

2024 BMB 4th-floor Poster Presentation

*3 – 5 pm, Friday, June
14, 2024*

**Learn the exciting and latest science from the 2024
Biochemistry Building 4th-floor Poster Presentations**

Who:

**Junior and not-so-junior scientists residing on the fourth floor of the
Biochemistry Building**

What:

The latest exciting research happening right here

Where:

Hall way of the fourth floor, Biochemistry Building

How:

**You know How – we do the talking, you do the asking and listening and
eating and drinking**

Why (1):

We want to share

Welcoming new – Balbach et al., and Skirycz et al.

Bidding farewell to the accomplished



2024 BMB 4th-floor Poster Presentation

List of authors and abstract:

*Presenter

Kuo, M-H* et al.,

Living long and happily ever after – research themes of the Kuo group

Henige, J*, Wang, K-W, Kuo, M-H.

Establishing a novel in cibo Drosophila Alzheimer's disease model

Hsiao, K-C*, Lin, H-Y, Kuo, M-H

Quorum Sensing Underlies Viability Resurgence in Chronologically Aged Yeast Cells

Wang, K-W*, Hagar, H-T, Lin, Y-C, Li, M, Hovde, S, Giletto, M, Ellsworth, E, Kuo, M-H

Alzheimer's disease drug discovery targeting hyperphosphorylated tau neurotoxicity

Lin, H-Y*, Hsiao, K-C, Kuo, M-H

Live-Long-Again suppressor screen identified new players in yeast lifespan regulation

Chien Hagar, H-T*, Kuo, M-H

Antagonism between hyperphosphorylated tau and heme oxygenase-1 in Alzheimer's disease

Phan, AQ*, Payankulam, S, Kuo, M-H

Expressing hyperphosphorylated tau in human cells by ePIMAX (eukaryotic Protein Interaction Modules-Assisted function X)

Kouatli M, Paladugu P, Asmus N*, Balbach M*

Deciphering the metabolic pathways during sperm capacitation

Balbach M*

Changes in energy metabolism during mouse and human sperm capacitation

Shen ZH, Mias GI, He J*

Loss of histone demethylase 6B in the nkx2.1+ neural progenitors causes early postnatal growth retardation and adult-onset metabolic syndrome-like phenotypes in mice

Fischer H*, Story L, Balbach M, Schillmiller A, Jander G, Skirycz A

A look at aphid salivary metabolite composition and interaction with the plant.

Agarwal P*, O'Reilly O, Balbach M, Schillmiller A, Fernie AR, Figueroa CM, Skirycz A

Investigating the effect of Ala-Ile dipeptide on early seedling growth of Arabidopsis.

Kang J*, Thirumalaikumar V, Sokolowska ME, Venegas Molina J, Goossens A, Skirycz A

Unraveling plant-pathogen interactions in a non-targeted, proteome- and metabolome wide manner.

Skirycz A* et al., MPI-MP, BTI and MSU team

The secret life of metabolites – what can we learn from protein-metabolite interactomes.

Mandal S*, Soriano A, Smith E, Erpelding C, Ruffner J, Orlando B, Kroos L

C-terminal part of BofA interacts with transmembrane segment of SpoIVFA.

Bannur A*, Kroos L

The role of SpoIVFA in inhibition of Bacillus subtilis intramembrane protease SpoIVFB.

Erpelding C*, Kroos L

Inhibitory proteins push membrane reentrant loop of intramembrane protease outside the membrane.

Ruffner, J*, Kroos L

Elucidating structural dynamics of an intramembrane metalloprotease by photocrosslinking.

Nirmal, M*, Vo T

Investigating the role of RNA polymerase II in RNAi-dependent heterochromatin.

Basu, S*, Xu, Y, Vo T

Decoding Epe1 demethylase: It's Role in stress response and chronological ageing in the fission yeast Schizosaccharomyces pombe.

Helgeson, J*, Vo T

Teaching basic genetics through games.

Ralston Lab Presentations

Farina Aziz (CMB) - SOX15 and SOX21 are the new buddies of SOX2 in mouse pluripotency

Ian McCrary (CMB) - OCT4 is two-timing in the early embryo and here's how I'm going to find out

Marcelio Shammami (GGS) - SOX2 does a lot of important stuff in the embryo

Alyssa Virola-Iarussi (GGS) - SOX2 gone wild; implication for in vitro fertilization

Shannon Walsh, Ph.D. - CUT&RUN is my jam

Phan, A*, Chen, G., Henry, RW

TBA

MORE TO COME...!!