The Children's Hospital of Philadelphia

Division of Gastroenterology, Hepatology and Nutrition
Division of Neonatal-Perinatal Medicine

The Hub for Clinical Collaboration 3500 Civic Center Boulevard, 6th floor Philadelphia, PA 19104

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EDUCATION

MD, University of Pittsburgh School of Medicine, Pittsburgh, PA, 2019

Areas of Concentration: Neuroscience and Public Health Gold Humanism Honor Society

PhD, McGill University, Montréal, QC, 2015

Integrated Program in Neuroscience (Advisors: Vincent L. Gracco, PhD and Denise Klein, PhD)

Montréal Neurological Institute and the Centre for Research on Brain, Language, and Music

Dissertation: Age-dependent effects on bilingual brain organization: Function, structure, and connectivity

BA, Yale University, New Haven, CT, 2010

Summa cum laude, Phi Beta Kappa

Majors: French (Distinction) and Psychology (Distinction)

French Thesis: Leçons d'anatomie: Figures de médecin selon Balzac, Huart, et Flaubert

Psychology Thesis: The role of the basal ganglia in language translation

POSTGRADUATE CLINICAL TRAINING

Fellowship in Gastroenterology, Hepatology, and Nutrition, University of Pennsylvania, 2027

The Children's Hospital of Philadelphia, Philadelphia, PA

Fellowship in Neonatal-Perinatal Medicine, University of Pennsylvania, 2027

The Children's Hospital of Philadelphia, Philadelphia, PA

The Hospital of the University of Pennsylvania, Philadelphia, PA

Residency in Pediatrics, McGaw Medical Center of Northwestern University, Chicago, IL, 2022

Ann and Robert H. Lurie Children's Hospital of Chicago

Physician-Scientist Training Program & Medical Education Clinical Scholars Program

American Board of Pediatrics Integrated Research Pathway

POSTGRADUATE RESEARCH TRAINING

Post-doctoral Fellowship, Perelman School of Medicine at the University of Pennsylvania, 2027

Department of Genetics & Institute for Diabetes, Obesity, and Metabolism

The Center for Molecular Studies in Digestive and Liver Diseases

Interplay Between Intestinal Epithelial Immaturity and Neurobehavioral Dynamics

(Advisors: Klaus H. Kaestner, PhD and Julie A. Blendy, PhD)

Post-doctoral Fellowship, Northwestern University Feinberg School of Medicine, Chicago, IL, 2022

<u>Prenatal Stress Mechanisms of Neurodevelopmental Vulnerability to Mental Health Problems</u> Institute for Innovations in Developmental Sciences, Department of Medical Social Sciences (Advisor: Laurie Wakschlag, PhD)

ADDITIONAL TRAINING

- 17th Annual Inflammatory Bowel Disease Workshop, Mount Sinai Icahn School of Medicine, 2023
- EDPH689: Teaching and Learning in Higher Education, McGill University Faculty of Education, 2014
- Inuktitut Language Course (Nunavik dialect), Module du Nord Québécois, Montréal Childrens' Hospital, 2011-2012
- FSL/FreeSurfer Course, University of Oxford Centre for Functional MRI of the Brain, 2011

BOARD CERTIFICATIONS

American Board of Pediatrics, 10/2023

CERTIFICATIONS

BLS (Exp: 8/2025) PALS (Exp: 8/2025) NRP (Exp: 8/2025)

HONORS & AWARDS

International/National/Regional

- American Society of Parenteral and Enteral Nutrition Neonatal Fellowship Grant, 2024
- NASPGHAN Baby Shark Tank Competition for Innovation Finalist, 2023
- Pennsylvania Pediatric Medical Device Consortium (\$10K), 2023
- Academic Medicine 2021 Call for Trainee-Authored Letters to the Editor: Honorable Mention, 2021
- Walter L. Copeland Fund of the Pittsburgh Foundation, Neurological Surgery, 2016
- NIH IMPACT Predoctoral Summer Program in Child and Adolescent Psychiatry, 2016
- Jonas Salk Fellowship, Jewish Healthcare Foundation of Pittsburgh, 2015
- Vanier Graduate Scholarship, Natural Sciences and Engineering Research Council of Canada, 2012-2015
- AAAS/Science Program for Excellence in Science, 2012-2014
- Finalist, Communication, Education, and Society, Forces Avenir Québec, 2012
- Psi Chi, The National Honor Society in Psychology, 2010

b) University of Pennsylvania

- Penn-Health Tech Seed Funding Grant (25K), 2024-2025
- Penn-Health Tech Accelerator Program, Semifinalist, 2023

c) McGaw Medical Center/Ann and Robert H. Lurie Children's Hospital of Chicago

- Pilot grant, Institute for Innovations in Developmental Sciences (\$1K), 2022
- Feinberg Academy of Medical Education (FAME) for Excellence in Health Professions Education, 2022
- Best Overall Quality Improvement Award, ASQ Developmental Screening Implementation, 2021
- People's Choice Award, ASQ Developmental Screening Implementation, 2021

d) University of Pittsburgh School of Medicine

- Gold Humanism Honor Society, 2018
- Lyubor Nimax Scholarship, 2018
- Herbert S. Green Memorial Scholarship, 2018
- A. Z. & Fannie A. Pittler Memorial Scholarship, 2018
- Lawrence Frank Fund, National Council of Jewish Women, 2018
- David R. Cox Scholarship for Rare Compassion Family Matching Program, 2018
- Morris H. and Gertrude M. Harris Scholarship, 2015-2018

e) McGill University

- First Prize, BrainReach Knowledge Translation Contest, 2014
- Dr. Richard Murphy Travel Award, 2013
- Graduate Travel Award, Centre for Research on Brain, Language, and Music, 2012 & 2015
- Graduate Research Enhancement and Travel Award, 2011-2015
- Richard H. Tomlinson Doctoral Scholarship, 2010-2013
- Max Stern Recruitment Award, 2010

Yale University

- The John Spangler Nicholas Prize (Salutatorian in Trumbull College), 2010
- The Montaigne Prize, Department of French, 2010
- The Mortimer L. Doolittle Memorial Scholarship, 2008-2010
- The John D. Walker and Roy C. Abbott Scholarship, 2008-2010
- Henry W. Scott Prize, Department of French, 2008
- The Kenneth Cornell Memorial Grant in French Studies, 2008

INTERNAL INSTITUTIONAL SERVICE

- a) Ann and Robert H. Lurie Children's Hospital of Chicago
 - Coordinator, Resident Research Blitz Lecture Series, 2020-2022
- b) University of Pittsburgh School of Medicine
 - Member, Committee on Admissions, 2016-2017
 - Member, Interviewing Committee, 2015-2016
- c) Montréal Neurological Institute & Hospital
 - Coordinator, Cognition & Circuits Seminar Series, 2014-2015
- d) Integrated Program in Neuroscience, McGill University
 - Development Manager, Northern Quebec Neuroscience Outreach Program, 2014-2015
 - Admissions Representative, 2013-2015
 - Elementary School Coordinator, BrainReach Neuroscience Outreach Program, 2011-2012
 - President, McGill Graduate Student Association of Neuroscience, 2011-2012

SCIENTIFIC AND MEDICAL ADVISORY BOARDS

- Society for Pediatric Research Emerging to Established (E2E) Committee Member, 2024—
- North American Society for Pediatric Gastroenterology, Hepatology, and Nutrition, Chair, Fellows' Education Subcommittee, 2024-
- American Society for Parenteral and Enteral Nutrition, Abstract Review Committee, 2024-2027
- North American Society for Pediatric Gastroenterology, Hepatology, and Nutrition, Fellows Committee, 2023-2027
- American Academy of Pediatrics Section on Pediatric Trainees Gastroenterology Fellowship Trainee Delegate, 2022
- Faculty Reviewer, PediaLink Course Section on Pediatric Trainees Interactive Writing Toolkit, 2022
- Member, Eating Disorders Clinical Care Guideline Nutrition Working Group, Lurie Children's Hospital, 2021-2022
- Coordinator, Birmingham Free Clinic, Pittsburgh, Pennsylvania, 2016-2017
- Scientific Consultant, Lester B. Pearson School Board, Pierrefonds, Québec, 2013-2015

PROFESSIONAL SOCIETY MEMBERSHIP

- American Academy of Pediatrics
- American Association for the Advancement of Science
- American Medical Association
- American Society for Parenteral and Enteral Nutrition
- Cognitive Neuroscience Society
- Eastern Society for Pediatric Research
- Necrotizing Enterocolitis (NEC) Society
- Newborn Brain Society
- North American Society for Pediatric Gastroenterology, Hepatology, and Nutrition
- Organization for Human Brain Mapping
- Pediatric Academic Societies
- Pennsylvania Perinatal Society
- Society for Neuroscience
- · Society for the Neurobiology of Language
- Society for Pediatric Research
- Yale Alumni Schools Committee

EDITORSHIPS & EDITORIAL BOARD SERVICE

- Review Editor, Frontiers in Language Sciences, Section on Neurobiology of Language, 2022-present
- Immediate Past Editor, Pediatrics, Section on Pediatric Trainees Feature, 2021-2022
- Editor, Pediatrics, Section on Pediatric Trainees Feature, 2020-2021
- Deputy Editor, Pediatrics, Section on Pediatric Trainees Feature, 2019-2020
- French Language Liaison, African Journal of Emergency Medicine, 2014-2015
- Associate Editor, Yale Daily News Insider's Guide to the Colleges, 2009-2010
- Founder and Editor-in-Chief, The French Language Journal at Yale, 2007-2010
- Managing Editor, Yale Journal of Medicine and Law, 2007-2009

MANUSCRIPT REVIEW RESPONSIBILITIES

- · American Journal of Preventive Medicine
- Brain and Cognition
- · Brain and Language
- · Brain Imaging and Behavior
- Brain Research
- Brain Sciences
- Brain Structure and Function
- · Child Psychiatry and Human Development
- Developmental Neuropsychology
- Frontiers in Psychology
- · Human Brain Mapping
- International Journal of Pediatric Otorhinolaryngology
- The Journal of Neuroscience
- · The Journal of Pediatrics
- Language
- Memory & Cognition
- Neurobiology of Language
- Neurolmage
- Neuropsychologia
- Neuroscience
- Pediatric Drugs
- Pediatrics
- PLOS One
- Scientific Reports
- Social Neuroscience

PUBLICATIONS & SCHOLARLY WORKS

- **Peer-Reviewed Original Investigations**
 - 1. Berken, J.A., Gracco, V.L., Chen, J-K., Watkins, K.E., Baum, S., Callahan, M., and Klein, D. (2015). Neural activation in speech production and reading aloud in native and non-native languages, Neurolmage, 112, 208-217, doi: 10.1016/j.neuroimage.2015.03.016.
 - 2. Berken, J.A., Gracco, V.L., Chen, J-K., and Klein, D. (2015). The timing of language learning shapes brain structure associated with articulation. Brain Structure and Function. doi: 10.1007/s00429-015-1121-9.
 - 3. Chai, X.J., Berken, J.A., Barbeau, E.B, Callahan, M., Soles, J., Chen, J-K., and Klein, D. (2016). Intrinsic functional connectivity in the adult brain and success in second language learning. The Journal of Neuroscience, 36(3), 755-761. [Highlighted in US News, SFN News, McGill News, Science Daily].
 - 4. Berken, J.A., Chai, X., Chen, J-K., Gracco, V.L., and Klein, D. (2016). Effects of early and late bilingualism on resting-state functional connectivity. The Journal of Neuroscience, 36(4), 1165-1172.
 - 5. Berken, J.A., Gracco, V.L., and Klein, D. (2016). Early bilingualism, language attainment, and brain development. Neuropsychologia. DOI: 10.1016/j.neuropsychologia.2016.08.031.
 - 6. Barbeau, E.B., Chai, X., Chen, I-K., Soles, I., Berken, I.A., Baum, S., Watkins, K.E., and Klein, D. (2016). The role of the left inferior parietal lobule in second language learning: an intensive language training fMRI study. Neuropsychologia. DOI: 10.1016/j.neuropsychologia.2016.10.003.
 - 7. Berken, J.A., Miller, E., and Moncrieff, D. (2020). Auditory processing disorders in incarcerated youth: A Call for early detection and treatment. International Journal of Pediatric Otorhinolaryngology. DOI: 10.1016/ j.jporl.2019.109683.

- 8. Wakschlag, L., Tandon, T., Krogh-Jespersen, S., Petitclerc, A., Nielsen, A., Ghaffari, R., Mithal, L., Bass, M., Ward, E., Berken, J.A., Fareedi, E., Mestan, K., Norton, E., Grobman, W., Rogers, J., Moskowitz, J., and Alshurafa, N. (2020). Moving the Dial on Prenatal Stress Mechanisms of Neurodevelopmental Vulnerability to Mental Health Problems: A Personalized Medicine Proof of Concept. Journal of Psychobiology. DOI: 10.1002/dev.22057.
- 9. Berken, J.A. and Chang, J. Neurologic Consequences of Neonatal Necrotizing Enterocolitis. (2022). Developmental Neuroscience. DOI: 10.1159/000525378.
- 10. Cummings, P., Petitclerc, A., Moskowitz, J., Tandon, D., Zhang, Y., MacNeil, L.A., Wakschlag, L., Krogh-Jespersen, S., Hamil, J.L., Nili, A., Berken, J.A., Grobman, W., Rangarajan, A., Alshurafa, N. Feasibility & Acceptability of a Well-being Intervention Utilizing Passive ECG Bio-sensing and EMA Emotion Reporting Technologies, Considerations for Scalability and Improved Uptake. (2022). Affective Sciences. s42761-022-00147-0.
- 11. Wechsler, J.B., Berken, J.A., Keeley, K., Singer, W., Jhaveri, R., Katz, B., Fortunato, J., and Saps, M. Somatic. emotional, and gastrointestinal symptom severity are increased among children and adolescents with COVID-19. (2024). Neurogastroenterology and Motility. DOI: 10.1111/nmo.14909.
- 12. Berken, J.A., Ramanan P, Akel MJ, Miller C, Nunes D, Aleynick DN, Wechsler JB, Wakschlag LS, Mithal LB. Association between neonatal necrotizing enterocolitis and neurodevelopmental outcomes: A comprehensive systematic review and meta-analysis. medRxiv 2024.09.20.24314095; doi: https://doi.org/ 10.1101/2024.09.20.24314095.
- 13. Berken, J.A., Craddock, K., Agarwal, S., Rand, E.B., and French, H.M. (2024). Mixed and Direct Hyperbilirubinemia: Time For Lights Out. Submitted.

b) Case Reports, Letters, Editorials

- 1. Berken, J.A., Heard-Garris, N., and Wakschlag, L. (2021). Guardians at the Gate: Early childhood adversity. neurocognitive development, and the role of the pediatrician in the era of COVID-19. Frontiers in Pediatrics. DOI: 10.3389/fped.2021.665335.
- 2. Berken, J.A., Saul, S., and Osgood, P.T. (2022). Case Report: Superior Mesenteric Artery Syndrome in an Adolescent with Cannabis Hyperemesis. Frontiers in Pediatrics. DOI: 10.3389/fped.2022.830280.
- 3. Hoffmann, N., Berken, J.A., Banc-Husu, A., Taylor, S., and Kriegermeier, A. (2022). A Case of Syphilitic Hepatitis in an Adolescent. JPGN Reports. DOI: 10.1097/PG9.000000000000189

c) Book Chapters

1. Berken, J.A. and Manfredi, M. Developmental Anatomy and Physiology of the Esophagus. Pediatric Gastrointestinal and Liver Disease, Seventh edition. Edited by Hyams and Kay. In press.

d) Op-Ed and Newspaper Articles

- 1. Berken, J.A. Control, Halt, Defeat: Tackling Teenage Depression in the Digital Age. The Pittsburgh Post-Gazette. August 14, 2018. http://www.postgazette.com/news/health/2018/08/14/Tackling-teenage-bullying-in-thedigital-age-Jonathan-Berken/stories/201808140007
- 2. Berken, J.A. No More Walking on Eggshells: Parents and Adolescents Open Up About Teen Depression. The Pittsburgh Post-Gazette. June 19, 2018. http://www.post-gazette.com/news/health/2018/06/19/No-morewalking-on-egg-shells-parents-and-adolescents-open-up-about-teenage-depression/stories/201806140124
- 3. Berken, J.A. Opinion: Montreal's Bilingualism Should Be Cherished. The Montreal Gazette. April 25, 2013.

e) Oral Presentations

- 1. Berken, J.A. Necrotizing enterocolitis affects neurodevelopment in preterm infants. The Eastern Society for Pediatric Research 24th Annual Meeting. March 8-10, 2024. Philadelphia, PA.
- 2. Berken, J.A. A 10-year-old boy with dysphagia. Children's Hospital of Philadelphia-Hospital of the University of Pennsylvania Case Conference. June 7, 2023.
- 3. Berken, J.A., Breastmilk Micronutrients and the Developing Brain. Nutrition Center and Integrative Health Seminar, Children's Hospital of Philadelphia. May 24, 2023.
- 4. Berken, J.A., Functional gastrointestinal disorders in children following COVID-19 infection resemble other postviral syndromes. Department of Pediatrics, Ann and Robert H. Lurie Children's Hospital of Chicago & Northwestern University Feinberg School of Medicine. June 6, 2022.
- 5. Berken, J.A., Onset of language acquisition shapes function and structure in the bilingual brain. Neuroscience Seminar, Department of Psychology, Loyola University Chicago. April 28, 2022.
- 6. Berken, J.A., Culinary Medicine for the Primary Care Pediatrician. Cooper Talk, Department of Pediatrics, Ann and Robert H. Lurie Children's Hospital of Chicago & Northwestern University Feinberg School of Medicine. January 13, 2022.
- 7. Berken, J.A., Bilingualism and the Developing Brain: Myths and Facts for the Primary Care Pediatrician. Cooper Talk, Department of Pediatrics, Ann and Robert H. Lurie Children's Hospital of Chicago & Northwestern University Feinberg School of Medicine. October 15, 2020.
- 8. Berken, J.A., Finding your voice as a pediatrician: How to hone your writing skills. American Academy of Pediatrics National Conference. October 4, 2020.
- 9. Berken, J.A., Section on Pediatric Trainees: Writing Workshop. American Academy of Pediatrics National Conference. October 4, 2020.
- 10. Berken, J.A., Legal and ethical considerations of admitting neuroimaging in the courtroom. McGill University, Neuroethics undergraduate class, Montreal, QC. January 28, 2014.
- 11.Berken, J.A., Effects of age of acquisition on bilingual brain organization: A Neuroimaging study. McGill University, Department of Psychology, Montreal, QC. October 4, 2013.
- 12.Berken, J.A., The Bilingual Advantage: How early learning of a second language shapes the brain. Address to faculty. School Year Abroad Program. Viterbo, Italy. November 5, 2012.
- 13.Berken, J.A., Early age of L2 acquisition correlates with increased cortical thickness of the left dorsolateral prefrontal cortex. Denis Melançon Lecture in Neuroradiology, Montreal Neurological Institute, Montreal, QC. Sept. 20, 2012.
- 14.Berken, J.A., The human brain and the five senses. Québec Aboriginal Science Fair, Kawawachikamach, Québec. March 2011.

f) Scientific & Medical Poster Abstracts/Presentations

Berken, J.A., Craddock, K., Agarwal, S., Rand, E.B., and French, H.M. Reevaluating Treatment Protocols for Mixed and Direct Hyperbilirubinemia: The Case Against Aggressive Interventions. The Eastern Society for Pediatric Research. March 14-16, 2025. Philadelphia, PA.

- 2. Berken, J.A., Silvestro, E., Manfredi, M., and Ryan, M. Novel unsedated transpacifier upper endoscopy for neonates and infants: A pilot study and proof-of-concept. 105th Annual Perinatal and Developmental Medicine Conference. November 12-15, 2024. Bonita Springs, FL.
- Ramanan P, Berken, J.A., Akel MJ, Miller C, Nunes D, Aleynick DN, Wechsler JB, Wakschlag LS, Mithal LB. Neurodevelopmental Outcomes Associated with Necrotizing Enterocolitis in Preterm Infants: A Systematic Review and Meta-Analysis. 18th Annual Lewis Landsberg Research Symposium. September 12, 2024. Northwestern University Feinberg School of Medicine, Chicago, IL.
- Ramanan, P., Berken, J.A., Akel, M., Aleynick, D., Wechsler, J., Wakschlag, L., and Mithal, L. Neurodevelopmental Outcomes in Preterm Infants with Necrotizing Enterocolitis: A Systematic Review and Meta-Analysis. Pediatric Academic Societies Meeting. May 2-6, 2024. Toronto, ON, Canada.
- Berken, J.A. and Manfredi, M. Can't pee, can't see, can't hear a bee. can't swallow tea? A case of a young boy with COL4A5/6 deletion and progressive dysphagia. 51st Annual Meeting of the North American Society for Pediatric Gastroenterology, Hepatology, and Nutrition. October 4-7, 2023. San Diego, CA.
- Coe, A., Berken, J.A., Brownell, J.N., Magbool, A., Anupindi, S., Acord, M., and Mamula. P. A Very Rare Case of Pancreatitis. 51st Annual Meeting of the North American Society for Pediatric Gastroenterology, Hepatology, and Nutrition. October 4-7, 2023. San Diego, CA.
- Berken, J.A., Ramanan, P., Akel, M., Wechsler, J., Wakschlag, L., and Mithal, L. Necrotizing enterocolitis associated neurobehavioral outcomes: A systematic review and meta-analysis. Necrotizing Enterocolitis Society Annual Meeting. August 28-30, 2023. San Diego, CA.
- Berken, J.A., Keeley, K., Saps, M., Fortunato, J. And Wechsler, J. Post-Infectious Somatic, Gastrointestinal, and Emotional Symptoms Are Not Unique to COVID-19. <u>Digestive Diseases Week. May 7-9, 2023. Chicago, IL.</u>
- Berken, J.A., Keeley, K., Saps, M., Fortunato, J. And Wechsler, J. Functional gastrointestinal disorders in children following COVID-19 infection resemble other post-viral syndromes. 50th Annual Meeting of the North American Society for Pediatric Gastroenterology, Hepatology, and Nutrition. October 12-15, 2022. Orlando, FL.
- 10. Berken, J.A., Ramanan, P., DeRegnier, R., Murthy, K., Wakschlag, L., Wechsler, J., and Mithal, L. Neurodevelopment outcomes of systemic inflammation in the neonatal period. Research Scholar Day at Northwestern University Feinberg School of Medicine. May 11, 2022. Chicago, IL
- 11. Berken, J.A., Saul, S., and Osgood, P.T. Weeding out the Diagnosis: A Case of Superior Mesenteric Artery Syndrome in a Patient with Cannabis Hyperemesis. North American Society for Pediatric Gastroenterology, Hepatology, and Nutrition. November 5-7, 2020. San Diego, California.
- 12. Hoffmann, N., Banc-Husu, A., Berken, J.A., Kriegermeier, A. (2020). Syphilitic Hepatitis in an Adolescent Male. North American Society for Pediatric Gastroenterology, Hepatology, and Nutrition. November 5-7, 2020. San Diego, California.
- 13. Barbeau, E.B., Chai, X.J., Chen, J-K., Berken, J.A., Baum, S., and Klein, D. Brain response changes in adults associated with twelve-week intensive second language learning. Organization for Human Brain Mapping. June 26-30, 2016. Geneva, Switzerland.
- 14. Barbeau, E.B., Chai, X.J., Chen, J-K., Berken, J.A., Baum, S., Watkins, K.E., and Klein, D. The role of the left inferior parietal lobule in second language learning: a twelve-week intensive language training fMRI study. Association for Research in Neuroeducation. May 25-26, 2016. Montréal, Québec, Canada.

- 15. Chai, X.J., Berken, J.A., Barbeau, E.B., Soles, J., Callahan, M., Chen J-K., and Klein D. Predicting second language learning success from resting-state connectivity. <u>Center for Research on Brain, Language, and Music.</u> Montreal (2016).
- 16. Berken, J.A., Chai, X., Chen, J-K., Gracco, V., and Klein, D. Resting-state functional connectivity in bilinguals reflects age of acquisition. Cognitive Neuroscience Society. April 2-5, 2016. New York, New York.
- 17. Berken, J.A., Chai, X., Chen, J-K., Gracco, V., and Klein, D. Interhemispheric functional connectivity in the bilingual brain. Symposium: Multiple Perspectives on Bilingualism and the Brain. May 28-30, 2015. Montreal Neurological Institute, Montreal, QC.
- 18. Barbeau, E.B., Chai, X., Chen, J.-K., Berken, J.A., Baum, S., and Klein, D. Brain response changes in the left inferior parietal lobule associated with twelve-week intensive language learning. Symposium: Multiple Perspectives on Bilingualism and the Brain. May 28-30, 2015. Montreal Neurological Institute, Montreal, QC.
- 19. Chai, X., Barbeau, E., Berken, J.A., Callahan, M., Chen, J-K., and Klein, D. Intrinsic functional connectivity in the brain predicts ability in second language learning. Symposium: Multiple Perspectives on Bilingualism and the Brain. May 28-30, 2015. Montreal Neurological Institute, Montreal, QC.
- 20. Berken, J.A., Mok, K., Chen, J-K., Gracco, V., Watkins, K., Baum, S., and Klein, D. Native bilingualism shapes the structure of Heschl's gyrus. Society for Neuroscience. November 15-18, 2014. Washington, D.C. **Identified as a hot topic for media coverage.
- 21. Berken, J.A., Chen, J-K., Gracco, V., Baum, S., Watkins, K., and Klein, D. The role of the putamen and premotor cortex in bilingual speech production. Cognitive Neuroscience Society. April 5-8, 2014. Massachussetts, USA.
- 22. Berken, J.A., Chen, J-K., Gracco, V., Baum, S., Watkins, K., and Klein, D. Structural differences related to age of acquisition and proficiency in the bilingual brain. Québec Bioimaging Network. January 28, 2014. Montréal, Québec, Canada.
- 23. Berken, J.A., Chen, J-K., Callahan, M., Gracco, V., Watkins, K., Baum, S., and Klein, D. Speech motor activation when speaking a non-native language: Support for a sensitive period in second language acquisition. Society for the Neurobiology of Language. November 6-8, 2013. San Diego, California, USA.
- 24. Berken, J.A., Chen, J-K., Gracco, V., Watkins, K., Baum, S., and Klein, D. Speech production in native and nonnative languages: An fMRI study of overt sentence reading. <u>International Conference on Multilingualism:</u> Linguistic Challenges and Neurocognitive Mechanisms. October 24-25, 2013. Montreal, Quebec, Canada.
- 25. Berken, J.A., Klein, D., Chen, J-K., Gracco, V., Baum, S., and Mok, K. Grey matter density differences in the left putamen correlate with age of second language acquisition: A voxel-based morphometry study. Society for the Neurobiology of Language. October 25-27, 2012. San Sebastián, Spain.
- 26. Berken, J.A., Mok, K., Chen, J-K., Gracco, V., Baum, S., and Klein, D. Age of second language acquisition affects cortical thickness in the left dorsolateral prefrontal cortex. Society for the Neurobiology of Language. October 25-27, 2012. San Sebastián, Spain.
- 27. Berken, J.A., Mok, K., Chen, J-K., Soles, J., Gracco, V., and Klein, D. Les différences structurelles du cerveau bilingue : Analyse de l'épaisseur du cortex cérébral. 80° Congrès de l'Association francophone pour le savoir, Symposium on Bilingualism, Montréal, Québec, Canada, May 8, 2012.

Undergraduate, Graduate, & Medical Education Poster Presentations

- Berken, JA., and Quadri, M. NOURISH Kids: A Proposal for a Culinary Medicine Curriculum, Cookbook, and Teaching Kitchen at Lurie Children's Hospital. Feinberg School of Medicine 11th Annual Conference on Medical Education. October 8, 2021. Chicago, Illinois.
- Elnicki, D., Berken, J.A., Al-Baghli, J., and Mahoney, J. The Learning Preferences of Medical Students: International Similarities and Differences. Association for Medical Education in Europe. August 24-28, 2019. Vienna, Austria.
- Hanrahan, B., Antony, A., Jones, P.W., Berken, J.A., Markantone, D., Popescu, A., and Bagic, A. The Effect of Completing a Neurology Clerkship on Diagnostic Accuracy of Paroxysmal Spells. American Academy of Neurology 71st Annual Meeting. May 4-May 10, 2019. Philadelphia, Pennsylvania.
- Berken, J.A., Mahoney, J., Al-baghli, J., and Elnicki, D.M. Understanding Differences in American and Kuwaiti Medical Students' Learning Preferences to Achieve Competency. Learn Serve Lead 2018: The Association of American Medical Colleges. November 3-5, 2018. Austin, Texas.
- Berken, J.A., Tibshirani, M., Kulaga-Yoskovitz., J., and Nalbantoglu, J. BrainReach North: Digital Curricula for Underserved Schools in Quebec First Nations and Rural Communities. Society for Neuroscience. November 15-19, 2014. Washington, D.C.

h) Other Scholarly Work

- Berken, JA.. Political Chameleon: The Private and Public Marquis de Sade. The Columbia University Journal of History. Spring 2009.
- Gaw, C., Chatty, P., Saltzman, H., Lanocha-Wilcox, N., Berken, J.A., Furman, L., Toto, R. Section on Pediatric <u>Trainees Medical Humanities Writing Curriculum [online course]</u>. PediaLink. American Academy of Pediatrics. Https://bit.ly/SOPT Writing Curr. Published 7/25/2022. Accessed (8/10/2022).

MEDIA COVERAGE

- 1. Gravel, P. Quand le bilinguisme épaissit le cerveau. Le Devoir. May 9, 2012.
- Vinals, L. Second-Language Learning Ability Revealed by Resting State Functional Connectivity. Journal of Neuroscience. June 8, 2016, 36(23):6141-6143.
- Learning a Second Language May Depend on How Your Brain Talks to Itself. McGill News. January 20, 2016.
- Ability to learning second language may depend on strength of brain connections. Neuroscience News. January 20, 2016.
- Grant, A. Brain Connectivity and Language Learning: New Findings, New Questions. Cognitive Neuroscience Society. August 29, 2016.

TEACHING EXPERIENCE & CURRICULUM DEVELOPMENT

- Preceptor, University of Pennsylvania Perelman School of Medicine, Philadelphia, PA
 - MD307, Introduction to the Pediatric History and Physical Examination
 - The goal of this course is to familiarize medical students with the pediatric history and physical exam and the tools needed for its successful completion.
- Adjunct Instructor, Department of Psychology, Loyola University, Chicago, IL
 - PSYC 382/BIOL 284, <u>Behavioral and Cognitive Neuroscience</u>, Spring 2022
 - Overview of topics and methodologies used in behavioral and cognitive neuroscience including: attention, learning and memory, language, reasoning, decision making, intelligence, emotions, social cognition, and consciousness.

- · Adjunct Instructor, Dept. of Psychology, Duquesne University McAnulty College of Liberal Arts, Pittsburgh, PA
 - PSYC 201, Research Methods in Psychology, Spring 2019
 - This course provides an introduction to psychological research. Both quantitative and qualitative approaches
 are addressed, with most of the course dedicated to the former. Students will learn to be knowledgeable
 readers of research reports, to understand and consider ethical issues in research, and to use APA writing
 style.
 - PSYC 220, Brain, Behavior, and Cognition, Spring 2019
 - The course explores the biological, behavioral and cognitive approaches to psychology, with particular attention to assumptions that underlie each system of thought. The course emphasizes both classical theories and current findings.
- Co-facilitator, Refugee Health Mini-Elective, University of Pittsburgh School of Medicine, January 2017
- Tomlinson Fellow in University-Level Science Education, McGill University, 2013-2015
 - Tomlinson Fellows are selected via a rigorous application process. They are involved in carrying out research in science teaching and deliver several workshops during the academic year to enhance the teaching techniques of ~200 graduate students and postdoctoral fellows at McGill.
- Teaching Assistant, McGill University.
 - ANAT 323 / Neuroanatomy / Fall 2014.
 - SCSD 638 / Neurolinguistics / Winter 2014.
 - ANAT 321 / Circuitry of the Human Brain / Fall 2013.
 - NSCI 300 / Neuroethics / Winter 2013 and Winter 2014.
 - BIOL 306 / Neural Basis of Behavior / Fall 2012.
 - BIOL 301 / Lab for Cell and Molecular Biology / Fall 2011, Winter 2011 and Winter 2012.
- Instructor, The Loomis Chaffee School, Windsor, CT.
 - Developed curricula and taught students at this preparatory boarding school. Mentored undergraduate teaching assistants for my courses who were interested in pursuing careers in teaching and education.
 - Human Behavior / Summer 2014
 - Neuroscience: The Brain and Why We Do What We Do / Summer 2013 and 2014
 - English as a Second Language / Summer 2013
- Founder and Director, Project F.R.E.N.C.H. at Yale, 2007–2010.
 - Developed curricula and taught French in underserved tuition-free New Haven schools.
 - First Year French / St. Martin de Porres Academy, New Haven, CT.
 - Second Year French / High School in the Community, New Haven, CT.

SUPERVISION

2021 — Priyanka Ramanan, Northwestern Feinberg School of Medicine, Area of Scholarly Concentration Program Project: Brain and behavioral alterations associated with systemic inflammation in neonates

LANGUAGES

- French Advanced
- Italian —Intermediate
- Modern and Biblical Hebrew Intermediate