



### **Eric Courchesne, Ph.D.**

Dr. Courchesne has introduced the new concept of ASD Living Biology, a new approach for discovering fetal brain developmental origins and explanations of ASD in the individual child. His work shows ASD begins in the 1<sup>st</sup> and 2<sup>nd</sup> trimesters and is due to progressive disruption of multiple fetal stages in brain development. His studies have identified genomic, molecular, cellular, and neural defects that lead to early language and social symptoms in autism and predict clinical outcomes. His work is internationally recognized. Dr. Courchesne's studies integrate clinical, brain imaging, developmental, cellular, genetic, and genomic findings that lead to a better understanding of the prenatal origins of autism. His team has also identified early diagnostic and outcome biomarkers. From this work, his team aims to identify treatments specific to biological subtypes. Dr. Courchesne has published over 200 articles in major journals such as Journal of the American Medical Association (JAMA), Science, Neuron, Molecular Psychiatry, Nature Neuroscience, and the New England Journal of Medicine.

### **Learning objectives**

1. Learn about the new concept of ASD Living Biology as a way to discover the fetal beginning and explanations for ASD in each child.
2. Learn about the fetal brain developmental events that are disrupted in autism.
3. Learn how these disrupted fetal events may lead to abnormal brain growth and function in infants and toddlers with autism.
4. Learn what brain growth and function biomarkers may underlie better vs worse long term behavioral outcomes in autism and why.
5. Learn about early biomarkers that signal risk for autism in the general pediatric population.