

Discovery of WIZ and NEK7 molecular glue degraders

Artiom Cernijenko

Novartis BioMedical Research

USA

artiom.cernijenko@novartis.com

Targeted protein degradation has emerged as a promising therapeutic strategy, enabling the removal of disease-driving proteins rather than simply inhibiting their function. Among these approaches, molecular glues represent a unique class of small molecules that induce proximity between an E3 ubiquitin ligase and a target protein, leading to selective ubiquitination and proteasomal degradation. This seminar will explore the design and application of cereblon-based molecular glue degraders, focusing on two interesting targets: WIZ, implicated in fetal hemoglobin induction for the treatment of sickle cell disease, and NEK7, a regulator of NLRP3 inflammasome activation in inflammatory disorders.