

FC 先端学術講演会

演題：**Mining and characterizing unusual enzymes in fungal natural product biosynthesis**

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日時：2026 年 8 月 21 日（金）14:45~16:15

場所：工学部フロンティア応用科学研究棟 1 階
SDGs オアシス

要旨：

Fungi are prolific producers of structurally diverse natural products with a broad range of biological activities. To accelerate the discovery of novel fungal natural products and unusual biosynthetic enzymes, we have been actively developing effective strategies for fungal genome mining. For example, we developed a genome mining tool, FunBGCEX, which has enabled the discovery of bioactive natural products and unprecedented biosynthetic mechanisms.¹⁻³

In this talk, I will present our recent efforts to discover and characterize unusual enzymes involved in fungal natural product biosynthesis, including enzymes that show little sequence or structural similarity to previously characterized proteins.

[References]

1. Tang, J.; Matsuda, Y. *Nat. Commun.* **2024**, *15*, 4312.
2. Yan, D.; Matsuda, Y. *Chem. Sci.* **2024**, *15*, 3011-3017.
3. Chan, T. K.; Wei, X.; Ma, L.; Wang, H.; Liao, P.; Matsuda, Y. *J. Am. Chem. Soc.* **2025**, *147*, 42100-42109.

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