

Natasha Mott, Ph.D

Creative and curious scientist philosopher with diverse experience in academia, industry, and media

Professional Experience & Education

2024 - present Sr. Medical Science Liaison (MSL), XXX I ain't tellin'XXX, Nashville TN

*Scientific communication and field education initiatives,
Medical/scientific support for commercially approved products;
pre-launch support for pipeline products*

2024 – 2025 Contributing Scholar, Discourse Magazine, George Mason University, Nashville TN

Writing on science for the Open Inquiry Initiative

08/2021 - present Cofounder, JobsMight, Nashville TN

Tool development and strategy for recruiting (Manufacturing, Chemical Engineering, Automation, Cybersecurity, Artificial Intelligence)

3/2020 – 2024 Science and Technology Consultant, Nashville TN

Scientific and marketing communications and product consulting for various pre-launch projects

2019 – 2021 Sr. Medical Science Liaison (MSL) Western US, Boston Biomedical, Cambridge MA

Pre-launch support in GI, Pancreatic, Ovarian, and Hematologic oncology

2017 – 2019 West US MSL ImmunoGen, Waltham MA

Pre-launch role in pre-launch support in Gynecologic oncology, Breast cancer, and Hematology (mirvetuximab soravtansine)

2014 – 2017 MSL Genzyme, Cambridge MA

Scientific, educational, and research support Endocrine oncology and Cardiovascular rare disease (vandetanib, thyrotropin alfa, and mipomersen)

2014 Post-doctoral Fellow Physiology and Pharmacology OHSU, Portland OR

Mapping steroid hormone receptor (GR, AR, ER) circuitry of the murine to the ovine hypothalamus

2007-2014 Graduate Research Assistant Loyola Chicago, Maywood IL

Ph.D in Cell Biology, Neurobiology, and Anatomy – nuclear receptor signaling in the aging brain

2004-2007 Research Assistant, University of Central Florida, Orlando FL

Bachelor of Science in Molecular and Microbiology – Identification of malarial SNARE proteins

Selected peer-reviewed publications, abstracts, and presentations

Publications

Pinceti E, Shults CL, Rao YS, **Mott NN**, Pak TR. Phosphorylation Alters Oestrogen Receptor β -Mediated Transcription in Neurons *J Neuroendocrinol*. 2015 Dec;27(12):861-71.doi:10.1111/jne.12326.

Mott NN, Pinceti E, Rao YS, Przybycien-Szymanska MM, Prins SA, Shults CS, Yang X, Glucksman MJ, Roberts JL, Pak TR. Age dependent effects of 17 β -estradiol on the dynamics of estrogen receptor beta (ER β) protein:protein interactions in the ventral hippocampus. *Mol Cell Proteomics*.2014 Jan 5

Mott NN, Pak TR. Estrogen signaling and the aging brain: context-dependent considerations for postmenopausal hormone therapy. *ISRN Endocrinology*. 2013 May 21 2013(1) Article ID 813690. <http://dx.doi.org/10.1155/2013/814690>

Rao YS, Mott NN, Wang Y, Chung WC, Pak TR. MicroRNAs in the aging female brain: A putative mechanism for age-specific estrogen effects. *Endocrinology*. 2013 May 29.

Pak TR, Rao YS, Prins SA, **Mott NN**. An emerging role for miRNAs in sexually dimorphic neurobiological systems. *Pflugers Arch*. 2013 May;465(5):655-67. doi: 10.1007/s00424-013-1227-y.

Mott NN, Pak TR. Constitutive regulation of neuronal gene promoters by human estrogen receptor beta (ER β) splice variants is independent of C-terminal domains. *J Neuroendocrinol*.2012 Oct;24(10):1311-21. Przybycien-Szymanska MM, **Mott NN**, Pak TR . Alcohol Dysregulates Corticotropin-Releasing-Hormone (CRH) Promoter Activity by Interfering with the Negative Glucocorticoid Response Element (nGRE) Site. *PLoS One*. 2011;6(10):e26647. Epub 2011 Oct 24.

Przybycien-Szymanska MM, **Mott NN**, Paul C, Gillespie R, Pak TR. Binge-pattern alcohol exposure during puberty induces long-term changes in HPA axis reactivity. *PLoS One*. 2011 Apr 13;6(4):e18350.

Rao YS, **Mott NN**, Pak TR. Kisspeptin alters corticotrophin-releasing hormone, arginine vasopressin and oxytocin mRNA: a role for kisspeptin regulation of the HPA axis. *Endocrine*. 2011 Jun;39(3):220-8.

Mott NN, Chung WC, Tsai P-S, Pak TR, Differential Fibroblast Growth Factor 8 (FGF8)-Mediated Autoregulation of Its Cognate Receptors, Fgfr1 and Fgfr3, in Neuronal Cell Lines. 2010. *PLoS One* 5(4): e10143. doi:10.1371

Presentations

Mott NN, Rao YS, Prins SA, Pinceti E, Shults CS, Pak TR. Age and hormone dependent nuclear protein accompaniment of estrogen receptor beta in the rodent brain. 2012. Annual SfN mtg, New Orleans, LA

Prins SA, Rao YS, **Mott NN**, Pinceti E, Pak TR. miRNA processing is dysregulated in the paraventricular nucleus (PVN), central amygdala (CeA), and hippocampus following adolescent binge-pattern alcohol exposure. 2012. Annual SfN mtg, New Orleans, LA

Rao YS, **Mott NN**, Pak TR. Estradiol regulates miRNA expression in the paraventricular nucleus of the hypothalamus in aged female rats 2011. Cell Symposia on Regulatory RNAs. Chicago, IL.

Mott NN, Pak TR. Constitutive regulation of neuronal gene promoters by human estrogen receptor beta (ER β) splice variants is independent of C-terminal domains 2011. Annual ENDO mtg, Boston, MA.

Mott NN, Pak TR. SUMOylation of estrogen receptor beta (ER β) in neurons: the consequences of 17 β -Estradiol 2010. Annual Meeting of the Society for Neuroscience, San Diego, CA.

Mott NN, Pak TR. Ligand-independent transcriptional actions of human ER β splice variants on ERE, AP-1 and human arginine vasopressin (hAVP) promoters in neuronal cells 2010. Nuclear Receptor and Disease Workshop, Cold Spring Harbor, NY.

McDonough CE, **Mott NN** and Pak TR. Phosphorylation as a potential mechanism for ligand-independent activation of ER β (2010). Wisconsin Midstate Meeting, Madison, WI

Mott NN, Pak TR. Analysis of ligand-independent transcriptional activity of estrogen receptor beta (ER β) splice variants (2010). Annual mtg of the Chicago Chapter of the Society for Neuroscience, Chicago, IL.

Mott NN, Tsai P-S, Pak TR. Comparison of fibroblast growth factor-8 regulation of GnRH in GT1-7 and Gn11 cell lines: evidence for a developmental change in FGF8 action 2009. Annual meeting of the Endocrine Society, Washington D.C.

Rao Y, **Mott NN**, Pak TR. Kisspeptin alters arginine vasopressin in a neuronal cell line: a potential role for kisspeptin regulation of the HPA axis 2009. Annual meeting of the Endocrine Society, Washington D.C.

Mott NN, Kandula S, Chung WCJ, Tsai P-S, Pak TR. Fibroblast growth factor-8 down-regulates GnRH transcriptional activity and differentially alters FGF receptor mRNA in immortalized GnRH neurons 2008. Annual meeting of the Endocrine Society, San Francisco, CA

Invited lectures & Panels

Mott NN. Work Hard, Play Hard: Secrets to Attaining and Enjoying Success in STEM. STEMMedia Success Summit. November 17, 2019

Mott NN, Kloos RT, Buchholz D. Career Track Panel Discussion E. Chester Ridgway Trainee Conference at the 15th International Thyroid Congress October 18, 2015

Mott NN, Rao YS, Prins SA, Pinceti E, Shults CS, Pak TR. Age and hormone regulate a subset of nuclear proteins that associate with estrogen receptor beta in the rodent brain regions. October 26, 2012. Annual St. Albert's Research Day, Loyola University Chicago

Mott NN, Rao YS, Pak TR. Estrogen receptor beta (ER β) associates with altered nuclear coregulatory proteins dependent on age and hormone treatment in anxiety related brain regions. September 25, 2011. *Summer School on Nuclear Receptor Signaling in Physiology and Disease, Spetses, Greece*.

Mott NN, Pak TR. Analysis of ligand-independent transcriptional activity of estrogen receptor beta (ER β) splice variants March 24, 2011. Chicago Chapter of SfN, Chicago, IL.

Przybycien-Szymanska MM, **Mott NN**, Pak TR. Alcohol Dysregulates Corticotropin-Releasing-Hormone (CRH) Promoter Activity by Interfering with the Negative Glucocorticoid Response Element (nGRE) Site. PLoS One. 2011;6(10):e26647. Epub 2011 Oct 24.

Przybycien-Szymanska MM, **Mott NN**, Paul C, Gillespie R, Pak TR. Binge-pattern alcohol exposure during puberty induces long-term changes in HPA axis reactivity. PLoS One. 2011 Apr 13;6(4):e18350.

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Mott NN, Chung WC, Tsai P-S, Pak TR, Differential Fibroblast Growth Factor 8 (FGF8)-Mediated Autoregulation of Its Cognate Receptors, Fgfr1 and Fgfr3, in Neuronal Cell Lines. 2010. *PLoS One* 5(4): e10143. doi:10.1371

Other Publications

Mott NN The Death of the Artist? July 2025. *Discourse Magazine*

Mott NN Insatiable Celebrity Worship: Consumption of the Chapel of Roan April 2025. *Everyday Analysis*

Mott NN Growing in Uncertainty. May 2024. *Discourse Magazine*

Mott NN Collective Intelligence Dec 2023. *Discourse Magazine*

Mott NN The Value of Ignorance Oct 2023. *Discourse Magazine*

Mott NN The Case for Scientific Failure July 2023. *Discourse Magazine*

Mott NN Uncertainty and the Neurobiology of Why We're So Divided Dec 2022. *Skeptic Magazine*

Mott NN Competition vs. Collaboration. November 2011. *Endocrine News*, Trainee Corner. p47

Mott NN Publications: Writing and Review. August 2010. *Endocrine News*, Trainee Corner. p17

Other writings found on [Substack](#)

My [Reading List](#)

Awards and Honors

2023 [Future of Life Institute Worldbuilding Honorable Mention](#)

2017 MSL of the Year, Genzyme - Rare Disease Unit

2016 Excellence in Medical Affairs – Cardio Endo MSL Team

2014 Loyola University Chicago Annual Outstanding Dissertation Award

2013 Charles Robert Schuster Travel Award, Loyola University Chicago

2012 2nd Place Graduate Oral Presentation, Loyola University Chicago Annual St. Albert's Day

2011 FEBS Transcontinental Youth Travel Fund (YTF) Award

2008 The Endocrine Society Trainee Day Award

Funding History

2014	"Mapping murine sexually dimorphic neural circuits"	NIH T32 HD007133
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2011 – 2014	"Determinants of Estrogen Receptor Beta (ER β) Protein: Protein Interactions Following Estrogen Withdrawal"	NIH F31 AG039931
	Funding Award: \$85,575	

2010 – 2011	"Constitutive activity of Estrogen Receptor Beta (ER β) splice variants"	NIH T32 AG031780
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Academic Associations & Service

2008- present	Member, American Society for Clinical Oncology
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2011- 2014	Member, American Society for Biochemistry and Molecular Biology
2010- 2012	Chair, Trainee Day Subcommittee, TES
2009- 2012	Member, Trainee & Career Development Core Committee, TES
2008- present	Member, Women in Endocrinology
2008- 2010	Member, Women in Endocrinology Mentoring Committee
2008- present	Member, The Society for Neuroscience
2007- present	Member, The Endocrine Society (TES)
Ad-Hoc Reviewer	Journal of Clinical Endocrinology and Metabolism Endocrinology

Education & Training

2022	The Effective Altruism In-Depth Program
2013	Ph.D Cell biology, Neurobiology and Anatomy Outstanding Dissertation Distinction Loyola University Chicago, Chicago, IL
2007	B.S Molecular and Microbiology University of Central Florida, Orlando, FL

Outreach

2017-2018 Portland March for Science, Board of Directors
2018-2020 Portland ScienceFEST, Founder
Rebranded the M4S, to Portland ScienceFEST to sustain the momentum of the Pro-Science movement. Held the inaugural Festival in May 2019, and planned an event for 2020 just following the shut down. Currently planning an event for 2022.

2014 – 2018 Outreach Director & Co-founder, Represent. Portland
Founding member of Portland chapter of Represent.Us. Key actions include outreach and adult education for local reform in advising and implementing state and local initiatives, organizing events and coordinating volunteers.

2009- 2010 Director, This is Me Inc., Board of Directors
Initiated directives for the organization, voted on curriculum, designed programs and made budgetary decisions. Organized annual fundraising including silent auctions, fundraising dinner and solicited and maintained relationships with current donors.

2009 Program Leader, This is Me Inc., Reinberg After-school program
Conceptualized program and designed entire curriculum on basic scientific and medical principles to encourage the interest of young girls in STEM and medical careers. I donated supplies and brought in guest scientists to give brief theoretical lessons and aid in facilitating the practical component of the program. I also designed the outcomes and collected metrics to report the success of the program.

2008- 2010 Program Leader, This is Me Inc., Hanson Park After- school program
Teaching, mentoring and facilitating pre-designed reading and communication curriculum. Independently led 5-10 girl groups. Designed outcomes and collected outcomes metrics for reporting