Open position in Chemical Biology of Cytoskeleton

Our laboratory of Biophysical Chemistry of Macromolecules (LCBM) at the EPFL in Lausanne, Switzerland (www.epfl.ch/labs/lcbm/) offers a PhD position in the field of chemical biology of the cytoskeleton, most importantly in deciphering the tubulin code.

One of the major components of the cytoskeleton, microtubules (MT), are highly post-translationally modified. In particular, the MTs that form highly stable specialized structures, i.e. the centrioles, carry distinct modification patterns. Tubulin modifications are key for the regulation of tubulin function, as they modulate both tubulin-tubulin interactions as well as the function of MT associated proteins.

Recently, our laboratory developed a novel chemical approach to synthesize tubulin proteins carrying defined post-translational modifications, combining peptide and protein chemistry and advanced protein engineering methods (Ebberink et al., Nature Chemistry, in press). This work forms the basis of a collaborative project involving multiple groups in Lausanne, Geneva, Fribourg and Vienna to dissect the function of tubulin PTMs. Within this project, we offer a PhD positions.

Your profile:

– A master or equivalent degree in chemistry, biochemistry, biophysics or chemical biology
– Experience in working in a chemistry, biochemistry or biophysics (imaging) laboratory.
– Good knowledge in written and oral English.
– Highly motivated for discovering new molecular mechanisms in a challenging environment.
– Interest for interdisciplinary projects.
– A passion for chemical biology at the highest level.

Application/selection procedure:

1. Send a Letter of motivation, a CV, a summary of previously done research and the contact information of 3 referees to beat.fierz@epfl.ch.
2. Selected candidates will be invited for a virtual interview, and, in a second round a virtual visit (including a seminar and meetings with PhD students and postdocs).
3. If you need further information, visit https://lcbm.epfl.ch/fierz/, or contact beat.fierz@epfl.ch. For administrative issues concerning the doctoral program, please contact Ms Odegaard (anelene.odegaard@epfl.ch).

Key reference: