Dr. Nuno Bandeira was recently awarded a 2013 Alfred P. Sloan Fellowship for early career scientists. The Alfred P. Sloan Foundation designates these fellowships for early career scientists and scholars who are likely to emerge as the next generation of leaders in the natural sciences, economics, mathematics and the computer sciences. Dr. Bandeira, who is appointed in the Skaggs School of Pharmacy & Pharmaceutical Sciences and the Department of Computer Science and Engineering, has developed new computer algorithms enabling the identification and characterization of proteins, natural products and signal transduction pathways involved in drug, hormone and neurotransmitter actions. From such developments new concepts in drug discovery are emerging.