Postdoctoral fellow in "Computational Biology of Single Cell and CRISPR Genomics in Dopamine Neurons and Parkinson's disease"

We invite applications for a position as postdoctoral fellow (2+2 years). The position will be placed at the Department of Medical Biochemistry and Biophysics, Division of Molecular Neurobiology, in the laboratory of Professor Ernest Arenas: http://ernestarenaslab.org/

We are looking for a creative computational biologist seeking to study the physiological mechanisms behind human midbrain development and neurodegeneration in Parkinson's disease. Data will initially include single cell RNA-seq and subsequently single cell epigenetic and proteomic analysis. The project will involve analysis of data from human samples, pluripotent stem cells during differentiation into dopaminergic neurons in 2D and 3D cultures, as well as cells undergoing direct reprogramming into dopaminergic neurons. The project is in part based on our recent identification of the cellular and molecular complexity of the developing mouse and human midbrain (La Manno et al., 2106, Cell) and the development of novel methods for direct *in vivo* reprogramming of astrocytes into functional induced dopamine neurons in a mouse model of Parkinson's disease (Rivetti et al., 2017, Nature Biotech).

You will be expected to manage your own bioinformatic pipelines, interact with other computational biologists in our research unit, model diverse aspects of development and disease and integrate different levels of information. You will collaborate with other lab members, will work in close interaction with wet scientists in the group and will provide input to guide targeted approaches based CRISPR/Cas9 technology. You will be encouraged to address challenging questions within the research field, think independently and develop high impact research. The post will provide a unique opportunity to ambitious individuals that enjoy a creative, interactive, interdisciplinary and international academic environment and seek personal development.

To qualify, the applicant must hold a recent doctor's degree and have a very strong motivation to pursue challenging research. The ideal candidate should have demonstrated skills in computational biology, in particular analysis of single cell data.

Please send your application through the following link:

https://ki.mynetworkglobal.com/what:job/jobID:196461/

Documentation needed:

1. A complete curriculum vitae, including date of the thesis defense, title of the thesis, previous academic positions, academic title, current position, academic distinctions, and committee work
2. A complete list of publications
3. A summary of current work (no more than one page)
4. Verifications for crediting of illness, military service, work for labor unions or student organizations, parental leave or similar circumstances
5. A letter of motivation (no more than one page)