第11回 バイオインフォマティクス分野講演会

Beyond Nature and Nurture: Does Stochastic Noise Change the Cellular Epigenetic Landscape?

(生まれと育ちを超えて:確率的ノイズは細胞のエピジェネティックランドスケープを変化させるか?)

河口 理紗 先生(京都大学 iPS 細胞研究所 未来科学開拓部門 講師)



While genetic variation frequently drives phenotypic variability, genetically identical individuals still exhibit distinctively different phenotypic traits. This can be because of rare somatic mutations, environmental fluctuations, or stochastic effects in early development. Although understanding these sources of variation is important to understanding incomplete penetrance and heritability in genetic diseases, it has been difficult to trace their relative influence, particularly due to confounding environmental factors.

In this talk, I will introduce our time-course transcriptome analysis on the nine-banded armadillo (*Dasypus novemcinctus*), which produce litters of genetically identical quadruplets. Analyzing the transcriptome profiles within the siblings indicated the existence of identity signatures under tight control of genetic and environmental factors. Finally, I will discuss our ongoing work, where the transcriptome and epigenetic variability is further assessed on large-scale omics data including hundreds of hPSC lines.

日時: 2024年1月29日[月]17:00-17:45

場所: 筑波大学 健康医科学イノベーション棟 301-2

Zoom 配信あり(下記 URL リンク先参照)

発表言語:英語

対象者: 教職員・学生など、どなたでもご参加いただけます

参加登録:必須(下記 URL リンク先参照)

URL: https://sites.google.com/view/ozakilab-jp/seminar

主催: 筑波大学 医学医療系 生命医科学域 バイオインフォマティクス研究室

お問い合わせ: haruka.ozaki@md.tsukuba.ac.jp