<セミナー開催のお知らせ・Seminar Announcement>

東大農学部・神経科学セミナー（第 11 回）

Sleep is where metabolism and memories meet

Dr. Jennifer C. Tudor, PhD

College of Arts & Sciences
Saint Joseph's University

日時：2025 年 6 月 27 日（金）15：00-16:30
場所：農学部 1 号館地階　第 5 講義室
Date: 15:00-16:30, June 27, 2025
Venue: Faculty of Agriculture Building No.1 - Lecture room #5 (basement floor)

Jennifer C. Tudor 博士は睡眠や疾患にフォーカスし、これらが記憶と行動を制御する脳内分子メカニズムや細胞シグナル伝達経路にどのような影響を与えるかについて研究をされています。わかりやすくご説明していただけますので、ぜひ奮ってご参加ください。

Abstract: There have been many hypotheses postulated regarding the function of sleep and its impact on memory. Many studies describe how sleep and cognitive function are interdependent, where periods of sleep loss leads not only to cause impaired memory, but also dysregulated cellular metabolism and energy homeostasis. In this presentation, not only will Dr Tudor highlight research findings that led to her hypothesis that sleep loss is a metabolic disorder, but she will also discuss her journey through sleep and memory research specifically highlighting critical moments in her career and share key skills that supported her growth as a scientist.

Reference:

1. Feeney SP, McCarthy JM, Petruconis CR, **Tudor JC**. Sleep loss is a metabolic disorder. Sci Signal. 2025 Apr 8;18(881):eadp9358.
2. Feeney SP, Threlfall E, Bilboa JM, Angelakos CC, Wimmer ME, Kida S, Abel T, **Tudor JC**. Sleep is enhanced in aged male mice that overexpress calcium/calmodulin-dependent protein kinase IV. Front Neurosci. 2025 Jun 3;19:1596602.
3. **Tudor JC**, Davis EJ, Peixoto L, Wimmer ME, van Tilborg E, Park AJ, Poplawski SG, Chung CW, Havekes R, Huang J, Gatti E, Pierre P, Abel T. Sleep deprivation impairs memory by attenuating mTORC1-dependent protein synthesis. Sci Signal. 2016 Apr 26;9(425):ra41.
4. Vecsey CG, Peixoto L, **Choi JH**, Wimmer M, Jaganath D, Hernandez PJ, Blackwell J, Meda K, Park AJ, Hannenhalli S, Abel T. Genomic analysis of sleep deprivation reveals translational regulation in

the hippocampus. Physiol Genomics. 2012 Oct 17;44(20):981-91.

（＊事前のお申込みは不要です/ No registration required.）

問い合わせ先/Contact：応用生命化学専攻 栄養化学研究室　喜田聡（Satoshi Kida）

Email: akida@g.ecc.u-tokyo.ac.jp