
[Hillblom Grants Funded for Diabetes Research](#)

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Assistant Professor Martin Valdearcos' project "Targeting hypothalamic microglia to regulate glucose homeostasis" will investigate the role of microglia during early life, a critical period for brain development in relation to the regulation of hypothalamic function, the region of the brain that controls energy and glucose homeostasis.

"This grant will provide a unique opportunity to discover new therapeutic targets to prevent and treat type 2 diabetes" states Dr. Valdearcos, who did his Postdoctoral Fellowship in Suneil Koliwad's laboratory. His grant, a Hillblom Foundation "Start-up" grant, is also designed to facilitate faculty independence. "This will be a great vehicle for Martin to develop into an independent leader in determining developmental factors that program our vulnerability to lose glucose control during our lifetime," Dr. Koliwad added.

Although type 2 diabetes risk is traditionally linked to an unhealthy lifestyle, substantial evidence indicates that this risk can also be "programmed" during early life by nutritional factors that produce structural and functional changes within the hypothalamus. Dr. Valdearcos will leverage innovative tools and animal models to understand how neonatal microglia mediate the programming of adult hypothalamic function and blood glucose control.



Martin

Valdearcos and Sudipta Ashe

Postdoctoral Fellow in Hebrok laboratory Sudipta Ashe has also received a grant for his project “Assessing the role of lipid droplets in human islet beta cell function,” which will focus on identifying the molecular and cellular signature of lipid droplet accumulation in human beta cells during diabetes and aging.

This will provide a better understanding of the genetic determinants of aging and T2D susceptibility in efforts to create novel preventive and therapeutic options for diabetes and obesity.

“We are excited for Martin and Sudipta to receive this tremendous support from the Larry L. Hillblom Foundation that will support two important efforts to elucidate novel signals that could be used to combat the growing T2D epidemic, said Matthias Hebrok, Director of the UCSF Diabetes Center and Hurlbut-Johnson Distinguished Chair in Diabetes Research.

The Larry L. Hillblom Foundation is a California non-profit public benefit corporation funded through a bequest from Larry L. Hillblom investing in medical research with particular attention to research programs conducted by the University of California including diabetes.

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