
The 74th iCeMS SEMINAR

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16:30-17:30

演 題 : **Pdr5 — an ABC transporter
for all seasons?**

講演者 : **Prof. Dr. Lutz Schmitt**
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場 所 : 京都大学 アイセムス本館 2階 (東一条北西角)
セミナー室 (A207)

Multidrug resistance can be a major challenge in the therapy of cancer and pathogenic fungal infections. More than three decades ago, P-glycoprotein was the first multidrug transporter identified, and P-gp has been extensively studied at the genetic and biochemical levels ever since. Pdr5, the most abundant ABC transporter in *Saccharomyces cerevisiae*, is highly homologous to azole-resistance-mediating multidrug transporters in fungal pathogens, and a focus of clinical drug resistance research. Despite functional equivalences, P-gp and Pdr5 exhibit striking differences in their architecture. Here, I will summarize our recent results of mutations that affect substrate selection and transport. These results will be summarized in a model that takes kinetic selection principles into account.

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