The central focus of the German laboratory is the cells that produce insulin, the beta-cells.

Beta-cells reside in the pancreas, in small clusters of endocrine cells called islets of Langerhans, and their loss, damage or dysfunction causes diabetes. Our group explores how the beta-cells arise during embryonic development, how they differentiate from the other pancreatic cell types, and what mechanisms control the expression of the genes necessary for these processes and for the function of the mature beta-cells. Ultimately, we believe that this knowledge will help us to understand where these processes break down in type 2 diabetes, and will yield novel strategies for curing diabetes (type 1 and 2).