Robert F. Berman, Ph.D.

Clinical Interests
Dr. Berman is Professor Emeritus and Senior Research Professor studying brain injury and neurodevelopmental disorders.

Research/Academic Interests
Dr.Berman's research focuses on mechanisms of brain injury and disorders of brain development. His research program develops new treatment strategies for such disorders, including Fragile x-associated tremor/ataxia syndrome, autism and Alexander disease.

Title
Senior Research Professor

Specialty
Brain Injury Medicine, Neurodevelopmental Disorders, Neuroscience Research

Department
Neurological Surgery

Division
Neurological Surgery

Center/Program Affiliation
Center for Neuroscience
UC Davis MIND Institute

Education
Post Doc, Biochemistry, University of North Carolina at Chapel Hill, Chapel Hill NC 1976-1978
Ph.D., Behavioral Neuroscience, University of Utah, Salt Lake City UT 1976
M.S., Behavioral Neuroscience, University of Utah, Salt Lake City UT 1974
B.A., Microbiology & Immunology, University of Utah, Salt Lake City UT 1970

Professional Memberships
American Association for Advancement of Science, Fellow
American Association for Neurochemistry
International Behavioral and Neural Genetics Society
Society for Neuroscience

Honors and Awards
National Associate of the National Academies (designated lifetime member), 2002
Visiting Scientist Award, Medical Research Council of Sweden, Karolinska Institute, Stockholm, Sweden, 1995
Visiting Professor, University of Otago, Dunedin, New Zealand, 1992

Select Recent Publications
To see a full list of Dr. Berman's publications, please click here.

Schwartzer JJ, Garcia-Arocena D, Jamal A, Izadi A, Willemsen R, Berman RF. Allopregnanolone Improves Locomotor Activity and Arousal in the Aged CGG Knock-in Mouse Model of Fragile X-Associated Tremor/Ataxia Syndrome. Front Neurosci. 2021 Dec 3;15:752973. doi:10.3389/fnins.

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Hagemann TL, Powers B, Lin NH, Mohamed AF, Dague KL, Hannah SC, Bachmann G, Mazur C, Rigo F, Olsen AL, Feany MB, Perng MD, Berman RF, Messing A. Antisense therapy in a rat model of Alexander disease reverses GFAP pathology, white matter deficits, and motor impairment. Sci Transl Med. 2021 Nov 17;13(620):eabg4711. doi:10.1126/scitranslmed.abg4711. Epub 2021 Nov 17. PMID:34788075.

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Ryan AM, Berman RF, Bauman MD. Bridging the species gap in translational research for neurodevelopmental disorders. Neurobiol Learn Mem. 2019 Nov;165:106950. doi:10.1016/j.nlm.2018.10.006. Epub 2018 Oct 19. PMID:30347236.

Careaga M, Taylor SL, Chang C, Chiang A, Ku KM, Berman RF, Van de Water JA, Bauman MD. Variability in PolyIC induced immune response: Implications for preclinical maternal immune activation models. J Neuroimmunol. 2018 Oct 15;323:87-93. doi:10.1016/j.jneuroim.2018.06.014. Epub 2018 Jun 28. PMID:30196839.

Berg EL, Copping NA, Rivera JK, Pride MC, Careaga M, Bauman MD, Berman RF, Lein PJ, Harony-Nicolas H, Buxbaum JD, Ellegood J, Lerch JP, Wöhr M, Silverman JL. Developmental social communication deficits in the Shank3 rat model of phelan-mcdermid syndrome and autism spectrum disorder. Autism Res. 2018 Apr;11(4):587-601. doi:10.1002/aur.1925. Epub 2018 Jan 29. PMID:29377611.

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Lechpammer M, Tran YP, Wintermark P, Martínez-Cerdeño V, Krishnan VV, Ahmed W, Berman RF, Jensen FE, Nudler E, Zagzag D. Upregulation of cystathionine -synthase and p70S6K/S6 in neonatal hypoxic ischemic brain injury. Brain Pathol. 2017 Jul;27(4):449-458. doi:10.1111/bpa.12421. Epub 2016 Aug 28. Erratum in: Brain Pathol. 2017 Nov;27(6):856. PMID:27465493.

Foote MM, Careaga M, Berman RF. What has been learned from mouse models of the Fragile X Premutation and Fragile X-associated tremor/ataxia syndrome? Clin Neuropsychol. 2016 Aug;30(6):960-72. doi:10.1080/13854046.2016.1158254. Epub 2016 Jun 29. PMID:27355912.

Ku KM, Weir RK, Silverman JL, Berman RF, Bauman MD. Behavioral Phenotyping of Juvenile Long-Evans and Sprague-Dawley Rats: Implications for Preclinical Models of Autism Spectrum Disorders. PLoS One. 2016 Jun 28;11(6):e0158150. doi:10.1371/journal.pone.0158150. PMID:27351457.

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