

# **IDDRC PUBLICATIONS**

**BY RESEARCH  
AFFILIATES**

**2021**

2021

**Kristina Adams Waldorf**

- Brokaw, A., Furuta, A., Dacanay, M., Rajagopal, L., **Adams Waldorf, K. M.** (2021). Bacterial and host determinants of Group B streptococcal vaginal colonization and ascending infection in pregnancy. *Frontiers in Cellular and Infection Microbiology*, 11, 720789. PMID: PMC8446444. doi: 10.3389/fcimb.2021.720789.
- Coleman, M., Armistead, B., Orvis, A., Quach, P., Brokaw, A., Gendrin, C., . . . **Munson, J., . . . Adams Waldorf, K. M.**, Rajagopal, L. (2021). Hyaluronidase impairs neutrophil function and promotes group B streptococcus invasion and preterm labor in nonhuman primates. *mBio*, 12, Jan 5 2021. doi: 10.1128/mBio.03115-20.
- Coler, B. S., Shynlova, O., Boros-Rausch, A., Lye, S., McCartney, S., Leimert, K. B., . . . **Adams Waldorf, K. M.** (2021). Landscape of preterm birth therapeutics and a path forward. *Journal of Clinical Medicine*, 10, Jun 29 2021. PMID: PMC8268657. doi: 10.3390/jcm10132912.
- Kachikis, A., Walker, C. L., McAdams, R. M., Gyamfi-Bannerman, C., **Adams Waldorf, K. M.** (2021). Phenotypic overlap in neonatal respiratory morbidity following preterm premature rupture of membranes versus spontaneous preterm labor. *Journal of Maternal-Fetal & Neonatal Medicine*, 34, 1941-1948. PMID: PMC7010543. doi: 10.1080/14767058.2019.1651280.
- LaCourse, S. M., Kachikis, A., Blain, M., Simmons, L. E., Mays, J. A., Pattison, A. D., . . . **Munson, J., . . . Adams Waldorf, K. M.**, Hitti, J. (2021). Low prevalence of severe acute respiratory syndrome coronavirus 2 among pregnant and postpartum patients with universal screening in Seattle, Washington. *Clinical Infectious Diseases*, 72, 869-872. PMID: PMC7314151. doi: 10.1093/cid/ciaa675.
- Li, M., Brokaw, A., Furuta, A. M., Coler, B., Obregon-Perko, V., Chahroudi, A., . . . **Adams Waldorf, K. M.** (2021). Non-human primate models to investigate mechanisms of infection-associated fetal and pediatric injury, teratogenesis and stillbirth. *Frontiers in Genetics*, 12, 680342. PMID: PMC8287178. doi: 10.3389/fgene.2021.680342.
- Lokken, E. M., Taylor, G. G., Huebner, E. M., Vanderhoeven, J., Hendrickson, S., Coler, B., . . . **Adams Waldorf, K. M.** (2021). Higher severe acute respiratory syndrome coronavirus 2 infection rate in pregnant patients. *American Journal of Obstetrics and Gynecology*, 225, 75.e1- 75.e16. PMID: PMC7884918. doi: 10.1016/j.ajog.2021.02.011.
- Lokken, E. M., Huebner, E. M., Taylor, G. G., Hendrickson, S., Vanderhoeven, J., Kachikis, A., . . . **Adams Waldorf, K. M.** (2021). Disease severity, pregnancy outcomes, and maternal deaths among pregnant patients with severe acute respiratory syndrome coronavirus 2 infection in Washington state. *American Journal of Obstetrics and Gynecology*, 225, 77.e1-77.e14. PMID: PMC7838012. doi: 10.1016/j.ajog.2020.12.1221.
- McCartney, S. A., **Kapur, R. P.**, Liggitt, H. D., Baldessari, A., Coleman, M., Orvis, A., . . . **Adams Waldorf, K. M.** (2021). Amniotic fluid interleukin 6 and interleukin 8 are superior predictors of fetal lung injury compared with maternal or fetal plasma cytokines or placental histopathology in a nonhuman primate model. *American Journal of Obstetrics and Gynecology*, 225, 89.e1-89.e16. PMID: PMC8254735. doi: 10.1016/j.ajog.2020.12.1214.
- Shynlova, O., Boros-Rausch, A., Farine, T., **Adams Waldorf, K. M.**, Dunk, C., Lye, S. J. (2021). Decidual inflammation drives chemokine-mediated immune infiltration contributing to term labor. *Journal of Immunology*, 207, 2015-2026. doi: 10.4049/jimmunol.2100493.

## Anne Arnett

- Arnett, A. B.**, Wang, T., **Eichler, E. E.**, Bernier, R. A. (2021). Reflections on the genetics-first approach to advancements in molecular genetic and neurobiological research on neurodevelopmental disorders. *Journal of Neurodevelopmental Disorders*, 13, 24. PMID: PMC8215789. doi: 10.1186/s11689-021-09371-4.
- Arnett, A. B.**, Rhoads, C., Rutter, T. M. (2021). Reduced error recognition explains post-error slowing differences among children with attention deficit hyperactivity disorder. *Journal of the International Neuropsychological Society*, 1-11. doi: 10.1017/s1355617721001065.
- Mamiya, P. C., **Arnett, A. B.**, **Stein, M. A.** (2021). Precision medicine care in ADHD: The case for neural excitation and inhibition. *Brain Sciences*, 11, Jan 13 2021. PMID: PMC7828220. doi: 10.3390/brainsci11010091.
- Peisch, V., Rutter, T., Wilkinson, C. L., **Arnett, A. B.** (2021). Sensory processing and P300 event-related potential correlates of stimulant response in children with attention-deficit/hyperactivity disorder: A critical review. *Clinical Neurophysiology*, 132, 953-966. PMID: PMC7981253. doi: 10.1016/j.clinph.2021.01.015.
- Rutter, T. M., **Arnett, A. B.** (2021). Temperament traits mark liability for coexisting psychiatric symptoms in children with elevated ADHD symptoms. *Journal of Attention Disorders*, 25, 1871 -1880. PMID: PMC7931648. doi: 10.1177/1087054720943282.

## Melissa Barker-Haliski

- Barker-Haliski, M. L.**, Knox, K., Zierath, D., Koneval, Z., Metcalf, C., Wilcox, K. S., **White, H. S.** (2021). Development of an antiepileptogenesis drug screening platform: Effects of everolimus and phenobarbital. *Epilepsia*, 62, 1677-1688. PMID: PMC8260451. doi: 10.1111/epi.16955.
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## Karen Elizabeth Bearss

- Berger, N. I., Wainer, A. L., Kuhn, J., **Bearss, K.**, Attar, S., Carter, A. S., . . . **Stone, W. L.** (2021). Characterizing available tools for synchronous virtual assessment of toddlers with suspected autism spectrum disorder: A brief report. *Journal of Autism and Developmental Disorders*, 1-12. PMID: PMC7893832. doi: 10.1007/s10803-021-04911-2.
- Bradshaw, J., Gillespie, S., McCracken, C., King, B. H., McCracken, J. T., Johnson, C. R., . . . **Bearss, K.**, . . . Scahill, L. (2021). Predictors of caregiver strain for parents of children with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 51, 3039-3049. doi: 10.1007/s10803-020-04625-x.
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## Olivia Bermingham-McDonogh

Wilkerson, B. A., Zebroski, H. L., Finkbeiner, C. R., Chitsazan, A. D., Beach, K. E., Sen, N., . . . **Bermingham-McDonogh, O.** (2021). Novel cell types and developmental lineages revealed by single-cell RNA-seq analysis of the mouse crista ampullaris. *eLife*, *10*, May 18 2021. PMID: PMC8189719. doi: 10.7554/eLife.60108.

## Kristie F. Bjornson

- Kerfeld, C. I., **Bjornson, K. F.** (2021). Commentary on "The preliminary criterion validity of the Activ8 activity monitor to measure physical activity in youth using a wheelchair". *Pediatric Physical Therapy*, Aug 18 2021. doi: 10.1097/pep.0000000000000838.
- Kerfeld, C. I., Hurvitz, P. M., **Bjornson, K. F.** (2021). Physical activity measurement in children who use mobility assistive devices: Accelerometry and global positioning system. *Pediatric Physical Therapy*, *33*, 92-99. doi: 10.1097/pep.0000000000000786.
- Leonard, R., Sweeney, J., Damiano, D., **Bjornson, K. F.**, Ries, J. (2021). Effects of orthoses on standing postural control and muscle activity in children with cerebral palsy. *Pediatric Physical Therapy*, *33*, 129-135. PMID: PMC8462467. doi: 10.1097/pep.0000000000000802.
- Tsao, E., Flanigan, M., Johnson, L., Toy, M., Giannini, E., **Bjornson, K. F.** (2021). Functional outcomes of pediatric patients in Short-term Pediatric Rehabilitation Intensive Therapy (SPRINT) while receiving acute oncologic and hematologic care. *PM&R*, Mar 27 2021. doi: 10.1002/pmjr.12595.
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## Cathryn Booth-LaForce

- Appelhans, B. M., Thomas, A. S., Roisman, G. I., **Booth-LaForce, C.**, Bleil, M. E. (2021). Preexisting executive function deficits and change in health behaviors during the COVID-19 pandemic. *International Journal of Behavioral Medicine*, *28*, 813-819. PMID: PMC7920747. doi: 10.1007/s12529-021-09974-0.
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- Bleil, M. E., **Spieker, S. J., Booth-LaForce, C.** (2021). Targeting parenting quality to reduce early life adversity impacts on lifespan cardiometabolic risk. *Frontiers in Psychology*, *12*, 678946. PMID: PMC8211431. doi: 10.3389/fpsyg.2021.678946.
- Dagan, O., Buisman, R. S. M., Nivison, M. D., Waters, T. E. A., Vaughn, B. E., Bost, K. K., . . . **Booth-LaForce, C.**, Roisman, G. I. (2021). Does secure base script knowledge mediate associations between observed parental caregiving during childhood and adult romantic relationship quality and health? *Attachment & Human Development*, *23*, 643-664. PMID: PMC8076343. doi: 10.1080/14616734.2020.1836858.
- Havewala, M., Bowker, J. C., Smith, K. A., Rose-Krasnor, L., **Booth-LaForce, C.**, Laursen, B., . . . Rubin, K. H. (2021). Peer influence during adolescence: The moderating role of parental support. *Children (Basel)*, *8*, Apr 17 2021. PMID: PMC8074199. doi: 10.3390/children8040306.

## Mark Bothwell

Chun, C., Smith, A. S. T., Kim, H., Kamenz, D. S., Lee, J. H., Lee, J. B., . . . **Bothwell, M.**, . . . Kim, D. H. (2021). Astrocyte-derived extracellular vesicles enhance the survival and electrophysiological function of human cortical neurons in vitro. *Biomaterials*, *271*, 120700. PMID: PMC8044026. doi: 10.1016/j.biomaterials.2021.120700.

Smith, A. S. T., Kim, J. H., Chun, C., Gharai, A., Moon, H. W., Kim, E. Y., . . . **Bothwell, M.**, . . . Kim, D. H. (2021). HDAC6 inhibition corrects electrophysiological and axonal transport deficits in a human stem cell-based model of Charcot-Marie-Tooth Disease (Type 2D). *Advanced Biology*, e2101308. doi: 10.1002/adbi.202101308.

## Eliot Brenowitz

**Brenowitz, E. A.** (2021). Taking turns: The neural control of birdsong duets. *Proceedings of the National Academy of Sciences of the United States of America*, *118*, Jun 22 2021. PMID: PMC8237565. doi: 10.1073/pnas.2108043118.

## Thomas Burbacher

Hendrix, A. M., Lefebvre, K. A., Quakenbush, L., Bryan, A., Stimmelmayer, R., Sheffield, G., . . . **Burbacher, T. M.**, **Marcinek, D. J.** (2021). Ice seals as sentinels for algal toxin presence in the Pacific Arctic and subarctic marine ecosystems. *Marine Mammal Science*, *37*, 1292-1308. PMID: PMC8518847. doi: 10.1111/mms.12822.

Petroff, R., Hendrix, A., Shum, S., Grant, K. S., Lefebvre, K. A., **Burbacher, T. M.** (2021). Public health risks associated with chronic, low-level domoic acid exposure: A review of the evidence. *Pharmacology and Therapeutics*, *227*, 107865. doi: 10.1016/j.pharmthera.2021.107865.

**Wood, T. R.**, Vu, P. T., Comstock, B. A., Law, J. B., Mayock, D. E., Heagerty, P. J., **Burbacher, T. M.**, . . . **Juul, S. E.** (2021). Cytokine and chemokine responses to injury and treatment in a nonhuman primate model of hypoxic-ischemic encephalopathy treated with hypothermia and erythropoietin. *Journal of Cerebral Blood Flow and Metabolism*, *41*, 2054-2066. PMID: PMC8327104. doi: 10.1177/0271678x21991439.

## William Catterall

Alexander, S. P., Mathie, A., Peters, J. A., Veale, E. L., Striessnig, J., Kelly, E., . . . **Catterall, W. A.**, . . . Zhu, M. (2021). THE CONCISE GUIDE TO PHARMACOLOGY 2021/22: Ion channels. *British Journal of Pharmacology*, *178*, S157-s245. doi: 10.1111/bph.15539.

Chuang, S. H., Westenbroek, R. E., **Stella, N.**, **Catterall, W. A.** (2021). Combined antiseizure efficacy of cannabidiol and clonazepam in a conditional mouse model of Dravet syndrome. *Journal of Experimental Neurology*, *2*, 81-85. PMID: PMC8301289. doi: 10.33696/neurol.2.040.

Gamal El-Din, T. M., Lantin, T., Tschumi, C. W., Juarez, B., Quinlan, M., Hayano, J. H., . . . **Zweifel, L. S.**, **Catterall, W. A.** (2021). Autism-associated mutations in KV7 channels induce gating pore current. *Proceedings of the National Academy of Sciences of the United States of America*, *118*, Nov 9 2021. PMID: PMC8609342. doi: 10.1073/pnas.2112666118.

Jiang, D., Tonggu, L., Gamal El-Din, T. M., Banh, R., Pomès, R., Zheng, N., **Catterall, W. A.** (2021). Structural basis for voltage-sensor trapping of the cardiac sodium channel by a deathstalker scorpion toxin. *Nature Communications*, *12*, 128. PMID: PMC7782738. doi: 10.1038/s41467-020-20078-3.

- Jiang, D., Gamal El-Din, T., Zheng, N., **Catterall, W. A.** (2021). Expression and purification of the cardiac sodium channel NaV1.5 for cryo-EM structure determination. *Methods in Enzymology*, *653*, 89-101. doi: 10.1016/bs.mie.2021.01.030.
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## Jeffrey Chamberlain

- Bengtsson, N. E., Tasfaout, H., Hauschka, S. D., **Chamberlain, J. S.** (2021). Dystrophin gene- editing stability is dependent on dystrophin levels in skeletal but not cardiac muscles. *Molecular Therapy*, *29*, 1070-1085. PMID: PMC7934576. doi: 10.1016/j.ymthe.2020.11.003.
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## Dimitri Christakis

- Browne, D. T., May, S. S., Colucci, L., Hurst-Della Pietra, P., **Christakis, D. A.**, Asamoah, T., . . . Prime, H. (2021). From screen time to the digital level of analysis: A scoping review of measures for digital media use in children and adolescents. *11*, e046367. PMID: PMC8137212. doi: 10.1136/bmjopen-2020-046367.
- Christakis, D. A.** (2021). More on epidurals and autism. *JAMA Pediatrics*, *175*, 705. doi: 10.1001/jamapediatrics.2021.0385.
- Christakis, D. A.** (2021). On masks and emotion recognition. *JAMA Pediatrics*, Nov 15 2021. doi: 10.1001/jamapediatrics.2021.4562.
- Dooley, D. G., **Christakis, D. A.** (2021). It is time to end the debate over school reopening. *JAMA Network Open*, *4*, e2111125. doi: 10.1001/jamanetworkopen.2021.11125.
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- Martin-Herz, S. P., Haggerty, K., Neilands, T. B., Sterling, M., **Christakis, D. A.** (2021). Factors associated with trajectories of externalizing behavior in preschoolers. *Academic Pediatrics*, Dec 25 2021. doi: 10.1016/j.acap.2021.12.027.
- McArthur, B. A., Hentges, R., **Christakis, D. A.**, McDonald, S., Tough, S., Madigan, S. (2021). Cumulative social risk and child screen use: The role of child temperament. *Journal of Pediatric Psychology*, Aug 13 2021. doi: 10.1093/jpepsy/jsab087.

## Lucio Costa

- Garrick, J. M., Cole, T. B., Bammler, T. K., MacDonald, J. W., Marsillach, J., **Furlong, C. E., Costa, L. G.** (2021). Paraoxonase 2 deficiency in mice alters motor behavior and causes region-specific transcript changes in the brain. *Neurotoxicology and Teratology*, *87*, 107010. PMID: PMC8440460. doi: 10.1016/j.ntt.2021.107010.
- Garrick, J. M., **Costa, L. G.**, Cole, T. B., Marsillach, J. (2021). Evaluating gait and locomotion in rodents with the CatWalk. *Current Protocols*, *1*, e220. PMID: PMC8363132. doi: 10.1002/cpz1.220.
- Marsillach, J., Richter, R. J., **Costa, L. G., Furlong, C. E.** (2021). Paraoxonase-1 (PON1) status analysis using non-organophosphate substrates. *Current Protocols*, *1*, e25. PMID: PMC7924808. doi: 10.1002/cpz1.25.

## Julia Yue Cui

- Fu, Z. D., Selwyn, F. P., **Cui, J. Y.**, Klaassen, C. D. (2021). RNA-Seq unveiled section-specific host response to lack of gut microbiota in mouse intestine. *Toxicology and Applied Pharmacology*, *433*, 115775. doi: 10.1016/j.taap.2021.115775.
- Lim, J. J., Dutta, M., Dempsey, J. L., Lehmler, H. J., MacDonald, J., Bammler, T., . . . **Cui, J. Y.** (2021). Neonatal exposure to BPA, BDE-99, and PCB produces persistent changes in hepatic transcriptome associated with gut dysbiosis in adult mouse livers. *Toxicological Sciences*, *184*, 83-103. PMID: PMC8557404. doi: 10.1093/toxsci/kfab104.

## Michael Cunningham

- Calpena, E., Wurmser, M., McGowan, S. J., Atique, R., Bertola, D. R., **Cunningham, M. L.**, . . . Wilkie, A. O. M. (2021). Unexpected role of SIX1 variants in craniosynostosis: Expanding the phenotype of SIX1-related disorders. *Journal of Medical Genetics*, Jan 12 2021. PMID: PMC8273188. doi: 10.1136/jmedgenet-2020-107459.
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- Lam, A. S., Bindschadler, M. D., Evans, K. N., Friedman, S. D., Blessing, M. S., Bly, R., **Cunningham, M. L.**, . . . Dahl, J. P. (2021). Accuracy and reliability of 4D-CT and flexible laryngoscopy in upper airway evaluation in robin sequence. *Otolaryngology and Head and Neck Surgery*, 1945998211027353. doi: 10.1177/01945998211027353.
- Lam, A. S., Liu, C. C., Deutsch, G. H., Rivera, J., Perkins, J. A., Holmes, G., . . . **Cunningham, M. L., Dahl, J. P.** (2021). Genotype-phenotype correlation of tracheal cartilaginous sleeves and FGFR2 mutations in mice. *The Laryngoscope*, *131*, E1349-e1356. PMID: PMC7930142. doi: 10.1002/lary.29060.
- Timberlake, A. T., Griffin, C., Heike, C. L., **Hing, A. V., Cunningham, M. L.**, Chitayat, D., . . . Luquetti, D. V. (2021). Haploinsufficiency of SF3B2 causes craniofacial microsomia. *Nature Communications*, *12*, 4680. PMID: PMC8333351. doi: 10.1038/s41467-021-24852-9.

Raimondo D'Ambrosio

Eastman, C. L., Fender, J. S., Klein, P., **D'Ambrosio, R.** (2021). Therapeutic effects of time-limited treatment with brivaracetam on posttraumatic epilepsy after fluid percussion injury in the rat. *Journal of Pharmacology and Experimental Therapeutics*, 379, 310-323. doi: 10.1124/jpet.121.000585.

Galanopoulou, A. S., Löscher, W., Lubbers, L., O'Brien, T. J., Staley, K., Vezzani, A., **D'Ambrosio, R.**, White, H. S., . . . Klein, B. (2021). Antiepileptogenesis and disease modification: Progress, challenges, and the path forward-report of the preclinical working group of the 2018 NINDS-sponsored antiepileptogenesis and disease modification workshop. *Epilepsia Open*, 6, 276-296. PMID: PMC8166793. doi: 10.1002/epi4.12490.

## Stephen Dager

Burrows, C. A., Bodfish, J. W., Wolff, J. J., Vollman, E. P., Altschuler, M. R., Botteron, K. N., **Dager, S. R., Estes, A. M.**, . . . Elison, J. T. (2021). Cataloguing and characterizing interests in typically developing toddlers and toddlers who develop ASD. *Autism Research*, 14, 1710-1723. doi: 10.1002/aur.2543.

Chaxiong, P., Burrows, C., Botteron, K. N., **Dager, S. R., Estes, A. M.**, Hazlett, H. C., . . . Wolff, J. (2021). Relations of restricted and repetitive behaviors to social skills in toddlers with autism. *Journal of Autism and Developmental Disorders*, May 6 2021. doi: 10.1007/s10803-021-05014-8.

Chen, L., **Shaw, D. W. W., Dager, S. R.**, Corrigan, N. M., Chu, B., **Kleinhans, N. M., Kuhl, P. K.**, . . . Yuan, C. (2021). Quantitative assessment of the intracranial vasculature of infants and adults using iCafe (intracranial artery feature extraction). *Frontiers in Neurology*, 12, 668298. PMID: PMC8193571. doi: 10.3389/fneur.2021.668298.

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Meera, S. S., Donovan, K., Wolff, J. J., Zwaigenbaum, L., Elison, J. T., Kinh, T., . . . **Estes, A. M.**, . . . **Dager, S. R.**, . . . Piven, J. (2021). Towards a data-driven approach to screen for autism risk at 12 months of age. *Journal of the American Academy of Child and Adolescent Psychiatry*, 60, 968-977. PMID: PMC8127075. doi: 10.1016/j.jaac.2020.10.015.

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