Torres Studies Link Between Immune System and Autism | CPD

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Dr. Anthony Torres

Research published by Dr. Anthony Torres from Utah State University’s Center for Person with Disabilities suggests a link between autism and the immune system. A new study by a different team of researchers appears to support Torres’ research.

Torres, a medical doctor, is the director of the CPD’s Biomedical Laboratory and has spent his entire career in research, formerly at the National Institute of Health, Yale University and private biotech companies, and now at USU.

Following leads published by former CPD researcher Dr. Reed Ward and a research group at the University of California-Davis, Torres’ research group examined KIR genes, which help regulate the killing response of Natural Killer lymphocytes (NK-lymphocytes). Their data suggests a highly significantly increase in activating KIR genes compared to inhibiting KIR genes, which indicates an increase killing response of NK-lymphocytes in subjects with autism. The research was published in Brain, Behavior and Immunity in January 2013. Another study, published in the same journal last month, supports Torres’ research.

Instead of scanning hundreds of thousands of genetic polymorphisms across the entire genome in this research, Torres and his team took a more targeted approach and examined very specific genes on chromosome 19 called the leukocyte receptor complex, in particular the KIR genes.

Torres studied DNA from two autism populations. Upon statistical examination, both groups have similar results, suggesting a strong association of KIR activating genes with autism. Torres is currently studying the same KIR genes in new samples received from the Genetic Disease Branch of the California Department of Health, which has one the largest bank of autism samples in the country.