



UNIVERSITÀ DI PAVIA  
Dipartimento di  
Biologia e Biotecnologie  
"Lazzaro Spallanzani"

**TWO POST-DOCTORAL POSITIONS  
TO STUDY NUCLEIC ACID SENSING AND INNATE IMMUNITY IN GENE THERAPY**

Two post-doctoral fellow positions are available, starting February 2024, in the **Lab of Prof. Anna Kajaste-Rudnitski** at the Department of Biology and Biotechnology of the University of Pavia, Pavia, Italy.

**About the project**

The goal of this ERC-funded project is to elucidate molecular mechanisms of nucleic acid sensing and pathogen recognition in clinically relevant targets of gene therapy for the development of innovative cell and gene therapy strategies and to fight infectious and autoimmune diseases. We combine molecular virology approaches with state-of-the-art NGS technologies and proteomics in advanced *in vitro* and *in vivo* models.

**What we look for**

The candidate must hold a PhD Degree in Biological Sciences, Biotechnology, or related disciplines with skills in molecular and cellular biology, as well as primary human cell culture and manipulation. Experience in iPSC culture and differentiation is a significant plus. Proficient English, independent working capacity, excellent organizational skills and team spirit are required.

**What we offer**

The successful candidate will be offered a **1-year renewable contract** and a competitive salary.

The Kajaste Lab, located at the Scientific Pole of Pavia University within the Department of Biology and Biotechnology (DBB), offers a dynamic and stimulating working environment within a motivated team. The DBB benefits from a highly competitive, international and scientifically stimulating environment and offers excellent working conditions, state-of-the-art facilities and infrastructures (Next Generation Sequencing, Cell Sorting and Imaging, Animal Facilities).

Pavia is a historical city-campus, with a network of university colleges and structures for study and sport that are unique in Italy, offering a vibrant and accessible multicultural environment to enjoy.

**Interested candidates should send their informal enquiries with a CV, a cover letter, and names of 1-2 references to Anna Kajaste-Rudnitski, [anna.kajaste@unipv.it](mailto:anna.kajaste@unipv.it)**

**Twitter (X):** <https://twitter.com/KajasteLab>

**LinkedIn:** [Anna Kajaste-Rudnitski | LinkedIn](#)

**Selected Publications:**

- [Unali G](#), [Civicich G](#), Pagani I, [Abou-Alezz M](#), [Folchini E](#), [Valeri E](#), Matafora V, Reisz JA, [Giordano AMS](#), [Cuccovillo I](#), Butta GM, Donnici L, D'Alessandro A, De Francesco R, Manganaro L, Cittaro D, Merelli I, [Petrillo C](#), Bachi A, Vicenzi E, [Kajaste-Rudnitski A\\*](#). Interferon-inducible phospholipids govern IFITM3-dependent endosomal antiviral immunity. **EMBO J**. 2023 Mar 27:e112234. (\*corresponding author; [lab member](#))
- [Giordano AMS](#), Luciani M, [Gatto F](#), [Abou Alezz M](#), Beghè C, della Volpe L, Migliara A, [Valsoni S](#), Genua M, Dzieciatkowska M, Frati G, [Tahraoui-Bories J](#), Giliani S, Orcesi S, Fazzi E, Ostuni R, D'Alessandro A, Di Micco R, Merelli I, Lombardo A, Reijns MAM, Gromak N, Gritti A, [Kajaste-Rudnitski A\\*](#). DNA damage contributes to neurotoxic inflammation in Aicardi-Goutières Syndrome astrocytes. **J Exp Med**. 2022 Apr 4;219(4):e20211121. (\*corresponding author; [lab member](#))
- [Piras F](#) and [Kajaste-Rudnitski A\\*](#). Antiviral immunity and nucleic acid sensing in haematopoietic stem cell gene engineering. **Gene Ther**. 2020 Jul 13:1-13. (\*corresponding author; [lab member](#))
- [Petrillo C](#), Thorne LG, [Unali G](#), Schirotti G, [Giordano AMS](#), [Piras F](#), [Cuccovillo I](#), Petit SJ, Ahsan F, Noursadeghi M, Clare S, Genovese P, Gentner B, Naldini L, Towers GJ, [Kajaste-Rudnitski A\\*](#). Cyclosporine H Overcomes Innate Immune Restrictions to Improve Lentiviral Transduction and Gene Editing In Human Hematopoietic Stem Cells. **Cell Stem Cell**. 2018 Oct 24. pii: S1934-5909(18)30489-2. (\*corresponding author; [lab member](#))
- [Piras F](#), Riba M, [Petrillo C](#), Lazarevic D, [Cuccovillo I](#), Bartolaccini S, Stupka E, Gentner B, Cittaro D, Naldini L, [Kajaste-Rudnitski A\\*](#). Lentiviral vectors escape innate sensing but trigger p53 in human hematopoietic stem and progenitor cells. **EMBO Mol Med**. 2017 Sep;9(9):1198-1211. (\*corresponding author; [lab member](#))

**Segreteria Amministrativa**

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