Bridging the gap between the lab and the clinic: the first European-wide PhD program to train physician-scientists launched

The Biotech Research & Innovation Centre (BRIC) has joined six other biomedical research institutes to train Europe’s next generation of physician-scientists. The PhD program will provide medical doctors with state-of-the-art biomedicine training and help bridge the gap between laboratory research and clinical practice.

Despite rapid advances in biomedical research, new discoveries do not always find their way to clinical practice, which would improve diagnostics or result in new and better treatments. Bridging this gap, known as the ‘valley of death’, is key to tackling global health challenges such as diabetes, Alzheimer’s disease and cancer.

Physician-scientists, which are medical doctors with a PhD in biomedical research, are uniquely placed to overcome this gap through their clinical insights, scientific knowledge and academic experience, helping identify where innovative research is most urgently needed and expand that knowledge for the benefit of patients.

“We urgently require scientists with a medical background who will play a crucial role in applying advances in omics, big data, artificial intelligence or high-resolution microscopy to address patient needs in the 21st century”, **says Michela Bertero, Head of International and Scientific Affairs at the Centre for Genomic Regulation (CRG), which is coordinating the training programme**. “However, the fragmentation of healthcare systems in Europe means that the development of European MDPhD programmes have been historically isolated, often lacking in collaboration and cross-border mobility.”

Now seven biomedical research institutes will overcome this challenge by joining efforts to create **Emerald**, the first European-wide physician-scientist training programme of its kind. Funded by the European Union’s Horizon 2020 programme, **Emerald** will provide medical doctors with unique opportunities to move to a different country to conduct a cutting-edge PhD research project, participate in tailored summer schools, benefit from peer-mentoring and explore and establish new collaborations.

The first call, for a total of 12 positions, opens today. Each position will be based at one of the seven host institutes each with strong experience in research training programmes and with most of them having previously run training programmes specifically for physician-scientists. Alongside the host institutions, there are more than 30 partners from 10 European countries, including universities, hospitals, patient associations, pharmaceutical companies and publishers, with each partner offering secondment opportunities, collaborations and bespoke training for the medical doctors.

The host institutions are:

* The Centre for Genomic Regulation (**CRG**) in Barcelona, Spain
* The Institut **Curie** in Paris, France
* The Biotech Research & Innovation Centre (**BRIC**) at the University of Copenhagen, Denmark
* The Fundação Calouste Gulbenkian - Instituto Gulbenkian de Ciência (**IGC**) in Lisbon, Portugal
* The Max Delbrück Center for Molecular Medicine in the Helmholtz Association (**MDC**) in Berlin, Germany
* The Netherlands Cancer Institute (**NKI**) in Amsterdam, The Netherlands
* The Flanders Institute for Biotechnology (**VIB**) in Ghent, Belgium

Further details on the application process can be found on the [Emerald project’s website](http://www.emerald-mdphd.eu/). The initial deadline for applications is 14th November 2021.

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**About Emerald**

The “International PhD Programme for Medical Doctors”, Emerald, will train and nurture excellent physician- scientists. The programme will recruit medical doctors to carry out a PhD in cutting-edge research in European centres of excellence in life sciences and biomedicine. Coordinated by the Centre for Genomic Regulation (CRG) in Barcelona, Emerald brings together 7 biomedical research institutes and 37 partner organizations across ten European countries to deliver its international training programme.

**About the European Union’s Horizon 2020 programme + MSCA**

Emerald has received funding from the European Union’s Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 101034290. The COFUND scheme aims to stimulate regional, national or international programmes to foster excellence in researchers' training, mobility and career development. The Emerald project received €4,5M of funding to deliver the training programme over the next five years.