Ph. D. Position for a Computational Biologist
"NEUcrest" ITN Early Stage Researcher position
at Curie Institute, Orsay, France.

Applications are invited from suitably qualified candidates for a full-time fixed term position as an Early Stage Researcher with Research Division of Curie Institute, Team Signaling and Neural Crest Development, located in Orsay near Paris, France (https://science.institut-curie.org/research/biology-chemistry-of-radiations-cell-signaling-and-cancer-axis/umr-3347-normal-and-pathological-signaling/team-monsoro-burq/)

This position is funded by the Horizon 2020 programme of the European Union, (No. 860635) and will be available in April 2020. Full details on the NEUcrest ITN Network and on the Ph. D. position are available at address above.

NEUcrest is a four-year project, funded by the European Union Horizon 2020 Programme. The neural crest is an essential stem cell population of the vertebrate embryos. The project focuses on integrating academic, clinical and industrial research for a better understanding of neural crest development and neural crest-related diseases. These pathologies are a major group of congenital diseases in human, and a heavy societal concern. The NEUcrest network comprises 20 partners in academia, industry and hospitals from seven European countries, gathered in a synergistic effort to advance knowledge and outreach about these diseases.

Job description.

The research project aims at constructing and understanding the gene regulatory network governing early cell fate and behavior decisions in the ectoderm, allowing the formation and migration of the neural crest, a key stem cell population of the vertebrate embryo. It will rely on bio-informatic analysis and integration of transcriptome and epigenome data coming from diverse biological samples, generated by the biology team, or previously published or from human congenital disease database repositories. It will include small-sample and single cell RNA sequencing data and be closely linked to experimental validation analyses by the team of biologists. The goal is to predict and validate a large-scale network of early neural crest development, using various mathematical and statistical approaches.

The successful candidate will be mentored both by a team including a biologist (Prof. AH Monsoro-Burq), a mathematician, a statistician and a bioinformatics specialist. He will be embedded in a team of biologists and closely connected to the Institut Curie bioinformaticians as well. He will also develop transverse skills as part of the Horizon 2020-funded ITN NEUcrest.

Profile.

- **Masters degree in bioinformatics** (experience in -omic data integration and/or sc-RNAsseq analysis would be considered as an advantage) and **Programming skills** (R, Python, bash), prior experience with relevant analytical software and related packages, knowledge of biostatistics would be appreciated.
- Autonomous and rigorous with a critical mind, ability to handle and analyze large and various data sets with biological and clinical information.
Prior experience with Cell and Developmental Biology is not mandatory

We encourage early applications. Deadline for early applications is November 25th 2019. Interviews of short-listed candidates will be conducted as applications are received, until November 2019.

Qualifications: Essential

- Masters degree in Biology awarded at the start of the Ph. D. position;
- Strong experience in Statistics and Bioinformatics;
- Training validated by internships and written reports (at bachelor and master level);
- Less than 4 years’ full time equivalent research experience and not yet been awarded a doctoral degree;
- Resided less than 12 months in France in the 3 years prior to selection;
- Excellent communication and organisation skills;
- Fluent in spoken and written English;
- Excellent writing and presentation skills;
- Flexibility and ability to work in a team environment;
- Availability to travel nationally and internationally two to three times a year.

Salary: Very good remuneration will be in line with the Marie Skłodowska-Curie guidelines (Early Stage Researchers, ITN)

Start date: Position is available in spring 2020. All enquiries about the position may be made to Professor Anne-Hélène Monsoro-Burq (anne-helene.monsoro-burq@curie.fr). Please find background information about Curie Institute (https://curie.fr/, a major French Cancer Research Center) and Université Paris Sud (https://www.u-psud.fr/en/index.html, the largest French Science campus).

To Apply: Applications, in English, should include a detailed CV, certificates of examination grades (bachelor and master), a motivation letter describing your career goals, skills and experience, as well as two letters of recommendation. Please send applications by e-mail (in word or pdf only) to Professor Anne-Hélène Monsoro-Burq (anne-helene.monsoro-burq@curie.fr). Please entitle the email as follows: "ITN_NEUcrest_ESR2-your name" in the subject line of email application. Closing date for receipt of early round of applications is 5.00 pm (Paris time, GMT+2) on 25th November 2019.