LÁSZLÓ KÜRTI, Ph.D.

László Kürti was born and raised in Hungary. He received his Diploma from Lajos Kossuth University (now University of Debrecen) where he conducted research in the laboratory of **Professor Sándor Antus** focusing on the total synthesis of benzofuranoid neolignans. Subsequently he received his Master of Science degree at the University of Missouri-Columbia, working with **Professor Michael Harmata** on inter- and intramolecular [4+3]-cycloadditions of halogen-substituted oxoallylic cations, and his Ph.D. degree (2006) in synthetic organic chemistry under the supervision of **Professor Amos B. Smith III** at the University of Pennsylvania where he developed a new method for the construction of highly substituted and strained indoles that was applied in the synthetic studies toward the construction of the complex indole diterpenoid natural products, nodulisporic acids A and B.

While still in graduate school he authored the now popular textbook/reference book ***"Strategic Applications of Named Reactions in Organic Synthesis"*** with Barbara Czakó that is now used in dozens of academic institutions and research laboratories worldwide.

In 2006 László joined the group of **Professor E.J. Corey** at Harvard University as a Damon Runyon Cancer Fellow where he was working on the development of potent antiangiogenic agents inspired by the structure of Cortistatin A. In 2007 he co-authored the book ***"Molecules and Medicine"*** with Professor E.J. Corey and Dr. Barbara Czakó. In February 2008, the Professional and Scholarly Division of the American Association of Publishers designated *Molecules and Medicine* "Best of Physical Sciences and Mathematics". In the Fall of 2010, László and Prof. Corey self-published ***"Enantioselective Chemical Synthesis: Methods, Logic and Practice"*** that was warmly received by the community. Now this book is sold by Elsevier/Academic Press.

László began his independent career as an Assistant Professor in the Department of Biochemistry at UT Southwestern Medical Center, Dallas, Texas, but **on June 1, 2015 he joined the faculty at Rice University (Houston, Texas) as an Associate Professor in the Department of Chemistry**. His laboratory is located in the BioScience Research Collaborative (BRC) building that has state of the facilities and offers many opportunities for collaborations.

The Kürti group focuses on the development of powerful new methods for the expedient enantioselective assembly of highly functionalized biaryls, heterocycles and carbocycles. Thus the group has been exploring several fundamentally new strategies for the transition-metal-free direct: (i) arylation of arenes; (ii); alpha-arylation of ketones, esters and amides; (iii) *O*-arylation of oximes; (iv) primary amination of arylboronic acids and (v) inter- and intramolecular C(sp^2)-H amination of arenes. In-depth experimental and computational studies have already identified the critical factors required for efficient alkyl-aryl, aryl-aryl, *O*-aryl, *N*-alkyl and *N*-aryl bond-formation and led to several innovative and environmentally benign methods for the rapid preparation of structurally diverse arylated carbonyl compounds, functionalized biaryls as well as *O*- and *N*-heterocycles. Recently, László has been the recipient of an NSF CAREER Award, Fellowship by the Japan Society for the Promotion of Science (JSPS), the 2014 Amgen Young Investigators' Award as well as the 2015 Biotage Young Principal Investigator Award.

Besides being engaged in research, teaching and writing, in his free time László travels all over the world with his wife and son and enjoys learning about other cultures and people. So far he has visited 37 countries on five continents and 38 states in the US.