

## Congratulations to the 2015-2016 K12 Child Health Research Center Development Award (CHRCDA) Scholars at the UCLA CDI Institute



2015-2016 CDI K12 CHRCDA Scholars pictured above from left to right: Drs. Chu, Gell, Hanudel and Kuo  
NIH Grant Number: K12-HD-034610

**Alison Chu, M.D.**, Assistant Professor, Neonatology  
“**Endothelial dysfunction in placental insufficiency**”

This study will look at changes in blood vessel cells in the placenta in disorders of pregnancy resulting in preterm birth or small babies. We will link the changes in these fetal cells to risk for cardiovascular disease as adults in children born to mothers with placental insufficiency.

**Joanna Gell, M.D.**, Fellow, Pediatric Hematology/Oncology  
“**Interrogating the role of PRDM14 in human germ cell development and germ cell tumorigenesis**”

Germ cell tumors (GCT) are the most common type of malignancy among adolescent and young adult males. Given the significant morbidity with current treatments, better understanding of the germ cell tumor biology is needed to develop novel treatment options. A protein that is of interest as a therapeutic target is the transcription factor PRDM14. The goal of this research is to better understand germ cell tumor genesis, specifically through evaluation of the role PRDM14 plays in the development of germ cell tumors.

**Mark Hanudel, M.D.**, Clinical Instructor, Pediatric Nephrology  
“**Iron and Fibroblast Growth Factor 23 in Chronic Kidney Disease**”

Patients with chronic kidney disease suffer from high rates of cardiovascular disease, some of which may be contributed to by the effects of a recently discovered hormone, fibroblast growth factor 23 (FGF23). It has been shown that this hormone may be regulated by iron. The goal of our research is to investigate how iron affects FGF23, which may lead to new therapies by which the pathologic effects of this hormone may be minimized.

**Caroline Kuo, M.D.**, Clinical Instructor, Pediatric Allergy and Immunology  
“**Targeted Gene Therapy in the Treatment of X-Linked Hyper-IgM Syndrome**”

Targeted gene therapy for patients with X-Linked Hyper-IgM Syndrome represents the possibility of a cure, especially for those unable to find HLA-matched bone marrow donors. The impact of successful, site-specific genome modification at this locus reaches beyond this disease alone. The results can advance the field of gene therapy and expand its role in the treatment of primary immunodeficiencies and other monogenic disorders.

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For information about the CDI Research Grant funding, please visit the [CDI website](#) or contact:  
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