

GF/2017/021 – Associate Academic Staff – 100% – Faculty of Medicine and Pharmacy - Supporting clinical sciences - LABO

Company details

The Vrije Universiteit Brussel has been a leading player in the Flemish Higher Education landscape for 40 years. The University numbers 12.000 students and together with its hospital - UZ Brussel – employs more than 6.000 people. The Vrije Universiteit Brussel is the largest Dutch speaking employer in the capital.

Teaching and research at the Vrije Universiteit Brussel are founded on the principle of unfettered inquiry to benefit the progress of mankind. This means rejecting dogmatic positions and guaranteeing the freedom to form opinions without interference; in this way the University aims to ensure the dispersal of the principle of unfettered inquiry throughout society.

The University is autonomous and democratically run. This means guaranteeing the exercise of the fundamental freedoms within the University, as well as the right of the University Community to participate in the decision making process and scrutiny of University policy.

The following form part of the University's mission:

- the development, the communication and the application of a high level of academic education and scientific research, free from all preconceived ideas;
- the translation of these ideals and knowledge into society in the spirit of social engagement;
- the creation of a society in which everyone is capable of engaging in critical thinking.

Function

Placed on:

Mon 19 June 2017

Location:

Brussels

One position (ESR5) is available at Vrije Universiteit Brussel (VUB, Belgium) at the In vivo Cellular and Molecular Imaging Lab (www.icmibrussels.be (<http://www.icmibrussels.be>)) :

Camelid single-domain antibody-fragments – the recombinantly produced antigen-binding domains of heavy chain-only antibodies, also called nanobodies – are proficient probes for molecular imaging due to their small size (15 kDa), high stability and specificity towards in vivo targets of disease. In this project we aim at the development of a method for radiolabeling of nanobodies with the prosthetic group ^{18}F -FDR (^{18}F -5-Fluoro-5-deoxyribose), evaluation of *in vitro* functionality, *in vivo* biodistribution and tumor targeting of the resulting nanobody tracers. This project aims are: (1) Nanobody generation and purification (2) Radiolabeling with F-18 using FDR (^{18}F -5-Fluoro-5-deoxyribose) prosthetic group; (3) Development of quality control procedures; (4) Preclinical validation *in vitro* (affinity measurements, cell binding assays, etc) and *in vivo* (biodistribution with pre-clinical PET/CT imaging techniques in animal models of disease); (5) Selection of a lead compound for GMP production; (6) learn about GMP production; (7) learn about Clinical translation: including IMPD writing, definition of patients population.

Secondments: (i) 4 months at University of Aberdeen, United Kingdom (month 7); (ii) 6 months at Imanova, UK (month 24).

The main responsibilities of the candidate will be:

- To manage and carry out an independent research project in close collaboration with partners in PET3D
- To actively participate in research and training activities within the PET3D network
- To contribute to writing articles for scientific journals
- To disseminate research results in the scientific community (via international conferences) and in the non-scientific community (via outreach and public engagement)

Questions about content?

Contact Vicky Caveliers on Vicky.Caveliers@vub.ac.be (<mailto:Vicky.Caveliers@vub.ac.be>) or Catarina Xavier on cxavier@vub.ac.be (<mailto:cxavier@vub.ac.be>).

Profile

Marie Skłodowska-Curie ITN-ETN PET3D-programme in “PET imaging in Drug Design and Development” comprises a total of 15 cutting edge research projects in three main therapeutic areas of oncology, cardiovascular and central nervous system at eight beneficiary institutions, providing research and training in the field of drug design and health. Leading experts in medicinal and organic chemistry, peptide and protein chemistry, radio-chemistry, pharmacology, cell and pre-clinical biology, molecular imaging, image analysis, and radiology are involved in PET3D. This expertise will be combined to train the next generation of molecular imaging experts. 6 academic and 2 non-academic beneficiaries will provide this unique training opportunity that will transfer key multidisciplinary and industry-relevant skills to 15 ESRs. Beneficiaries: UK - University of Aberdeen UK - Coordinating University- (Graduate School in Life Sciences and Medicine); The Netherlands - Stichting VU-VUMC; Belgium - Vrije Universiteit Brussel; Spain - Asociación – CIC biomaGUNE; Germany - Westfaelische Wilhelms-Universitaet Muenster; UK – Imanova Limited; Sweden - AstraZeneca plc.

PET3D AIM: PET imaging will be used to revolutionize drug design and development by providing reliable answers at a much earlier stage of drug development to key questions emerging during the disease care cycle, thus facilitating effective transition from pre-clinical to clinical phase in drug development.

Eligibility criteria for Marie Skłodowska-Curie Innovative Training Networks

There are strict eligibility requirements for the ESR positions in Marie Skłodowska-Curie Innovative Training Networks. Please ensure that you are eligible before applying, as ineligible candidates cannot be considered.

- **Degree requirement:** Admission to the programme is *open* to applicants who hold a master degree as specified below for admission to doctoral studies. The required degree must be obtained before the deadline indicated in this call for applicants.
- **English language requirement:** Applicants are required to be

proficient in the English language. Those who have passed an English proficiency test such as IELTS or TOEFL should enclose the relevant certificate with their application. English proficiency of short listed applicants shall be assessed during the selection interview (see Selection Procedure).

- **ESR requirement:** Applicants should – at the time of recruitment – be in the first four years (full time equivalent research experience) of their research careers not yet have been awarded a doctorate.
- **Mobility requirement:** Applicants should - at the time of recruitment by the host institution - not have resided or carried out their main activity (work, studies, etc.) in Belgium for more than 12 months in the 3 years immediately prior to the reference date. Compulsory national service and/or short stays such as holidays are not taken into account.

Required Academic Qualifications:

Degree: Master Degree or equivalent

Degree Field: Chemistry/ Medicinal Chemistry/Pharmaceutical Chemistry/ Organic Chemistry

Career Stage: Early stage researcher or 0-4 yrs (Post graduate)

Research Profiles: First Stage Researcher (R1)

Comment/web site for additional job details: <http://www.pet3d.eu>

Desired profile and skills:

- Career profile and potential for excellence
- Ability and motivation to work independently as well as collaboratively in an interdisciplinary team
- Excellent oral and written communicative and intercultural skills
- Willingness for significant mobility throughout Europe and stakeholder interactions.
- Laboratory experience in chemistry and radiochemistry is an advantage
- Excellent attitude and commitment to work.

Required Languages

Language: ENGLISH

Language Level: Good

EU Research Framework Programme: H2020/Marie Curie Actions

Project's Marie Curie Grant Agreement Number: H2020-MSCA-ITN-2015, proposal 675417 – PET3D

In addition to the online submission of the required documents for application (see below), please send the following documents as a pdf to the project supervisors:

E-Mail: Vicky.Caveliers@vub.ac.be (<mailto:Vicky.Caveliers@vub.ac.be>)

E-Mail: cxavier@vub.ac.be (<mailto:cxavier@vub.ac.be>)

- Detailed *curriculum vitae* (European format; List of Publications, Participation in

funded research projects, Other qualifications, if any, must be included)

- Certified copy of Academic Degree/s in original language along with a certified

translation into English, and/or Diploma Supplement (if applicable)

- Certified copies of official Academic Transcripts relating to all academic courses

taken to earn every degree (bachelor/master or equivalent), translated into English, and correspondent grade point average

- Letter of research statement, describing the applicant's research experience in

relation with the project s/he is applying for (max 1500 words). The letter will

report a description of the applicant's master research project and a self-evaluation

on scientific and soft skills. It will also include a description of the motivations for undertaking this PhD ((Form 1)

- Two recommendation letters (Form 2)
- English test result
- Copy of passport (or, for EU citizens, equivalent ID document)
- A declaration by the applicant (signed and dated) certifying that all the information

given in the application is true and correct

The candidate is expected to endorse the educational vision of the university (full text available on the university website).

Female candidates are particularly encouraged to apply.

Each ESR of the Marie Skłodowska-Curie ITN-ETN PET3D-programme will be exposed to a variety of highly complementary research environments and spend at least one secondment in a different country and will attend training events and consortium meetings in all of the 7 countries involved in PET3D. Training activities provided: cutting edge research training, technical training, generic skills training; cross-sectorial training – translational skills training, commercialisation; access to state of the art technologies in each of the beneficiary sites; transferrable and generic skills training – communications, presentation, writing, management, dissemination, intellectual property rights protection, dissemination and exploitation, ethical issues, entrepreneurial initiatives, CV writing and interview training available locally at each beneficiary site.

Offer

As an employee of the Vrije Universiteit Brussel your days will be spent in a dynamic, diverse and multilingual environment. Both our campuses are set within green oases on the outskirts of the centre of the capital of Flanders, Belgium and Europe. This centre, with all its opportunities, is within your reach by public transport in under half an hour.

Depending on your experience and academic merits you will receive a salary on one of the pay scales laid down by the government.

Hospitalisation cover and free use of public transport for travel to and from work are standard conditions of employment. If you would rather cycle to work, compensation is also available for that. Both campuses have extensive sporting facilities which are at your disposal and a nursery is within walking distance.

More information is available at www.vub.ac.be (<http://www.vub.ac.be>) under the heading 'future employees'.

- Planned starting date: Position is vacant
- Length of contract: 2 years
- Deadline for application: 31/08/2017

Applications can only be submitted online (via the website of the Vrije Universiteit Brussel)

All applications must at least include the following attachments:

- A brief CV
- Comprehensive details of academic portfolio
- Teaching and research perception, mentioning the candidate's five most important publications (for post-doctoral positions)
- A concise statement of the reason for applying including explanation about the development of future research
- Diplomas

Interested?

For more information:

Call **HILDE WILLEMS**

at the number: **02/4749312**

