

## Biosketch

Dr. Laura Solt established her independent laboratory at the Scripps Research Institute in Florida following her postdoctoral training at Scripps with Dr. Thomas Burris. She secured the postdoctoral position after earning a Ph.D. in Immunology from the University of Pennsylvania working in the lab of Dr. Michael May. Her graduate research at the university focused on NF- $\kappa$ B activation via the I $\kappa$ B Kinase Complex (IKK) and its role in the immune system. Her postdoctoral work at Scripps under Dr. Burris focused on the study of the nuclear receptor superfamily, specifically the pharmacology and drug discovery efforts necessary to generate pharmacological tools for both *in vitro* and *in vivo* use. During her postdoctoral training, Dr. Solt studied several nuclear receptors, including the RORs and the REV-ERBs, and their roles in the development of T<sub>H</sub>17 cells, metabolism, and the circadian rhythm. This work led to two publications in *Nature* describing the design of a synthetic ligand, SR1001, that specifically inhibits ROR $\alpha/\gamma$  activity in T<sub>H</sub>17 cells and in an autoimmune disease setting, and the development and characterization of the first REV-ERB $\alpha/\beta$  synthetic ligands with *in vivo* activity and their effects on metabolism and the circadian rhythm. Since becoming Principal Investigator of her own laboratory, Dr. Solt has expanded upon her research on the RORs and REV-ERBs in the immune system in order to better understand T<sub>H</sub>17-mediated autoimmunity. Dr. Solt's lab also focuses on the central roles played by nuclear receptors in the tissue-specific regulation of metabolism, including instances of altered signaling that may cause harmful imbalances in metabolic homeostasis. These findings indicate that selective targeting of certain nuclear receptors could prove an attractive strategy for the treatment of metabolic diseases in addition to those affecting autoimmune response. Using a variety of approaches based in genetics, molecular biology, and chemical biology, Dr. Solt's laboratory aims to identify and develop small molecule modulators for nuclear receptors as therapeutics in the treatment of autoimmune disease, metabolic disorders, and other related conditions.