15 PhD Positions
are available within the
Marie Skłodowska Curie Innovative Training Network on
pH and Ion Transport in Pancreatic Cancer – *pHioniC*

pHioniC (www.medizin.uni-muenster.de/phionic/home/) is a Marie Skłodowska Curie Innovative Training Network funded by the European Commission. We are an established team of **10 academic and 2 industrial partner organizations from 7 European countries** specialized in the field of ion transport in oncology. Our current research activities are centered on pancreatic cancer which is still one of the deadliest cancers. Our team pursues a highly innovative approach by focusing on the role of the unique pancreatic microenvironment for disease progression (see *Bioassays* 39, 6, 1600253, 2017 for a detailed elaboration of the underlying hypothesis). We will provide a structured 3-years cutting-edge PhD training programme in and beyond the fields of ion transport and oncology, including among others complex *in vitro* / *in vivo* model systems and various (ionic) imaging techniques, electrophysiology as well as bioinformatics and genomics. The anticipated starting date will be 01 September, 2019. *pHioniC* builds upon the success and experience of our previous ITN *IonTraC* (www.medizin.uni-muenster.de/iontrac/home/).

We are looking for highly motivated and talented PhD students holding a Master degree in medical science, biology, biochemistry, biotechnology, physics, chemistry, bioinformatics or related fields, with relevant preparative training. Excellent command of spoken and written English, communication skills as well as team spirit are essential. We are offering a competitive, interdisciplinary environment with a track record of intense mutual collaboration. In addition to the individual training-through-research our programme includes further elements such as workshops, summer schools, internships and secondments to the partners' laboratories.

The following eligibility rules apply for participation in a Marie Skłodowska Curie Innovative Training Network: Applicants must be in the first 4 years after obtaining their Master´s degree and must not have resided or carried out their main activity (work, studies, etc.) in the host country for more than 12 months in the 3 years immediately before the recruitment date. In addition, local regulations of the host countries may apply.

The salary is based on standard living, mobility and family allowances which are adapted to the respective country of recruitment.

The following positions are available:

1 PhD at the University of Münster, Germany
Principal Investigator (PI) and coordinator Albrecht Schwab (aschwab@uni-muenster.de)
Modulation of pressure sensing of pancreatic stellate cells by pancreatic pH.

1 PhD at the University of Oxford, United Kingdom
PI Pawel Swietach (pawel.swietach@dpag.ox.ac.uk),
Modelling and understanding spatio-temporal pH dynamics in PDAC in silico using in vivo and in vitro data.

3 PhDs at the University of Copenhagen, Denmark
1. PI Ivana Novak (inovak@bio.ku.dk)
Role of pH and purinergic signaling in normal pancreas and PDAC.
2. PI Stine F. Pedersen (sfpedersen@bio.ku.dk)
Interactions between microenvironmental acidity and PDAC driver mutations studied in 3D organotypic culture.
3. PI Albin Sandelin (albin@binf.ku.dk)
Relation and causality between pH homeostasis and driver mutation generation in PDAC development.

1 PhD at the University of Bari, Italy
PI Stephan J Reshkin (stephanjoel.reshkin@uniba.it)
Role of ECM composition and stromal cells in determining tumour and cancer stem cell pH/O_2 handling and therapeutic response.

1 PhD at the University of Florence, Italy
PI Annarosa Arcangeli (annarosa.arcangeli@unifi.it)
Targeting ion channel and adhesion receptor interaction during PDAC progression by pH-sensitive engineered antibodies.

1 PhD at the University of Lille, France
PI Natalia Prevarskaya (Natacha.Prevarskaya@univ-lille1.fr)
Role of Ca^{2+} permeable channels in PDAC and PSCs.

1 PhD at the University of Picardie Jules Verne in Amiens, France
PI Halima Ouadid-Ahidouch (halima.ahidouch-ouadid@u-picardie.fr)
Expression profiling of pH-regulatory and -sensitive transportome: epigenetic analysis and correlation with clinical parameters.

2 PhDs at the Max-Planck-Institute for Experimental Medicine
1. PI Luis Pardo (pardo@em.mpg.de)
Simultaneous targeting of tumour cells and stroma by pH-sensitive engineered biologicals.
2. PI Frauke Alves (falves@gwdg.de)
Assessment of physico-chemical parameters of PDAC by non-invasive imaging during tumour progression and in therapeutic response to targeting pH-dependent processes.

1 PhD at the University of Kiel, Germany
PI Anna Trauzold (atrauzold@email.uni-kiel.de)
Acquired nuclear functions of TRAIL-receptors as a consequence and motor of pH gradient reversal in PDAC.

1 PhD at the University of Debrecen, Hungary
PI György Panyi (panyi@med.unideb.hu)
Ion channels of immune cells and their regulation by the micro- environment in PDAC and its interface with normal tissue.

1 PhD at Percuros B.V., Leiden, NL
PI Alan Chan (B.Chan@lumc.nl)
Molecular imaging of the microenvironment-transportome interplay in PDAC.

1 PhD at Heidelberg-Pharma Research GmbH, Germany
PI Andreas Pahl (A.Pahl@hdpharma.com)
Generation of PDAC specific ADCs and preclinical profiling.

Further details can be obtained from the respective PIs or the coordinator (aschwab@uni-muenster.de)**.**

Please submit your application to the *pHioniC* coordinator Albrecht Schwab at the following address phionic@uni-muenster.de until 20 February, 2019. Your applications should include the following:

- **motivation letter**
- **CV**
- **copies of the relevant certificates**
- **brief summaries of your Bachelor and Master theses (15 lines each)**
- **two to three references**
- **prioritised list of the three preferred *pHioniC* laboratories**

We are committed to an open and fair recruitment procedure according to "The Code of Conduct for the Recruitment of European Researchers".