within the mouse suprachiasmatic nucleus. *European Journal of Neuroscience*, 47(7), 845-857. <u>https://doi.org/10.1111/ejn.13850</u>
- Dey, D., Eckle, V. S., Vitko, I., Sullivan, K. A., Lasiecka, Z. M., Winckler, B., Stornetta, R.L., Williamson, J.M., Kapur, J., Perez-Reyes, E. (2014). A potassium leak channel silences hyperactive neurons and ameliorates status epilepticus. *Epilepsia*, 55(2), 203-213. <u>https://doi.org/10.1111/epi.12472</u>

Oral Presentations

- Systems Biology Integration of Multi-Omic Data Reveals Biological Pathways Underlying Substance Use Disorders. Sullivan, K.A. College on Problems of Drug Dependence Annual Scientific Meeting, Denver, CO, June 2023.
- 2. Multi-omic Network Analysis Identifies Key Neurobiological Pathways in Opioid Addiction. **Sullivan, K.A**. Million Veteran Program (MVP) Science Symposium, St. Petersburg, FL, December 2022.

- 3. Multi-omic network analysis identifies key neurobiological pathways in opioid addiction. **Sullivan, K.A**. 10th Annual Oak Ridge Postdoctoral Association Research Symposium, Oak Ridge, TN, July 2022.
- 4. Multi-omic network analysis identifies key neurobiological pathways in opioid addiction. **Sullivan, K.A**. 2022 National Institute on Drug Abuse Genetics and Epigenetics Cross Cutting Research Team (GECCRT) Virtual Meeting, Online, April 2022.
- 5. Systems biology approaches uncover novel genetic variants conferring productivity traits in Switchgrass. Sullivan, K.A. Center for Bioenergy Innovation Annual Science Meeting, Online, June 2021.
- 6. Mammary tumors and chemotherapy independently disrupt circadian rhythms in mice. **Sullivan, K.A.** Institute for Behavioral Medicine Research Day, The Ohio State University, Columbus, OH, April 2020. *Due to COVID-19-related meeting cancellation, this peer-reviewed presentation was accepted but not presented.
- 7. Mammary tumors and chemotherapy independently disrupt circadian rhythms in mice. **Sullivan, K.A.** Edward F. Hayes Graduate Research Forum, The Ohio State University, Columbus, OH, February 2020.

Poster Presentations

- GRIN identifies additional genes contributing to suicidal behavior below traditional genome-wide significance thresholds. Sullivan, K.A., Lane, M., Cashman, M., Miller, J.I., Pavicic, M., Walker, A.M., Cliff, A., Romero, J., Qin, X., Lindquist, J., Mullins, N., Docherty, A., Coon, H., Ruderfer, D.M., Garvin, M.R., Pestian, J.P., Ashley-Koch, A.E., Beckham, J.C., McMahon, B., Oslin, D.W., Kimbrel, N.A., Jacobson, D.A., Kainer, D. Million Veteran Program (MVP) Science Symposium, St. Petersburg, FL., December 2022.
- Neurobiological pathways underlying opioid addiction identified by systems biology multi-omic gene integration. Sullivan, K.A., Kainer, D., Lane, M., Garvin, M.R., Townsend, A., Quach, B.C, Willis, C., Gaddis, N.C., Mathur, R., Corradin, O, Maher, B.S., Scacheri, P.C., Sanchez-Roige, S., Palmer, A.A., Troiani, V., Chesler, E., Hancock, D.B., Johnson, E.O., Jacobson, D.A. American Society of Human Genetics Annual Meeting, Los Angeles, CA, October 2022.
- Multi-omic Network Analysis Identifies Key Neurobiological Pathways in Opioid Addiction. Sullivan, K.A., Kainer, D., Lane, M., Garvin, M.R., Townsend, A., Quach, B.C, Willis, C., Gaddis, N.C., Mathur, R., Corradin, O, Maher, B.S., Scacheri, P.C., Sanchez-Roige, S., Palmer, A.A., Troiani, V., Chesler, E., Hancock, D.B., Johnson, E.O., Jacobson, D.A. World Congress of Psychiatric Genetics, Florence, Italy, September 2022.
- Using network biology and machine learning to get more out of Genome Wide Association Studies. Kainer, D., Sullivan, K.A., Miller, J.I., Cashman, M., Lane, M. Walker, A., Jacobson, D. North American Forest Genetics Society, Asilomar, CA, June 2022.
- Heroin abuse-associated transcriptional and epigenetic alterations in the orbitofrontal cortex concentrate in GABA interneurons and provide insight into potential sex-specific regulatory response. Noshay, J.M., Sullivan, K.A., Kozlenkov, A., Rompala, G., Townsend, A., Vadukapuram, R., Hurd, Y.L., Jacobson, D.A., Dracheva, S. 2022 National Institute on Drug Abuse Genetics and Epigenetics Cross Cutting Research Team (GECCRT) Virtual Meeting, Online, April 2022.
- 6. Systems biology and genomic approaches uncover distinct genes controlling switchgrass biomass and height. **Sullivan, K.A.**, Chhetri, H., Kainer, D., Pavicic, M., Wang, Y., Pendergast, T.H., Kang, Y., Devos, K., Jacobson, D.A., Tuskan, G.A. 2022 Genomic Science Program Annual PI Meeting, Online, February 2022.
- 7. Genome-Wide Association Studies of Drought Tolerance and Water Use Efficiency Related Traits in Switchgrass. Wang, Y., Chhetri, H., Sullivan K., Kainer, D., York, L.M., Saha, M.C., Udvardi, M.K.,

Jacobson, D., Missaoui, A., Kang Y., Tuskan, G.A. Plant and Animal Genome XXIX Conference, January 2022.

- 8. Paclitaxel chemotherapy disrupts behavioral and molecular circadian clocks in mice. **Sullivan, K.A.**, Grant, C.V., Jordan, K.R., Obrietan, K., *Pyter, L.M. American College of Neuropsychopharmacology, December 2021. *Presenting author
- *A random walk with restart approach elucidates pathophysiological insight into opioid use disorder.
 Sullivan, K.A., Kainer, D., Kranzler, H.R., Justice, A.C., Jacobson, D. 2021 MVP Science Virtual Meeting, Online, September 2021.
 *Selected for Poster Highlights session as a candidate for Best Genomics Poster or Best Phenomics Poster
- Graph-based filtering of genome-wide association study results reveals pathophysiological insights into increased risk of alcohol use disorder. Sullivan, K.A., Kainer, D., Kranzler, H.R., Justice, A.C., Jacobson, D. 2021 MVP Science Virtual Meeting, Online, September 2021.
- 11. Uncovering suicide attempt pathophysiology using a genome-wide association study of United States veterans and systems biology approaches. **Sullivan, K.A.**, Kainer, D., Qin, X., Kimbrel, N.A., Jacobson, D. 2021 MVP Science Virtual Meeting, Online, September 2021.
- 12. Filtering significant genome-wide significant loci to improve polygenic risk scores in Million Veteran Program exemplars. **Sullivan, K.A.,** Kainer, D., Madduri, R., Justice, A.C., Jacobson, D. 2021 MVP Science Virtual Meeting, Online, September 2021.
- Graph-based filtering of a genome-wide association meta-analysis provides mechanistic insight into peripheral cardiovascular disease. Sullivan, K.A., Kainer D., Bick, A.G., Damrauer, S.M., Jacobson, D. 2021 MVP Science Virtual Meeting, Online, September 2021.
- A Predictive Model of Suicide Attempt in the U.S. Veteran Population. Walker, A., Pavicic, M., Sullivan, K.A., Kimbrel, N.A., Jacobson, D. 2021 MVP Science Virtual Meeting, Online, September 2021.
- Pathophysiological insights into prostate cancer using a genome-wide association study of United States veterans and systems biology approaches. Pavicic, M., Kainer, D., Sullivan, K.A., Justice, A.C., Jacobson, D. 2021 MVP Science Virtual Meeting, Online, September 2021.
- 16. Exascale Biology: From genome to climate with a few stops along the way. Jacobson, D., Sullivan, K.A., Kainer D., Lagergren, J., Townsend, A., Walker A., Furches, A., Geiger, A., Cliff, A., Hyatt, P.D., Prates, E.T., Gazolla, J.G.F.M., Chhetri, H., Miller, J.I., Vergara, V.M., Streich, J., Merlet, J., Brunkan, I., Romero, J., Shah, M., Lane, M., McDevitt, M.C. Garvin, M., Pavicic, M., Jones, P., Noshay, J., Joubert, W. Federation of European Biochemical Societies, Online, July 2021.
- Embracing Complexity: Explainable-AI and Network-Based Filtering For Mechanistic Understanding of Biological Systems. Jacobson, D., Sullivan, K.A., Kainer, D., Walker, A., Cliff, A., Lane, M. Platform for Advanced Scientific Computing (PASC) Conference, Online, July 2021.
- Random Walks and multi-omics: exploring plant-microbe associations with multiplex networks. Kainer, D., Cliff, A., Romero, J., Sullivan, K.A., Miller, J.I., Walker, A., Jacobson, D. Lawrence Berkeley National Laboratory All-BSSD SFAs Workshop, Online, October 2020.
- 19. The role of gut microbiota in cancer and cancer treatment-induced behavioral comorbidities. Lahoud, A., Loman, B., Jordan, K., Kaur, J., Russart, K.L.G., **Sullivan, K.A.**, Bailey, M.T., Pyter, L.M. International Cognition and Cancer Task Force, Denver, CO, February 2020.

- Circadian dysregulation of behavior and physiology by tumor biology and chemotherapy in mice. Sullivan, K.A., Bever, S.R., Strehle, L.D., Russart, K.L.G., Jordan, K., Patel, A., Wentworth, K.M., Lahoud, A., Kaur, J., Obrietan, K., Pyter, L.M. Society for Neuroscience, Chicago, IL, October 2019.
- 21. The role of gut microbiota in chemotherapy induced anxiety-like behavior. Lahoud A., Jordan, K.R., Vickery S., Kaur, J., Sullivan, K.A., Pyter, L.M. Society for Neuroscience, Chicago, IL, October 2019.
- 22. The role of gut microbiota in chemotherapy induced anxiety-like behavior. Lahoud A., Jordan, K.R., Vickery S., Kaur, J., **Sullivan, K.A.**, Pyter, L.M. Psychoneuroimmunology Research Society, Berlin, Germany, June 2019.
- 23. Circadian dysregulation of behavior and physiology by mouse models of breast cancer and chemotherapy. Sullivan, K.A., Jordan K., Lahoud, A., Kaur, J., Russart, K.L.G., Patel A., Wentworth, K.L., Bever, S.R., Strehle, L.D., Obrietan, K., and Pyter, L.M. 2019 Life Sciences Interdisciplinary Graduate Programs Symposium, The Ohio State University, Columbus, OH, May 2019.
- 24. Effects of chemotherapy on circadian-regulated behavior and physiology in mice. **Sullivan, K.A.**, Patel A., Jordan K., Lahoud, A., Kaur, J., Russart, K.L.G., Strehle, L, Obrietan, K., and Pyter, L.M. Institute for Behavioral Medicine Research Day, The Ohio State University, Columbus, OH, March 2019.
- 25. Circadian physiological parameters in breast cancer patient and survivor mouse models. Sullivan, K.A., Bever, S.R., Strehle, L.D., Haynes, B., Hilvert, A.M., McKim, D., Godbout, J.P., Sheridan, J.F., Obrietan, K., & Pyter, L.M. The Ohio State University Interdisciplinary Graduate Program Symposium, Columbus, OH, May 2018.
- 26. Expression and functional characterization of PEA-15 within the suprachiasmatic nucleus. Wheaton K., Quieroz, L.S., **Sullivan, K.A.**, Obrietan K., Hoyt, K. American Society for Pharmacology and Experimental Therapeutics, Chicago, IL, April 2017.
- 27. Sullivan, K.A., Vitko, I., Williamson, J.M., Stornetta, R., Dey, D., Kapur, J., Perez-Reyes, E. Development and validation of doxycycline-regulated (Dox-On) adeno-associated viral vectors. Society for Neuroscience, Washington, DC, November 2014.
- Sullivan, K.A., Vitko, I., Stornetta, R., Williamson, J.M., Kapur, J., Perez-Reyes, E. Understanding Epilepsy through Induction of Spontaneous Seizures. Central Virginia Chapter of the Society for Neuroscience Meeting, Richmond, VA, March 2014.

Software Development

- Lead developer of GRIN (Gene set Refinement using Interacting Networks), an open-source, command line script to filter gene sets using biological networks: <u>https://github.com/sullivanka/GRIN</u>
- Co-developer of RWRtoolkit (<u>https://github.com/dkainer/RWRtoolkit</u>), an open-source R package and command-line set of tools to enable easy use of Random Walk with Restart on multiplex networks
- Co-developer of RWRtoolkit-data (<u>https://github.com/dkainer/RWRtoolkit-data</u>) containing biological networks for *Arabidopsis thaliana*

Technical and Professional Skills

- Extensive experience coding in Python, R, MATLAB, Java, C++, Shell scripting, and UNIX environments
- Strong data and statistical analysis experience, including use of R, GraphPad Prism, SPSS Statistics, Python, and Microsoft Excel
- Moderate experience coding in MySQL, Apache, PHP, and Android

- Extensive fluorescent microscopy experience, including *in vivo* two-photon brain imaging in mouse, confocal microscopy (spinning disk and laser scanning), and widefield microscopy (brightfield and fluorescent microscopy)
- Strong background in a variety of wet laboratory techniques, including: immunohistochemistry and histology, ELISAs (including multiplex immunoassays), Western blotting, transgenic mouse genotyping, molecular cloning, PCR, qRT-PCR, mouse survival surgery (cranial window implantation, tumor induction, tumor resection, telemetry implantation, EEG implantation, and AAV injection), mouse blood collection (retroorbital eye bleeds, trunk blood), transcardial perfusion, brain tissue slicing (using either a vibratome, freezing microtome, and cryostat), tissue homogenization and sonication, electroencephalogram (EEG) recording and analysis, hippocampal slice electrophysiology, and cell and tissue culture
- Experienced in running and analyzing behavioral neuroscience assays, including open field test, contextual fear conditioning, rodent wheel running, and novel object location

Teaching and Mentoring Experience

| 2022 | Mentor to Darian Dilling (Undergraduate, Major: Psychology) |
|-------------|---|
| 2018 – 2020 | Mentor to Ashnee Patel (Undergraduate, Major: Neuroscience) Mentor to Kylie Wentworth (Undergraduate, Major: Neuroscience) |
| 2016 | Teaching Assistant for NeuroSc 4100 – Basic and Clinical Foundations of Neurological Disease (Ohio State) |

Press Coverage and Speaking Engagements

2019 Press Release of 2019 Society for Neuroscience poster presentation (link: <u>http://bit.ly/KS-OSUMC</u>)

Graduate Pelotonia Fellow YouTube interview (link: http://bit.ly/KS-Fellow)

Formal remarks given at Sync Cancer, an annual cancer research event held at Ohio State (over \$37,000 raised over a 7-year period)

<u>Ad Hoc Reviewer</u>

- Brain, Behavior, and Immunity
- Brain, Behavior, and Immunity Health
- Neurobiology of Stress
- PLOS One
- Psychiatry Research
- Science Progress
- Scientific Reports

Service and Volunteer Opportunities

2019-2020 Neuroscience Graduate Program Student Representative

- Responsible for coordinating annual Neuroscience Graduate Program (NGP) recruitment activities and annual program retreat
- Serves on NGP Graduate Studies committee with responsibilities including, but not limited to, voicing student concerns to faculty and voting on NGP faculty membership

• Coordinates with other Life Sciences Interdisciplinary Graduate Programs (IGPs) to organize biannual Life Sciences IGP Career Day, where representatives from academic and non-academic careers explain post-graduate career opportunities

2018 Council of Graduate Students (CGS) Delegate, Neuroscience Graduate Program

- Reports concerns and represents students in the Neuroscience Graduate Program students to the Ohio State Graduate School
- Serves on the Ray Travel Award for Service and Scholarship committee, awarding travel grants to Ohio State graduate students who have exhibited exemplary service to their department, the university, and surrounding Columbus, OH community

Neuroscience Graduate Student Organization, Treasurer

- Creates budget for the Neuroscience Graduate Student Organization, an organization dedicated to improving Neuroscience Graduate Program students by providing career development, community outreach, and social activities
- Hosts fundraisers to raise capital for career development, community outreach, social, and department-sponsored activities

Science, Technology, Engineering, and Mathematics (STEM) Expo, *Neuroscience Graduate Student Organization*

• Educated local Columbus elementary school students and families about neuroscience through trivia activities and interactive neuroscience demonstrations

Brain Injury Awareness 5K, Neuroscience Graduate Student Organization

• Assisted with setup and timing of 1 mile walk and 5K charity race used to raise funds for traumatic brain injury and spinal cord injury research at The Ohio State Wexner Medical Center (\$2,912 raised in 2018)

2017 Neuroscience Graduate Student Organization, Professional Development Chair

- Organized and conducted professional development activities for students in the Neuroscience Graduate Program
- Hosted workshop for NGP students on ways to improve networking by designing clear and effective business cards

Explorations in Neuroscience Camp, Graduate Student Volunteer

- Engaged with students by directly answering questions about graduate school application process and life as a PhD graduate student from 2017 to 2019
- Escorted high school students to various neuroscience laboratory activities, including confocal microscopy, electrophysiology, and behavioral neuroscience

Frontiers of Neuroscience Seminar Selection Committee Member, *Neuroscience Graduate Program*

• Participated as a member on a student-led Neuroscience Graduate Program committee to select and invite leading neuroscientists with HHMI, National Academy of Sciences, or Nobel laureate honors

2016 Midwest/Great Lakes Undergraduate Research Symposium in Neuroscience (mGluRs) Guest Judge, Neuroscience Graduate Program

• Judged undergraduate neuroscience poster presentations for annual mGluRs conference, consisting of students from various Midwest colleges and universities, held at Ohio State in 2016

Brain Awareness Week at COSI, *Neuroscience Education: Urban and Rural Outreach (NEURO)*

• Presented various mammalian and human brain/spinal cord samples and other educational neuroscience materials for patrons at Center of Science and Industry (COSI) museum in Columbus, OH from 2016-2019

Professional Memberships

- American Society of Human Genetics
- College on Problems of Drug Dependence (Member-In-Training)
- International Society of Psychiatric Genetics
- National Postdoctoral Association
- Society for Neuroscience
- Oak Ridge National Laboratory Postdoctoral Association

Professional References

Dr. Daniel Jacobson

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Dr. Leah Pyter

Associate Professor Dept. of Psychiatry & Behavioral Health 223 Institute for Behavioral Medicine Research 460 Medical Center Dr Columbus, OH 43210 The Ohio State University <u>leah.pyter@osumc.edu</u>

Dr. Karl Obrietan

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