第 1478 回生物科学セミナー

日時: 11月22日(水) 16:00-17:30

演者: Dr. Maciej Maselko

Research Group Leader & CSIRO Synthetic Biology Future Science Fellow

Applied BioSciences

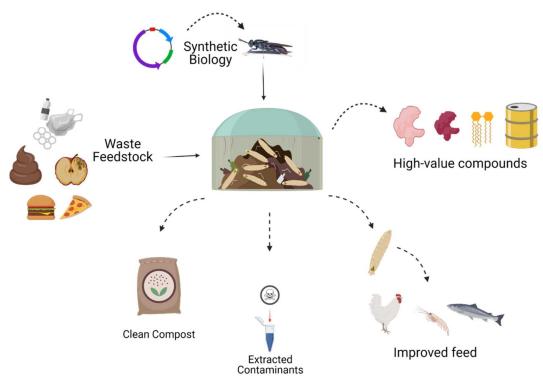
Macquarie University, Australia

演題: Engineering Animals for Improved Waste Management, Bioremediation,

and Biomanufacturing

要旨:

Expression of fungal and microbial enzymes by animals expands their metabolic capabilities. I'll discuss the advantages of engineering animals for industrial and conservation applications and how my lab has engineered animals to decontaminate harmful substances and produce high-value products.



References

- 1. Clark M, Tepper K, Petroll K, Kumar S, Sunna A, Maselko M (2022) Bioremediation of Industrial Pollutants by Insects Expressing a Fungal Laccase. *ACS Synthetic Biology* **11**, 308–316.
- 2. Maselko M, Feltman N, Upadhyay A, Hayward A, Das S, Myslicki N, Peterson AJ, O'Connor MB, Smanski MJ (2020) Engineering multiple species-like genetic incompatibilities in insects. *Nature Communications* **11**, 4468.
- 3. Clark M, Maselko M (2020) Transgene biocontainment strategies for molecular farming *Frontiers in Plant Science* **11** (Review).

場所: 本セミナーは Zoom でおこないます。 参加ご希望の方は、UTAS シラバス詳細情報の「オンライン授業内容」で Zoom の URL をご確認下さい。

担当: 東京大学大学院理学系研究科·生物科学専攻·細胞生理化学研究室