Postdoctoral & PhD-student positions in chemical biology, small-molecule engineering & drug discovery

On projects funded by European Research Council (ERC via SERI), Swiss National Science Foundation, Swiss Cancer League, and collaborating pharma industries

Your mission :

We have several positions opening in the Aye laboratory in Swiss Federal Institute of Technology Lausanne (EPFL), Switzerland, both at PhD student and postdoctoral researcher levels. Our laboratory is a multidisciplinary laboratory focusing on redox/reactive small-molecule metabolite signaling as it pertains to intra- and intercellular communication and drug discovery. We have pioneered numerous novel and multi-award-winning chemical biology concepts and techniques that have been applied to important biological questions.

The available projects will build on previously-published foundational studies, and encompass wide-ranging areas in the broader context of organic chemistry and chemical biology including small-molecule probe engineering: such as, **(i)** development of selective small-molecule inhibitors targeting proteins/pathways essential in anticancer and immunotherapeutic development. There is possibility to learn cell-based assays and cutting-edge biochemical assays, in line with candidates' interest to diversify and successful and timely production of desired molecules (and subsequent SAR); (**ii)** projects aimed at understanding and reprogramming subcellular metabolite trafficking and signaling mechanisms through the design and application of novel small-molecule probes; and **(iii)** projects targeting chemistry-driven innovations of advanced spatial & functional omics methods in multiple living models.

Your profile :

For postdoctoral candidates, they should have, by the time they begin work, a Ph.D. in organic chemistry or biological or medicinal chemistry. Ideal candidates should have a broad experience with functional groups, diverse synthetic routes, and work in both small- and large-scale experiments. Use of NMR (1 and 2D, nOe, etc.) and LC/GC-MS, is a must for adequate compound characterization. *A supple mind-set and willingness to focus on production over elegance is likely a must.* Experience with some in vitro biochemical procedures is a bonus, but is *not* required. For doctoral (PhD program) candidates, we welcome all interested aspiring interdisciplinary students. Master-level experience in organic chemistry, bioengineering, or biotechnology is a plus, *but* not strictly required.

We offer :

A laboratory that is well funded, has won numerous awards lying at a nexus between numerous fields interfacing with chemistry. The successful candidate will enjoy unique state-of-the-art instrumentation, a team-playing environment where they can learn and develop, and projects that are aiming to make real-world impact. The facilities and infrastructure in EPFL are also fantastic.

More information about both of our research groups, including other active research themes, can be found at **https://leago.epfl.ch/**

Start date :

For all positions, they are available immediately, funding is available, and the start date is flexible. All applications should include in PDF format:
(i) Cover letter,
(ii) CV,
(iii) the contact information of three references.

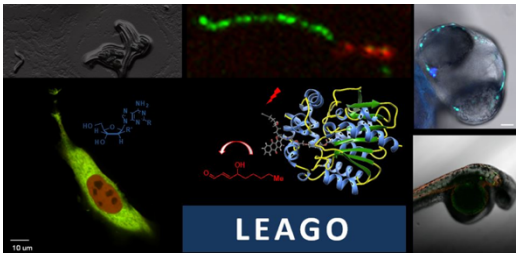

Photo credit : Aye lab former & current members

Term of employment :

Fixed-term (CDD)

Work rate :

100%

Duration :

Postdoc: 1 year, renewable up to a maximum of 4 years;
PhD: 4-year program

Contact :

For questions or additional information, please contact yimon.aye@epfl.ch

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