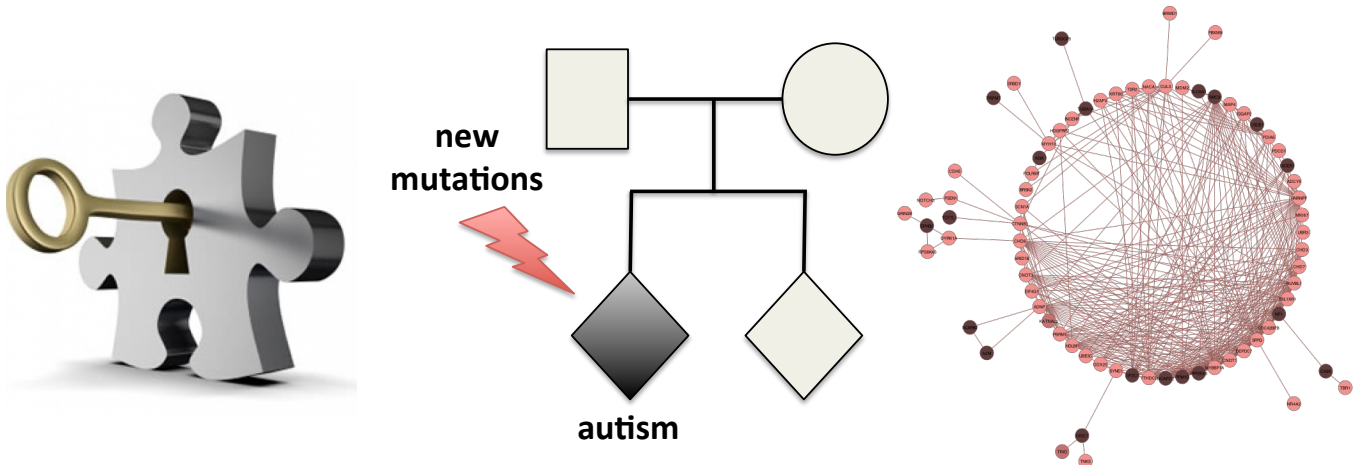


California State University, Fresno  
Department of Biology  
Co-sponsored by the Biology Tri-Beta Student Club  
*Presents*

**Dr. Brian J. O'Roak**  
Assistant Professor  
Molecular & Medical Genetics  
Oregon Health & Science University



***Unlocking Autism: Massively Parallel  
Strategies and Shifting Genetic Paradigms***



**Summary:** We are now at a critical juncture where emerging technologies have the potential to transform our understanding of human disease. In recent years, the genetic intractability of complex genetic disorders, such as autism, has been challenged. First, by the application of genomewide platforms to detect copy number variants and more recently sequencing of the entire protein-coding genome (aka exome). Exome studies of simplex or “sporadic” autism has highlighted the importance of *de novo* mutations and led to the discovery of many novel candidate genes. Our data strongly support a major role for recurrently disrupted genes in sporadic autism, many of which span diagnostic boundaries, and provide a model to discover and rigorously validate *bona fide* genetic risk factors for neurodevelopmental disorders.

**Friday, April 25th, 2014**  
**Science 2, room 109 @ 3:00 – 4:00 PM**

If you need a disability-related accommodation or wheelchair access, please contact Katie Williams at the Department of Biology at 278-2001, or e-mail [katiew@csufresno.edu](mailto:katiew@csufresno.edu) (at least one week prior to event).