

講演者／タイトル：

「**Phosphoinositide metabolism at the plasma membrane: From signaling to membrane dynamics**」

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アブストラクト：

Plasma membrane, a principal “business center” of the cell, regulates a variety of fundamental processes including, but not limited to, signaling, endo/exocytosis, cytoskeletal rearrangement and lipid metabolism. How does the plasma membrane manage such diverse, sophisticated processes? A growing body of evidence highlights a critical regulation by lipids, especially phosphoinositides. In this talk, I will describe how membrane dynamics such as clathrin-coated pit/vesicle formation, as well as signaling, is tightly coupled to phosphoinositide metabolism at the plasma membrane. I will also discuss how phosphoinositides control homeostasis and determine plasma membrane identity.

日時： 平成 25 年 6 月 12 日 (水) 16:00-17:00

場所： 生命機能研究科ナノバイオロジー棟 3F セミナー室

関連論文：

- Nakatsu *et al.* **PtdIns4P synthesis by PI4KIIIa at the plasma membrane and its impact on plasma membrane identity.** *J. Cell Biol.* 199(6):1003-16, 2012
- Nakatsu *et al.* **The inositol 5-phosphatase SHIP2 regulates endocytic clathrin-coated pit dynamics.** *J. Cell Biol.* 190(3):307-15, 2010
- Di Paolo *et al.* **Phosphoinositides in cell regulation and membrane dynamics.** *Nature* 443 (7112) 651-7, 2006
- Balla *et al.* **Phosphatidylinositol 4-kinases: old enzymes with emerging functions.** *Trends Cell Biol.* 16(7):351-61, 2006

セミナー言語： 英語（質疑応答は日本語可）

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