

Seattle Institute for Biomedical and Clinical Research

Feature



Nicole M. Sanders, PhD

Nicole Sanders, PhD is a Research Health Scientist at the VA Puget Sound Health Care System and Acting Assistant Professor at the University of Washington. Dr. Sanders was recently awarded the prestigious Junior Faculty Award titled "The Role of Hindbrain Serotonin Neurons in Glucose Counterregulatory Responses and in the Development of Hypoglycemia-Associated Autonomic Failure (HAAF)" funded by the American Diabetes Association (ADA) and administered through the Seattle Institute for Biomedical and Clinical Research (SIBCR).

Dr. Sanders has had many notable accomplishments including receiving two Young Investigator Awards through the Society of the Study of Ingestive Behavior, travel awards to national and international meetings through the Juvenile Diabetes Foundation and the American Dietetic Association, and a Postdoctoral Fellowship Award through the Juvenile Diabetes Research Foundation International.

Her ADA funded research project focuses on a common side-effect of intensive diabetes management: low blood glucose or hypoglycemia. As a result of more frequent insulin injections, the incidence of severe hypoglycemic episodes has increased significantly. When glucose is decreased, the brain initiates powerful hormonal and behavioral (i.e., food intake) counterregulatory responses that function to increase blood glucose levels. These counterregulatory responses can become impaired after exposure to prior episodes of hypoglycemia. In this clinical condition known as HAAF, blood glucose levels can decline to dangerously low levels, without any warning signals (hunger, shakiness) or activation of counterregulatory responses and oftentimes lead to injury, coma or death.

A specific research goal is to define the relative importance of one particular hindbrain glucose sensing site in the activation of hormonal and behavioral counterregulatory responses during hypoglycemia and its role in the development of HAAF. Another goal is to identify the type of nerve cells in this hindbrain site that respond to hypoglycemia. Identification of the type of nerve cell is a required step before pharmacological agents can be developed that specifically target these glucose sensing nerve cells.

What's New

Website...

Check out our new website at www.sibcr.org. We would love to hear your comments.

Congratulations...

President of SIBCR Board of Directors, Dr. Murray Raskind, is the first to be awarded an NIH grant through SIBCR.

Grant Submissions...

From 10/1/04 – 6/30/05 SIBCR submitted 40 grant applications to NIH and 16 to various other sponsors.

Brochure...

SIBCR has a new brochure. The brochure contains general information about what we do as well as contact information. Please contact our office if you would like copies.

Important Announcements

- **ANNUAL MEMBERS MEETING**
7/18/05 3:30-4:30, BLDG 1/240
- **AS OF 6/6/05 SIBCR NEGOTIATED INDIRECT COST RATE IS 36.9%**