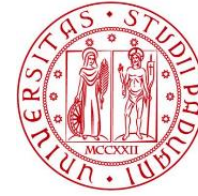




Post-doctoral position at the
Amadei Laboratory
of Mammalian Embryo Stem Cell Models



UNIVERSITÀ
DEGLI STUDI
DI PADOVA

Applications are invited for a postdoctoral fellow to join the research group of Dr. Gianluca Amadei at the Department of Biology, University of Padova. My laboratory aims to understand the mechanisms regulating the early stages of mammalian embryo development using *in vitro*, stem cell-based approaches to generate embryo-like structures (ETiX-embryoids) that can model embryonic development in a dish. These structures will be analysed using interdisciplinary approaches combining cellular, molecular and computational biology.

I am looking for a highly motivated and creative candidate with a PhD (or graduates with a Master's degree with at least three years of suitable postgraduate experience) and relevant publications in the fields of molecular and cellular biology, biochemistry or similar. The position is available for 18 months from February 2023 for a total gross salary (before taxes) of 42.750,00 €.

This project is supported by the University of Padova and aims to characterize several novel aspects of ETiX-embryoid development, such as their metabolism and neural development, by performing multi-omics analyses and by testing the function of gene candidates using genetically modified versions of ETiX-embryoids. Specific aspects of these experiments will be done in collaboration with the group led by Prof. Graziano Martello (<https://martellolab.org/>).

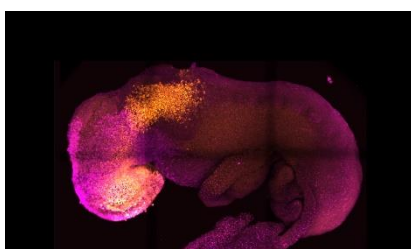
Please see the following relevant publications to familiarize yourself with the work:

- Lau KYC et al. (2022) Mouse embryo model derived exclusively from embryonic stem cells undergoes neurulation and heart development. *Cell Stem Cell*. 29: 1445-1458. Published online on 08.09.2022
- Amadei G et al.(2022) Embryo model completes gastrulation to neurulation and organogenesis. *Nature*. 610: 143-153. Published online on 25.8.22
- Amadei G et al. (2021) Inducible stem cell-derived embryos capture mouse morphogenetic events *in vitro*. *Developmental Cell*. 56: 366-382.

The University of Padova (<https://www.unipd.it/en/>) is one of the top Italian research institutions. Its strong tradition in cell biology and a willingness to tackle new challenges with innovation and collaborative approaches make it an ideal environment for life science research. Padova is a historical university city with a vibrant and rich life. It is located in the North-East of Italy, near Venice, the Mediterranean Sea and the Dolomites, enabling a healthy work-life balance. It is also extremely well-connected to the rest of Italy via rail and plane.

Applicants should send to gianluca.amadei@unipd.it their CV, a cover letter explaining why you are interested in joining the lab, and contact information of two references.

Normal embryo (E8.5)



ETiX-embryoid (Day 8)

