



	姓 名:	蒋霓
	职 称:	研究员
	电话/传真:	86-10-64802837
	电子邮件:	njiang@genetics.ac.cn
	研究方向:	表型组学

简历介绍:

蒋霓, 博士, 研究员, 博士生导师

2009年获华中科技大学生物医学工程专业和计算机科学与技术专业双学士学位。2014年获华中科技大学生物医学工程专业博士学位, 之后加入Donald Danforth Plant Science Center从事博士后研究。2018年于该中心任职高级计算科学家。2021年8月加入中国科学院遗传与发育生物学研究所, 任职所级公共技术中心表型组学平台首席科学家。主要研究方向为作物表型组学。

研究领域:

研究内容:

主要从事表型组图像和数据分析、表型大数据融合与挖掘等计算机科学与生物学领域的交叉学科应用研究。

1. 结合多种成像技术(包括可见光成像、红外成像、三维激光扫描、X射线断层成像等)、图像分析和机器学习, 开发高通量、高精度的自动化表型组学研究平台, 实现多模态、多尺度、多维度的表型性状研究。
2. 基于统计分析、数学建模和机器学习, 融合各类表型数据, 依据表型数据对植物进行识别、分类和预测等, 实现表型大数据的智能挖掘与应用。
3. 结合表型组数据与基因组数据, 基于人工智能, 从基因型-表型数据中发现知识和规律, 提高基因型-表型图谱的理解。

代表论著:

发表论文:

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地址:北京市朝阳区北辰西路1号院2号, 遗传与发育生物学研究所 邮编:100101 邮件:genetics@genetics.ac.cn

