The Marie Sklodowska-Curie Innovative Training Network (ITN) STRATEGY-CKD - PhD Training Network on "**System omics to unravel the gut-kidney axis in Chronic Kidney Disease**" funded by the European Commission (H2020) under GA No 860329, invites applications for the following full-time Early Stage Researcher (ESR) positions, with a minimum duration of 36 months, starting between 01/06/2020 and 01/12/2020 or depending on the national and international covid-19 regulations.

Job topics

ESR2: Plasma peptidomics and metabolome analysis for the identification of mediators of gut-kidney axis

Host: University Hospital Aachen (Germany)

ESR5: Proteome analysis revealing the Gut-kidney axis

Host: Biomedical Research Foundation of the Academy of Athens (Greece)

ESR7: Impact of an altered microbiota on CKD progression

Host: Instituto de Investigación Sanitaria Fundación Jimenez Díaz (Spain)

ESR9: Structure and function of the intestinal barrier: Exploring the impact of uremia on colonic epithelial function

Host: KU Leuven (Belgium)

ESR12: Impact of microbiota on thrombotic risk during CKD.

Host: University D'Aix Marseille (France)

ESR2 - UNIVERSITAETSKLINIKUM AACHEN

EU RESEARCH FRAMEWORK PROGRAMME: Innovative Training Network "STRATEGY-CKD" (H2020-MSCA-ITN-860329)
RESEARCH FIELD: Biomedical Sciences
RESEARCHER PROFILE: Early Stage Researcher (ESR)
APPLICATION DEADLINE: 31 August 2020
LOCATION: University Hospital Aachen, Germany
TYPE OF CONTRACT: 36 months
JOB STATUS: Full-time
HOURS PER WEEK: 38,5 h
OFFER STARTING DATE: Between 01/06/2020 and 01/12/2020 or depending on the national and international covid-19 regulations

General objectives of the STRATEGY-CKD project

System omics to unravel the gut-kidney axis in Chronic Kidney Disease: There is a great need for multi-disciplinary and methodologically well-trained scientists in order to unravel complex diseases. Chronic kidney disease (CKD), which is more prevalent in women, and its high risk for cardiovascular disease (CVD) with nearly 50% of all deaths in CKD patients caused by CVD, is such a complex disease and its socio-economic burden is extremely high. STRATEGY-CKD will in this context focus on the gut-kidney axis and the role of the intestinal microbiome as important contributor to the genesis and evolution of CVD in CKD and as possible therapeutic target to improve outcome of CKD patients. For this purpose, 10 leading multidisciplinary academic and 2 industrial investigators and their teams will train young researchers in (1) excellent scientific skills, integrating technological skills [in vitro, bacterial and animals molecular and functional studies, state-of-the-art omic (cultur-, microbi, peptid-, prote-, metabolomics) approaches, bioinformatics, systems biology] in clinical/mechanistic knowledge to generate innovative insights triggering the pathogenesis and treatment of CKD related CVD;
(2) Excellent complementary skills in personal and career development as well as business training required to extend beyond scientific research; and (3) exposure to both academic and non-academic environments, required to build bridges between researchers and entrepreneurs and support the future translation of research findings in innovative therapies and services. STRATEGY-CKD builds on already available advanced technology, models and patient samples, and established collaborations. STRATEGY-CKD links to ongoing European programs among partners of the consortium. STRATEGY-CKD will stimulate the development of young, broadly trained scientists able to successfully link basic to clinical research in academia as well as in industry unravelling complex diseases such as CVD-CKD.

Specific Information for the position

Plasma peptidomics and metabolome analysis for the identification of mediators of a pathological gut-kidney axis
The ESR will be trained in state-of-the-art liquid chromatography and high-resolution mass spectrometry techniques, as applied to protein/peptide and metabolite identification and quantification. Notably, this application is of highest interest as there is a general lack of information on protein/peptide modifications as well as metabolites involved in the gut-kidney crosstalk. The ESR will isolate and identify mediators involved in the interaction of the gut and the kidney in plasma. Based on vast omics experiences in our institute to identify disease

mediators, the ESR will generate high-throughput profiles of proteins/peptides and metabolites using LC-MS/MS on already available plasma samples of patients with chronic kidney disease. The ESR will quantify plasma peptides and metabolites using LC-ESI-MS, MALDI-FT-Orbitrap and MALDI-TOF/TOF-MS and will generate comprehensive lists of peptides and metabolites associated with the gut and kidney interaction using a bioinformatics approach. Additionally, protein/protein post-translational modifications in relation to chronic kidney disease will be investigated. The ESR will also analyse the relationship of selected protein bound uremic retention solutes like indoxyl sulfate, p-cresyl sulfate and phenylacetic acid, on the interaction of the gut and the kidney using mass spectrometry.
In summary, the ESR will be intensively trained in 1) the identification of mediators and biomarkers of disease and a pathological organ cross-talk using chromatography and high resolution mass spectrometry techniques; 2) the identification of post-translational modification of substances in pathology; and 3) the understanding of the gut-kidney interaction in chronic kidney disease.
Several secondments to other partner institutes are planned.

Additional Information

According to the EU rules for the ITN projects, the recruited researchers must comply with the following conditions:
- are — at the date of recruitment — **early-stage researchers** (i.e. NOT have a doctoral degree AND be in the first 4 years (full-time equivalent research experience) of their research career)
- are recruited under an **employment contract/equivalent direct contract** (i.e. other contract with equivalent benefits and social security coverage), including sickness, parental, unemployment and invalidity benefits - pension rights and - benefits for accidents at work and occupational diseases.

If national law prevents them from recruiting researchers under an employment contract/equivalent direct contract, beneficiaries may — exceptionally and subject to the Agency's prior agreement — offer **a fixed-amount fellowship** with minimum social security coverage, including: sickness, parental and invalidity benefits and benefits for accidents at work and occupational diseases.
In this case, the living allowance will be reduced by 50%.
- be employed for **at least 3 months and up to 36 months.**
- **be employed full-time**, unless the Agency has approved a part-time employment for personal or family reasons
- work **exclusively** on the research training activities
- must comply with the following **mobility rule**: not have resided in the country of the recruiting beneficiary for more than 12 months in the 3 years immediately before the recruitment date (and not have carried out their main activity (work, studies, etc.) in that country) — unless as part of a procedure for obtaining refugee status under the Geneva Convention. For beneficiaries that are international European interest organisations or international organisations: not have spent with the beneficiary more than 12 months in the 3 years immediately before the recruitment date.

Requirements

-You hold a Master's degree in biochemistry, (bio-)medical, pharmaceutical or life sciences or related area and thrive in a multidisciplinary research environment.
-You have a strong interest in cardiorenal research and analytical techniques as mass

spectrometry and chromatography. You are ambitious, well organised and have excellent communication skills.
-You are verbally and written fluent in English and have the ability to work effectively and collaboratively.
-You are an enthusiastic, self-motivated individual, who is willing to take part in personal skills training, international travel and public outreach activities.
-You have demonstrated commitment to high-quality research.

We offer:

- Contract type: Three-year employment contract according to the German "Wissenschaftszeitvertragsgesetz" [WissZeitVG].
- Starting date: earliest 01 March 2020
- Salary: the full Marie Sklodowska-Curie Early Stage Researcher allowances as set by the European Commission
- Intensive guidance and a structured network-wide PhD training program
- Intensive cooperations with the other ESRs within the consortium
- Secondments within the consortium
- Well-established methods
- An excellent working atmosphere

Application

Applications must contain the following documents:

- a personal (motivation) letter and curriculum vitae,
- a copy of degree certificates and associated certificates,
- a transcript of records of the bachelor and master curriculum,
- a copy of degree projects and any previous publications,
- a proof of English language skills,
- two recommendation letters (or the names and email addresses of two references).

The application documents should be sent to euprojects@exelixisrm.com, with a clear reference in the title of the mail to the ESR position(s) you apply for. The mails need to be addressed to the STRATEGY-CKD recruitment coordinator: **Professor Griet Glorieux, Ghent University**.

RWTH Aachen University has been rewarded with the "Total-E-Quality-Award" for its efforts with respect to gender equality. In cases of equal qualification and expertise of the applicants, female applicants will be given preferential treatment for those salary groups and careers in which females are underrepresented, unless there are preponderant reasons to give preference to another applicant. Furthermore, applications from severely disabled people with appropriate suitability are explicitly welcome.

ESR5 - IDRYMA IATROVIOLOGIKON EREUNON AKADEMIAS ATHINON

EU RESEARCH FRAMEWORK PROGRAMME: Innovative Training Network "STRATEGY-CKD"

(H2020-MSCA-ITN-860329)
RESEARCH FIELD: Biomedical Sciences
RESEARCHER PROFILE: Early Stage Researcher (ESR)
APPLICATION DEADLINE: 31 August 2020
LOCATION: Biomedical Research Foundation, Academy of Athens, Greece
TYPE OF CONTRACT: 12 months (with possibility for renewal for 24 more months)
JOB STATUS: Full-time
HOURS PER WEEK: 42h
OFFER STARTING DATE: Between 01/06/2020 and 01/12/2020 or depending on the national and international covid-19 regulations

General objectives of the STRATEGY-CKD project

System omics to unravel the gut-kidney axis in Chronic Kidney Disease: There is a great need for multi-disciplinary and methodologically well trained scientists in order to unravel complex diseases. Chronic kidney disease (CKD), which is more prevalent in women, and its high risk for cardiovascular disease (CVD) with nearly 50% of all deaths in CKD patients caused by CVD, is such a complex disease and its socio-economic burden is extremely high. STRATEGY-CKD will in this context focus on the gut-kidney axis and the role of the intestinal microbiome as important contributor to the genesis and evolution of CVD in CKD and as possible therapeutic target to improve outcome of CKD patients. For this purpose, 10 leading multidisciplinary academic and 2 industrial investigators and their teams will train young researchers in (1) excellent scientific skills, integrating technological skills [in vitro, bacterial and animals molecular and functional studies, state-of-the-art omic (cultur-, microbi, peptid-, prote-, metabolomics) approaches, bioinformatics, systems biology] in clinical/mechanistic knowledge to generate innovative insights triggering the pathogenesis and treatment of CKD related CVD;
(2) Excellent complementary skills in personal and career development as well as business training required to extend beyond scientific research; and (3) exposure to both academic and non-academic environments, required to build bridges between researchers and entrepreneurs and support the future translation of research findings in innovative therapies and services. STRATEGY-CKD builds on already available advanced technology, models and patient samples, and established collaborations. STRATEGY-CKD links to ongoing European programs among partners of the consortium. STRATEGY-CKD will stimulate the development of young, broadly-trained scientists able to successfully link basic to clinical research in academia as well as in industry unravelling complex diseases such as CVD-CKD.

Specific Information for the position

A position for a PhD candidate is open at the Biomedical Research Foundation, Academy of Athens Greece in the laboratory of Dr Antonia Vlahou. The team (currently comprised of 12 post-doctoral fellows and PhD students) has extensive experience in clinical proteomics applications, having being embedded in multiple leading international networks and EU— funded projects. The successful candidate will work at the interface between kidney and cardiovascular disease as part of STRATEGY-CKD H2020-MSCA-ITN project. Main research activities are the proteomics analysis of biological samples, (provided by the STRATEGY-CKD partners), via application of state of the art high resolution mass spectrometry; systematics analysis of existing knowledge and molecular data on gut-kidney axis; functional annotation of the produced proteomics and other relevant –omics datasets followed by their integration into molecular pathways; and prioritization of findings via statistical tools for the determination of biomarkers and therapeutic

targets. Validation of certain findings via targeted assays (immunoassay-based and/or targeted contemporary mass spectrometry assays) will also be performed.

The ESR will primarily be trained in (1) proteomics analysis of biological samples including sample preparation and analysis by state of the art mass spectrometry, (2) protein quantification, functional annotation and prioritization for further study, (3) integrated data analysis linking multi-omics, multi-source molecular data to clinical phenotypes. In parallel, the student will get exposure in the multi-disciplinary projects taking place in the laboratory including, besides proteomics analyses (mainly investigating cardiorenal and urogenital diseases), also cell culture target silencing experiments and respective functional assays and health economics considerations for biomarker implementation.
Several secondments to other partner institutes are planned.

Additional Information

According to the EU rules for the ITN projects, the recruited researchers must comply with the following conditions:
- are — at the date of recruitment — **early-stage researchers** (i.e. NOT have a doctoral degree AND be in the first 4 years (full-time equivalent research experience) of their research career)
- are recruited under an **employment contract/equivalent direct contract** (i.e. other contract with equivalent benefits and social security coverage), including: sickness, parental, unemployment and invalidity benefits - pension rights and - benefits for accidents at work and occupational diseases.
- be employed for **at least 3 months and up to 36 months.**
- **be employed full-time**
- work **exclusively** on the research training activities
- must comply with the following **mobility rule**: not have resided in the country of the recruiting beneficiary (Greece) for more than 12 months in the 3 years immediately before the recruitment date (and not have carried out their main activity (work, studies, etc.) in Greece)
— unless as part of a procedure for obtaining refugee status under the Geneva Convention.

Requirements

-You hold a Bachelor's and Master's degree on biology, chemistry, bioinformatics or related area
- You have experience in fields related to proteomics, mass spectrometry, bioinformatics, R language and platform
-Relevant presentations to scientific meetings and/or publications will be positively evaluated
- You are ambitious, well organised and have excellent communication skills.
-You are verbally and written fluent in English and have the ability to work effectively and collaboratively.
-You are an enthusiastic, self-motivated individual, who is willing to take part in personal skills training, international travel and public outreach activities.
-You have demonstrated commitment to high-quality research.

Application

Applications must contain the following documents:

- a personal (motivation) letter and curriculum vitae,

- a copy of degree certificates and associated certificates,
- a transcript of records of the bachelor and master curriculum,
- a copy of degree projects and any previous publications,
- a proof of English language skills,
- two recommendation letters (or the names and email addresses of two references).

The application documents should be sent to euprojects@exelixisrm.com, with a clear reference in the title of the mail to the ESR position(s) you apply for. The mails need to be addressed to the STRATEGY-CKD recruitment coordinator: **Professor Griet Glorieux, Ghent University**.

ESR7 - INSTITUTO INVESTIGACION SANITARIA FUNDACION JIMENEZ DIAZ

EU RESEARCH FRAMEWORK PROGRAMME: Innovative Training Network "STRATEGY-CKD" (H2020-MSCA-ITN-860329)
RESEARCH FIELD: Biomedical Sciences
RESEARCHER PROFILE: Early Stage Researcher (ESR)
APPLICATION DEADLINE: 31 August 2020
LOCATION: Madrid, Spain
TYPE OF CONTRACT: 24 months plus 12 months
JOB STATUS: Full-time
HOURS PER WEEK: 37h
OFFER STARTING DATE: Between 01/06/2020 and 01/12/2020 or depending on the national and international covid-19 regulations

General objectives of the STRATEGY-CKD project

System omics to unravel the gut-kidney axis in Chronic Kidney Disease: There is a great need for multi-disciplinary and methodologically well trained scientists in order to unravel complex diseases. Chronic kidney disease (CKD), which is more prevalent in women, and its high risk for cardiovascular disease (CVD) with nearly 50% of all deaths in CKD patients caused by CVD, is such a complex disease and its socio-economic burden is extremely high. STRATEGY-CKD will in this context focus on the gut-kidney axis and the role of the intestinal microbiome as important contributor to the genesis and evolution of CVD in CKD and as possible therapeutic target to improve outcome of CKD patients. For this purpose, 10 leading multidisciplinary academic and 2 industrial investigators and their teams will train young researchers in (1) excellent scientific skills, integrating technological skills [in vitro, bacterial and animals molecular and functional studies, state-of-the-art omic (cultur-, microbi, peptid-, prote-, metabolomics) approaches, bioinformatics, systems biology] in clinical/mechanistic knowledge to generate innovative insights triggering the pathogenesis and treatment of CKD related CVD;
(2) Excellent complementary skills in personal and career development as well as business training required to extend beyond scientific research; and (3) exposure to both academic and non-academic environments, required to build bridges between researchers and entrepreneurs and support the future translation of research findings in innovative therapies and services. STRATEGY-CKD builds on already available advanced technology, models and patient samples, and established collaborations. STRATEGY-CKD links to ongoing European programs among partners of the consortium. STRATEGY-CKD will stimulate the development of young, broadly-trained scientists able to successfully link basic to clinical research in academia as well as in industry unravelling complex diseases such as CVD-CKD.

Specific Information for the position

Impact of an altered microbiota on CKD progression. The aim is to explore the effect of a dysregulated microbiota on kidney injury. Nlrp6 ko mice, co-housed wild-type littermates and separately grown wild-type littermates will be subjected to acute kidney injury and chronic kidney disease. This will allow to study the separate impact of Nlrp6 deficiency and an altered microbiota on kidney injury. Co-housed Nlrp6 knockout mice and wild-type mice share the same microbiota while separately grown wild-type littermates have a different microbiota.

The ESR will study serum levels of uraemic toxins, composition of microbiota, histological kidney injury and gut- and kidney expression of relevant genes. Gut expression of Nlrp6 will be analyzed in human controls and CKD patients.

Another part of the project is to evaluate the association between uraemic toxins and the intestinal microbiome through bioinformatics and systems biology approaches. The aim is to identify possible associations between specific bacterial members of the intestinal microbiota and circulating (uraemic) metabolites (toxins) and proteins.

The ESR will gain expertise in 1) characterisation of the CKD microbiome; 2) proof-of-concept animal model experiments for testing identified bacterial species contributing to the uraemic environment by association; 3) interventions in *in vitro* and in animal models: cell culture; 4) lab techniques such as Rt-qPCR, immunohistochemistry and Western blotting

Several secondments to other partner institutes are planned.

The group is based at the Fundacion Jimenez Diaz University Hospital,, affiliated to the Universidad Autonoma de Madrid, in Madrid, Spain. It is led by Maria D Sanchez-Niño, PhD (https://scholar.google.es/citations?user=C_xvVdEAAAAJ&hl=es), h-index 45. The group is embedded in the Nephrology and Hypertension Department led by Alberto Ortiz, MD, PhD (https://scholar.google.es/citations?user=1IKOVx0AAAAJ&hl=es), h-index 91.

Additional Information

According to the EU rules for the ITN projects, the recruited researchers must comply with the following conditions:

- are — at the date of recruitment — **early-stage researchers** (i.e. NOT have a doctoral degree AND be in the first 4 years (full-time equivalent research experience) of their research career)
- are recruited under an **employment contract/equivalent direct contract** (i.e. other contract with equivalent benefits and social security coverage), including: sickness, parental, unemployment and invalidity benefits - pension rights and - benefits for accidents at work and occupational diseases.

If national law prevents them from recruiting researchers under an employment contract/equivalent direct contract, beneficiaries may — exceptionally and subject to the Agency's prior agreement — offer **a fixed-amount fellowship** with minimum social security coverage, including: sickness, parental and invalidity benefits and benefits for accidents at work and occupational diseases.

In this case, the living allowance will be reduced by 50%.

- be employed for **at least 3 months and up to 36 months.**
- **be employed full-time**, unless the Agency has approved a part-time employment for personal or family reasons
- work **exclusively** on the research training activities
- must comply with the following **mobility rule**: not have resided in the country of the recruiting beneficiary for more than 12 months in the 3 years immediately before the recruitment date

(and not have carried out their main activity (work, studies, etc.) in that country) — unless as part of a procedure for obtaining refugee status under the Geneva Convention. For beneficiaries that are international European interest organisations or international organisations: not have spent with the beneficiary more than 12 months in the 3 years immediately before the recruitment date.

Requirements

-You hold a Master's degree in (bio-)medical, pharmaceutical, or life sciences or related area and thrive in a multidisciplinary research environment.

-You have a strong background in renal physiology and/or microbiology and experience with animal research. You are ambitious, well organised and have excellent communication skills.

-You are verbally and written fluent in English and have the ability to work effectively and collaboratively.

-You are an enthusiastic, self-motivated individual, who is willing to take part in personal skills training, international travel and public outreach activities.

-You have demonstrated commitment to high-quality research.

Application

Applications must contain the following documents:

- a personal (motivation) letter and curriculum vitae,
- a copy of degree certificates and associated certificates,
- a transcript of records of the bachelor and master curriculum,
- a copy of degree projects and any previous publications,
- a proof of English language skills,
- two recommendation letters (or the names and email addresses of two references).

The application documents should be sent to euprojects@exelixisrm.com, with a clear reference in the title of the mail to the ESR position(s) you apply for. The mails need to be addressed to the STRATEGY-CKD recruitment coordinator: **Professor Griet Glorieux, Ghent University**.

ESR9 - KATHOLIEKE UNIVERSITEIT LEUVEN

EU RESEARCH FRAMEWORK PROGRAMME: Innovative Training Network "STRATEGY-CKD" (H2020-MSCA-ITN-860329)
RESEARCH FIELD: Biomedical Sciences
RESEARCHER PROFILE: Early Stage Researcher (ESR)
APPLICATION DEADLINE: 31 August 2020
LOCATION: Leuven, Belgium
TYPE OF CONTRACT: 24 months plus 12 months
JOB STATUS: Full-time
HOURS PER WEEK: 38
OFFER STARTING DATE: Between 01/06/2020 and 01/12/2020 or depending on the national and international covid-19 regulations

Within the H2020 EU-funded Marie-Curie Initial Training Network (ITN) "STRATEGY-CKD" one

PhD studentship is available at the laboratory of nephrology, department of microbiology, immunology and transplantation, in close collaboration with TrAnslational Research center for GastroIntestinal Disorders (TARGID). The studentship, funded by the STRATEGY-CKD project, is tenable for 4 years and will be available from February 2020.
There is a great need for multi-disciplinary and methodologically well-trained scientists in order to unravel complex diseases. Chronic kidney disease (CKD), which is more prevalent in women, and its high risk for cardiovascular disease (CVD) with nearly 50% of all deaths in CKD patients caused by CVD, is such a complex disease and its socio-economic burden is extremely high. STRATEGY-CKD will in this context focus on the gut-kidney axis and the role of the intestinal microbiome as important contributor to the genesis and evolution of CVD in CKD and as possible therapeutic target to improve outcome of CKD patients. For this purpose, 10 leading multidisciplinary academic and 3 industrial investigators and their teams will train young researchers in (1) excellent scientific skills, integrating technological skills [*in vitro*, bacterial and animals molecular and functional studies, state-of-the-art omic (cultur-, microbi, peptid-, prote-, metabolomics) approaches, bioinformatics, systems biology] in clinical/mechanistic knowledge to generate innovative insights triggering the pathogenesis and treatment of CKD related CVD; (2) excellent complementary skills in personal and career development as well as business training required to extend beyond scientific research; and (3) exposure to both academic and non-academic environments, required to build bridges between researchers and entrepreneurs and support the future translation of research findings in innovative therapies and services.
STRATEGY-CKD builds on already available advanced technology, models and patient samples, and established collaborations. STRATEGY-CKD links to ongoing European programs among partners of the consortium. STRATEGY-CKD will stimulate the development of young, broadly-trained scientists able to successfully link basic to clinical research in academia as well as in industry unravelling complex diseases such as CVD-CKD.

Studentship description, position KU Leuven

Translational Research of colon transport

This Early Stage Researcher (ESR) will be trained in structural and functional characterization of colonic tissue obtained from patients with chronic kidney disease. Samples will be studied using Ussing chambers allowing functional characterization of transport mechanisms involved in indole and p-cresol uptake, intracellular metabolism and systemic excretion of the metabolites. In a bedside to bench approach, observed characteristics will be translated into (surgical and chemical induced) rodent models of CKD to decipher mechanistic pathways regulating gut permeability (epithelial barrier function) in CKD.
Expected Results: The ESR will have expertise in handling tissue from patients with CKD, Ussing chamber experiments, molecular biology techniques, rodent models of CKD. Within the innovative training network, it is possible to bridge knowledge with other consortium partners.

Eligibility criteria

›The fellow does not have a doctoral degree (PhD).
›The fellow is in the first 4 years of his/her research career (full-time equivalent research experience) at the date of recruitment (i.e. the starting date indicated in the employment contract).
›The fellow has not resided or carried out his/her main activity of work (e.g. work, studies) in Belgium for more than 12 months in the 3 years immediately before the date of recruitment.
›The fellow is recruited for a minimum of 3 months and a maximum of 36 months.
The researchers will be hosted by KU Leuven and will be expected to register for PhD studies at

the Faculty of Medicine, KU Leuven. For further information contact Prof. Dr. Bjorn Meijers (bjorn.meijers@uzleuven.be).

Application

Applications must contain the following documents:

- a personal (motivation) letter and curriculum vitae,
- a copy of degree certificates and associated certificates,
- a transcript of records of the bachelor and master curriculum,
- a copy of degree projects and any previous publications,
- a proof of English language skills,
- two recommendation letters (or the names and email addresses of two references).

The application documents should be sent to euprojects@exelixisrm.com, with a clear reference in the title of the mail to the ESR position(s) you apply for. The mails need to be addressed to the STRATEGY-CKD recruitment coordinator: **Professor Griet Glorieux, Ghent University**.

ESR12 - UNIVERSITE D'AIX MARSEILLE

EU RESEARCH FRAMEWORK PROGRAMME: Innovative Training Network "STRATEGY-CKD" (H2020-MSCA-ITN-860329)
RESEARCH FIELD: Biomedical Sciences
RESEARCHER PROFILE: Early Stage Researcher (ESR)
APPLICATION DEADLINE: 31 August 2020
LOCATION: Marseille, France
TYPE OF CONTRACT: 24 months plus 12 months
JOB STATUS: Full-time
HOURS PER WEEK: 38h
OFFER STARTING DATE: Between 01/06/2020 and 01/12/2020 or depending on the national and international covid-19 regulations

General objectives of the STRATEGY-CKD project

System omics to unravel the gut-kidney axis in Chronic Kidney Disease: There is a great need for multi-disciplinary and methodologically well trained scientists in order to unravel complex diseases. Chronic kidney disease (CKD), which is more prevalent in women, and its high risk for cardiovascular disease (CVD) with nearly 50% of all deaths in CKD patients caused by CVD, is such a complex disease and its socio-economic burden is extremely high. STRATEGY-CKD will in this context focus on the gut-kidney axis and the role of the intestinal microbiome as important contributor to the genesis and evolution of CVD in CKD and as possible therapeutic target to improve outcome of CKD patients. For this purpose, 10 leading multidisciplinary academic and 2 industrial investigators and their teams will train young researchers in (1) excellent scientific skills, integrating technological skills [in vitro, bacterial and animals molecular and functional studies, state-of-the-art omic (cultur-, microbi, peptid-, prote-, metabolomics) approaches, bioinformatics, systems biology] in clinical/mechanistic knowledge to generate innovative insights triggering the pathogenesis and treatment of CKD related CVD;
(2) Excellent complementary skills in personal and career development as well as business training required to extend beyond scientific research; and (3) exposure to both academic and

non-academic environments, required to build bridges between researchers and entrepreneurs and support the future translation of research findings in innovative therapies and services. STRATEGY-CKD builds on already available advanced technology, models and patient samples, and established collaborations. STRATEGY-CKD links to ongoing European programs among partners of the consortium. STRATEGY-CKD will stimulate the development of young, broadly-trained scientists able to successfully link basic to clinical research in academia as well as in industry unravelling complex diseases such as CVD-CKD.

Specific Information for the position

Our goal is to modelize how uremic toxins produced by the gut lead to venous thrombosis. We described the effect of tryptophan derived uremic toxins (indoxyl sulfate, and indol acetic acid) which activate aryl hydrocarbon receptor and induce activation of thrombosis in vitro and in vivo in Tissue factor dependent manner. We studied the arterial effect of the TDUT. Venous thrombosis is increased during CKD, now we want to modelize it in mouse. So we will use TDUT as a proof of concept to test other gut derived uremic toxins as procoagulant toxins.

The ESR will primarily be trained in (1) Described TDUT metabolism and activation of AhR in a Col4A3 knock out mouse of CKD (2) Learn to perfom inferior vena cava model of deep venous thrombosis (DVT) and (3) Study the impact of CKD and TDUT on DVT in mouse. These research training components will allow to provide a better understand of pathophysiology of DVT during CKD and to provide new ways to prevent DVT during CKD. The model could allow us to test the effect of antibiotics on the risk of DVT and the inhibition of AhR as a way to prevent DVT. In addition, this model could be used to test others uremic toxins identified by the consortium.

The ESR will gain expertise in 1) Analyze of mouse model of CKD; 2) Development of a mouse model of DVT; 3) interventions in animal models (e.g. nutritional interventions)

Several secondments to other partner institutes are planned.

Additional Information

According to the EU rules for the ITN projects, the recruited researchers must comply with the following conditions:

- are — at the date of recruitment — **early-stage researchers** (i.e. NOT have a doctoral degree AND be in the first 4 years (full-time equivalent research experience) of their research career)
- are recruited under an **employment contract/equivalent direct contract** (i.e. other contract with equivalent benefits and social security coverage), including: sickness, parental, unemployment and invalidity benefits - pension rights and - benefits for accidents at work and occupational diseases.

If national law prevents them from recruiting researchers under an employment contract/equivalent direct contract, beneficiaries may — exceptionally and subject to the Agency's prior agreement — offer **a fixed-amount fellowship** with minimum social security coverage, including: sickness, parental and invalidity benefits and benefits for accidents at work and occupational diseases.

In this case, the living allowance will be reduced by 50%.

- be employed for **at least 3 months and up to 36 months.**
- **be employed full-time**, unless the Agency has approved a part-time employment for personal or family reasons
- work **exclusively** on the research training activities
- must comply with the following **mobility rule**: not have resided in the country of the recruiting beneficiary for more than 12 months in the 3 years immediately before the recruitment date (and not have carried out their main activity (work, studies, etc.) in that country) — unless as

part of a procedure for obtaining refugee status under the Geneva Convention. For beneficiaries that are international European interest organisations or international organisations: not have spent with the beneficiary more than 12 months in the 3 years immediately before the recruitment date.

Requirements

-You hold a Master's degree in (bio-)medical, pharmaceutical, or life sciences or related area and thrive in a multidisciplinary research environment.
-You have a strong background in renal physiology and/ or vascular biology and experience with animal research. You are ambitious, well organised and have excellent communication skills.
-You are verbally and written fluent in English and have the ability to work effectively and collaboratively.
-You are an enthusiastic, self-motivated individual, who is willing to take part in personal skills training, international travel and public outreach activities.
-You have demonstrated commitment to high-quality research.

Application

Applications must contain the following documents:

- a personal (motivation) letter and curriculum vitae,
- a copy of degree certificates and associated certificates,
- a transcript of records of the bachelor and master curriculum,
- a copy of degree projects and any previous publications,
- a proof of English language skills,
- two recommendation letters (or the names and email addresses of two references).

The application documents should be sent to euprojects@exelixisrm.com, with a clear reference in the title of the mail to the ESR position(s) you apply for. The mails need to be addressed to the STRATEGY-CKD recruitment coordinator: **Professor Griet Glorieux, Ghent University**.