This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 956780

SURREAL

A systems approach towards urban health

H2020-MSCA-ITN-2020 Action

15 ESRs

How to understand and co-creatively intervene in urban health?

- **Full-time**
- **3 years (36 months)**
- **Work contract in Belgium, Estonia, France, Israel, Luxembourg, the Netherlands or Spain.**
- **Latest start date: 01.09.2021**

The SURREAL consortium invites highly qualified and motivated applicants for an ESR position within the framework of the Innovative Training Networks (ITN) action «SURREAL - Systems approach of URban enviRonmEnts and heALth», which has been awarded under the Horizon 2020 - Marie Skłodowska-Curie Action of the European Commission.

Description of the Action

SURREAL (Systems approach of urban environments and health) is a Marie Skłodowska-Curie Innovative Training Network (ITN) action funded by the European Commission, which started as of January 2021. The network will employ 15 Early Stage Researchers (ESR students) for a 3 years' high quality interdisciplinary and intersectoral PhD training. The aim of the action is to deliver a unique, creative and single training network for 15 ESR students working on an improved understanding of the urban health system's complexity, and on co-designing and applying adequate interventions in the system. The action will draw upon interactions between academic disciplines such as epidemiology, public health, human movement science, psychology, sociology, geography, and urban planning and a wide range of entities such as medical centres, public authorities, firms, and NGOs as well as citizens. Equipped with this expertise and supported by innovative training formats, such as Collaborative Learning in Practice (CLiP), SURREAL trains the next generation of professionals in urban health.

The team

The consortium is composed of 10 universities and research institutes joining forces with 20 partner organizations. Luxembourg Institute of Socio-Economic Research - LISER (LU) (Martin Dijst) is the managing coordinator in the project. The other beneficiaries are Université du Luxembourg - uni.lu (LU), Institut National de la Santé et de la Recherche Médicale – INSERM (FR), Universitair Medisch Centrum Utrecht - UMC UTRECHT (NL), Erasmus Universitair Medisch Centrum Rotterdam - ERASMUS MC (NL), Wageningen University – WU (NL), Universiteit Hasselt – UHASSELT (BE), Tel Aviv University – TAU (IL), Fundacion Privada Instituto de Salud Global Barcelona - ISGLOBAL (ES) and Tartu Ülikool – UTARTU (EE). The partner organizations are located in The Netherlands, Germany, Iceland, Luxembourg, Belgium, Israel, Spain, France, UK, and Estonia.

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Your role

Within the SURREAL network, we will select 15 ESR students for a 3-year advanced research training for the following individual ESR research projects resulting in a PhD-thesis:

Please click the link in the Ref. column for further information on the project.

Individual ESR research project title	Host institute	Local supervisor	Ref.	Application deadline
Social inequalities in exposures and implications for physical and mental health.	ERASMUS MC (NL)	Prof. Dr. Frank van Lenthe	ESR1	19.04.2021
The impact of environmental exposures on cardiometabolic health and cognitive functioning in children in different SES groups	UHASSELT (B)	Prof. Dr. Tim Nawrot	ESR2	10.05.2021
Understanding of the health differences in migrants and SES groups living in an urban environment	UMC UTRECHT (NL)	Dr. Ilonca Vaartjes	ESR3	27.04.2021
Effects of exposure to green spaces versus the built environment on physical and mental health differentiated by SES	uni.lu (LU)	Prof. Dr. Claus Vögele	ESR4	19.04.2021
Socio-spatial inequalities in changes in exposures and implications for changes cardio-metabolic health	LISER (LU)	Prof. Dr. Martin Dijst	ESR5	10.05.2021
Changes in physical environment related to changes in neigbourhood SES and the impact on health and behaviour	UMC UTRECHT (NL)	Dr. Ilonca Vaartjes	ESR6	27.04.2021
Environmental and health inequalities in industrially contaminated areas	UTARTU (EE)	Dr. Kati Orru	ESR7	19.04.2021
Use of novel marker to assess the relation in exposure to combustion-related black carbon air pollution cardiometabolic outcomes in children in different SES groups	UHASSELT (B)	Prof. Dr. Tim Nawrot	ESR8	10.05.2021
Sensor-based innovations for assessing momentary neighbourhood, environmental, and mobility exposures	INSERM (FR)	Dr. Basile Chaix	ESR9	10.05.2021
Sensor-based innovations for assessing momentary and daily health outcomes relevant to mental and cardiovascular health	TAU (IL)	Dr. Amit Birenboim	ESR10	23.04.2021
Virtual and Augmented Reality in urban health research and planning	LISER (LU)	Prof. Dr. Martin Dijst	ESR11	10.05.2021
The impact of urban policies for social inequalities in physical and mental health	ERASMUS MC (NL)	Dr. Mariëlle Beenackers	ESR12	19.04.2021
Health impact assessment of urban and transport developments in Barcelona, Paris and Utrecht	ISGLOBAL (ES)	Prof. Dr. Mark Nieuwenhuijsen	ESR13	16.03.2021
Co-creating community-based healthy lifestyle interventions in a low socioeconomic neighbourhood	WU (NL)	Dr. Monique Simons	ESR14	12.05.2021
Evaluating the role of citizens in gamified experiences for health	uni.lu (LU)	Dr. Catherine Jones	ESR15	19.04.2021

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Your profile (general)

- The minimum requirement is a recognized diploma qualifying for doctoral studies in the recruiting country (e.g. Master degree). Students in their last year of study may apply but can only be recruited upon successful graduation. For specific diploma requirements, please see the project description.
- Strong motivation to engage in interdisciplinary and intersectoral network wide training activities
- Willingness to closely collaborate with other academic disciplines and societal stakeholders;
- Willingness to participate in two internships ;
- Willingness to participate in network-wide training events, and to communication, dissemination and engaging activities;
- Fluent in English, both written as well as oral;
- Skills in academic writing and reporting;
- Good organizational skills, good communications skills;
- Ability to take own initiatives as well as work in groups to solve complex problems;

Offer

- A first period of x[1] months full-time appointment to be extended with a further period of 36-x months (for a total of 3 years) contingent on a satisfactory performance during the first period.
- An exciting, multi-disciplinary and international research environment with ample opportunities for exchange with scholars from related disciplines at the universities and research institutes in the consortium, as well as with the local partner organizations and local stakeholders;
- A creative, entrepreneurial, innovative and holistic training environment consisting of :
    - Individual Research Projects (IRP), providing excellent supervision and mentoring with academics and non-academics;
    - Structured local training programs, comprising specific training courses in research-related skills and well as training in complementary skills, offered on the basis of a Personal Career Development Plan;
    - Network-wide activities, i.c. 3 Network Schools, in Utrecht, Paris and Barcelona;
    - Secondments, i.c. at least two inter-sectoral secondments to participants within the SURREAL Network;
    - Collaborative learning in practice (CLiP), allowing to engage continuously with and learn from working in real urban health intervention situations;
    - Career development modules, i.c. the use of Vitae Researcher Development Framework (RDF) and how to effectively employ the RDF Planner as basis for a Personal Career Development Plan (PCDP);
- Additional training and networking opportunities through participation in international conferences.

[1] Often 12 months, but more or less is possible and depends on local procedures.

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Application process

Please submit your complete application via the email address or platform indicated in the project(s) you wish to apply for, until the deadline that is indicated in the project description.

The following documents are required:

- Copy of your ID
- Letter of motivation
- A note suggesting specific research questions related to the project's theme (1/2 A4)
- Curriculum Vitae
- Copy of the highest diploma. The minimum requirement is a diploma qualifying for doctoral studies in the recruiting country (e.g. Master degree). Students in their last year may apply but can only be recruited upon successful graduation.
- Contact details of two referees (no recommendation letter)
- Writing sample (e.g. student's paper or chapter thesis) preferably in English

Applicants can apply for up to 4 Individual ESR Research Projects, indicating their order of priority.

Selected applicants will be called for an interview.

The job will start at the latest September 1, 2021.

For **SURREAL related information**, please contact prof. dr. Martin Dijst (Network Coordinator) martin.dijst@liser.lu.
For **information on the individual ESR projects** please contact the local supervisor.
For **administrative matters**, please contact elke.brungs@liser.lu (Consortium Office Manager).

All Beneficiaries in the consortium are Equal Opportunity Employers

GDPR consent statement

By submitting your application via the email address or platform indicated in the project(s), you consent to the following:

- *Your personal records and application files are kept at the institution(s) to which you submitted them, until 5 years after the end date of the project, i.c. 31.12.2029;*
- *Your personal records and application files may also be shared with the recruitment committees of other projects in the consortium, in particular if such sharing increases your chances of being recruited;*
- *In the event you are shortlisted in view of potential recruitment, your personal records and application files are additionally kept at the Network Coordinator institute, i.c. LISER – Luxembourg Institute of Socio-Economic Research, until 5 years after the end date of the project, i.c. 31.12.2029;*
- *Any additional GDPR/data protection notices for recruitment applicable at the institution to which you submit your application.*

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Project descriptions

1. ESR1

Host institution: Erasmus Universitair Medisch Centrum Rotterdam - ERASMUS MC (the Netherlands)
Research field (EURAXESS): Geosciences, Sociology, Medical Sciences
Researcher Profile: First Stage Researcher (R1)
Hours per week contract: 36 Hours per week
Contact: Prof. Dr. Frank van Lenthe - f.vanlenthe@erasmusmc.nl
Project Title: Social inequalities in exposures and implications for physical and mental health.
Project Description: Growing within-city inequalities in health are a major societal challenge. Urban environments shape health behaviour and stress in a complex way. The major objective of this project is to develop an in-depth understanding of the equity impact of urban environmental exposures to health behaviour (PA, dietary) and health outcomes (stress, cardiometabolic), using a systems perspective. The applicant will develop a systems model, and test and apply elements of systems mode, using existing datasets. In this project, theory from geography, sociology and public health converge, and the resulting model will be supported with quantitative analyses using existing data.
Enrolment in Doctoral degree(s): at the host institution, ERASMUS MC
Required Diploma: • Master degree is health sciences, sociology, epidemiology, geography or other related field relevant to the described project **Required Research Experience:** • Excellent knowledge of theories in geography, sociology, or public health on urbanization and/or socioeconomic inequalities • Knowledge and expertise in quantitative analyses of large datasets, preferably using R
Eligibility: If you are interested in this ESR project, you are required to: ☐ be working exclusively for the action; AND ☐ not have resided AND not have carried out your main activity (work, studies) in the Netherlands for more than 12 months in the 3 years immediately before the recruitment date; AND ☐ be — at the date of recruitment — in the first four years of your research career and not have a doctoral degree. Considered is: time spent as FTE research experience, measured from the date when you obtained the degree entitling you to embark on a doctorate even if a doctorate was never started or envisaged.
Complete applications with all required documents are to be submitted to www.werkenbijerasmusmc.nl, before April 19, 2021. **This project is part of the SURREAL H2020-ITN PhD training network of in total 15 Individual ESR Research projects.** **You may apply for up to 4 projects within the network, adding a document to your application file in which you indicate their order of priority.**

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2. ESR 2

Host Institution: Universiteit Hasselt – UHASSELT (Belgium)
Research field (EURAXESS): Environmental Sciences, Medical sciences
Researcher Profile: First Stage Researcher (R1)
Hours per week contract: 38 Hours per week
Contact: Prof. Dr. Tim Nawrot - tim.nawrot@uhasselt.be
Project Title: The impact of environmental exposures on cardiometabolic health and cognitive functioning in children in different SES groups
Project Description: Environmental insults impair human health around the world. Air pollution including black carbon entail considerable health impact of environmental exposures during the life-span. Here we study the impact during a susceptible period of life (prenatal exposure) by using a novel biomarker of internal exposure as well as a molecular marker of ageing. The aim is to estimate the current exposure to combustion-related black carbon air pollution in infants and the relation with cardiometabolic outcomes and cognitive function. Effect-modification by SES will be taken into account.
Enrolment in Doctoral degree(s): at the host institution, UHASSELT
Required Diploma: • Biology, Biomedical Sciences, Medical Sciences **Required Research Experience:** • Statistical expertise and data management is recommended
Eligibility: If you are interested in this ESR project, you are required to: ☐ be working exclusively for the action; AND ☐ not have resided AND not have carried out your main activity (work, studies) in Belgium for more than 12 months in the 3 years immediately before the recruitment date; AND ☐ be — at the date of recruitment — in the first four years of your research career and not have a doctoral degree. Considered is: time spent as FTE research experience, measured from the date when you obtained the degree entitling you to embark on a doctorate even if a doctorate was never started or envisaged.
Complete applications with all required documents are to be submitted to tim.nawrot@uhasselt.be and martien.peusens@uhasselt.be**, before May 10, 2021 (DEADLINE POSTPONED).** **This project is part of the SURREAL H2020-ITN PhD training network of in total 15 Individual ESR Research projects.** **You may apply for up to 4 projects within the network, adding a document to your application file in which you indicate their order of priority.**

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3. ESR 3

Host institution: Universitair Medisch Centrum Utrecht - UMC UTRECHT (the Netherlands)
Research field (EURAXESS): Medical Sciences
Researcher Profile: First Stage Researcher (R1)
Hours per week contract: 36 Hours per week
Contact: Dr. Ilonca Vaartjes - c.h.vaartjes@umcutrecht.nl
Project Title : Understanding of the health differences in migrants and SES groups living in an urban environment
Project Description: Unfavorable health outcomes have been observed in various ethnic groups as well as in lower SES groups. Within this project we aim to better understand the role of an individual's environment on these health inequalities in urban settings. We will focus on cardiovascular health. The candidate will enrich large health data sets with environmental data and explores, validates and when possible improves exposure assessment specifically for ethnic groups and SES groups.
Enrolment in Doctoral degree(s): at the diploma issuing university, Universiteit Utrecht – UU (the Netherlands)
Required Diploma: • We are looking for an enthusiastic Environmental Health Scientist, Health Scientist or Epidemiologist with experience in working with geographical data, or • a Geoscientist who is interested in or has experience with studying the relation between environment and health. **Required Research Experience:** • Within this project we are looking for a candidate who is keen on working with big data and who can show that they are interested in health inequality research. • Experience with GIS analysis or statistical modelling is preferred.
Eligibility: If you are interested in this ESR project, you are required to: ☐ be working exclusively for the action; AND ☐ not have resided AND not have carried out your main activity (work, studies) in the Netherlands for more than 12 months in the 3 years immediately before the recruitment date; AND ☐ be — at the date of recruitment — in the first four years of your research career and not have a doctoral degree. Considered is: time spent as FTE research experience, measured from the date when you obtained the degree entitling you to embark on a doctorate even if a doctorate was never started or envisaged.
Complete applications with all required documents are to be submitted through https://www.werkenbijumcutrecht.nl/vacatures/Paginas/default.aspx, before April 27. **This project is part of the SURREAL H2020-ITN PhD training network of in total 15 Individual ESR Research projects.** **You may apply for up to 4 projects within the network, adding a document to your application file in which you indicate their order of priority.**

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4. ESR 4

Host institution: Université du Luxembourg - uni.lu (Luxembourg)

Research field (EURAXESS): Psychological Sciences

Researcher Profile: First Stage Researcher (R1)

Hours per week contract: 40 Hours per week

Contact: Prof. Dr. Claus Vögele - claus.voegele@uni.lu

Project Title:

Effects of exposure to green spaces versus the built environment on physical and mental health differentiated by SES

Project Description:

This project will investigate the effects of exposure to green spaces versus the built environment on indicators of physical and mental health (e.g. stress reactivity, mental well-being, cell-ageing) for different SES. This will involve an examination of the interaction between environmental factors and health behaviours (i.e. physical activity in a nature environment) affecting behaviour change processes using established health behaviour change frameworks to increase physical activity in a nature-rich environment. The project will include experimental (laboratory-based) and quasi-experimental (field-based) designs to compare nudge and boost interventions in terms of their efficacy and acceptance by SES.

Enrolment in Doctoral degree(s): at the host institution, uni.lu

Required Diploma:

- Master in Psychology or related field

Required Research Experience:

- Knowledge of and / or experience with experimental-psychological research designs, including measurement of health and well-being using self-report and physiological indicators
- Knowledge of and/or experience with behavioural intervention trials
- Quantitative statistics

Eligibility: If you are interested in this ESR project, you are required to:

☐ be working exclusively for the action; AND

☐ not have resided AND not have carried out your main activity (work, studies) in Luxembourg for more than 12 months in the 3 years immediately before the recruitment date; AND

☐ be — at the date of recruitment — in the first four years of your research career and not have a doctoral degree. Considered is: time spent as FTE research experience, measured from the date when you obtained the degree entitling you to embark on a doctorate even if a doctorate was never started or envisaged.

Complete applications with all required documents are to be submitted through https://recruitment.uni.lu/en/, before April 19, 2021.
This project is part of the SURREAL H2020-ITN PhD training network of in total 15 Individual ESR Research projects.
You may apply for up to 4 projects within the network, adding a document to your application file in which you indicate their order of priority.

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5. ESR 5

Host institution: Luxembourg Institute of Socio-Economic Research - LISER (Luxembourg)

Research field (EURAXESS): Environmental sciences, geography, medical sciences

Researcher Profile: First Stage Researcher (R1)

Hours per week contract: 40 Hours per week

Contact: Prof. Dr. Martin Dijst - martin.dijst@liser.lu

Project Title:

Socio-spatial inequalities in changes in exposures and implications for changes cardio-metabolic health

Project Description:

Cardio-metabolic diseases are one of the leading causes of premature death worldwide and a major contributor to health disparities. This project will investigate the relationships between the socio-economic, built and natural environmental characteristics of residential neighborhoods, behavioral risk factors (diet, physical activity, sedentary behaviors), and cardio-metabolic health over nine years. More specifically, this project aims at examining the long-term effects of time-varying environmental exposures, completing a country-wide, population-based longitudinal study and investigating social disparities (i.e., gender and socio-economic status) in time-varying neighborhood effects on cardiometabolic health.

Enrolment in Doctoral degree(s): at the diploma issuing university, Université du Luxembourg (uni.lu)

Required Diploma:

- Master degree in health sciences (biostatistics, public health, etc.), in geography or in a related field

Required Research Experience:

- Experience in geography research with a strong interest in health, or experiences in health research with a strong interest in contextual and neighbourhoods affects
- Experience in using geographic information systems
- Experience in statistical analyses
- Writing scientific reports and communication skills
- Fluent in English; speaking French, German or Luxembourgish will be considered an asset.

Eligibility: If you are interested in this ESR project, you are required to:

☐ be working exclusively for the action; AND

☐ not have resided AND not have carried out your main activity (work, studies) in Luxembourg for more than 12 months in the 3 years immediately before the recruitment date; AND

☐ be — at the date of recruitment — in the first four years of your research career and not have a doctoral degree. Considered is: time spent as FTE research experience, measured from the date when you obtained the degree entitling you to embark on a doctorate even if a doctorate was never started or envisaged.

Complete applications with all required documents are to be submitted to https://jobs.liser.lu/jobs, before May 10 (DEADLINE POSTPONED).

This project is part of the SURREAL H2020-ITN PhD training network of in total 15 Individual ESR Research projects.

You may apply for up to 4 projects within the network, adding a document to your application file in which you indicate their order of priority.

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6. ESR 6

Host institution: Universitair Medisch Centrum Utrecht - UMC UTRECHT (the Netherlands)
Research field (EURAXESS): Medical Sciences
Researcher Profile: First Stage Researcher (R1)
Hours per week contract: 36 Hours per week
Contact: Dr. Ilonca Vaartjes - c.h.vaartjes@umcutrecht.nl
Project Title : Changes in physical environment related to changes in neigbourhood SES and the impact on health and behaviour
Project Description: An individual's residential neighbourhood has been shown to be related with various health outcomes. In this project we aim to better understand the impact of changes in residential neighbourhood on health and behavior. For example, an individual can move to a greener and safer or to a more deprived area or a neighborhood where an individual resides can change (e.g. gentrification). In addition we aim to explore the role of SES in these associations. The candidate will enrich large health data sets with environmental data and maps changes in physical environment over time and relates these changes with health outcomes and SES. We will focus on cardiovascular health.
Enrolment in Doctoral degree(s): at the diploma issuing university, Universiteit Utrecht – UU (the Netherlands)
Required Diploma: • We are looking for an enthusiastic Geoscientist who is interested in or has experience with studying the relation between environment and health, or • an Environmental Health Scientist, Health Scientist or Epidemiologist with experience in working with geographical data **Required Research Experience:** • Within this project we are looking for a candidate who is keen on working with big data and who can show their interest in the topic. • Experience with GIS analysis or statistical modelling is preferred.
Eligibility: If you are interested in this ESR project, you are required to: ☐ be working exclusively for the action; AND ☐ not have resided AND not have carried out your main activity (work, studies) in the Netherlands for more than 12 months in the 3 years immediately before the recruitment date; AND ☐ be — at the date of recruitment — in the first four years of your research career and not have a doctoral degree. Considered is: time spent as FTE research experience, measured from the date when you obtained the degree entitling you to embark on a doctorate even if a doctorate was never started or envisaged.
Complete applications with all required documents are to be submitted through https://www.werkenbijumcutrecht.nl/vacatures/Paginas/default.aspx, before April 27. **This project is part of the SURREAL H2020-ITN PhD training network of in total 15 Individual ESR Research projects.** **You may apply for up to 4 projects within the network, adding a document to your application file in which you indicate their order of priority.**

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7. ESR 7

Host institution: Tartu Ülikool – UTARTU (Estonia)
Research field (EURAXESS): Sociology, Medical Science, Environmental Science, Political science
Researcher Profile: First Stage Researcher (R1)
Hours per week contract: 40 Hours per week
Contact: Dr. Kati Orru - kati.orru@ut.ee
Project Title: Environmental and health inequalities in industrially contaminated areas
Project Description: Ida-Viru County, in Eastern Estonia, features industrially contaminated sites–where oil shale has been mined and used for electricity generation, and shale oil extraction. Following health statistics, the areas has higher prevalence of respiratory and cardiovascular diseases, decreased birth weight and lower life expectancy. Besides environmental pollution, region has severe social problems with high ethnic segregation. During the PhD project you will first identify the key drivers that cause vulnerability and large inequality in public health measures. Second you will build up models describing the interaction between environment, health and societal resilience. Third you study the acceptance and efficiency of the policy-relevant transition measures to improve public health in the context of European Green Deal.
Enrolment in Doctoral degree(s): at the host institution, UTARTU
Required Diploma: • Master degree in health sciences (public health, epidemiology etc.), in geography or in a relevant social sciences discipline **Required Research Experience:** • basic background on public health measures (e.g. morbidity, mortality, life-expectancy) as well as environmental indicators (e.g. air pollution) is required • knowledge of the basics of environmental policies and interest in green transition of the EU.
Eligibility: If you are interested in this ESR project, you are required to: ☐ be working exclusively for the action; AND ☐ not have resided AND not have carried out your main activity (work, studies) in Estonia for more than 12 months in the 3 years immediately before the recruitment date; AND ☐ be — at the date of recruitment — in the first four years of your research career and not have a doctoral degree. Considered is: time spent as FTE research experience, measured from the date when you obtained the degree entitling you to embark on a doctorate even if a doctorate was never started or envisaged.
Complete applications with all required documents are to be submitted to Hans.Orru@ut.ee, before April 19, 2021. **This project is part of the SURREAL H2020-ITN PhD training network of in total 15 Individual ESR Research projects.** **You may apply for up to 4 projects within the network, adding a document to your application file in which you indicate their order of priority.**

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 956780

8. ESR 8

Host institution: Universiteit Hasselt – UHASSELT (Belgium)

Research field (EURAXESS): Medical Sciences, Environmental Sciences

Researcher Profile: First Stage Researcher (R1)

Hours per week contract: 38 Hours per week

Contact: Prof. Dr.Tim Nawrot - tim.nawrot@uhasselt.be

Project Title:

Use of novel marker to assess the relation in exposure to combustion-related black carbon air pollution cardiometabolic outcomes in children in different SES groups

Project Description:

Environmental insults impair human health around the world. Air pollution including black carbon entail considerable health impact of environmental exposures during the life-span. Specific insults include oxidative stress and inflammation, mitochondrial dysfunction, genomic alterations and mutations, epigenetic alterations, endocrine disruption, altered intercellular communication, altered microbiome communities, and impaired nervous system function. Here we study the impact during a susceptible period of life (childhood) by using a novel biomarker of internal exposure. The aim is to estimate the current exposure to combustion-related black carbon air pollution in infants and the relation with cardiometabolic outcomes.

Enrolment in Doctoral degree(s): at the host institution, UHASSELT

Required Diploma:

- Biology, Biomedical Sciences, Medical Sciences

Required Research Experience:

- Statistical expertise and data management is recommended

Eligibility: If you are interested in this ESR project, you are required to:

☐ be working exclusively for the action; AND

☐ not have resided AND not have carried out your main activity (work, studies) in Belgium for more than 12 months in the 3 years immediately before the recruitment date; AND

☐ be — at the date of recruitment — in the first four years of your research career and not have a doctoral degree. Considered is: time spent as FTE research experience, measured from the date when you obtained the degree entitling you to embark on a doctorate even if a doctorate was never started or envisaged.

Complete applications with all required documents are to be submitted by email to tim.nawrot@uhasselt.be and martien.peusens@uhasselt.be, **before May 10, 2021 (DEADLINE POSTPONED).**
This project is part of the SURREAL H2020-ITN PhD training network of in total 15 Individual ESR Research projects.
You may apply for up to 4 projects within the network, adding a document to your application file in which you indicate their order of priority.

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9. ESR 9

Host institution: Institut National de la Santé et de la Recherche Médicale – INSERM - Pierre Louis Institute of Epidemiology and Public Health, Nemesis team (UMR-S 1136) (France)

Research field (EURAXESS): Medical sciences

Researcher Profile: First Stage Researcher (R1)

Hours per week contract: 38,5 Hours per week

Contact: Dr. Basile Chaix - basile.chaix@iplesp.upmc.fr

Project Title:

Sensor-based innovations for assessing momentary neighbourhood, environmental, and mobility exposures

Project Description:

The specific objectives of the PhD are the following:

1) Identify and develop methodologies based on sensors (including GPS receivers, personal noise sensors, etc.) and smartphones for evaluating objective and perceived neighbourhood, environmental, and mobility exposures in deprived and non-deprived neighbourhoods;
2) Calculate improved variables of momentary exposures all over the observation period permitting to assess how environmental exposures vary across space and time and between participants;
3) Identify which environmental factors or situational factors are associated with short-term changes in blood pressure in French and Israeli samples, and whether these associations are mediated by selected mental health variables.

Enrolment in Doctoral degree(s): at the diploma issuing university, Sorbonne Université (Pierre Louis Public Health Doctoral school, #393)

Required Diploma:

- Master in Public health or Epidemiology or in other social sciences (including Geography).

Required Research Experience

- Knowledge in epidemiology or geographic information sciences
- Statistical analysis of data, manipulation of statistical analysis softwares
- Programming languages
- Data management skills
- Advanced skills for writing scientific articles in English
- Skills in French language would be helpful but are not strictly mandatory

Eligibility: If you are interested in this ESR project, you are required to:

☐ be working exclusively for the action; AND

☐ not have resided AND not have carried out your main activity (work, studies) in France for more than 12 months in the 3 years immediately before the recruitment date; AND

☐ be — at the date of recruitment — in the first four years of your research career and not have a doctoral degree. Considered is: time spent as FTE research experience, measured from the date when you obtained the degree entitling you to embark on a doctorate even if a doctorate was never started or envisaged.

Complete applications with all required documents are to be submitted by email to basile.chaix@iplesp.upmc.fr, with the subject heading "PhD ITN project (SURREAL)", before May 10, 2021 (DEADLINE POSTPONED).
This project is part of the SURREAL H2020-ITN PhD training network of in total 15 Individual ESR Research projects.
You may apply for up to 4 projects within the network, adding a document to your application file in which you indicate their order of priority.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 956780

10. ESR 10

Host institution: Tel Aviv University - TAU (Israel)

Research field (EURAXESS): Geoscience / Geography / medical sciences / computer sciences

Researcher Profile: First Stage Researcher (R1)

Hours per week contract: 40 Hours per week

Contact: Dr. Amit Birenboim - abirenboim@tauex.tau.ac.il

Project Title:

Sensor-based innovations for assessing momentary and daily health outcomes relevant to mental and cardiovascular health

Project Description:

The project aims at Identifying, developing and testing sensor-based technologies that will allow a dynamic investigation of individuals' environmental exposure, activity and mobility intensity, and health outcomes. As part of the project the PhD will develop smartphone- and sensor-based tools that can be used to monitor daily behaviours and will lead a field work that utilizes these technologies. The project will be performed in collaboration with INSERM, France (ESR 9).

Enrolment in Doctoral degree(s): at the host institution, TAU

Required Diploma:

- Master in Geography or Public health or Epidemiology or Computer Sciences or other relevant social sciences discipline.

Required Research Experience:

- Knowledge in geographic information sciences or epidemiology.
- Knowledge in quantitative research methods and statistics.
- Some programming skills
- Data management skills
- Advanced skills for writing scientific articles in English
- Skills in Hebrew language would be helpful but are not strictly mandatory

Eligibility: If you are interested in this ESR project, you are required to:

☐ be working exclusively for the action; AND

☐ not have resided AND not have carried out your main activity (work, studies) in Israel for more than 12 months in the 3 years immediately before the recruitment date; AND

☐ be — at the date of recruitment — in the first four years of your research career and not have a doctoral degree. Considered is: time spent as FTE research experience, measured from the date when you obtained the degree entitling you to embark on a doctorate even if a doctorate was never started or envisaged.

Complete applications with all required documents are to be submitted by email to abirenboim@tauex.tau.ac.il, with the subject heading "PhD ITN project (SURREAL)", before April 23, 2021.
This project is part of the SURREAL H2020-ITN PhD training network of in total 15 Individual ESR Research projects.
You may apply for up to 4 projects within the network, adding a document to your application file in which you indicate their order of priority.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 956780

11. ESR 11

Host institution: Luxembourg Institute of Socio-Economic Research - LISER (Luxembourg)
Research field (EURAXESS): geography, geosciences, psychological sciences, medical sciences
Researcher Profile: First Stage Researcher (R1)
Hours per week contract: 40 Hours per week
Contact: Prof. Dr. Martin Dijst - martin.dijst@liser.lu
Project Title: Virtual and Augmented Reality in urban health research and planning
Project Description: In this project, we will focus on the use of virtual or augmented reality applications to study environmental attributes that could encourage citizens to walk more often in urban areas and which could reduce stress levels. To that purpose, stress will be measured in experimental studies prior, during and after exposure to real and identical virtual/augmented walking environments. Accelerometers will be used to measure intensity of being physical active(PA). Based on a stated-preference method, virtual/augmented simulations and measurements of PA and stress, the most promising attributes of walking environments for policy interventions will be identified.
Enrolment in Doctoral degree(s): at the diploma issuing university, Université du Luxembourg (uni.lu)
Required Diploma: • Master in geography or other relevant social sciences discipline, or in public health or in epidemiology **Required Research Experience:** • Knowledge in geography, social science, public health or epidemiology. • Knowledge in experimental quantitative research methods and statistics. • Experience with virtual and/or augmented reality methods would be useful but is not mandatory • Data management skills • Advanced skills for writing scientific articles in English • Skills in French and/or German language would be helpful but are not strictly mandatory
Eligibility: If you are interested in this ESR project, you are required to: ☐ be working exclusively for the action; AND ☐ not have resided AND not have carried out your main activity (work, studies) in Luxembourg for more than 12 months in the 3 years immediately before the recruitment date; AND ☐ be — at the date of recruitment — in the first four years of your research career and not have a doctoral degree. Considered is: time spent as FTE research experience, measured from the date when you obtained the degree entitling you to embark on a doctorate even if a doctorate was never started or envisaged.
Complete applications with all required documents are to be submitted to https://jobs.liser.lu/jobs, before May 10 (DEADLINE POSTPONED). **This project is part of the SURREAL H2020-ITN PhD training network of in total 15 Individual ESR Research projects.** **You may apply for up to 4 projects within the network, adding a document to your application file in which you indicate their order of priority.**

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 956780

12. ESR 12

Host institution: Erasmus Universitair Medisch Centrum Rotterdam - ERASMUS MC (The Netherlands)

Research field (EURAXESS): Geography, Sociology, Medical Sciences, Political Sciences

Researcher Profile: First Stage Researcher (R1)

Hours per week contract: 36 Hours per week

Contact: Dr. Mariëlle Beenackers - m.beenackers@erasmusmc.nl

Project Title:

The impact of urban policies for social inequalities in physical and mental health

Project Description:

Interventions in the broader urban health system have the potential to widen or decrease health inequalities. The objective of the project is therefore to gain in-depth understanding on how 'urban natural policy experiments' impact inequalities in health behaviors and stress. The applicant will identify these experiments across European cities and evaluate them using advanced quasi-experimental methods and existing data. The applicant will also assess the transferability of the empirical findings in specific European cities to other cities in Europe. In this project, theories and methods from public health, geography, urban planning, and econometrics strengthen each other.

Enrolment in Doctoral degree(s): at the host institution, ERASMUS MC

Required Diploma

- Master degree is health sciences, sociology, epidemiology, geography or other related field relevant to the described project

Required Research Experience:

- Understanding of quasi-experimental research methods.
- Knowledge and expertise in quantitative analyses of large datasets, preferably using R.
- Knowledge of theories and methods in geography, sociology, or public health on urbanization and/or socioeconomic inequalities.

Eligibility: If you are interested in this ESR project, you are required to:

☐ be working exclusively for the action; AND

☐ not have resided AND not have carried out your main activity (work, studies) in the Netherlands for more than 12 months in the 3 years immediately before the recruitment date; AND

☐ be — at the date of recruitment — in the first four years of your research career and not have a doctoral degree. Considered is: time spent as FTE research experience, measured from the date when you obtained the degree entitling you to embark on a doctorate even if a doctorate was never started or envisaged.

Complete applications with all required documents are to be submitted to www.werkenbijerasmusmc.nl, before April 19, 2021.
This project is part of the SURREAL H2020-ITN PhD training network of in total 15 Individual ESR Research projects.
You may apply for up to 4 projects within the network, adding a document to your application file in which you indicate their order of priority.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 956780

13. ESR 13

Host institution: Fundacion Privada Instituto de Salud Global Barcelona – ISGLOBAL (Spain)
Research field (EURAXESS): medical sciences, environmental science
Researcher Profile: First Stage Researcher (R1)
Hours per week contract: 40 Hours per week
Contact: Prof. Dr. Mark Nieuwenhuijsen - mark.nieuwenhuijsen@isglobal.org
Project Title: Health impact assessment of urban and transport developments in Barcelona, Paris and Utrecht
Project Description: The project will conduct Health impact assessment of urban and transport developments in Barcelona, Paris and Utrecht. The tasks are: 1) To estimate the health impacts of new urban and transport planning developments in Barcelona, Paris and Utrecht; 2) To provide cost benefit analyses; 3) To conduct knowledge translation. The work will extend the UTOPHIA tool (**U**rban and **T**ransp**O**rt **P**lanning **H**ealth **I**mpact **A**ssessment tool). The work will provide 1) the (inequality in) number of premature deaths, morbidity, disability adjusted life years (DALYs) and life expectancy of new urban developments in Barcelona, Paris and Utrecht; 2) Cost benefit analyses for different policy scenarios based on the best available data; 3) Stakeholder consultation and knowledge translation material including health impact assessment tools, stakeholder consultation material and case study results.
Enrolment in Doctoral degree(s): at the diploma issuing university, Universitat Pompeu Fabra – UPF (Spain)
Required Diploma: • You have obtained or you are about to obtain a degree in public health or equivalent **Required Research Experience:** • Experience in health impact assessment
Eligibility: If you are interested in this ESR project, you are required to: ☐ be working exclusively for the action; AND ☐ not have resided AND not have carried out your main activity (work, studies) in Spain for more than 12 months in the 3 years immediately before the recruitment date; AND ☐ be — at the date of recruitment — in the first four years of your research career and not have a doctoral degree. Considered is: time spent as FTE research experience, measured from the date when you obtained the degree entitling you to embark on a doctorate even if a doctorate was never started or envisaged.
Complete applications with all required documents are to be submitted by email to job@isglobal.org, with the subject heading "PhD ITN project (SURREAL)", before March 16, 2021. **This project is part of the SURREAL H2020-ITN PhD training network of in total 15 Individual ESR Research projects.** **You may apply for up to 4 projects within the network, adding a document to your application file in which you indicate their order of priority.**

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 956780

14. ESR 14

Host institution: Wageningen University – WU (the Netherlands)

Research field (EURAXESS): Psychological Science, Medical Sciences, Communication Sciences

Researcher Profile: First Stage Researcher (R1)

Hours per week contract: 38 Hours per week

Contact: Dr. Monique Simons – monique.simons@wur.nl

Project Title:

Co-creating community-based healthy lifestyle interventions in a low socioeconomic neighbourhood

Project Description:

In this project healthy lifestyle (e.g. physical activity, sedentary behavior) interventions will be co-designed with adolescents from a low socioeconomic (SES) neighborhood. Participatory methods and novel technologies will be applied to collect data from adolescents about their social (organizational) networks (e.g. their significant others), and health related behaviors and exposures to urban environments. Main tasks of the ESR involve:

- Communication with stakeholders (e.g. adolescents, schools, neighborhood workers)
- Setting up and conducting participatory action research (e.g. focus groups, observations, co-creating and co-evaluating interventions)
- Analyze qualitative and quantitative research data
- Report and communicate results through e.g. scientific papers and presentations

Enrolment in Doctoral degree(s): at the host institution, WU

Required Diploma:

- master's degree (preferably a research master) in Health Promotion, (Health) Psychology, (Health) Communication, Design, Anthropology or a related discipline

Required Research Experience:

- Experience or interest in youth and lifestyle
- Experience or affinity with co-design, intervention development and evaluation
- Experience or affinity with participatory research methods and novel technologies
- Be willing to learn and think across disciplines
- Be able to communicate with fellow researchers, adolescents, other stakeholders, and societal partners
- Excellent organizational and social skills
- Be collaborative and a real team player
- Good written and oral communication skills in Dutch and English are crucial for the successful development of this study.

Eligibility: If you are interested in this ESR project, you are required to:

☐ be working exclusively for the action; AND

☐ not have resided AND not have carried out your main activity (work, studies) in the Netherlands for more than 12 months in the 3 years immediately before the recruitment date; AND

☐ be — at the date of recruitment — in the first four years of your research career and not have a doctoral degree. Considered is: time spent as FTE research experience, measured from the date when you obtained the degree entitling you to embark on a doctorate even if a doctorate was never started or envisaged.

Complete applications with all required documents are to be submitted via https://www.wur.nl/nl/Werken-bij/vacatures.htm before May 12, 2021 (DEADLINE POSTPONED).
This project is part of the SURREAL H2020-ITN PhD training network of in total 15 Individual ESR Research projects.
You may apply for up to 4 projects within the network, adding a document to your application file in which you indicate their order of priority.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 956780

15. ESR 15

Host institution: Université du Luxembourg - uni.lu (Luxembourg)
Research field (EURAXESS): Geography
Researcher Profile: First Stage Researcher (R1)
Hours per week contract: 40 Hours per week
Contact: Dr. Catherine Jones - catherine.jones@uni.lu
Project Title: Evaluating the role of citizens in gamified experiences for health
Project Description: To understand if and how gamified location experiences can support interventions in the urban-health system, this project will explore the different roles of citizens in gamified experiences and appraise their impact for supporting health by encouraging citizens to explore viewpoints and reflections on the social determinants of health. You will used a case study approach to evaluate different levels of engagement and forms of experience to acquire understanding and insights of how future gamified citizen science projects can best contribute to public health knowledge and policy dialogues. The work will support the (1) creation of a best practice evaluation framework and analysis of the involvement of citizens in gamified experiences to explore social determinants of health and (2) An improved understanding and knowledge of the value of location-based games in citizen science processes for the creation of public health knowledge.
Enrolment in Doctoral degree(s): at the host institution, uni.lu
Required Diploma: • degree in geography, sociology, or other urban related degree; • Potentially students with a degree in human computer interaction and cognition will also be considered if they can demonstrate understanding of social sciences. **Required Research Experience:** • Excellent knowledge of theories in geography, citizen science, public health or urbanization and/or socioeconomic inequalities. • Interest in the impact of urbanization on health from the perspective of citizens • Interest in the use of location-based games as tools for reflection • Knowledge of mixed method approaches in geography.
Eligibility: If you are interested in this ESR project, you are required to: ☐ be working exclusively for the action; AND ☐ not have resided AND not have carried out your main activity (work, studies) in Luxembourg for more than 12 months in the 3 years immediately before the recruitment date; AND ☐ be — at the date of recruitment — in the first four years of your research career and not have a doctoral degree. Considered is: time spent as FTE research experience, measured from the date when you obtained the degree entitling you to embark on a doctorate even if a doctorate was never started or envisaged.
Complete applications with all required documents are to be submitted through https://recruitment.uni.lu/en/, before April 19, 2021. **This project is part of the SURREAL H2020-ITN PhD training network of in total 15 Individual ESR Research projects.** **You may apply for up to 4 projects within the network, adding a document to your application file in which you indicate their order of priority.**