

重庆大学药学院

天然产物全合成与创新药物研究重庆市重点实验室

学 术 报 告 第 三 百 六 十 四 讲

报告题目: Recent advances in DNA-encoded library technology at
ETH Zurich

报 告 人: Jörg Scheuermann 教授 (ETH Zurich)

时 间: 2025 年 4 月 10 日 (周四) 10: 00

地 点: 药学院 205 会议室

报告人简介:

Jörg Scheuermann 博士,先后在海德堡大学和苏黎世联邦理工学院攻读化学专业,其博士研究聚焦于发现靶向血管生成标志物的结合分子。自 2002 年起,他与 Dario Neri 教授合作,始终走在 DNA 编码化合物库 (DEL) 技术发展的最前沿,累计发表 80 余篇同行评审论文并获多项专利,其中包括 2004 年发表于《自然·生物技术》的开创性成果,以及近期刊于《Science》的论文《Highly pure DNA-encoded chemical libraries by dual-linker solid-phase synthesis》。Jörg Scheuermann 博士领导着一支致力于 DEL 技术优化与拓展的活跃研究团队。除科研工作外,他每年还筹办在苏黎世、波士顿和中国三地轮流举行的“DNA 编码化合物库国际研讨会”。作为基于其《Science》论文专利技术创立的苏黎世联邦理工学院衍生企业 PureDEL 公司的联合创始人,他同时活跃于产学研领域。



由苏黎世联邦理工学院 (ETH Zurich) 共同开创的 DNA 编码化合物库 (DEL) 技术,已成为小分子药物研发不可或缺的工具。本次报告将展示通过固相合成获得高纯度 DEL 库的方法,该技术将突破常规仅含 3-4 个可变元件的局限,进而实现对大环化合物等迄今难以触及的化学空间的探索。

Prof. Dr. Jörg Scheuermann (*1970) studied Chemistry at the University of Heidelberg and

ETH Zurich, where he earned his Ph.D. with a focus on discovering binding molecules to target markers of angiogenesis. Since 2002, he has been at the forefront of advancing DNA-encoded library (DEL) technology in collaboration with Prof. Dario Neri, culminating in more than 80 peer-reviewed publications and several patents, including the seminal Nature Biotechnology publication from 2004 and the recent Science article, "Highly pure DNA-encoded chemical libraries by dual-linker solid-phase synthesis." Prof. Scheuermann leads a dynamic research group dedicated to refining and expanding DEL technology. In addition to his research, he organizes the prestigious annual "International Symposium on DNA-Encoded Chemical Libraries," held alternately in Zurich, Boston, and China. He is also a co-founder of PureDEL, an ETH spin-off company that is based on the patented technology from his Science publication.