JOB OFFER

Position in the project:	**Sano MSc Project - Project title:** Brain functional connectivity gradients in the case of stroke
Scientific discipline:	Computational Medicine, Machine Learning, Computer Vision
Job type (employment contract/stipend):	Stipend – approx. 16 working hours per week (40% FTE)
Number of job offers:	1
Remuneration/stipend amount *("X0 000 PLN of full remuneration cost, i.e. expected net salary at X 000 PLN"):*	• Stipend up to 2500 PLN gross monthly
Position starts on:	Expected start in April 2023
Maximum period of contract/stipend agreement:	Until end of December 2023
Institution:	Sano Centre for Computational Personalised Medicine – International Research Foundation, Krakow, Poland
Project leader:	Sano: dr. Alessandro Crimi (Computer Vision Data Science Group Leader)
Project title:	Operationally, Sano strategically combines the most prestigious scientific grant currently available from the national Polish Foundation for Science (FNP) – the International Research Agenda Programme (IRAP) – with one of the most competitive grants in the EU's H2020 programme, Teaming for Excellence. Combined with additional Polish Ministry of Science guarantees, the Centre has secured investment exceeding €30M. With this scale of funding, and aided by an excellent European partnership network, we can be confident that Sano will bring a critical mass to this transformational field of research, in order to translate scientific advancement into clinical practice.
Project description:	**Sano presents a great opportunity for people who want to make a change in the world by developing life-changing technologies and solutions for healthcare worldwide.** Sano Centre for Computational Medicine is a new International Scientific Foundation located in Kraków, Poland. Sano aspires to be a major translational scientific institute, operating at the meeting point of academic science, established MedTech industry, and emerging start-up environment, combining the best of these three perspectives. Established with support from the European Commission and the Foundation for Polish Science, Sano aims to be a major driving force behind the advancement of computational medicine for the benefit of healthcare systems worldwide. Sano acts as a core technology and expertise provider for industry, and creator of innovation, developing state-of-the-art solutions for healthcare. Thanks to the substantial funding and excellent European partnership network, Sano will bring a critical mass to this transformational field of research, in order to translate scientific advancements onto clinical practice. Sano's ambition is to become the Reference Centre for Computational Medicine in Central Europe and build a reputation as a leading institute on a global level. As a cross-disciplinary institution, Sano uses machine learning/artificial intelligence (ML/AI), large scale computer simulations (HPC), data

	science, and other computational technologies towards overcoming global challenges in healthcare systems. The research agenda will be executed in close collaboration with Partners in Poland, EU and USA. **We value:** • Passion - Passion in what we do, engagement in Sano operations, taking responsibility, providing initiative, being happy at work. • Innovation - Boldness in articulating and pursuing novel ideas, courage to think outside the box. • Integrity - Directness, openness, tolerance and respect. Scientific integrity (we do not cut corners). • Diversity - Diversity in backgrounds, cultures and opinions of Sano employees. Promotion of women in STEM. Sano's Research Agenda is built on six research pillars, interacting with each other. For each of the pillars, Sano aims to attract senior professionals to assume positions of Group Leaders. Although fully independent, all of the groups at Sano will be working in concert to invent computational healthcare solutions of the future.
Key responsibilities include:	Sano is looking to fulfill a role of: **MSc Student - Project title: Brain functional connectivity gradients in the case of stroke** Brain connectivity, or the connectome, refers to the network of connections within the brain, including both structural connections between brain regions (i.e., white matter tracts) and functional connections (i.e., communication between brain regions). It has become an active area of research in clinical studies due to its potential to provide insight into various neurological and psychiatric disorders. Objectives: The project aims to identify the differences in functional connectivity of human brain, in case of brain stroke. An already available dataset of human brain fMRI will be used to conduct the experiment As opposed to the traditional whole-brain comparisons, it will be important to report the effect of location and the size of the stroke on the connectivity differences. Requirements: Basic understanding of coding (preferably in python), 3D/4D image and signal processing, network theory, statistics, and interest in the relevant topic. You are expected to: • do original research under the direction of your supervisor; • participate in the many seminars by internal and external speakers as well as journal clubs and group activities; • collaborate with students, researchers and other Sano employees. You will have the opportunity to co-learn advanced coding techniques with the help of experienced scientific programmers and data scientists.
Profile of candidates/requirements:	Required background and skills of the candidate: • undergraduate degree – BSc, BEng or other, preferably in computer science or related field;

	• interest in pursuing applied research in a multi-disciplinary environment; • good programming skills in Python; • knowledge of complex networks; • basic knowledge of differential ecquations; • excellent written and oral English communication skills.
Required documents:	Sano is an equal-opportunity employer. We prioritize diversity and are committed to creating an inclusive environment for everyone. We value a spirit of enquiry and perseverance, provide the space to keep asking questions, and promote a culture of curiosity and creativity. Do you recognize yourself in the job profile? Then we look forward to receiving your application. Applications in .pdf should include: • a cover letter with an emphasis on your research interests; • a curriculum vitae;
We offer:	We offer a stipend contract maximally until end of 2023 (or until graduation at the end of summer semester of 2022/2023 academic year), and expect the student to work on the project for approx. 16 hours per week (40% FTE). This includes attendance in courses, trainings and internal research meetings. The research will be conducted in close collaboration with supervisors at Sano and AGH. The student will receive a stipend of up to 2500 PLN gross monthly for the duration of the contract. **Sano offers excellent opportunities for study and development, an access to many international conferences on computational medicine and a possibility to grow in a scientific society.**
Please submit the following documents to:	Our recruitment system: https://sano.elevato.net/en/sano-msc-project-brain-functional-connectivity-gradients-in-the-case-of-stroke,ja,157 We will support you in every stage of the recruitment process.
Application deadline:	April 9th 2023
For more details about the position please visit (website/webpage address):	www.sano.science
Euraxess job/stipend offer (in case of PhD and postdoc positions):	

Non-Discrimination

To provide open, transparent and internationally accessible career development opportunities the Centre will follow The European Charter for Researchers and The Code of Conduct for the Recruitment of Researchers. The entire recruitment process will be carried out respecting the non-discrimination rules; the Centre is an equal opportunity employer, values diversity and affirms the right of every qualified applicant to receive consideration for employment without regard to race, colour, religion or belief, sex, gender identity or expression, national origin, language, sexual orientation, disability, age, political opinion, social or economic condition.

European Funds Smart Growth | Republic of Poland | FNP Foundation for Polish Science | European Union European Regional Development Fund

Your Personal Data

In accordance with the general regulation of 27 April 2016 on the protection of personal data, hereinafter referred to as GDPR, we wish to inform you that:

1. The Administrator of your personal data is the Sano Centre for Computational Personalised Medicine - International Research Foundation – located at (30-072) Kraków, ul. Nawojki 11. The Administrator may be contacted at the following e-mail address: legal@sano.science.
2. Your personal data shall be processed for the purposes of the recruitment process.
3. The legal basis for processing your personal data for the purposes of recruitment shall be Article 6 Section 1 Point c of the GDPR, with processing being necessary for the fulfilment of a legal obligation to which the Administrator is subject, particularly Article 118a of the Law on Higher Education as well as Article 221 of the Labour Code. The condition legalising the processing of personal data provided voluntarily by the candidate, which is beyond the scope of data referred to in Article 221 of the Labour Code, shall be Article 6 Section 1 Point a of the GDPR – consent by the data subject.
4. Providing your personal data, subsequent to the decision to enter the recruitment process, is obligatory within the scope defined by Article 221 of the Labour Code and the Law on Higher Education and determines the possibility of applying for work as well as possible further employment. In the case of personal data which is beyond the scope of the aforementioned legal regulations, providing your data is voluntary but it does determine the possibility of participating in the recruitment process.
5. Your personal data shall be processed on behalf of the data administrator by authorised personnel purely for the recruitment purposes.
6. Your personal data shall be stored for a period of time necessary for the fulfilment of the recruitment process. Should the recruitment outcome prove negative, your data shall be removed immediately at the completion of recruitment, unless otherwise provided by the record-keeping regulations — then for a period of time specified in these regulations.
7. Your personal data shall not be shared with external entities with the exception of cases provided for by legal regulations. Should you submit your application documents in electronic form, the recipient of your data may be an entity acting on behalf of the administrator i.e. a mail service operator.
8. Under the terms of the GDPR, you shall be entitled to:
    a. the right to access your data,
    b. the right to rectify it if factually incorrect,
    c. the right to remove or restrict the processing of the data as well as the right to data portability – in cases prescribed by the law,
    d. the right to object to the processing of the data,
    e. the right to file a complaint with the supervisory authority – the President of the Personal Data Protection Office, should you consider that the processing of your personal data violates personal data protection regulations.