Seminar Announcement

Date: 16:00-17:00 Dec 1, 2025
Onsite: Biken Hall, RIMD

Dr.Andrea Pauli

Senior Group Leader (PI)

Research Institute of Molecular Pathology (IMP) ,Vienna, Austria

Title: Life-s first kiss – what do we miss?

Life of sexually reproducing organisms starts with the fusion of two highly specialized cells, the egg and the sperm, which gives rise to a single cell, the zygote. Fertilization initiates the egg-to-embryo transition, one of the most dramatic developmental transition resulting in the transformation of the egg from a dormant state into regulatorily and functionally distinct embryonic cells. While this transition has been studied extensively in respect to zygotic genome activation, the molecular mechanisms that regulate the maintenance of dormancy in the egg and mediate sperm-egg binding and fusion during fertilization remain poorly understood.

The vision of the Pauli lab is to gain mechanistic insights into the egg-to-embryo transition, with a specific focus on the molecular control of fertilization and developmentally programmed dormancy and re-activation. In her seminar, Andi will talk about recent findings from her lab towards uncovering the mechanism of vertebrate fertilization and translational regulation during the egg-to-embryo transition. By combining genetic, molecular, cellular, biochemical, structural and genomics approaches in vivo and in vitro, the Pauli lab aims to reveal new concepts and molecular mechanisms governing this fascinating developmental transition that marks the beginning of life.

No registration is required.

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