

Publications 2021-2022

Nathan Achilly

Achilly, N. P., Wang, W., & Zoghbi, H. Y. (2021). Presymptomatic training mitigates functional deficits in a mouse model of Rett syndrome. *Nature*, *592*, 596–600. <https://doi.org/10.1038/s41586-021-03369-7>

Achilly, N. P., He, L. J., Kim, O. A., Ohmae, S., Wojaczynski, G. J., Lin, T., Sillitoe, R. V., Medina, J. F., & Zoghbi, H. Y. (2021). Deleting *Mecp2* from the cerebellum rather than its neuronal subtypes causes a delay in motor learning in mice. *eLife*, *10*, e64833. <https://doi.org/10.7554/eLife.64833>

Ben Belfort

Pekarek, B. T., Hunt, P. J., **Belfort, B.**, Liu, G., & Arenkiel, B. R. (2021). Imaging and Quantification of Intact Neuronal Dendrites via CLARITY Tissue Clearing. *Journal of visualized experiments : JoVE*, (170), 10.3791/62532. <https://doi.org/10.3791/62532>

Erin Bolte

Bolte, E. E., Moorshead, D., & Aagaard, K. M. (2022). Maternal and early life exposures and their potential to influence development of the microbiome. *Genome Medicine*, *14*(1), 4. <https://doi.org/10.1186/s13073-021-01005-7>

Hannah Campbell

Ni, L., Lahiri, S. K., Nie, J., Pan, X., Abu-Taha, I., Reynolds, J. O., **Campbell, H. M.**, Wang, H., Kamler, M., Schmitz, W., Muller, F. U., Li, N., Wei, X., Wang, D. W., Dobrev, D., & Wehrens, X. H. T. (2021). Genetic inhibition of nuclear factor of activated T-cell c2 prevents atrial fibrillation in CREM transgenic mice. *Cardiovascular Research*. Advance online publication. <https://doi.org/10.1093/cvr/cvab325>

Rao, A. N., **Campbell, H. M.**, Guan, X., Word, T. A., Wehrens, X. H., Xia, Z., & Cooper, T. A. (2021). Reversible cardiac disease features in an inducible CUG repeat RNA-expressing mouse model of myotonic dystrophy. *JCI Insight*, *6*(5), e143465. <https://doi.org/10.1172/jci.insight>

Hilda Chan

Fogg, J. M., Judge, A. K., Stricker, E., **Chan, H. L.**, & Zechiedrich, L. (2021). Supercoiling and looping promote DNA base accessibility and coordination among distant sites. *Nature Communications*, *12*(1), 5683. <https://doi.org/10.1038/s41467-021-25936-2>

Christopher Cronkite

Duman, J. G., Blanco, F. A., **Cronkite, C. A.**, Ru, Q., Erikson, K. C., Mulherkar, S., Saifullah, A. B., Firozi, K., & Tolia, K. F. (2021). Rac-maninoff and Rho-vel: The symphony of Rho-GTPase signaling at excitatory synapses. *Small GTPases*. Advance online publication. <https://doi.org/10.1080/21541248.2021.1885264>

Moez Dawood

Zhang, C., Jolly, A., Shayota, B. J., Mazzeu, J. F., Du, H., **Dawood, M.**, Soper, P. C., Ramalho de Lima, A., Ferreira, B. M., Coban-Akdemir, Z., White, J., Shears, D., Thomson, F. R., Douglas, S. L., Wainwright, A., Bailey, K., Wordsworth, P., Oldridge, M., Lester, T., Calder, A. D., ... Carvalho, C. (2021). Novel pathogenic variants and quantitative phenotypic analyses of Robinow syndrome: WNT signaling perturbation and phenotypic variability. *HGG Advances*, *3*(1), 100074. <https://doi.org/10.1016/j.xhgg.2021.100074>

Khayat, M. M., Hu, J., Jiang, Y., Li, H., Chander, V., **Dawood, M.**, Hansen, A. W., Li, S., Friedman, J., Cross, L., Bijlsma, E. K., Ruivenkamp, C., Sansbury, F. H., Innis, J. W., O'Shea, J. O., Meng, Q., Rosenfeld, J. A., McWalter, K., Wangler, M. F., Lupski, J. R., ... Gibbs, R. A. (2021). AHDC1 missense mutations in Xia-Gibbs syndrome. *HGG Advances*, *2*(4), 100049. <https://doi.org/10.1016/j.xhgg.2021.100049>

Herman, I., Jolly, A., Du, H., **Dawood, M.**, Abdel-Salam, G. M. H., Marafi, D., Mitani, T., Calame, D. G., Coban-Akdemir, Z., Fatih, J. M., Hegazy, I., Jhangiani, S. N., Gibbs, R. A., Pehlivan, D., Posey, J. E., & Lupski, J. R. (2022). Quantitative dissection of multilocus pathogenic variation in an Egyptian infant with severe neurodevelopmental disorder resulting from multiple molecular diagnoses. *American Journal of Medical Genetics*, *188*(3), 735–750. <https://doi.org/10.1002/ajmg.a.62565>

Kali Deans-Fielder

Criss, Z. K., 2nd, Bhasin, N., Di Rienzi, S. C., Rajan, A., **Deans-Fielder, K.**, Swaminathan, G., Kamyabi, N., Zeng, X. L., Doddapaneni, H., Menon, V. K., Chakravarti, D., Estrella, C., Yu, X., Patil, K., Petrosino, J. F., Fleet, J. C., Verzi, M. P., Christakos, S., Helmrath, M. A., Arimura, S., ... Shroyer, N. F. (2021). Drivers of transcriptional variance in human intestinal epithelial organoids. *Physiological Genomics*, *53*(11), 486–508. <https://doi.org/10.1152/physiolgenomics.00061.2021>

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Jennifer Deger

Deger, J., Goethe, E. A., LoPresti, M. A., & Lam, S. (2021). Intraventricular Hemorrhage in Premature Infants: A Historical Review. *World neurosurgery*, 153, 21–25. <https://doi.org/10.1016/j.wneu.2021.06.043>

Lois Dodson

Dodson, L. M., Kurtz, K. J., Marcogliese, A. N., Friend, B. D., Stevens, A. M., & Fisher, K. E. (2022). Acute myeloid leukemia in a child with familial platelet disorder and a cryptic runx1 intragenic deletion. *Pediatric Hematology and Oncology*. Advance online publication. <https://doi.org/10.1080/08880018.2022.2035028>

Selma Elsarrag

Jiang, Z., **Elsarrag, S. Z.**, Duan, Q., LaGory, E. L., Wang, Z., Alexanian, M., McMahon, S., Rulifson, I. C., Winchester, S., Wang, Y., Vaisse, C., Brown, J. D., Quattrocchi, M., Lin, C. Y., & Haldar, S. M. (2022). KLF15 cistromes reveal a hepatocyte pathway governing plasma corticosteroid transport and systemic inflammation. *Science Advances*, 8(10), eabj2917. <https://doi.org/10.1126/sciadv.abj2917>

Eric Joshua Garcia

Garcia, E. J., & Sidransky, E. (2021). Genetics provides new individualized therapeutic targets for Parkinson's disease. *Neural regeneration research*, 16(5), 994–995. <https://doi.org/10.4103/1673-5374.297076>

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Thomas Gebert

Gebert, J. T., Shegog, E., Xiao, E., Fan, J., McEvoy, M., Lopez, A., & Clark, D. (2022). Associations of incomplete SARS-CoV-2 vaccination among patients with unstable housing in Houston. *Journal of Health Care for the Poor and Underserved*. In press.

Karthik Goli

Cholankeril, G., **Goli, K.**, Rana, A., Hernaez, R., Podboy, A., Jalal, P., Da, B. L., Satapathy, S. K., Kim, D., Ahmed, A., Goss, J., & Kanwal, F. (2021). Impact of COVID-19 Pandemic on Liver Transplantation and Alcohol-Associated Liver Disease in the USA. *Hepatology* (Baltimore, Md.), 74(6), 3316–3329. <https://doi.org/10.1002/hep.32067>

Keller, R. J., Porter, W., **Goli, K.**, Rosenthal, R., Butler, N., & Jones, J. A. (2021). Biologically-Based and Physiochemical Life Support and In Situ Resource Utilization for Exploration of the Solar System-Reviewing the Current State and Defining Future Development Needs. *Life (Basel, Switzerland)*, 11(8), 844. <https://doi.org/10.3390/life11080844>

Katie Hogan

Smoak, M. M., **Hogan, K. J.**, Grande-Allen, K. J., & Mikos, A. G. (2021). Bioinspired electrospun dECM scaffolds guide cell growth and control the formation of myotubes. *Science Advances*, 7(20), eabg4123. <https://doi.org/10.1126/sciadv.abg4123>

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Publications 2021-2022

Patrick Hunt

- Lyons-Warren, A. M., Herman, I., **Hunt, P. J.**, & Arenkiel, B. R. (2021). A systematic-review of olfactory deficits in neurodevelopmental disorders: From mouse to human. *Neuroscience and Biobehavioral Reviews*, *125*, 110–121. <https://doi.org/10.1016/j.neubiorev.2021.02.024>
- Pekarek, B. T., **Hunt, P. J.**, Belfort, B., Liu, G., & Arenkiel, B. R. (2021). Imaging and Quantification of Intact Neuronal Dendrites via CLARITY Tissue Clearing. *Journal of Visualized Experiments*, *170*, e62532. <https://doi.org/10.3791/62532>
- Lusk, S. J., McKinney, A., **Hunt, P. J.**, Fahey, P. G., Patel, J., Chang, A., Sun, J. J., Martinez, V. K., Zhu, P. J., Egbert, J. R., Allen, G., Jiang, X., Arenkiel, B. R., Tolia, A. S., Costa-Mattioli, M., & Ray, R. S. (2022). A CRISPR toolbox for generating intersectional genetic mouse models for functional, molecular, and anatomical circuit mapping. *BMC Biology*, *20*(1), 28. <https://doi.org/10.1186/s12915-022-01227-0>

Angad Jolly

- Herman, I., **Jolly, A.**, Du, H., Dawood, M., Abdel-Salam, G. M. H., Marafi, D., Mitani, T., Calame, D. G., Coban-Akdemir, Z., Fatih, J. M., Hegazy, I., Jhangiani, S. N., Gibbs, R. A., Pehlivan, D., Posey, J. E., & Lupski, J. R. (2022). Quantitative dissection of multilocus pathogenic variation in an Egyptian infant with severe neurodevelopmental disorder resulting from multiple molecular diagnoses. *American Journal of Medical Genetics*, *188*(3), 735–750. <https://doi.org/10.1002/ajmg.a.62565>
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Zachary Kadow

- Kahr, P. C., Tao, G., **Kadow, Z. A.**, Hill, M. C., Zhang, M., Li, S., & Martin, J. F. (2021). A novel transgenic Cre allele to label mouse cardiac conduction system. *Developmental Biology*, *478*, 163–172. <https://doi.org/10.1016/j.ydbio.2021.07.005>

Gerry Koons

- Koons, G. L.**, Kontoyiannis, P. D., Diba, M., Chim, L. K., Scott, D. W., & Mikos, A. G. (2021). Effect of 3D Printing Temperature on Bioactivity of Bone Morphogenetic Protein-2 Released from Polymeric Constructs. *Annals of Biomedical Engineering*, *49*(9), 2114–2125. <https://doi.org/10.1007/s10439-021-02736-9>
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Colleen Longley

- Stevens, S. R., **Longley, C. M.**, Ogawa, Y., Teliska, L. H., Arumanayagam, A. S., Nair, S., Osés-Prieto, J. A., Burlingame, A. L., Cykowski, M. D., Xue, M., & Rasband, M. N. (2021). Ankyrin-R regulates fast-spiking interneuron excitability through perineuronal nets and Kv3.1b K⁺ channels. *eLife*, *10*, e66491. <https://doi.org/10.7554/eLife.66491>
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Publications 2021-2022

Grant Mangleburg

Hill, E. J., **Mangleburg, C. G.**, Alfradique-Dunham, I., Ripperger, B., Stillwell, A., Saade, H., Rao, S., Fagbongbe, O., von Coelln, R., Tarakad, A., Hunter, C., Dawe, R. J., Jankovic, J., Shulman, L. M., Buchman, A. S., & Shulman, J. M. (2021). Quantitative mobility measures complement the MDS-UPDRS for characterization of Parkinson's disease heterogeneity. *Parkinsonism & Related Disorders*, *84*, 105–111. <https://doi.org/10.1016/j.parkreldis.2021.02.006>

Malcolm McDonald

McDonald, M. F., Barrett, S. C., Malik, T. H., Anand, A., Keeling, S. S., Christmann, C. R., Goff, C. R., Galvan, T., Kanwal, F., Cholankeril, G., Goss, J., & Rana, A. (2021). Elevated serum sodium in recipients of liver transplantation has a substantial impact on outcomes. *Transplant International*, *34*(10), 1971–1983. <https://doi.org/10.1111/tri.13968>

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Vicki Mercado-Evans

Lum, G. R., **Mercado, V.**, van Ens, D., Nizet, V., Kimmey, J. M., & Patras, K. A. (2021). Hypoxia-Inducible Factor 1 Alpha Is Dispensable for Host Defense of Group B Streptococcus Colonization and Infection. *Journal of Innate Immunity*, *13*(6), 391–403. <https://doi.org/10.1159/000515739>

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David Moorshead

Bolte, E. E., **Moorshead, D.**, & Aagaard, K. M. (2022). Maternal and early life exposures and their potential to influence development of the microbiome. *Genome Medicine*, *14*(1), 4. <https://doi.org/10.1186/s13073-021-01005-7>

Mejia, M. E., Ottinger, S., Vrbanac, A., Babu, P., Zulk, J. J., **Moorshead, D.**, Bode, L., Nizet, V., & Patras, K. A. (2022). Human Milk Oligosaccharides Reduce Murine Group B Streptococcus Vaginal Colonization with Minimal Impact on the Vaginal Microbiota. *mSphere*, *7*(1), e0088521. <https://doi.org/10.1128/msphere.00885-21>

Kristen Panthagani

Al Mohajer, M., **Panthagani, K. M.**, Lasco, T., Lembcke, B., & Hemmige, V. (2021). Association between universal face shield in a quaternary care center and reduction of SARS-COV2 infections among healthcare personnel and hospitalized patients. *International Journal of Infectious Diseases*, *105*, 252–255. <https://doi.org/10.1016/j.ijid.2021.02.060>

Publications 2021-2022

Rowland Pettit

- Byun, J., Han, Y., Ostrom, Q. T., Edelson, J., Walsh, K. M., **Pettit, R. W.**, Bondy, M. L., Hung, R. J., McKay, J. D., Amos, C. I., & for INTEGRAL-ILCCO (2021). The Shared Genetic Architectures Between Lung Cancer and Multiple Polygenic Phenotypes in Genome-Wide Association Studies. *Cancer Epidemiology, Biomarkers & Prevention*, 30(6), 1156–1164. <https://doi.org/10.1158/1055-9965.EPI-20-1635>
- Peng, B., **Pettit, R. W.**, & Amos, C. I. (2021). Population simulations of COVID-19 outbreaks provide tools for risk assessment and continuity planning. *JAMIA Open*, 4(3), ooaa074. <https://doi.org/10.1093/jamiaopen/ooaa074>
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- Pettit, R. W.**, Fullem, R., Cheng, C., & Amos, C. I. (2021). Artificial intelligence, machine learning, and deep learning for clinical outcome prediction. *Emerging Topics in Life Sciences*, 5(6), 729–745. <https://doi.org/10.1042/ETLS20210246>
- Pettit, R. W.**, Kaplan, J., Delancy, M. M., Reece, E., Winocour, S., Offodile, A. C., Kumar, A., & Chu, C. K. (2022). Industry Payments to Plastic Surgeons: What Has Changed Over the Last 6 Years Following Implementation of the Physician Payments Sunshine Act?. *Aesthetic Surgery Journal*, 42(2), 210–221. <https://doi.org/10.1093/asj/sjab158>
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Riyad Seervai

- Bertocchio, J., Grosset, N., Groussin, L., Kamenicky, P., Larceneux, F., Lienhardt-Roussie, A., Linglart, A., Maruani, G., Mirallie, E., Pattou, F., **Seervai, R. N. H.**, Sido, C., Silve, C., Vilfaillot, A., Tabarin, A., Vantyghem, A., Houillier, P., & the investigators of the Epi-Hypo study. (2022). Practice patterns for chronic hypoparathyroidism: data from patients and physicians in France. *Endocrine Connections*, 11(1), e210350. <https://doi.org/10.1530/EC-21-0350>
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