



## 2019 EIT HEALTH START-UPS MEET PHARMA Call for Start-ups

The 2019 EIT Health Start-ups Meet Pharma is a challenge-based programme connecting teams of MSc, MDs PhD students, as well as post-docs and professionals, developing innovative solutions for chronic care beyond the pill with key pharma partners in Europe. The programme invites start-ups developing digital solutions, which impact both the Pharma industry and patients, to tackle set challenges in collaboration with top pharma partners. In this document you can find extensive information about: Challenges; Important Dates; Locations; Programme Structure; Selection procedure.

### Challenges

#### 1. Providing the right diagnosis at the right point in time – Rheumatoid Arthritis.

Partner: Amgen Tech Hub.

Area: Chronic Inflammatory disease; Rheumatoid Arthritis.

Description: The complexity of the care pathway, with numerous HCPs involved in the diagnosis and time being a critical factor for patients, the problem of late diagnosis presents itself as a service design challenge. Patients with Rheumatoid Arthritis are usually diagnosed too late and do not receive the needed support and treatment. Patients are often suffering a longer time from their disease with repeat visits at the GP or different specialist before the right diagnosis takes place. The impact of a late diagnosis is often disability, damage to heart and lungs, inability to work and a significantly shortened life expectancy. Symptoms



are often not taken seriously, patients think of it as natural forms of aging or that they overdone it with gardening or at the gym. There are opportunities to: provide patients with a personalized care plan, from the first onset of symptoms; provide patients with a systematic care pathway that helps earlier diagnosis, to help prevent chronic damage to joints; provide HCPs with better tools and solutions to quickly diagnose Rheumatoid Arthritis; and to help raise awareness in the medical care community, especially with primary care physicians about the disease and consequences of Rheumatoid Arthritis.

## 2. Telemedicine based patient support program.

Partner: Bayer AG.

Area: Women's Health, Cardiology, Oncology, Hematology, Ophthalmology, Pulmonology.

Description: There are always innovative approaches for therapies. All new approaches for treatment require a certain level of process understanding both by the physician and the patient, as well as proper patient data management and analysis. A way to identify patients that can benefit from these innovative approaches and to provide support to the patients during treatment can be an integral telemedicine based solution.

This telemedicine solution should help patients to:

- get remote consultation in order to evaluate her condition;
- discuss treatment progress and potential side effects.

The solution should streamline and simplify a complex process, that includes not only online consultation, but also the monitoring and processing of relevant patient data (in compliance with GDPR), it should also increase patient adherence to the treatment and should make the whole treatment a truly patient-centric approach.

## 3. Parkinson's Disease – How to improve the management of "wearing-off" motor episodes (dyskinesias, dystonias); including freezing episodes.

Partner: Ferrer.

Area: Parkinson's Disease.

Description: With long-term use, the gold standard medication for Parkinson's disease, levodopa, can wear off before it's time for another dose, causing motor fluctuations called "off" episodes. Complicating treatment is that too much levodopa can cause debilitating side effects such as dyskinesia (abnormal, uncontrolled, involuntary movement). In the case of freezing, it tends to occur with increased frequency as Parkinson's progresses and appears to be linked to long-term use of levodopa. Although, it can be experienced by people who do not take levodopa, so it is not simply a side effect of medication. Many people notice that freezing is worse when their medication level is low, when they are 'off'. But freezing is not the same as being 'on' or 'off'. Freezing episodes are sudden, short, transient blocks of movement that occur primarily with initiating walking, turning, navigating through narrow spaces or approaching obstacles. Freezing can last just a few seconds or up to several minutes. It is estimated to affect around 7% of people with early disease over half of patients with advanced PD after 5 years of illness, and up to 85% in more advanced stages of the disease leading to loss of life quality, independence, and mobility. Therefore, we are seeking a technology to develop effective management of "on-off" episodes and/or to prevent those "off" episodes, based on objective measures.

#### 4. Creating a Biomarker Measurement Platform.

Partners: Johnson & Johnson World Without Disease.

Area: Disease agnostic but focusing on Disease Prevention and Interception with positive and negative prediction models.

Description: Biomarkers are defined as specific measurements that aid in the prediction, diagnosis or prognosis of a disease in individual subjects. Sometimes, the presence of a single biomarker may already be an objective indication of a certain medical state; for example, C-reactive protein (CRP) is a marker for inflammation, the presence of a mutated CFTR gene indicates that a newborn has cystic fibrosis, and p24 antigen is a marker for early HIV infection. Some medical states are more difficult to detect and need multiple biological analytes to be measured.

The Johnson & Johnson World Without Disease Accelerator aims to prevent and intercept disease before symptoms occur. Biomarkers predicting the future development or detecting incubation of the diseases are required to indicate which subjects would benefit from intervention. These biomarkers are expected to be a set of different molecules that represent physiological processes at system levels: genomics, epigenomics, transcriptomics, proteomics and metabolomics. Analytes representing these different "omics" levels require different technologies for measurement. Our current efforts aim to apply multiple "omics" technologies to identify the optimal combination of biomarkers signifying disease development.

Once the optimal biomarker combination is identified and validated, the "omics" technologies need to be translated into clinically feasible assays that allow for routine testing. In an ideal world, such biomarker tests are relatively simple and affordable assays performed on biological samples that can be obtained in a minimally invasive manner. The challenge is to develop such technology that can combine the measurements of different "omics" marker classes, either by a common read out, or by a device that can split samples in different processes, or by any other means that can be applied to biological samples.

#### 5. The measurement of skin health in the assessment of treatment efficacy and ability to predict flares for conditions such as Atopic Dermatitis and Chronic Spontaneous Urticaria currently relies on direct clinical observation which can be subject to variability and subjectivity.

Partners: UCB, Immunology Patient Value Units and Translational Medicine Departments.

Area: Atopic Dermatitis and Chronic Spontaneous Urticaria.

Description: Explore the opportunities presented by non-invasive digital technologies to provide objective measurements which may represent surrogate or alternative endpoints for assessing the phenotypical presentation of these disorders, the efficacy of their treatment, and ability to predict flares. These technologies may offer better or more objective measures of dermal intervention or opportunities to explore disease progression / intervention in a more continuous manner facilitating clinical trial modalities such as decentralises clinical trials. Digital technologies for the measurement of clinical outcomes could range from optical or other imaging technologies, devices or other technologies that might offer objective measures of features relevant to the healthy and diseased presentation of skin and skin lesions.

### Important dates

- Submission deadline: 27/03/2019
- Start of the programme and Module 1: 11/06/2019 - 14/06/2019
- Module 2: 24/06/2019 - 28/06/2019
- Module 3: 08/07/2019 - 17/07/2019
- End of the programme and Module 4: 25/07/2019 - 26/07/2019

### Locations

- Module 1, 2, 4: Heidelberg and Mannheim, Germany.
- Module 3: Roadshow.

### Programme structure

- Module 1: 4 days of workshops on innovation, corporate ventures, business development, and start-up collaborations by C-level experts from four leading pharma partners.
- Module 2: 5 days of beyond-the-pill tailored trainings on business modeling, marketing and sales strategy, financial planning and forecasting, regulatory hurdles and pitching & presenting skills.
- Module 3: Roadshows to pharma partners in 4 different leading innovation areas in Europe with presentations, feedback & interaction with BD teams for possible collaboration and deal generation.
- Module 4: Demo day with industry partners and Investors Network (VCs and BA Network).

### Selection procedure

- Applications will open via the EIT Health application platform, hosted by Optimy. To apply, you will need to create an EIT Health Optimy account: [eithealth.optimytool.com](http://eithealth.optimytool.com).
- Based on your written application, you may receive an invitation to pitch your business idea via Skype.
- A selection committee will choose the most promising start-ups to participate in the programmes. The committee will include diverse experts from each partner.
- Applicants may only choose one Challenge when applying.
- Applicants must commit to the program attendance expectations.

Want to know more about the 2019 EIT Health Start-ups Meet Pharma?

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