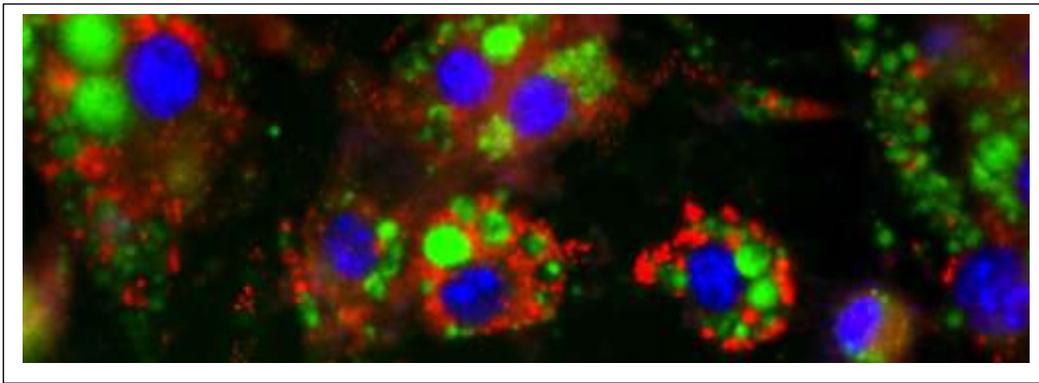


The Color of Fat: Brown, Beige, White, and More

Mammals possess at least two distinct types of thermogenic fat cells, brown adipocytes and beige adipocytes, that play a key role in the regulation of systemic energy homeostasis. Both brown fat and beige fat possess thermogenic properties in addition to common morphological and biochemical characteristics, including multilocular lipid droplets and cristae-dense mitochondria. Recent studies also identify distinct features between the two types of thermogenic fat cells, such as their developmental regulation and function. Of particular interest is the role of beige fat in the regulation of glucose homeostasis and tissue homeostasis beyond its conventional thermogenic mechanism via uncoupling protein 1 (UCP1). I will discuss recent progress regarding the adipose tissue heterogeneity, *i.e.*, the existence of developmentally and functionally distinct populations of thermogenic fat cells and the underlying mechanisms.



Shingo Kajimura, Ph.D.

UC San Francisco

Friday, April 12, 2019

3:00 – 4:00 PM

Science 2, room 109

For further information: www.csufresno.edu/biology

Bio: Dr. Kajimura earned his B.A., M.A., and Ph.D. from The University of Tokyo. He completed his post-doc at Harvard Medical School, Dana-Farber Cancer Institute in Boston. He is currently an associate professor in the Department of Cell and Tissue Biology, UCSF Diabetes Center, and Eli and Edythe Broad Center of Regeneration Medicine and Stem Cell Research at UCSF. Broadly, his research is focused on uncovering the molecular circuits that regulate energy homeostasis, along with the functions of adipose tissues in metabolism. Dr. Kajimura received the Presidential Early Career for Scientists and Engineers from the White House (PEACE Award). <https://kajimuralab.ucsf.edu/>

If you need a disability-related accommodation or wheelchair access, please contact Lindasue Garner at the Department of Biology at 278-2001 or e-mail lgarner@csufresno.edu (at least one week prior to event).