## Seattle Institute for Biomedical and Clinical Research

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Kristina Utzschneider, MD

## FEATURE

Associate Director of the Diabetes Research Group at the VA Puget Sound Health Care System. She is an Assistant Professor of Medicine at the University of Washington in the Department of Medicine, Division of Metabolism, Endocrinology and Nutrition. She was recently awarded the prestigious Presidential Early Career Award for Scientists and Engineers (PECASE) which aims to honor and support young investigators. Dr. Utzschneider's work focuses on understanding the factors underlying the development of type 2 diabetes. These factors include both the ability of the specialized endocrine cells in the pancreas (beta-cells) to respond to glucose and secrete insulin as well as the ability of the body to respond to insulin (insulin sensitivity).

Dr. Utzschneider is studying a condition where excess fat accumulates in the liver which has been linked with insulin resistance and an increased risk for liver disease as well as diabetes. Her work has demonstrated that fatty liver is a condition characterized by insulin resistance both in the liver as well as in the muscle and that the insulin resistance is strongly associated with free fatty acids. More recent work has focused on the role of dietary composition in the development of this condition. In collaboration with Dr. Suzanne Craft, she was able to show that 4 weeks on a high fat, high saturated fat diet did not change liver fat, but that a low fat, low saturated fat diet led to a significant reduction in liver fat in older non-diabetic adults. In a separate ongoing feeding study in younger individuals, a low fat, low saturated fat diet again appears to be improving liver fat, while the high fat, high saturated fat diet is having no effect. Dr. Utzschneider was recently awarded an NIH R01 administered by SIBCR that is investigating the effect of glucose variability and oxidative stress on beta-cell function in people with type 2 diabetes or those at risk. In these studies, she is testing whether the anti-oxidant N-acetylcysteine improves glucose tolerance and beta-cell function and whether decreasing the ups and downs of the blood glucose levels with dietary interventions can decrease oxidative stress and improve insulin secretion.

Dr. Utzschneider's future plans include participating in a national multi-center comparative effectiveness study that will examine medication combinations to determine optimal initial management in recent-onset type 2 diabetes.

## **AWARDS**

- ★ The Endocrine Society honored Alvin M. Matsumoto, MD, with the Sidney H. Ingbar Distinguished Service Award for 2012 in recognition of outstanding service to the Society and to endocrinology.
- ★ In September 2011, President Obama named recipients of the Presidential Early Career Awards for Scientists and Engineers, the highest honor bestowed by the United States government on science and engineering professionals in the early stages of their independent research careers. Kristina Utzschneider, MD, was one of 94 researchers nationwide who received this honor.

Congratulations to Drs. Matsumoto and Utzschneider on these awards!

## **MEETING**

Please join us for the SIBCR Annual Members Meeting on April 23, 2012 4 PM Building 1 Room 240 Refreshments will be served.