

JOB OFFER

| | |
|---|---|
| Position in the project: | Ph.D. Student in Cancer Genetics |
| Research group: | Loss of chromosome Y and human disease (PI: Prof. Jan Dumanski) |
| Scientific discipline: | Molecular biology, cancer genetics, biotechnology, biomedicine, clinical sciences, computational biology |
| Job type (employment contract/stipend): | Stipend (non-taxable income), net 3500 PLN per month (1 EUR = 4.3 PLN, 1 USD = 3.9 PLN) corresponding with average net salary rate in Poland, health and social insurance |
| Number of job offers: | 1 |
| Position starts on: | March 1 st , 2020 (or as soon as possible) |
| Maximum period of contract/stipend agreement: | August 31 st , 2023 |
| Institution: | Medical University of Gdansk, Gdansk, Poland |
| Project leaders: | Prof. Jan Dumański, prof. Arkadiusz Piotrowski |
| Project title/Context: | <p>Mutations acquired during lifetime that lead to increased risk for human disease, with focus on cancer</p> <p>The centre is funded within the International Research Agendas Programme of the Foundation for Polish Science. The 3P-Medicine Lab (Preventive, Personalized, Precision) International Research Agenda is joint unit of Medical University of Gdansk in Poland and Uppsala University in Sweden.</p> <p>More about the center: https://ira3p.mug.edu.pl/ https://www.fnp.org.pl/en/3p-medicine-preventive-personalized-precision/</p> <p>More about participating universities: https://www.uu.se/en https://mug.edu.pl/</p> |
| Project description: | <p>The 3P-Medicine Laboratory (personalized, preventive, precision) is a new science center specializing in research on acquired genetic mutations as risk factors for cancer and other diseases. Our center is focused on somatic mutations that occur early in life in seemingly normal cells that eventually contribute to malignant transformation. Primary interest is in common malignancies that are etiologically related to environmental stimuli: breast cancer, colorectal cancer, urinary bladder cancer and prostate cancer. Our unique collection of clinical samples includes not only primary and metastatic tumors, but also multiple biopsies of macroscopically normal tissue including frozen sections, peripheral blood, viable skin and stromal fibroblasts as well as cryopreserved primary cell cultures. A part of the centre is working on Loss Of chromosome Y (LOY) in men, mainly in connection with cancer and Alzheimer's disease (AD).</p> |
| Research Group Description: | The group is devoted to the research on association between LOY in peripheral blood and higher risk of cancer and AD in aging men. Our |

| | |
|--|--|
| | <p>ultimate goal is to develop LOY-based screening approach for the assessment of non-hereditary cancer and neurodegeneration risk, years before first clinical symptoms become apparent. We are aiming to unravel the functional mechanisms of LOY in the process of disease development. We will analyze selected populations of peripheral blood leukocytes, tumor infiltrating and brain immune cells as well as cell culture models. We will use state-of-the-art methodology including cell sorting, high dimensional flow cytometry, laser microdissection, genotyping microarrays, massively parallel sequencing of DNA, bulk RNA- and single cell RNA-seq, spatial transcriptomics. The resulting wet-lab data will be subjected to advanced bioinformatic and biostatistical analysis.</p> |
| <p>Key responsibilities include:</p> | <ol style="list-style-type: none"> 1. Sorting of selected populations of leukocytes. 2. Performing downstream experiments on sorted cells (involving genotyping microarrays, ddPCR, laser microdissection, massively parallel sequencing techniques in genetic and transcriptomic context and single cell analysis). 3. Participation in high throughput data analysis. 4. Interactions with clinical partners, biobanking and bioinformatics teams. |
| <p>Profile of candidates/requirements:</p> | <ol style="list-style-type: none"> 1. B.Sc. or M.Sc. in biology, biotechnology, bioinformatics or equivalent. 2. Background in cancer research, cell culture, massively parallel sequencing techniques, bioinformatics or biostatistics is desired, although not absolutely required. 3. Prior participation in foreign scholarships or trainings and scientific achievements is welcome. 4. Interest in writing research manuscripts is highly encouraged. 5. Good knowledge of written and spoken English. 6. Strong motivation for research work, flexibility and self-driven interest to learn new techniques. 7. Good communication and work organization skills. 8. Ability to work in a team. |
| <p>Required documents:</p> | <ol style="list-style-type: none"> 1. CV 2. Motivation letter 3. References to at least two mentors with phone and email address <p>Please submit all above documents in a single pdf file.</p> |
| <p>We offer:</p> | <ol style="list-style-type: none"> 1. Opportunity to gain and broaden expertise in the aspects of human genetics related to somatic origin of cancer with emphasis on single cell genomics and transcriptomics. 2. Mentoring and support from senior colleagues in the fields of genetics, cell and molecular biology, bioinformatics and biostatistics. 3. Opportunity for motivated PhD students to work in an international multidisciplinary training environment. |

| | |
|--|--|
| | <ol style="list-style-type: none">4. International collaboration opportunities including short term visits to foreign partner (Uppsala University).5. Access to state-of-the-art equipment and computing resources. |
| For more information about the position please contact: | Jan Dumanski (jan.dumanski@gumed.edu.pl) |
| Please submit the documents to: | mab@gumed.edu.pl |
| Application deadline: | January 12 th , 2020 |
| Euraxess job/stipend offer (in case of PhD and postdoc positions): | https://euraxess.ec.europa.eu/jobs/453447 |

Due to the entry into force of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016, we also require that your job advertisements include a clause requesting the candidate's consent to the processing of his or her personal data by the institution which carries out the recruitment process: "I agree to the processing of personal data provided in this document for realizing the recruitment process pursuant to the Personal Data Protection Act of 10 May 2018 (Journal of Laws 2018, item 1000) and in agreement with Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)".