



The Marie Skłodowska-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.

1. UNIVERSITEIT GENT

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: 15 May 2020

LOCATION: Ghent, 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

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 Ghent University (Hospital) in Belgium in the laboratory of Prof. Griet Glorieux. This research group is internationally renowned for its work in the context of uremic toxicity. The successful candidate will work on linking intestinally generated uraemic metabolites, proteins and peptides and the gut microbiome profiles in CKD and providing proof-of-concept analyses as part of STRATEGY-CKD H2020-MSCA-ITN project.

The ESR will primarily be trained in uraemic toxicity and in linking intestinal microbiome profiles to plasma and faecal levels of metabolites, proteins and peptides in different stage of CKD. These research training components will allow to provide a proof-of-concept for the uraemic solute generating capacity of the associated bacterial species or specific CKD microbiome in *in vitro* cell culture settings and a germ-free murine model. Subsequently, these novel relational insights will form the scientific rationale to test a nutritional intervention *in vitro* and in animals in order to decrease uraemic solute generation and toxicity.

The ESR will gain expertise in 1) characterisation of the CKD microbiome; 2) proof-of-concept *in vitro* and animal model experiments for testing identified bacterial species contributing to the uraemic environment; 3) interventions in *in vitro* and 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.
- 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 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 background in renal physiology and/or microbiology and experience with *in vitro* cell culture and animal research and statistical analyses. 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@exelixism.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**.

2. 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: 15 May 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 Skłodowska-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@exelixism.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.

3. MOSAIQUES DIAGNOSTICS GMBH

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: 15 May 2020

LOCATION: Mosaiques Diagnostics, Germany, Hannover 30659 Rotenburger Straße 20

TYPE OF CONTRACT: 36 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 fixed-term for 3 years PhD position is open at Mosaiques Diagnostics, Hannover, Germany. The successful candidate will work at the interface between kidney and cardiovascular disease as part of STRATEGY-CKD H2020-MSCA-ITN project (<https://www.strategy-ckd.eu>). Mosaiques Diagnostics is the leading specialist in clinical proteome and CE-MS analysis, currently the most advanced technology to identify disease-specific polypeptide biomarkers in body fluids. MOS has published more than 300 papers in leading journals and has also led the consortium that defined standards for clinical proteome analysis. Main research activities are identification of urinary biomarkers for human diseases; sequencing of peptide biomarkers, identification of posttranslational modifications, development of software to analyse multidimensional data; and establishment of proteome maps of human body fluids. Mosaiques' proprietary technology enables reproducible analysis and evaluation of urine samples with mass spectrometry in a short time, based on a unique and proprietary database of proteins and peptides in human urine from over 70.000 participants. See also <http://mosaiques-diagnostics.com>.

The successful candidate will study CKD pathology related to the microbiome, with a focus on peptide biomarkers that may enable diagnosis, prognosis or prediction of response. The specific project rests on previous work where urinary biomarkers for kidney and cardiovascular disease were identified and validated, in part in large studies. The student will investigate endogenous peptides in human samples from large cohorts (between 100 and 1000) employing CE-MS, which is available as routine technology platform. Special emphasis will be on identification of biomarkers significantly associated with progression in disease, and on linking the biomarkers to disease pathophysiology. For more information, we refer to e.g. Htun

NM, et al. Prediction of acute coronary syndromes by urinary proteome analysis. PLoS. One., 12: e0172036.; Pontillo C, et al. Prediction of chronic kidney disease stage 3 by CKD273, a urinary proteomic biomarker. Kidney International Reports, 2(6):1066-1075.

Several secondments to other partner institutes are planned.

To apply, please send your CV and information on previous experience with emphasis on publications and presentations to Prof.Dr. Harald Mischak, mischak@mosaiques.de

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 experience in bioinformatics, statistics, and ideally you have programming skills.
- You are ambitious, well organised and have good 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@exelixism.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**.

4. UNIVERSITÄTSKLINIKUM HEIDELBERG

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: 15 May 2020

LOCATION: Institute for Computational Biomedicine, UNIVERSITÄTSKLINIKUM HEIDELBERG

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.

For more information: Prof. Julio Saez-Rodriguez (julio.saez@bioquant.uni-heidelberg.de)

Specific Information for the position

Please describe the project that your ESR is going to do in the frameworks of the project Integration of the microbiome and other different omic data sets by applying bioinformatics and systems biology

The ESR will primarily be trained in the analysis of integration of diverse biomedical 'omic' data types, along with clinical data. These data will be obtained from both the fecal microbiome/culturome as well as plasma, urine and cell culture medium to identify the contribution of specific microbiota to the molecular processes that increase the risk for Cardiovascular Disease in Chronic Kidney Disease. State of the art machine learning algorithms will be applied Biological knowledge such as pathways and other molecular processes will be used as appropriate to interpret the data. Results will be jointly analyzed with the experimental partners.

The ESR will gain expertise in 1) tools of statistics, machine learning, bioinformatics, and systems biology, 2) analysis and interpretation of microbiome and other omics data, 3) target and biomarker identification.

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 computational sciences (mathematics, physics, engineering, (bio)informatics), although biological background with significant training in computational disciplines could be considered.
- You have strong programming and data analysis skills.
- You thrive in a multidisciplinary research environment.
- 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 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@exelixism.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**.

5. 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: 15 May 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@exelixism.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**.

6. VIB VZW

EU RESEARCH FRAMEWORK PROGRAMME: Innovative Training Network "STRATEGY-CKD" (H2020-MSCA-ITN-860329)

RESEARCH FIELD: Biomedical/Life Sciences

RESEARCHER PROFILE: Early Stage Researcher (ESR)

APPLICATION DEADLINE: 15 May 2020

LOCATION: Laboratory of Molecular Bacteriology, VIB-KU Leuven Center for Microbiology, Leuven, Belgium

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.

For more information: <https://cordis.europa.eu/project/id/860329>

Specific Information for the position

Association between uraemic toxins and the intestinal microbiome through bioinformatics and in vitro systems biology approaches

The ESR will have the unique opportunity to be trained in both dry lab (bioinformatics) and wet lab (microbiological culturing and fermentation) approaches to identify possible associations between specific bacterial members of intestinal microbiota in CKD patients and circulating (uraemic) metabolites (toxins). From the bioinformatics perspective, the impact of body fluid composition on microbiota will be studied in both data-driven and hypothesis-driven approaches. This will be coupled to validation of predicted associations and relationships using in vitro culture-based experiments. For this purpose, the ESR will be trained in (i) targeted isolation and anaerobic culturing of toxin-producing bacterial species from CKD fecal samples and (ii) co-culturing and metabolomic profiling of bacterial toxin-producers with their predicted positive/negative interacting species in a state-of-the-art parallelized microscale fermentation system.

The outcome of this integrated bioinformatics and in vitro approach will yield a more profound understanding of the gut-kidney axis and identify possible routes for the testing and development of microbiome-based modulation strategies in CKD.

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 biomedical, bioengineering or life sciences or related area and thrive in a multidisciplinary research environment.
- You have a strong background in microbiology.
- 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@exelixism.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**.

7. 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: 15 May 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_xvVdEAAA&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=1IKOVx0AAA&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@exelixism.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**.

8. UNIVERSITA DEGLI STUDI DELLA CAMPANIA LUIGI VANVITELLI

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: 15 May 2020

LOCATION: Naples, Italy

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

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 microbiota as an important contributor to the genesis and evolution of CVD in CKD and as a 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 in the laboratory of Prof. Alessandra F. Perna, Professor of Nephrology, at the Division of Nephrology, Department of Translational Medical Sciences – School of Medicine, Naples, Italy, and Prof. Diego Ingrosso, Professor of Clinical Biochemistry & Clinical Molecular Biology, at the Department of Precision Medicine, same institution. This research group holds an internationally recognized experience, spanning three decades, in the study of uremic toxicity, and the mechanisms through which it influences CKD patient outcomes and the occurrence of typical complications, such as cardiovascular disease and mineral and bone disease. As a qualifying part of the overall STRATEGY-CKD H2020-MSCA-ITN project, the role of hydrogen sulfide (H₂S), lanthionine and other sulfur compounds, in uremic toxicity and the related cardiovascular burden, will be investigated.

The young scientist will gain expertise in the general topic of the metabolisms of sulfur amino acids and of the one carbon unit in health and disease (CKD) and how relevant alterations may affect disease risks factors associated with uremia. The young scientist will also acquire practical skills in the measurement of several sulfur compounds of interest, with several different techniques utilized in a biochemistry and molecular biology laboratory.

Main aspects of the ESR8 training will include: 1) characterisation of the microbiome from CKD patients and controls, generally using 16S ribosomal RNA sequencing on fecal samples; however, alternative recent techniques will also be assessed and results compared; 2) test of the hypothesis that significant microbiota changes, in CKD, may play a role in the induction of significant modifications of the uremic microenvironment, in particular with respect to sulfur compounds endowed with pathophysiological potential roles; 3) experimental testing of the effects of therapeutic protocols and regimens on the metabolism of sulfur amino acid and their products. From a methodological standpoint, ESR8 training will include:

- Measurements of H₂S, lanthionine, and related sulfur compounds on fecal and blood samples of CKD patients, on conservative therapy, or on peritoneal or hemodialysis.
- Comparison of various methods for measuring H₂S: I. spectrophotometrically; II. using an ion sensitive specific electrode; using MBB derivatization and UHPLC/MS.
- Lanthionine will be measured with UHPLC/MS.

Models will include CKD patients, *in vivo* animal models (*e.g. Danio rerio*) and *in vitro* models, also in collaboration with other groups. Samples will be made available to the other units to measure the other uremic toxins or other metabolites of relevance to the project, as well as the type of microbiota present. The effect of interventions with pro- or pre-biotics on intestinal flora will be also pursued.

Various secondments to other partner institutes are planned (P1, G. Glorieux, and P11, A. Argiles).

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 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 organizations or international organizations: 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 or equivalent in bio-medical, pharmaceutical, or life sciences or related areas and thrive in a multidisciplinary research environment.
- You have a research background in biochemistry, molecular biology, renal physiology and/or microbiology, and experience with *in vitro* cell cultures, animal research, clinical research, as well as statistical analyses. 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@exelixism.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**.

9. 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: 15 May 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@exelixism.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**.

10. UNIVERSITEIT UTRECHT

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: 15 May 2020

LOCATION: Utrecht University, the Netherlands

TYPE OF CONTRACT: 48 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

ESR13: Translational immunology with a strong focus on inflammation management. From ingredient towards proof-of-concept.

This Early Stage Researcher (ESR13) will be trained in translational research focused on inflammation management (immune fitness) using dietary interventions aimed at both protection of intestinal homeostasis and microbiota management. Focus will be put on microbial uremic metabolites and their effect on intestinal epithelial barrier function and inflammation. Studies will be done using both *in vitro* as well as *in vivo* models and materials from clinical studies made available with the STRATEGY-CKD consortium. In addition, the ESR

will investigate if and how environmental risk-factors contribute to the formation and effects of uremic microbial metabolites in a CKD setting.

Expected Results: Expertise in *in vitro* analyses for microbial metabolite-related inflammation management and *in vivo* animal models for microbiome-induced inflammation management. Clinical validation of microbiome management and inflammation. Systems immunology, ability to link uremic microbial metabolites, inflammation data and clinical outcomes.

The researchers will be hosted by Utrecht University in close collaboration with Danone Nutricia Research and will be expected to register for PhD studies at UIPS (Utrecht Institute for Pharmaceutical Sciences). For further information contact Dr. Jeroen van Bergenhenegouwen (jeroen.vanbergen@danone.com).

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 immunology and/or microbiology and experience with *in vitro* and *in vivo* 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@exelixism.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**.

11. RD NEPHROLOGIE SAS

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: 15 May 2020

LOCATION: Montpellier, France

TYPE OF CONTRACT: Temporary, 36 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

Project title: Microbiome participation in CKD and CKD-MBD animal models

The ESR (ESR11) will investigate the participation of the microbiome in the mechanisms of appearance of CKD-linked vascular calcification, which is a hallmark of CKD-mineral and bone disease (CKD-MBD). The ESR will be trained to perform an animal model of CKD-MBD, which involves subtotal nephrectomy and dietary phosphate modulation in Sprague – Dawley rats. The ESR will perform histopathology studies of intestine to assess CKD-MDB-related modifications. The ESR will analyse the microbiome, blood, urine and faeces, with a specific focus on retention solutes known to originate from the gut-kidney axis, in particular indoxyl sulfate and paracresol sulphate and trimethylamine-N-oxide. In addition, -omics analyses of serum, urine and faeces will be done in collaboration within the consortium. Based on obtained results, the ESR will set up and animal study modulating the microbiome by dietary

and therapeutic interventions (probiotics, antibiotics) to further elucidate the participation of the microbiota on CKD-MBD (WP7).

The ESR will be working in the research company RD-Nephrologie in a French-speaking environment. The ESR will prepare a PhD from the University of Montpellier, under the supervision of Prof Dr Angel Argilés, renal physician and researcher. In addition, the ESR will perform two secondments to gain access to additional training and technologies:

- 3 months at the Institute for Molecular Cardiovascular Research and the Division of Nephrology of University of Aachen (Aachen, Germany) to learn measurement of specific uraemic toxins under the supervision of Prof Joachim Jankowski
- 2 months at the VIB Center for Microbiology (Leuven, Belgium) to learn in microbiome analysis under the supervision of Prof Jeroen Raes

The ESR will travel to attend network-wide training events and conferences in an English-speaking environment.

During this project, the ESR will gain expertise in: animal experimentation; microbiota analysis; blood, urine and faeces sample handling for chemistries; uraemic retention solute assessment; tissue preparation for histology and immunohistochemistry; molecular biology and protein characterization.

Requirements

The ESR should have a Master's Degree in Biological Sciences or equivalent, experience in working in a biology laboratory and a strong interest in animal studies. Previous experience in histology as well as in cell culture and molecular biology would be an advantage. Spoken and written English are required, and learning French is necessary.

In addition to following good research practice and complying with ethical requirements, the ESR should be critical, self-motivated, far-sighted, well organized and flexible. The ESR should also have the ability to work in autonomy and collaboratively with other researchers and ESRs. The applicant should be enthusiastic, and willing to take part in training activities, international travel and public outreach activities.

To be eligible for the position, the ESR should:

- Have a Master's degree in (bio-)medical, pharmaceutical, or life sciences or equivalent acknowledged by the French Ministry of Higher Education, Research and Innovation
- Have a strong background in physiology and/or microbiology and experience with animal research
- Be fluent in oral and written in English, and be willing to learn French.

Additional Information

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

- be an **early-stage researcher** at the date of recruitment (i.e. NOT have a doctoral degree AND be in the first 4 years (full-time equivalent research experience) of their research career)
- work **exclusively** on the research training activities
- 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.

The salary will follow the EU rules for ITN projects.

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@exelixism.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**.

12. 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: 15 May 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 perform 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,
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