



MMI 291 Seminar Series

Current Theme: Interdisciplinary Research
Winter Quarter 2020 – **CRN 65452 Friday
Seminar – 12:10-1 p.m.**



“Mining the Perinatal Epigenome for Insights into
Autism Risk and Multifactorial Health Disparities”

Research

Dr. LaSalle is a Professor of Microbiology and Immunology at the University of California, Davis; With leadership roles in several research centers on campus, reflecting the interdisciplinary nature of her research program in epigenetics mechanisms at the interface of genes and environment in autism spectrum disorders. Dr. LaSalle is co-director of the new campus-wide IMPACT center, Perinatal Origins of Disparities (POD) Center. She also serves as the Associate Director of Genomics at the UC Davis Genome Center, Deputy Director of the Environmental Health Sciences Center, and on the Executive Committee of the IDDRC at the MIND Institute. She recently served as chair of the Genes in Health and Disease study section for the NIH. Dr. LaSalle also serves on the editorial board of the journals *Human Molecular Genetics*, *Molecular Autism*, and *Environmental Epigenetics* and is on the Scientific Advisory boards of the International Rett Syndrome Foundation, Dup15q Alliance, and Foundation for Prader-Willi Research.

Research focus in Dr. LaSalle's laboratory is on epigenetics of neurodevelopmental disorders, including autism, Rett, Prader-Willi, Angelman, and Dup15q syndromes. Dr. LaSalle's laboratory uses genomic and epigenomic technologies to investigate the role of DNA methylation and MeCP2 in the pathogenesis of Rett syndrome and autism spectrum disorders. Dr. LaSalle's lab also takes integrative genetic and epigenomic approaches to investigate perinatal tissues such as placenta, cord blood, and newborn blood spots for prediction and prevention of health disparities.

Publications

Placental DNA methylation levels at CYP2E1 and IRS2 are associated with child outcome in a prospective autism study. Zhu Y, Et al. *Hum Mol Genet.* 2019 Aug

Epigenomic convergence of neural-immune risk factors in neurodevelopmental disorder cortex. Vogel Ciernia A, Et al *Cereb Cortex.* 2019 Jun

Cord blood DNA methylome in newborns later diagnosed with autism spectrum disorder reflects early dysregulation of neurodevelopmental and X-linked genes. Mordaunt CE, Et al. *Genome Med.*, in revision.

March 13



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Center
Genome Center
Environmental Health Sciences
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MIND Institute
UC Davis

**March 13, 2020
12:10 – 1 p.m.
GBSF 1005**

Medical Microbiology &
Immunology
School of Medicine

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We hope to see you there!