

# Academic and Training Offer

## UNIVERSITY OF ANTWERP



DOCTORATE EXCHANGE							
Faculty	<a href="#">Field of study</a>	Name of PhD programme	Additional documents to be uploaded / Admission requirements	Language of instruction	Required language certificates	Website link to all courses/ECTS/learning outcomes <i>(in order to be able to fill in the mobility activity plan)</i>	Remarks
Pharmaceutical, Biomedical and Veterinary Sciences	Biochemistry	PhD exchange programme in 'Proteomic analysis of the intracellular molecular mechanism of Withaferine A, a steroidal antitumor compound from the plant Withania somnifera' - - Promotor: Prof. Dr. Xaveer Van Ostade - Co-promotor: Prof. Dr. Wim Vanden Berghe	Relevant Master degree	English	No language certificate required	<a href="https://www.uantwerp.be/en/rg/ppes/">https://www.uantwerp.be/en/rg/ppes/</a>	It has been shown that the beneficial properties of the plant Withania somnifera are caused by a steroidal compound, Withaferin A (WA). This compound has a broad array of activities including in vitro antitumoral and chemosensitizing capacities. Unfortunately, this broad activity may also induce side-effects during treatment. WA has several reactive groups which cause the molecule to bind with proteins that are part of a wide variety of intracellular pathways, many of which are crucial for cancer to survive. Indeed, experiments in our lab showed that the molecule has a large number of intracellular targets and causes the SUMOylation of many intracellular proteins. Others demonstrated association of WA with intracellular proteins like vimentin, annexin II, NF-κB, hsp90 or LXRα. In addition, it could very well be that WA performs its activity in cancer cells via an epigenetic mechanism since 1. radiosensitizing and counter radioresistance mechanisms of phytochemicals in cancer cells have been shown to be associated with changes in epigenetic gene regulation and 2. experiments performed by us showed that WA is able to induce epigenetic regulation factors and (de)methylation of DNA. We want to extend this knowledge and measure the epigenetic alterations that take place when cells are treated with WA. To this end, epigenetic posttranslational modifications like methylation, acylation, SUMOylation will be measured by the application of proteomics techniques on a large scale and in different cell types and tumors. The lab has developed a 2D-LC-MS/MS proteomics platform for the identification of proteins, including microcapillary- or nano-chromatography and MALDI-TOF/TOF and Orbitrap mass spectrometry. In addition, we are developing a proteomics platform that allows for fast development of WA variants with increased selective activity. Using the SILAC methodology, these platforms will be used to identify WA-specific antitumoral pathways which may contain target proteins for the development of new cancer therapies.
Zebrafishlab – Department of Veterinary Sciences	Biology	PhD exchange programme in 'Development of an acute zebrafish embryo test to predict chronic toxicity of chemicals' - Promotor: prof. dr. Dries Knapen	MA degree in biological sciences	English	No language certificate required but candidate has to be fluent in academic English reading, writing and speaking	<a href="mailto:dries.knapen@uantwerpen.be">dries.knapen@uantwerpen.be</a> , <a href="http://www.zebrafishlab.be">www.zebrafishlab.be</a>	Testing for chronic fish toxicity is one of the most animal demanding areas in environmental risk assessment. The Fish Early Life-Stage (FELS) test (OECD TG 210) is the primary guideline used to estimate chronic toxicity of regulated chemicals to fish. Industry and regulatory bodies have expressed the need for developing alternative testing strategies focusing on non-animal alternatives and mechanistic information. However, the development of alternative testing approaches requires a detailed understanding of the mechanisms leading to chronic toxicity. In 2013 we started a project funded by the CEFIC Long-range Research Initiative (LRI-ECO20-UA) to develop an alternative testing strategy to reduce the need for FELS tests. The research approach is based on the adverse outcome pathway (AOP) concept representing the sequence of key events at multiple levels of biological organization leading to toxicity. The zebrafish embryo is not considered a laboratory animal up to the age of 5 days post fertilisation according to EU regulation. Using a 5 day ZFET (ZebraFish Embryo Toxicity) test, toxicity will be studied along these AOPs to allow for prediction of chronic toxicity. We are using two putative AOPs as case studies: thyroperoxidase inhibition leading to impaired swim bladder inflation, and narcosis leading to respiratory failure. We will use a combination of modified ZebraFish Embryo Toxicity (ZFET) tests to study (molecular initiating) events at lower levels of biological organization along the selected AOPs and investigate the predictivity of these events for FELS toxicity. These events may include amongst others: hatching rate, morphological malformations of tail, eyes, ear, head, etc., larval length as an indication of growth, larval swimming behaviour, transcriptional expression patterns, hormone levels and histological analyses.

Department of Economics	Economics	PhD exchange programme in 'Preschool Attendance and School Performance: A Cross-Country Comparison' - Promotor: Sunčica Vujčić	MSc in Economics or equivalent, with a strong affinity for empirical labour economics research, and associated quantitative research methods. Experience with statistical/econometric software is required.	English	No language certificate required but candidate has to be fluent in academic English reading, writing and speaking	<a href="mailto:suncica.vujic@uantwerpen.be">suncica.vujic@uantwerpen.be</a>	<p>The aim of this project is to analyse the relationship between preschool attendance and later school performance, taking into account school characteristics and socio-economic background of households. The analysis is based on the Programme for International Student Assessment (PISA) data in 2009, across four countries in the "broadly defined" Western Balkan region: Serbia, Montenegro, Croatia, and Slovenia. The effect of preschool education on student achievement is measured through 15-year-old school pupils' scholastic performance in reading, mathematics and scientific literacy evaluated through PISA. The research methodology is based on the multivariate regression analysis, taking into account potential endogeneities between preschool attendance and school performance using instrumental variables (IV) and/or other relevant econometric techniques.</p> <p>This is the first education economics research project focussing on the cross-country analysis between Serbia, Montenegro, Croatia, and Slovenia. Further, there have been several educational reforms in these countries in recent times directed at increasing inclusion of children, the quality of preschools, and their program standards. Therefore, it would be desirable to see whether these reforms not only affected preschool education, but also indirectly affected later scholastic performance of the affected cohorts. The long-term benefits to both the state and the individuals from early childhood education are backed up by solid economics reasoning, as evidenced in the research of Heckman (2007). Firstly, children perform better in primary and secondary education. In the short run this saves costs by reducing school drop-out and grade retention. In the long run this improves educational attainment and achievement, as evidenced by research in the European countries. For example, the effect of preschool education on student achievement, measured through 15-year old school pupils' scholastic performance in reading, is 25 points higher for pupils who attended preschool for more than one year in comparison to those who have not attended preschool. Secondly, improvements in the human capital accumulation affect efficiency of the labour force, prove future earnings, and accelerate economic growth of the economy (Hanushek and Kimko, 2000).</p> <p>Heckman, J. (2007). Skill Formation and the Economics of Investing in Disadvantaged Children. <i>Science</i>, 312(5782), 1900–1902.</p> <p>Hanushek, E. A., and Kimko, D. D. (2000). Schooling, Labor-Force Quality, and the Growth of Nations." <i>American Economic Review</i>, 90, 1184–1208.</p>
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<p>SPHERE (Systemic Physiological and Ecotoxicological Research), Department of Biology</p>	<p>Environmental Sciences, Ecology</p>	<p>PhD exchange programme in 'Environmental changes impact aquatic organisms at multiple levels of organization: a multidisciplinary approach'</p>	<p>Master in Science or PhD in Science or equivalent (e.g. Bioengineer, Toxicology, Biochemistry etc) depending on the requested position</p>	<p>English</p>	<p>No language certificate required but candidate has to be fluent in academic English reading, writing and speaking</p>	<p>www.sphere.be  lieven.bervoets@uantwerpen.be  ronny.blust@uantwerpen.be  gudrun.deboeck@uantwerpen.be  steven.husson@uantwerpen.be</p>	<p>The group Systemic Physiological and Ecotoxicological Research of the University of Antwerp, Belgium, performs fundamental and applied research concerning key issues in environmental and adaptational biology. SPHERE focuses on how organisms respond to environmental changes, and does so at multiple levels of organization: from the molecular level (including genomics, proteomics and metabolomics), over the organismal level (bioaccumulation, biomarkers, metabolism, osmoregulation) to responses of populations in real field situations (bioaccumulation, biomarkers, species abundance). This creates the unique opportunity to integrate these different levels of organization in our studies, and mechanistically understand the changes observed in ecosystems.</p> <p>Besides anthropogenic impacts (pollution, global change,...), natural and man-made extreme situations can provide opportunities to study long term adaptations in aquatic organisms and provide information on the flexibility and plasticity that aquatic organisms show to acclimate/adapt to these environments (and how this affects their capacity to withstand further disturbance). E.g. extremely soft, acidic waters in the Amazon basin, African soda lakes, eutrophied and/or hypoxic water bodies, historical pollution gradients in mining area etc. all contribute to our understanding of how aquatic organisms respond to environmental change.</p> <p>At present, we successfully relate observations at the molecular level to the changes seen at organismal levels. The ultimate goal is to relate these to field observations, i.e. very complex multi-stress situations, where multiple parameters vary between sites and over time. Our final goal is to, through a better understanding of underlying mechanisms, better protect environmental health and to do so in a societal sustainable manner.</p> <p>Any subject that relates to aquatic toxicology and/or ecophysiology would be considered for collaboration.</p>
<p>Ecosystem Management research group, Department of Biology</p>	<p>Environmental Sciences, Ecology</p>	<p>PhD exchange programme in 'Response of coastal and deltaic wetlands to global change' - Promotor: Prof. Dr. Stijn Temmerman</p>	<p>Master's degree in one of the following disciplines: Geography; Geology; Environmental Sciences; Environmental Engineering.</p>	<p>English</p>	<p>No language certificate required but candidate has to be fluent in academic English reading, writing and speaking</p>	<p>Stijn.temmerman@uantwerpen.be  http://www.ua.ac.be/main.aspx?c=stijn.temmerman  https://www.uantwerpen.be/nl/</p>	<p>Tidal wetlands, such as salt marshes and mangroves, are valuable ecosystems that occur along sheltered coasts, estuaries and deltas. Their existence is globally under pressure by global changes, such as sea level rise, increasing storm intensity, and increasing human disturbances such as dam building that reduces the sediment supply to tidal wetlands. As a result, these wetland ecosystems may be increasingly flooded by sea level rise, which causes stress to the wetlands vegetation and may lead to permanent loss of tidal wetland ecosystems.</p> <p>In this project we want to study the adaptability of tidal marshes to global changes, by interactions between the marsh vegetation, flow hydrodynamics, and sediment deposition. The marsh vegetation is able to reduce hydrodynamic forces (tidal currents and waves) and to promote the deposition of sediments. In some places in the world this sediment accretion is enough so that tidal marshes can grow up with the rising sea level and hence can survive. However, in other places sediment accretion may be too limited to follow the rising sea level, so that tidal marshes finally disappear.</p> <p>In this project we want to identify the critical thresholds that determine the survival or disappearance of tidal marshes in response to global changes, including sea level rise, increasing storm activity, and changing sediment supply. These thresholds involve both biotic variables (like vegetation characteristics) and geophysical variables (like hydrodynamics by tides and waves, and transport of sediments).</p> <p>This project will result in recommendations on protection of tidal marshes against global change.</p>

Ecosystem Management research group, Department of Biology	Geography	PhD exchange programme in 'Response of coastal and deltaic wetlands to global change' - Promotor: Prof. Dr. Stijn Temmerman	Master's degree in one of the following disciplines: Geography; Geology; Environmental Sciences; Environmental Engineering.	English	No language certificate required but candidate has to be fluent in academic English reading, writing and speaking	Stijn.temmerman@uantwerpen.be <a href="http://www.ua.ac.be/main.aspx?c=stijn.temmerman">http://www.ua.ac.be/main.aspx?c=stijn.temmerman</a> <a href="https://www.uantwerpen.be/nl/">https://www.uantwerpen.be/nl/</a>	<p>Tidal wetlands, such as salt marshes and mangroves, are valuable ecosystems that occur along sheltered coasts, estuaries and deltas. Their existence is globally under pressure by global changes, such as sea level rise, increasing storm intensity, and increasing human disturbances such as dam building that reduces the sediment supply to tidal wetlands. As a result, these wetland ecosystems may be increasingly flooded by sea level rise, which causes stress to the wetlands vegetation and may lead to permanent loss of tidal wetland ecosystems.</p> <p>In this project we want to study the adaptability of tidal marshes to global changes, by interactions between the marsh vegetation, flow hydrodynamics, and sediment deposition. The marsh vegetation is able to reduce hydrodynamic forces (tidal currents and waves) and to promote the deposition of sediments. In some places in the world this sediment accretion is enough so that tidal marshes can grow up with the rising sea level and hence can survive. However, in other places sediment accretion may be too limited to follow the rising sea level, so that tidal marshes finally disappear.</p> <p>In this project we want to identify the critical thresholds that determine the survival or disappearance of tidal marshes in response to global changes, including sea level rise, increasing storm activity, and changing sediment supply. These thresholds involve both biotic variables (like vegetation characteristics) and geophysical variables (like hydrodynamics by tides and waves, and transport of sediments).</p> <p>This project will result in recommendations on protection of tidal marshes against global change.</p>
Ecosystem Management research group, Department of Biology	Geology	PhD exchange programme in 'Response of coastal and deltaic wetlands to global change' - Promotor: Prof. Dr. Stijn Temmerman	Master's degree in one of the following disciplines: Geography; Geology; Environmental Sciences; Environmental Engineering.	English	No language certificate required but candidate has to be fluent in academic English reading, writing and speaking	Stijn.temmerman@uantwerpen.be <a href="http://www.ua.ac.be/main.aspx?c=stijn.temmerman">http://www.ua.ac.be/main.aspx?c=stijn.temmerman</a> <a href="https://www.uantwerpen.be/nl/">https://www.uantwerpen.be/nl/</a>	<p>Tidal wetlands, such as salt marshes and mangroves, are valuable ecosystems that occur along sheltered coasts, estuaries and deltas. Their existence is globally under pressure by global changes, such as sea level rise, increasing storm intensity, and increasing human disturbances such as dam building that reduces the sediment supply to tidal wetlands. As a result, these wetland ecosystems may be increasingly flooded by sea level rise, which causes stress to the wetlands vegetation and may lead to permanent loss of tidal wetland ecosystems.</p> <p>In this project we want to study the adaptability of tidal marshes to global changes, by interactions between the marsh vegetation, flow hydrodynamics, and sediment deposition. The marsh vegetation is able to reduce hydrodynamic forces (tidal currents and waves) and to promote the deposition of sediments. In some places in the world this sediment accretion is enough so that tidal marshes can grow up with the rising sea level and hence can survive. However, in other places sediment accretion may be too limited to follow the rising sea level, so that tidal marshes finally disappear.</p> <p>In this project we want to identify the critical thresholds that determine the survival or disappearance of tidal marshes in response to global changes, including sea level rise, increasing storm activity, and changing sediment supply. These thresholds involve both biotic variables (like vegetation characteristics) and geophysical variables (like hydrodynamics by tides and waves, and transport of sediments).</p> <p>This project will result in recommendations on protection of tidal marshes against global change.</p>

<p>Political and Social Sciences - Media, Policy &amp; Culture Research Group, Department of Communication Studies, University of Antwerp</p>	<p>Journalism</p>	<p>PhD exchange programme in 'Science Communication in a global context: mediated risks' - Promotor: Prof. Dr. Pieter Maesele</p>	<p>Relevant Master degree + a critical attitude</p>	<p>English</p>	<p>No language certificate required</p>	<p><a href="https://www.uantwerp.be/en/staff/pieter-maesele">https://www.uantwerp.be/en/staff/pieter-maesele</a></p>	<p>Climate change, GM food, shale gas, nuclear energy, fine dust, nanotech, cloning, etc., are all 'products' of scientific and technological progress. Nonetheless, these examples also demonstrate that scientific and technological progress brings along its (known and unknown) risks. Furthermore, these are of an exceptional kind: global and imperceptible to the senses.</p> <p>This renders us dependent on the mediation of external knowledge, elevating the significance and power of (i) science and (ii) mass media.</p> <p>In this context, both science and mass media are theoretically privileged as key sites with respect to three interrelated roles: science, as scientific (and technological) progress not only a) creates these risks, but also serves as b) a medium for their definition as well as c) a source of possible solutions.</p> <p>Mass media, as in providing the 'master forum' in society, acquire a decisive role with respect to not only a) the social construction and revelation of these risks, but also their b) social contestation and c) social criticism.</p> <p>This project aims to examine how media across the world cover science-led debates: (i) how much attention does controversial science receive in television and national/local newspaper reports? Which sources appear in these stories (scientists, policy-makers, industry, social movements/NGOs, citizens, etc.)? And how are these debates framed in terms of democratic debate and citizenship?</p>
<p>ACIM – Antwerp Centre for Institutions and Multilevel Governance</p>	<p>Political Science</p>	<p>PhD exchange programme in 'Comparative regionalism: issues of regional integration focus on decision-making, interest groups or democratic legitimacy' - Promotor: Prof. Peter Bursens</p>	<p>Relevant Master degree + profound knowledge of comparative politics theories and methods</p>	<p>English</p>	<p>No language certificate required but candidate has to be fluent in academic English reading, writing and speaking</p>	<p><a href="mailto:peter.bursens@uantwerpen.be">peter.bursens@uantwerpen.be</a> / <a href="http://www.ua.ac.be/acim">www.ua.ac.be/acim</a></p>	<p>The European Union is by far the most developed regional integration project. However, states in other continents have increasingly engaged in regional integration as well, triggering a growing academic interest in comparing regional integration projects.</p> <p>The research group ACIM focuses on several aspects of multilevel political settings, with a focus on the EU: the politics of multi-level government, the politics of interest representation, and regulatory and judicial politics. See <a href="http://www.ua.ac.be/acim">www.ua.ac.be/acim</a> for details of the research agenda and ongoing projects. We welcome applications on PhD or post-doc level within these research lines. Scholars from other regions and continents may embed relevant questions resorting under any of the the above mentioned research lines in a regional comparative perspective.</p>
<p>Ecosystem Management research group, Department of Biology</p>	<p>Soil and Water Sciences</p>	<p>PhD exchange programme in 'Response of coastal and deltaic wetlands to global change' - Promotor: Prof. Dr. Stijn Temmerman</p>	<p>Master's degree in one of the following disciplines: Geography; Geology; Environmental Sciences; Environmental Engineering.</p>	<p>English</p>	<p>No language certificate required but candidate has to be fluent in academic English reading, writing and speaking</p>	<p><a href="mailto:Stijn.temmerman@uantwerpen.be">Stijn.temmerman@uantwerpen.be</a> <a href="http://www.ua.ac.be/main.aspx?c=stijn.temmerman">http://www.ua.ac.be/main.aspx?c=stijn.temmerman</a> <a href="https://www.uantwerpen.be/nl/">https://www.uantwerpen.be/nl/</a></p>	<p>Tidal wetlands, such as salt marshes and mangroves, are valuable ecosystems that occur along sheltered coasts, estuaries and deltas. Their existence is globally under pressure by global changes, such as sea level rise, increasing storm intensity, and increasing human disturbances such as dam building that reduces the sediment supply to tidal wetlands. As a result, these wetland ecosystems may be increasingly flooded by sea level rise, which causes stress to the wetlands vegetation and may lead to permanent loss of tidal wetland ecosystems.</p> <p>In this project we want to study the adaptability of tidal marshes to global changes, by interactions between the marsh vegetation, flow hydrodynamics, and sediment deposition. The marsh vegetation is able to reduce hydrodynamic forces (tidal currents and waves) and to promote the deposition of sediments. In some places in the world this sediment accretion is enough so that tidal marshes can grow up with the rising sea level and hence can survive. However, in other places sediment accretion may be too limited to follow the rising sea level, so that tidal marshes finally disappear.</p> <p>In this project we want to identify the critical thresholds that determine the survival or disappearance of tidal marshes in response to global changes, including sea level rise, increasing storm activity, and changing sediment supply. These thresholds involve both biotic variables (like vegetation characteristics) and geophysical variables (like hydrodynamics by tides and waves, and transport of sediments).</p> <p>This project will result in recommendations on protection of tidal marshes against global change.</p>

POST-DOCTORATE							
Faculty	<a href="#">Field of work/study</a>	Name of work/teaching/research programme	Additional documents to be uploaded / Admission requirements	Working language	Required language certificates	Website link to all faculties/departments/institutions/aboratories/offices/services	Remarks
Pharmaceutical, Biomedical and Veterinary Sciences	Biochemistry	Postdoctorate programme in 'Proteomic analysis of the intracellular molecular mechanism of Withaferine A, a steroidal antitumor compound from the plant Withania somnifera' - Promotor: Prof. Dr. Xaveer Van Ostade - Co-promotor: Prof. Dr. Wim Vanden Berghe	Relevant degree	English	No language certificate required	<a href="https://www.uantwerp.be/en/rg/ppes/">https://www.uantwerp.be/en/rg/ppes/</a>	It has been shown that the beneficial properties of the plant Withania somnifera are caused by a steroidal compound, Withaferin A (WA). This compound has a broad array of activities including in vitro antitumoral and chemosensitizing capacities. Unfortunately, this broad activity may also induce side-effects during treatment. WA has several reactive groups which cause the molecule to bind with proteins that are part of a wide variety of intracellular pathways, many of which are crucial for cancer to survive. Indeed, experiments in our lab showed that the molecule has a large number of intracellular targets and causes the SUMOylation of many intracellular proteins. Others demonstrated association of WA with intracellular proteins like vimentin, annexin II, NF-kB, hsp90 or LXRalpha. In addition, it could very well be that WA performs its activity in cancer cells via an epigenetic mechanism since 1. radiosensitizing and counter radioresistance mechanisms of phytochemicals in cancer cells have been shown to be associated with changes in epigenetic gene regulation and 2. experiments performed by us showed that WA is able to induce epigenetic regulation factors and (de)methylation of DNA. We want to extend this knowledge and measure the epigenetic alterations that take place when cells are treated with WA. To this end, epigenetic posttranslational modifications like methylation, acylation, SUMOylation will be measured by the application of proteomics techniques on a large scale and in different cell types and tumors. The lab has developed a 2D-LC-MS/MS proteomics platform for the identification of proteins, including microcapillary- or nano-chromatography and MALDI-TOF/TOF and Orbitrap mass spectrometry. In addition, we are developing a proteomics platform that allows for fast development of WA variants with increased selective activity. Using the SILAC methodology, these platforms will be used to identify WA-specific antitumoral pathways which may contain target proteins for the development of new cancer therapies.
Zebrafishlab – Department of Veterinary Sciences	Biology	Postdoctorate programme in 'Development of an acute zebrafish embryo test to predict chronic toxicity of chemicals' - Promotor: prof. dr. Dries Knapen	PhD in biological sciences	English	No language certificate required but candidate has to be fluent in academic English reading, writing and speaking	dries.knapen@uantwerpen.be, www.zebrafishlab.be	Testing for chronic fish toxicity is one of the most animal demanding areas in environmental risk assessment. The Fish Early Life-Stage (FELS) test (OECD TG 210) is the primary guideline used to estimate chronic toxicity of regulated chemicals to fish. Industry and regulatory bodies have expressed the need for developing alternative testing strategies focusing on non-animal alternatives and mechanistic information. However, the development of alternative testing approaches requires a detailed understanding of the mechanisms leading to chronic toxicity. In 2013 we started a project funded by the CEFIC Long-range Research Initiative (LRI-ECO20-UA) to develop an alternative testing strategy to reduce the need for FELS tests. The research approach is based on the adverse outcome pathway (AOP) concept representing the sequence of key events at multiple levels of biological organization leading to toxicity. The zebrafish embryo is not considered a laboratory animal up to the age of 5 days post fertilisation according to EU regulation. Using a 5 day ZFET (ZebraFish Embryo Toxicity) test, toxicity will be studied along these AOPs to allow for prediction of chronic toxicity. We are using two putative AOPs as case studies: thyroperoxidase inhibition leading to impaired swim bladder inflation, and narcosis leading to respiratory failure. We will use a combination of modified ZebraFish Embryo Toxicity (ZFET) tests to study (molecular initiating) events at lower levels of biological organization along the selected AOPs and investigate the predictivity of these events for FELS toxicity. These events may include amongst others: hatching rate, morphological malformations of tail, eyes, ear, head, etc., larval length as an indication of growth, larval swimming behaviour, transcriptional expression patterns, hormone levels and histological analyses.

Department of Economics	Economics	Postdoctorate programme in 'Operation Allied Force: Unintended Health Consequences of NATO Bombing in Serbia' - Promotor: Sunčica Vujić	PhD in Economics with a strong background in empirical labour economics and associated quantitative research methods. Experience with statistical/econometric software is required.	English	No language certificate required but candidate has to be fluent in academic English reading, writing and speaking	<a href="mailto:suncica.vujic@uantwerpen.be">suncica.vujic@uantwerpen.be</a>	<p>From March 24 to June 10, 1999 the North Atlantic Alliance (NATO) initiated air strikes on Yugoslavia (Serbia and Montenegro) under the "Operation Allied Forces". The military intervention consisted of an air campaign targeting not only military facilities, but also strategic targets such as factories, bridges and government buildings. The goal of this research project is to estimate the causal effect of NATO bombing on health outcomes in Serbia.</p> <p>First, during the NATO's attacks depleted uranium bombs have been deployed. Depleted uranium is a weakly radioactive substance which decays at a slow pace. If there is an effect of depleted uranium on health outcomes, because of uranium's long decay, we expect that the effect persist over a long period of time.</p> <p>Second, according to both the United Nations Environment Programme (UNEP) and the Yugoslav Environment Ministry statistics, at least 23 petrochemical plants, oil refineries and fuel depots in Yugoslavia have been bombed, as well as at least another 121 major industrial plants containing various chemicals and substances dangerous to human health. Thousands of tonnes of highly toxic chemicals were uncontrollably released into the air, soil and water. Due to this, we expect a higher incidence of diseases related to the respiratory system in the short run (due to a higher concentration of chemicals in the air) and a higher incidence of cancer rates resulting from the environmental contamination.</p> <p>Third, if hospitals were destroyed during the bombing in some municipalities, this could have a negative effect on the supply of health services in these municipalities.</p> <p>Fourth, the Yugoslav Wars fought in the period 1991-1999 on the territory of former Yugoslavia, coupled with the UN sanctions against Serbia and Montenegro (May 1992 to November 1995), severely destroyed Yugoslavia's infrastructure and caused a large drop in GDP. This fourth, potentially confounding mechanism resulted in a fall of the public health expenditure in the country as a whole and further deterioration of health outcomes of its citizens.</p> <p>The research methodology will involve data collection and multivariate regression analysis, taking into account potential endogeneities, for example, through instrumental variables (IV) and/or other relevant econometric techniques.</p> <p>The findings of this research will have implications for estimation of broader set of costs of bombing and whether the costs are borne by those in a destination country who may not be "targeted" by such a policy instrument.</p>
SPHERE (Systemic Physiological and Ecotoxicological Research), Department of Biology	Environmental Sciences, Ecology	Postdoctorate programme in 'Environmental changes impact aquatic organisms at multiple levels of organization: a multidisciplinary approach'	Degree in Science or equivalent (e.g. Bioengineer, Toxicology, Biochemistry etc) depending on the requested position	English	No language certificate required but candidate has to be fluent in academic English reading, writing and speaking	<a href="http://www.sphere.be">www.sphere.be</a> <a href="mailto:lieven.bervoets@uantwerpen.be">lieven.bervoets@uantwerpen.be</a> <a href="mailto:ronny.blust@uantwerpen.be">ronny.blust@uantwerpen.be</a> <a href="mailto:gudrun.deboeck@uantwerpen.be">gudrun.deboeck@uantwerpen.be</a> <a href="mailto:steven.husson@uantwerpen.be">steven.husson@uantwerpen.be</a>	<p>The group Systemic Physiological and Ecotoxicological Research of the University of Antwerp, Belgium, performs fundamental and applied research concerning key issues in environmental and adaptational biology. SPHERE focuses on how organisms respond to environmental changes, and does so at multiple levels of organization: from the molecular level (including genomics, proteomics and metabolomics), over the organismal level (bioaccumulation, biomarkers, metabolism, osmoregulation) to responses of populations in real field situations (bioaccumulation, biomarkers, species abundance). This creates the unique opportunity to integrate these different levels of organization in our studies, and mechanistically understand the changes observed in ecosystems.</p> <p>Besides anthropogenic impacts (pollution, global change,...), natural and man-made extreme situations can provide opportunities to study long term adaptations in aquatic organisms and provide information on the flexibility and plasticity that aquatic organisms show to acclimate/adapt to these environments (and how this affects their capacity to withstand further disturbance). E.g. extremely soft, acidic waters in the Amazon basin, African soda lakes, eutrophied and/or hypoxic water bodies, historical pollution gradients in mining area etc. all contribute to our understanding of how aquatic organisms respond to environmental change.</p> <p>At present, we successfully relate observations at the molecular level to the changes seen at organismal levels. The ultimate goal is to relate these to field observations, i.e. very complex multi-stress situations, where multiple parameters vary between sites and over time. Our final goal is to, through a better understanding of underlying mechanisms, better protect environmental health and to do so in a societal sustainable manner.</p> <p>Any subject that relates to aquatic toxicology and/or ecophysiology would be considered for collaboration.</p>

Ecosystem Management research group, Department of Biology	Environmental Sciences, Ecology	Postdoctorate programme in 'Response of coastal and deltaic wetlands to global change' - Promotor: Prof. Dr. Stijn Temmerman	PhD degree in one of the following disciplines: Geography; Geology; Environmental Sciences; Environmental Engineering.	English	No language certificate required but candidate has to be fluent in academic English reading, writing and speaking	Stijn.temmerman@uantwerpen.be <a href="http://www.ua.ac.be/main.aspx?c=stijn.temmerman">http://www.ua.ac.be/main.aspx?c=stijn.temmerman</a> <a href="https://www.uantwerpen.be/nl/">https://www.uantwerpen.be/nl/</a>	<p>Tidal wetlands, such as salt marshes and mangroves, are valuable ecosystems that occur along sheltered coasts, estuaries and deltas. Their existence is globally under pressure by global changes, such as sea level rise, increasing storm intensity, and increasing human disturbances such as dam building that reduces the sediment supply to tidal wetlands. As a result, these wetland ecosystems may be increasingly flooded by sea level rise, which causes stress to the wetlands vegetation and may lead to permanent loss of tidal wetland ecosystems.</p> <p>In this project we want to study the adaptability of tidal marshes to global changes, by interactions between the marsh vegetation, flow hydrodynamics, and sediment deposition. The marsh vegetation is able to reduce hydrodynamic forces (tidal currents and waves) and to promote the deposition of sediments. In some places in the world this sediment accretion is enough so that tidal marshes can grow up with the rising sea level and hence can survive. However, in other places sediment accretion may be too limited to follow the rising sea level, so that tidal marshes finally disappear.</p> <p>In this project we want to identify the critical thresholds that determine the survival or disappearance of tidal marshes in response to global changes, including sea level rise, increasing storm activity, and changing sediment supply. These thresholds involve both biotic variables (like vegetation characteristics) and geophysical variables (like hydrodynamics by tides and waves, and transport of sediments).</p> <p>This project will result in recommendations on protection of tidal marshes against global change.</p>
Ecosystem Management research group, Department of Biology	Geography	Postdoctorate programme in 'Response of coastal and deltaic wetlands to global change' - Promotor: Prof. Dr. Stijn Temmerman	PhD degree in one of the following disciplines: Geography; Geology; Environmental Sciences; Environmental Engineering.	English	No language certificate required but candidate has to be fluent in academic English reading, writing and speaking	Stijn.temmerman@uantwerpen.be <a href="http://www.ua.ac.be/main.aspx?c=stijn.temmerman">http://www.ua.ac.be/main.aspx?c=stijn.temmerman</a> <a href="https://www.uantwerpen.be/nl/">https://www.uantwerpen.be/nl/</a>	<p>Tidal wetlands, such as salt marshes and mangroves, are valuable ecosystems that occur along sheltered coasts, estuaries and deltas. Their existence is globally under pressure by global changes, such as sea level rise, increasing storm intensity, and increasing human disturbances such as dam building that reduces the sediment supply to tidal wetlands. As a result, these wetland ecosystems may be increasingly flooded by sea level rise, which causes stress to the wetlands vegetation and may lead to permanent loss of tidal wetland ecosystems.</p> <p>In this project we want to study the adaptability of tidal marshes to global changes, by interactions between the marsh vegetation, flow hydrodynamics, and sediment deposition. The marsh vegetation is able to reduce hydrodynamic forces (tidal currents and waves) and to promote the deposition of sediments. In some places in the world this sediment accretion is enough so that tidal marshes can grow up with the rising sea level and hence can survive. However, in other places sediment accretion may be too limited to follow the rising sea level, so that tidal marshes finally disappear.</p> <p>In this project we want to identify the critical thresholds that determine the survival or disappearance of tidal marshes in response to global changes, including sea level rise, increasing storm activity, and changing sediment supply. These thresholds involve both biotic variables (like vegetation characteristics) and geophysical variables (like hydrodynamics by tides and waves, and transport of sediments).</p> <p>This project will result in recommendations on protection of tidal marshes against global change.</p>

Ecosystem Management research group, Department of Biology	Geology	Postdoctorate programme in 'Response of coastal and deltaic wetlands to global change' - Promotor: Prof. Dr. Stijn Temmerman	PhD degree in one of the following disciplines: Geography; Geology; Environmental Sciences; Environmental Engineering.	English	No language certificate required but candidate has to be fluent in academic English reading, writing and speaking	Stijn.temmerman@uantwerpen.be <a href="http://www.ua.ac.be/main.aspx?c=stijn.temmerman">http://www.ua.ac.be/main.aspx?c=stijn.temmerman</a> <a href="https://www.uantwerpen.be/nl/">https://www.uantwerpen.be/nl/</a>	<p>Tidal wetlands, such as salt marshes and mangroves, are valuable ecosystems that occur along sheltered coasts, estuaries and deltas. Their existence is globally under pressure by global changes, such as sea level rise, increasing storm intensity, and increasing human disturbances such as dam building that reduces the sediment supply to tidal wetlands. As a result, these wetland ecosystems may be increasingly flooded by sea level rise, which causes stress to the wetlands vegetation and may lead to permanent loss of tidal wetland ecosystems.</p> <p>In this project we want to study the adaptability of tidal marshes to global changes, by interactions between the marsh vegetation, flow hydrodynamics, and sediment deposition. The marsh vegetation is able to reduce hydrodynamic forces (tidal currents and waves) and to promote the deposition of sediments. In some places in the world this sediment accretion is enough so that tidal marshes can grow up with the rising sea level and hence can survive. However, in other places sediment accretion may be too limited to follow the rising sea level, so that tidal marshes finally disappear.</p> <p>In this project we want to identify the critical thresholds that determine the survival or disappearance of tidal marshes in response to global changes, including sea level rise, increasing storm activity, and changing sediment supply. These thresholds involve both biotic variables (like vegetation characteristics) and geophysical variables (like hydrodynamics by tides and waves, and transport of sediments).</p> <p>This project will result in recommendations on protection of tidal marshes against global change.</p>
Urban Studies Institute	History	Postdoctorate programme in 'Solidarity before and beyond the Welfare State' - Promotor: Bert De Munck & Stijn Oosterlynck	Relevant degree + Background in History or a related field in urban studies	English	No language certificate required but candidate has to be fluent in academic English reading, writing and speaking	<a href="mailto:bert.demunck@uantwerpen.be">bert.demunck@uantwerpen.be</a>	<p>The aim of this project is to comparatively examine the grounds of solidarity in an urban context in order to contribute to the development of new ways of thinking solidarity in the context of the waning welfare state. On what grounds can solidarity be organized in a post-national environment? How to deal with the field of tension between the city as a nod in networks and the city as a territory? What could be the role of 'proximity', relative to family and religion? These questions will in this project be tackled from an interdisciplinary perspective, including a long term historical approach. Empirically, we concentrate on two periods of transition, namely the long transition to modern national industrial capitalism in the 19th century and the contemporary transition from modern national industrial capitalism to post-modern global knowledge-based capitalism. Conceptually, we combine a historical perspective with a contemporary sociological perspective, which enables to really analyze how solidarity acquires new meanings through new articulations of spatial, political and scientific practices. Three themes in particular will be tackled:</p> <ol style="list-style-type: none"> <li>1. The issue of place. Is proximity sufficient as a ground for solidarity or is there a need for the creation of a shared history first? What about connections and networks (e.g., based on family, religion etc.) which transcend the boundaries of the city?</li> <li>2. The issue of the social versus the political. One important field of tension throughout history is the connection between, on the one hand, solidarity and sociality, and, on the other, political recognition and representation (or political subjectivation and the assertion of equality). New concepts of solidarity need to come to grips with that field of tension.</li> <li>3. The role of social sciences. Historically, social sciences have impacted gravely upon the conception of solidarity and the relationship between the subject, the social and the political. Their current role as well, is in need of rethinking – starting from an adequate historical understanding of how their role has transformed to date.</li> </ol>

<p>Political and Social Sciences - Media, Policy &amp; Culture Research Group, Department of Communication Studies, University of Antwerp</p>	<p>Journalism</p>	<p>Postdoctorate programme in 'Science Communication in a global context: mediated risks' - Promotor: Prof. Dr. Pieter Maeselele</p>	<p>Relevant degree + a critical attitude</p>	<p>English</p>	<p>No language certificate required</p>	<p><a href="https://www.uantwerp.be/en/staff/pieter-maeselele">https://www.uantwerp.be/en/staff/pieter-maeselele</a></p>	<p>Climate change, GM food, shale gas, nuclear energy, fine dust, nanotech, cloning, etc., are all 'products' of scientific and technological progress. Nonetheless, these examples also demonstrate that scientific and technological progress brings along its (known and unknown) risks. Furthermore, these are of an exceptional kind: global and imperceptible to the senses.</p> <p>This renders us dependent on the mediation of external knowledge, elevating the significance and power of (i) science and (ii) mass media.</p> <p>In this context, both science and mass media are theoretically privileged as key sites with respect to three interrelated roles: science, as scientific (and technological) progress not only a) creates these risks, but also serves as b) a medium for their definition as well as c) a source of possible solutions.</p> <p>Mass media, as in providing the 'master forum' in society, acquire a decisive role with respect to not only a) the social construction and revelation of these risks, but also their b) social contestation and c) social criticism.</p> <p>This project aims to examine how media across the world cover science-led debates: (i) how much attention does controversial science receive in television and national/local newspaper reports? Which sources appear in these stories (scientists, policy-makers, industry, social movements/NGOs, citizens, etc.)? And how are these debates framed in terms of democratic debate and citizenship?</p>
<p>ENdEMIC (Environmental Ecology and Applied Microbiology), Dep. Bioscience Engineering</p>	<p>Microbiology, Biotechnology</p>	<p>Postdoctorate programme in 'Microbiome comparison of the nasopharynx of humans living in urban versus rural environments' - Promotor: Prof. Sarah Lebeer</p>	<p>Relevant degree in Microbiology, Biotechnology, Biomedical Sciences, Bio-engineering Sciences, Molecular Biology or related</p>	<p>English</p>	<p>No language certificate required but candidate has to be fluent in academic English reading, writing and speaking</p>	<p><a href="mailto:sarah.lebeer@uantwerpen.be">sarah.lebeer@uantwerpen.be</a>, <a href="http://www.uantwerpen.be/en/rg/ndemic/">www.uantwerpen.be/en/rg/ndemic/</a></p>	<p>The human body is occupied by a vast number of microorganisms, which live in symbiosis with their host and are collectively called microbiota. These microbes mainly inhabit the skin, the oronasopharyngeal cavity, the genital tract and gastrointestinal tract. Various disorders involve a dysbalance of the microbiota of the oronasopharyngeal cavity and upper respiratory tract, such as rhinosinusitis, tonsillitis, asthma and even middle ear infections. Current epidemiological studies suggest a link between air pollution in urban environments and the increased incidence of diseases of the respiratory tract such as asthma. Especially, particulate matter (PM) seems to be highly correlated with the health risks of PM.</p> <p>In this project, we aim to investigate the microbiota of healthy individuals from urban versus rural environments via Illumina MiSeq sequencing of the bacterial communities. In addition, via RNA seq (MiSeq), possible differences in the human transcriptome will be explored. These comparisons should provide answers to the following research questions</p> <ol style="list-style-type: none"> <li>(1) Is the microbiome of the nasopharynx different in individuals living in urban environments with high average concentrations of air pollution and PM, even in the absence of disease symptoms?</li> <li>(2) Is the host transcriptome of the nasopharynx different in individuals living in urban environments with high average concentrations of air pollution and PM, even in the absence of disease symptoms?</li> <li>(3) Can microbiome and human transcriptome analyses result in possible new biomarkers for PM-related diseases?</li> </ol>

<p>Biochemical Engineering Technology (BIT), Faculty of Applied Engineering</p>	<p>Microbiology, Biotechnology</p>	<p>Postdoctorate programme in 'Recovery of alginate-like extracellular polymers from aerobic granular sludge'</p>	<p>Ph.D. in microbiology, biotechnology, biochemical engineering, environmental engineering... or similar</p>	<p>English</p>	<p>No language certificate required but candidate has to be fluent in academic English reading, writing and speaking</p>	<p>Jan.dries2@uantwerpen.be ; <a href="https://www.uantwerpen.be/en/rg/biochemical-engineering-technology/">https://www.uantwerpen.be/en/rg/biochemical-engineering-technology/</a></p>	<p>Wastewater treatment using activated sludge was "invented" 100 years ago, and is still the most widely applied aerobic biological treatment system. The poor settling properties of the bacterial flocs represent a major disadvantage of this treatment technology, resulting in low biomass concentrations and the need for oversized and inefficient reactors and settlers.</p> <p>In the last decade, a revolutionary new biological treatment system was developed, based on the formation of very dense and active aerobic granules with extremely fast settling velocities. The good settling properties allow the use of high biomass concentrations in sequencing batch reactors (SBR) with short settling times, resulting in a 75% lower footprint and 25-35% energy savings.</p> <p>An interesting recently discovered feature of aerobic granular sludge is the significantly higher content of alginate-like extracellular polysaccharides (ALE) in comparison to conventional flocculent activated sludge. Alginates are biopolymers with some very valuable applications, that are currently harvested from brown seaweeds. The influence of a number of factors such as the characteristics of the wastewater, the microbial composition of the granules and the operation of the bioreactor on the ALE yield are largely unknown.</p> <p>The objectives of the current project, which fits into a sustainable vision on the future of wastewater technology as a resource factory, are therefore:</p> <ol style="list-style-type: none"> <li>(1) Elucidation of the impact of the type of wastewater (e.g. nutrient content) and the reactor operation (e.g. feeding regime) on the alginate yield</li> <li>(2) Elucidation of the role of specific groups of micro-organisms, such as nitrifying, denitrifying and phosphate-accumulating bacteria in the formation of alginates by granular sludge</li> </ol>
<p>Arts - Department of Literary Studies, Section of German Literature</p>	<p>Others - Languages and Philological Sciences (German Literature)</p>	<p>Postdoctorate programme in 'Writing Totalitarian Experience: Reflections on National Socialist Language and World View in the Literary Writings of the Rote Kapelle' - Promotor: Prof. dr. Arvi Sepp</p>	<p>Relevant PhD degree</p>	<p>English</p>	<p>No language certificate required</p>	<p><a href="https://www.uantwerpen.be/nl/personeel/arvi-sepp/">https://www.uantwerpen.be/nl/personeel/arvi-sepp/</a></p>	<p>Literature has always posed a problem to totalitarian regimes. The inherent polysemic character of literature is difficult to align with the manichean world view of National Socialism or Stalinism. The purpose of the proposed research project is to investigate the narrative devices and argumentative structures used to deconstruct National Socialist Language and the discursive fields of völkisch ideology in a selected corpus of literary texts by German authors belonging to the anti-Nazi resistance group Rote Kapelle. The texts and authors that should be analyzed are: PLN. Die Passionen der halykonischen Seele (Werner Krauss), Der Deutsche von Bayencourt (Adam Kuckhoff) and Memorial (Günther Weisenborn). This corpus can, however, still be altered in the course of the research project. The first area of the research focuses on the narrative devices and argumentative structures used by the above authors to criticize and lay bare the cold political pragmatism of Nazi ideology and policy and offer alternatives and means to subvert dictatorship. In this context, the language-critical impetus of these authors should be closely scrutinized. The researcher should analyze the philosophical, religious, and political modes used in the texts to reflect upon the ways how the "new" Nazi language presented itself as a "new manner of thinking" (Victor Klemperer) which is opposed to the "ancient world" and is fixed as a foreign body. The second area of the research project should develop the idea of "alienation" which extends from discursive strategies to modes of thinking, the latter being modified by exterior as well as interior marks of stereotyping. What, moreover, is the grid of reference in the Rote Kapelle texts: intertextual references made, literary and philosophical traditions influenced by.</p> <p>Methodologically, this research project should ideally combine a historical and a context-based approach (sociology of literary and Critical Discourse Analysis) with a text-analytical one (close reading).</p>

Arts - Department of Literary Studies, Section of German Literature	Others - Languages and Philological Sciences (German Literature)	Postdoctorate programme in 'The Representation of Transcultural Space in Contemporary German-Speaking Minority Literature in Europe' - Promotor: Prof. dr. Arvi Sepp	Relevant PhD degree	English	No language certificate required	<a href="https://www.uantwerpen.be/nl/personeel/arvi-sepp/">https://www.uantwerpen.be/nl/personeel/arvi-sepp/</a>	<p>This research project deals with the relationship between space and identity in German-language minority literature from two selected multilingual areas such as South Tyrol, Luxembourg, East Belgium, Transylvania, Bukovina, Alsace, Silesia etc. written after 1989. The discourses of national belonging, of cultural self-definition and self-understanding which come to the fore in these literary texts, will be the object of my study. In the post-national constellation of Europe, a vigorous resurgence of German minority culture can be observed. The changing minority-majority relationship after the disappearance of the Iron Curtain and the related processes of Europeanization of opportunity structures for the political and cultural mobilization of language minorities has given a strong impetus to the visibility of minority literature. The border regions and enclaves the German-language authors to be studied here write from play an important role in their conception of Europe as a multi-centred space of democratic values. In their heterotopical writing, they reflect a variety of possible relationships to German culture as well as of the cultural, literary, and historical contexts of the countries of which they are citizens. Their literary significance cannot be grasped solely in relationship of one regional or national space of belonging. The protagonists in the novels or lyrical personae in the poems of these authors often collect experiences of space, piece them together into a patchwork, and endow them with value by drawing connections over time and space. The comparison with the context of minorities and multilingualism in the Balkan would be enlightening to the project, which could equally be adapted to the field of comparative literature.</p>
ACIM – Antwerp Centre for Institutions and Multilevel Governance	Political Science	Postdoctorate programme in 'Comparative regionalism: issues of regional integration focus on decision-making, interest groups or democratic legitimacy' - Promotor: Prof. Peter Bursens	Relevant degree + profound knowledge of comparative politics theories and methods	English	No language certificate required but candidate has to be fluent in academic English reading, writing and speaking	peter.bursens@uantwerpen.be / <a href="http://www.ua.ac.be/acim">www.ua.ac.be/acim</a>	<p>The European Union is by far the most developed regional integration project. However, states in other continents have increasingly engaged in regional integration as well, triggering a growing academic interest in comparing regional integration projects.</p> <p>The research group ACIM focuses on several aspects of multilevel political settings, with a focus on the EU: the politics of multi-level government, the politics of interest representation, and regulatory and judicial politics. See <a href="http://www.ua.ac.be/acim">www.ua.ac.be/acim</a> for details of the research agenda and ongoing projects. We welcome applications on PhD or post-doc level within these research lines. Scholars from other regions and continents may embed relevant questions resorting under any of the the above mentioned research lines in a regional comparative perspective.</p>
Ecosystem Management research group, Department of Biology	Soil and Water Sciences	Postdoctorate programme in 'Response of coastal and deltaic wetlands to global change' - Promotor: Prof. Dr. Stijn Temmerman	PhD degree in one of the following disciplines: Geography; Geology; Environmental Sciences; Environmental Engineering.	English	No language certificate required but candidate has to be fluent in academic English reading, writing and speaking	Stijn.temmerman@uantwerpen.be <a href="http://www.ua.ac.be/main.aspx?c=stijn.temmerman">http://www.ua.ac.be/main.aspx?c=stijn.temmerman</a> <a href="https://www.uantwerpen.be/nl/">https://www.uantwerpen.be/nl/</a>	<p>Tidal wetlands, such as salt marshes and mangroves, are valuable ecosystems that occur along sheltered coasts, estuaries and deltas. Their existence is globally under pressure by global changes, such as sea level rise, increasing storm intensity, and increasing human disturbances such as dam building that reduces the sediment supply to tidal wetlands. As a result, these wetland ecosystems may be increasingly flooded by sea level rise, which causes stress to the wetlands vegetation and may lead to permanent loss of tidal wetland ecosystems.</p> <p>In this project we want to study the adaptability of tidal marshes to global changes, by interactions between the marsh vegetation, flow hydrodynamics, and sediment deposition. The marsh vegetation is able to reduce hydrodynamic forces (tidal currents and waves) and to promote the deposition of sediments. In some places in the world this sediment accretion is enough so that tidal marshes can grow up with the rising sea level and hence can survive. However, in other places sediment accretion may be too limited to follow the rising sea level, so that tidal marshes finally disappear.</p> <p>In this project we want to identify the critical thresholds that determine the survival or disappearance of tidal marshes in response to global changes, including sea level rise, increasing storm activity, and changing sediment supply. These thresholds involve both biotic variables (like vegetation characteristics) and geophysical variables (like hydrodynamics by tides and waves, and transport of sediments).</p> <p>This project will result in recommendations on protection of tidal marshes against global change.</p>

**STAFF**

Faculty/Department/ Service/Office	<a href="#">Field of work</a>	Name of work/ teaching/research programme	Additional documents to be uploaded / Admission requirements	Working language	Required language certificates	Website link to all faculties/departments/institutions/l aboratories/offices/services	Remarks
Faculty of Science	Informatics - Computer Science	Staff exchange at the Faculty of Science	Staff applicants should submit a work plan and a support letter from the host professor / host department together with their online application. If you cannot identify a suitable host professor / host department yourself, then please submit your academic CV and work plan to joineusee@uantwerp.be so the JoinEU SEE team can try to find a suitable match for you	English	n/a	<a href="https://www.uantwerpen.be/en/research-and-innovation/">https://www.uantwerpen.be/en/research- and-innovation/</a>	Contact: joineusee@uantwerp.be
Faculty of Design Sciences	Others - Architecture, Urban and Regional Planning	Staff exchange at the Faculty of Design Sciences	Staff applicants should submit a work plan and a support letter from the host professor / host department together with their online application. If you cannot identify a suitable host professor / host department yourself, then please submit your academic CV and work plan to joineusee@uantwerp.be so the JoinEU SEE team can try to find a suitable match for you	English	n/a	<a href="https://www.uantwerpen.be/en/research-and-innovation/">https://www.uantwerpen.be/en/research- and-innovation/</a>	Contact: joineusee@uantwerp.be
Faculty of Applied Economics	Others - Business Studies, Management Science	Staff exchange at the Faculty of Applied Economics	Staff applicants should submit a work plan and a support letter from the host professor / host department together with their online application. If you cannot identify a suitable host professor / host department yourself, then please submit your academic CV and work plan to joineusee@uantwerp.be so the JoinEU SEE team can try to find a suitable match for you	English	n/a	<a href="https://www.uantwerpen.be/en/research-and-innovation/">https://www.uantwerpen.be/en/research- and-innovation/</a>	Contact: joineusee@uantwerp.be
Faculty of Applied Engineering	Others - Engineering, Technology	Staff exchange at the Faculty of Applied Engineering	Staff applicants should submit a work plan and a support letter from the host professor / host department together with their online application. If you cannot identify a suitable host professor / host department yourself, then please submit your academic CV and work plan to joineusee@uantwerp.be so the JoinEU SEE team can try to find a suitable match for you	English	n/a	<a href="https://www.uantwerpen.be/en/research-and-innovation/">https://www.uantwerpen.be/en/research- and-innovation/</a>	Contact: joineusee@uantwerp.be
Faculty of Arts	Others - Humanities	Staff exchange at the Faculty of Arts	Staff applicants should submit a work plan and a support letter from the host professor / host department together with their online application. If you cannot identify a suitable host professor / host department yourself, then please submit your academic CV and work plan to joineusee@uantwerp.be so the JoinEU SEE team can try to find a suitable match for you	English	n/a	<a href="https://www.uantwerpen.be/en/research-and-innovation/">https://www.uantwerpen.be/en/research- and-innovation/</a>	Contact: joineusee@uantwerp.be

Faculty of Law	Others - Law	Staff exchange at the Faculty of Law	Staff applicants should submit a work plan and a support letter from the host professor / host department together with their online application. If you cannot identify a suitable host professor / host department yourself, then please submit your academic CV and work plan to <a href="mailto:joineusee@uantwerp.be">joineusee@uantwerp.be</a> so the JoinEU SEE team can try to find a suitable match for you	English	n/a	<a href="https://www.uantwerpen.be/en/research-and-innovation/">https://www.uantwerpen.be/en/research-and-innovation/</a>	Contact: <a href="mailto:joineusee@uantwerp.be">joineusee@uantwerp.be</a>
Faculty of Medicine and Health Sciences	Others - Medical Sciences	Staff exchange at the Faculty of Medicine and Health Sciences	Staff applicants should submit a work plan and a support letter from the host professor / host department together with their online application. If you cannot identify a suitable host professor / host department yourself, then please submit your academic CV and work plan to <a href="mailto:joineusee@uantwerp.be">joineusee@uantwerp.be</a> so the JoinEU SEE team can try to find a suitable match for you	English	n/a	<a href="https://www.uantwerpen.be/en/research-and-innovation/">https://www.uantwerpen.be/en/research-and-innovation/</a>	Contact: <a href="mailto:joineusee@uantwerp.be">joineusee@uantwerp.be</a>
Faculty of Pharmaceutical, Biomedical and Veterinary Sciences	Others - Medical Sciences	Staff exchange at the Faculty of Pharmaceutical, Biomedical and Veterinary Sciences	Staff applicants should submit a work plan and a support letter from the host professor / host department together with their online application. If you cannot identify a suitable host professor / host department yourself, then please submit your academic CV and work plan to <a href="mailto:joineusee@uantwerp.be">joineusee@uantwerp.be</a> so the JoinEU SEE team can try to find a suitable match for you	English	n/a	<a href="https://www.uantwerpen.be/en/research-and-innovation/">https://www.uantwerpen.be/en/research-and-innovation/</a>	Contact: <a href="mailto:joineusee@uantwerp.be">joineusee@uantwerp.be</a>
Faculty of Science	Others - Natural Sciences	Staff exchange at the Faculty of Science	Staff applicants should submit a work plan and a support letter from the host professor / host department together with their online application. If you cannot identify a suitable host professor / host department yourself, then please submit your academic CV and work plan to <a href="mailto:joineusee@uantwerp.be">joineusee@uantwerp.be</a> so the JoinEU SEE team can try to find a suitable match for you	English	n/a	<a href="https://www.uantwerpen.be/en/research-and-innovation/">https://www.uantwerpen.be/en/research-and-innovation/</a>	Contact: <a href="mailto:joineusee@uantwerp.be">joineusee@uantwerp.be</a>
Faculty of Political and Social Sciences	Others - Social Sciences	Staff exchange at the Faculty of Political and Social Sciences	Staff applicants should submit a work plan and a support letter from the host professor / host department together with their online application. If you cannot identify a suitable host professor / host department yourself, then please submit your academic CV and work plan to <a href="mailto:joineusee@uantwerp.be">joineusee@uantwerp.be</a> so the JoinEU SEE team can try to find a suitable match for you	English	n/a	<a href="https://www.uantwerpen.be/en/research-and-innovation/">https://www.uantwerpen.be/en/research-and-innovation/</a>	Contact: <a href="mailto:joineusee@uantwerp.be">joineusee@uantwerp.be</a>

Faculty of Pharmaceutical, Biomedical and Veterinary Sciences	Pharmacy	Staff exchange at the Faculty of Pharmaceutical, Biomedical and Veterinary Sciences	Staff applicants should submit a work plan and a support letter from the host professor / host department together with their online application. If you cannot identify a suitable host professor / host department yourself, then please submit your academic CV and work plan to <a href="mailto:joineusee@uantwerp.be">joineusee@uantwerp.be</a> so the JoinEU SEE team can try to find a suitable match for you	English	n/a	<a href="https://www.uantwerpen.be/en/research-and-innovation/">https://www.uantwerpen.be/en/research-and-innovation/</a>	Contact: <a href="mailto:joineusee@uantwerp.be">joineusee@uantwerp.be</a>
Faculty of Pharmaceutical, Biomedical and Veterinary Sciences	Veterinary Medicine	Staff exchange at the Faculty of Pharmaceutical, Biomedical and Veterinary Sciences	Staff applicants should submit a work plan and a support letter from the host professor / host department together with their online application. If you cannot identify a suitable host professor / host department yourself, then please submit your academic CV and work plan to <a href="mailto:joineusee@uantwerp.be">joineusee@uantwerp.be</a> so the JoinEU SEE team can try to find a suitable match for you	English	n/a	<a href="https://www.uantwerpen.be/en/research-and-innovation/">https://www.uantwerpen.be/en/research-and-innovation/</a>	Contact: <a href="mailto:joineusee@uantwerp.be">joineusee@uantwerp.be</a>