

Hosting offer for Marie Sklodowska-Curie Postdoctoral Fellowships (PF) 2022 at University of Antwerp/research group Adrem Data Lab / biomina (biomedical informatics research network Antwerpen)

<u>MSCA Postdoctoral Fellowships</u> are individual research grants offering excellent <u>postdoctoral</u> <u>researchers</u> the chance to develop their skills by means of international mobility. Through the implementation of an original and personalised research project, MSCA Postdoctoral Fellowships aim to foster excellence through training and mobility and to equip researchers with new skills and competences in order to identify solutions to current and future challenges.

University of Antwerp/research group Adrem Data Lab invites motivated postdoctoral researchers to jointly prepare an application for the <u>MSCA-PF-2022 call</u> <u>Marie Skłodowska-Curie Postdoctoral</u> <u>Fellowships</u> call (<u>MSCA-PF-2022</u>) with them as host organisation.

Description of Hosting organisation/group

The bioinformatics & biomedical data sciences team of Prof. dr. Kris Laukens is embedded in the Adrem Data Lab (dep. Computer Science), which has an internationally recognized track record in both theoretical aspects of data science algorithms, and their applications. As head of the interdisciplinary hub biomina (biomedical informatics network Antwerp), the Laukens lab (6 Postdocs, 16 PhD students) consists of data scientists and life scientists who develop and apply data mining and artificial intelligence technology to generate new insights from large scale molecular and clinical datasets.

The team participates in a wide range of (pre-)clinical research projects with innovative data analysis and interpretation technologies to enable data-driven decision support. Through collaborations, these techniques are applied to datasets from a diverse range of life science domains, the majority of which in the area of immunology, virology, microbiology, and parasitology. The group has founded one spin-off company (ImmuneWatch), and collaborates with a large range of hospitals, biotech and pharma companies as well as academic research labs worldwide. Its interdisciplinary dynamic offer an attractive path for both life scientists and computational scientists eager to expand their horizon.

Hosting group website: <u>https://laukenslab.org</u>

Topics/expertise

We welcome candidates with a broad scientific interest, in one or (preferably) a combination of following domains:

- Bioinformatics of high throughput molecular data (sequencing, mass spectrometery), including data integration, functional and network analysis;

- Development and / or application of machine learning, (unsupervised) pattern discovery, artificial intelligence and computational decision support techniques for the interpretation of large scale molecular or clinical (including time series) data;

- Application of data sciences in biomedical domains such as infectious diseases, immune responses and the dynamic of microbial communities (or other life science domains that fit with ongoing research);

We will offer a supervision that complements your current expertise, by one or several of our senior team members, including Prof. Kris Laukens, dr. Pieter Meysman, dr. Bart Cuypers or dr. Wout Bittremieux (or others).

Your profile

- We expect strong qualifications in at least one of the above-mentioned domains, and a keen affinity towards the interdisciplinary interface between life sciences and data sciences. Computer scientists, engineers and life scientists are equally encouraged to apply.
 - Candidates must have a PhD degree in bioinformatics, life sciences, engineering, computer sciences or equivalent.
- You must have a completed PhD at the time of the call deadline (14 September 2022).
- Candidates must have a maximum of 8 years full-time research experience from the PhD award date until September 14, 2022. Periods of inactivity in research (e.g. unemployment, periods of employment outside research, parental or sick leave) do not count towards the time of research experience.
- For European fellowships, candidates can be of any nationality and must not have resided or carried out their main activity (work, studies, etc.) in Belgium for more than 12 months in the 36 months immediately before September 14, 2022.
- Highly motivated candidate with an excellent research track record appropriate to career stage, as evidenced by academic publications and other scientific output.

What we offer

- Support and guidance for the preparation of your MSCA PF proposal
- A stimulating, interdisciplinary environment for high-level research.

How to apply?

Indicate your interest by contacting the host institution as follows:

Please contact Prof. Kris Laukens (kris.laukens@uantwerpen.be) by e-mail with a short CV and motivation to indicate your interest to prepare a MSCA-PF application.

After the supervisor agrees to support you as a MSCA-PF candidate, you can start preparation of MSCA PF project proposal and will be supported further by the supervisor and the Research Support Office of the host university.

For more information on the MSCA PF scheme or the host institution, you can contact the MSCA coordinator of the University of Antwerp: Dr. Liesbet Cockx (Research, Innovation & Valorisation Antwerp, Grants Office): Liesbet.cockx@uantwerpen.be