



### Webinar | IMI2 – Call 13 Genome-environment interactions in inflammatory skin disease

15 December 2017 • 15:00 CET

### Agenda

- How to use GoToWebinar Catherine Brett, IMI
- Introduction Iwona Jablonska, IMI
- The Call topic Paul Bryce & Peter Hecht, Sanofi
- Involvement of SMEs, patients and regulators Iwona Jablonska, IMI
- Questions & answers



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### How to use GoToWebinar



### Before we start...

- This webinar is being recorded and will be published on the IMI website and / or IMI YouTube channel
- Presentation slides will be published on the webinar web page
- A participant list will be circulated
- IMI2 Call 13 has been launched and all Call documents & details of how to apply can be found on the IMI website







### Webinar IMI2 - Call 13 Topic 2: Genome-Environment Interactions in Inflammatory Skin Disease

Iwona Jablonska

# Today's webinar

### Will cover all aspects of the Call topic

- Introduction to IMI programme
- Proposed project
  - Objectives, need for public-private collaborative research
  - Key deliverables
  - Structure of the project
  - Expected contribution of the applicants
  - Contribution of industry consortium

### Will not cover rules and procedures

- Webinars on IMI's rules and procedures and opportunities for SMEs took place on Thursday 7 December – recordings are available online
- Both will be repeated in January 2018 sign up via imi.europa.eu



### IMI – Europe's partnership for health

### **IMI** mission

IMI facilitates open collaboration in research to advance the development of, and accelerate patient access to, personalised medicines for the health and wellbeing of all, especially in areas of unmet medical need.



# IMI – Ecosystem for innovative collaborations

- Allow engagement in a cross-sector, multi-disciplinary consortium at the forefront of cutting-edge research
- Provide the necessary scale by combining funding, expertise, knowledge, skills and resources
- Build a collaboration based on trust, creativity and innovative and critical thinking
- Learn from each other new knowledge, skills, ways of working
- Take part in transformative research that will make a difference in drug development and ultimately patients' lives

IMI is a **neutral platform** where **all involved** in drug development can engage in **open collaboration** on **shared challenges**.



### IMI 2 budget (2014 – 2024)





### How a topic is generated

Industrial partners align themselves around a real challenge for industry and agree to work together **and commit resources** 

New ideas from public sector, universities, SMEs etc. are needed to address the challenge

Scale is a key to success and is provided through IMI funding

Outcomes should be transformative for the industry as well as having a clear "public" value







nitiative



nitiative



nitiative



# Submitting a proposal

<u>https://ec.europa.eu/research/participants/portal/desktop/en/oppo</u> <u>rtunities/h2020/index.html</u>

**** **** European Commission	R	RESEARCH & INNOVATION Participant Portal									
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Justice Programme

### **Proposal Template**

- Available on IMI website & H2020 submission tool
- For first stage proposals, the page limit is **30 pages**.

Title	e of Proposal		
List	of participants		
Tab	le of Contents		
1.	EXCELLENCE	3.	IMPLEMENTATION
1.1	Objectives	3.1	Outline of project plan — Work packages, and
1.2	Relation to the call topic text.	3.2	Management structure and procedures
1.3	Concept and approach	3.3	Consortium as a whole
1.4	Ambition	3.4	Table 3.1a:         List of work packages
2.	IMPACT	4.	PARTICIPANTS

1 Expected impacts

4.1. Participants (applicants)

major deliverables



# **Evaluation Criteria (1/2)**

#### Excellence

- Clarity and pertinence of the proposal to meet all key objectives of the topic;
- Credibility of the proposed approach;
- Soundness of the concept, including trans-disciplinary considerations, where relevant;
- Extent that proposed work is ambitious, has innovation potential, and is beyond the state of the art;
- Mobilisation of the necessary expertise to achieve the objectives of the topic, ensure engagement of all relevant key stakeholders.

#### Impact

- The expected impacts of the proposed approach as mentioned in the Call for proposals;
- Added value from the public private partnership approach on R&D, regulatory, clinical and healthcare practice as relevant;
- Strengthening the competitiveness and industrial leadership and/or addressing specific societal challenges;
- Improving European citizens' health and wellbeing and contribute to the IMI2 objectives.



# **Evaluation Criteria (2/2)**

#### Quality and efficiency of the implementation

- Coherence and effectiveness of the outline of the project work plan, including appropriateness of the roles and allocation of tasks, resources, timelines and approximate budget;
- Complementarity of the participants within the consortium (where relevant) and strategy to create a successful partnership with the industry consortium as mentioned in the topic description in the Call for proposal;
- Appropriateness of the proposed management structures and procedures, including manageability of the consortium.



# Tips for writing a successful proposal

- Read all the call-relevant material: <u>www.imi.europa.eu</u>
- Begin forming your consortium early
   Partner search tools & networking events
- Provide reviewers with all the information requested to allow them to evaluate your proposal
- Finalise and submit your proposal early
- Contact the IMI Office (<u>NOT</u> industry topic writers): infodesk@imi.europa.eu



### **Common mistakes**

- Admissibility/Eligibility criteria not met:
  - submission deadline missed
  - minimum of 3 legal entities from 3 member states & H2020 associated countries not met
- The proposal does not address all the objectives of the topic
- A proposal is scientifically excellent but will have limited impact
- **Complementarity** with Industry consortium not well described.



# Find project partners

- Network with your contacts
- Network with fellow webinar participants
- Use Partner Search Tools:
  - EU participant portal:

https://ec.europa.eu/research/participants/portal/desktop/en/or ganisations/partner\_search.html

- German NCP partner search tool: <u>www.imi-partnering.eu</u>
- Get in touch with your local IMI contact point: <u>www.imi.europa.eu/about-imi/governance/states-representatives-group</u>
- Talk to your Health National Contact Point (NCP)
- Network on social media (e.g. IMI LinkedIn group)



# Participation of SMEs, patient groups, regulators

We encourage the participation of a wide range of health research and drug development stakeholders in our projects.

- SMEs and mid-sized companies
  - check the list of interested SMEs on the Call 13 web page
- Patient organisations
- Regulatory bodies
- Companies / organisations from related fields (e.g. diagnostics, animal health, IT, imaging etc...)



# Genome-Environment Interactions in Inflammatory Skin Disease

P. Bryce – Sanofi: Scientific Lead P. Hecht – Sanofi: IMI Alliance Mgmt



### Background & Objective

- Inflammatory skin diseases affect a significant percentage of our global population. Atopic Dermatitis (AD) affects approximately 10% of children and 3% of adults worldwide. Psoriasis (Pso) affects approximately 2% of our population.
- Poor understanding of their mechanism, endotypes, ontology and co-morbidities, affecting the quality of effective treatments.
- While there may be aspects of these diseases that overlap, others show little or no similarities e.g. their associated co-morbidities are generally quite distinct with Pso being linked with arthritis, psychiatric disorders, metabolic syndrome and cardiovascular sequelae while AD is associated with rhinitis, asthma, food allergy as well as cardiovascular complications.
- Need for sophisticated, in-depth investigations of these diseases that address transformative topics. These studies include, but are not limited to, the impact of environmental factors (e.g. via the microbiome) interacting with genomic factors and studies that help elucidate molecular pathways of disease in a comprehensive, patient-driven manner.
- To define the key heterogeneous and homogeneous aspects of AD and Pso, both within each disease and across their shared biology.
- Such characterization can include clinical hallmarks, patient epidemiology and reported outcomes, and assessment of molecular signatures.
- Expanding our current knowledge to understand unique endotypes of inflammatory skin diseases will help give rise to more precise, targeted treatments that can yield long lasting reductions in disease burden and improved patient quality of life, fulfilling unmet medical needs in patient care.



Need and opportunity for public-private collaborative research

This complex issue can only be adequately addressed by a **combination of collaboration and specialised expertise** Specific contributions to a collaborative effort would likely be:

- Pharmaceutical companies possess access to clinical trial samples related to Pso and AD, and the expertise in specialised technologies that can be applied;
- Academia has the clinical expertise and patient access (both retrospective and prospective) needed, as well as unique, state-of-the-art technologies;
- Patients and caregivers, as well as advocacy groups related to these diseases, provide important inputs into the real-world issues related to inflammatory skin diseases;
- Small- and Medium-sized Enterprises (SMEs), businesses with appropriate interests and Contract Research Organisations may contribute to centralised development of key output information and deliverables.



#### Scope:

- To lead to a step change in our understanding of the molecular mechanism and ontology of the two main inflammatory skin diseases: AD and Pso.
- Elucidating the molecular pathways of these inflammatory skin conditions over time will give rise to novel and meaningful therapeutic targets for specific patient populations and help address the complex patterns of comorbidities.
- Identify biomarkers that will enable robust, efficient and meaningful patient management.

These objectives should be achieved both via a retrospective assessment of Pso and AD patients that can aid in defining key endotypes of disease and the disease commonalities and uniqueness, as well as via access to ongoing prospective studies that will embrace novel approaches and hypotheses relating to defining these. It is expected that reliable access to robustly defined clinical information and specimens will be vital to the overall scope.



Identify shared and distinct disease mechanisms of AD and Pso

- Establish a new disease ontology by defining distinct and overlapping inflammatory skin disease endotypes and co-morbidities
- Identify molecular, immunological and microbial biomarkers that inform prognosis and response to therapy of patients suffering from inflammatory skin disease – these deliverables should be capable of improving diagnosis and directed care decisions



### Participation and budgets

#### Participating companies:

- Sanofi (Lead)
- Boehringer Ingelheim
- Pfizer
- UCB
- The indicative industry in-kind contribution is EUR 8 300 000
- The financial contribution from IMI2 JU is a maximum of EUR 10 500 000 (tbc)
- The indicative duration of the action is 60 months



### Expected in-kind industry contribution

- Pharma companies have contributions are framed across the needs of the work-flow and include management support, methodological expertise and training, access to specimens and samples and data-management and data control. The specifics of each partner are listed in the call topic text
  - Sanofi (Project Leader)
    - Scientific leadership and alliance management
    - Access to precision based technologies and bioinformatic capabilities. clinical and translational expertise and access to resources that are necessary for regulatory oversight and ethics.
  - Boehringer Ingelheim
    - postdoctoral scientists embedded within members of the consortium.
    - Support for activities immune cell assays, (prospective & retrospective cohorts)
  - Pfizer:
    - samples from ongoing prospective clinical trials
    - advanced technologies (e.g. single cell analysis from skin, lipidomics, epigenetics) that cannot be performed on retrospective samples.
    - contributions to the clinical and molecular profiling needs important to assessing endotypes of AD and Pso.
  - UCB:
    - Internal FTEs for clinical and molecular profiling
    - Support Data management and capture needs



### Applicant consortium

- Access to existing samples relevant to the skin disease topic (especially AD and/or Pso), as well as access to *de novo* samples from ongoing collection.
- Access to clinical epidemiology information related to skin diseases through comprehensive medical records.
- Highly specialized techniques of relevance to the overall topic and science of skin and inflammation, including microbiome assessment, and bulk and/or single-cell analysis of transcriptomics, lipidomics, metabolomics; inclusion of precision-based approaches to this is considered a strength.
- Provide state-of-the-art approaches to studying skin biology, including 3D organotypic cultures.
- advanced modelling of human diseases based on multi-parameter data streams

Since access to clinical information and specimens is critical to the overall success of defining endotypes and the consortium goals, applicants should demonstrate their capacity (e.g. patient consent or waiver to consent) and quality to provide access to these







# Involvement of SMEs, patient groups, regulators

Iwona Jablonska

### **SME** participation

IMI encourages the participation of SMEs in applicant consortia as they can offer a complementary perspective to other organisations.

- The applicant consortium must demonstrate significant experience, possibly through the participation of an experienced SME, in both Advanced Analytical approaches and strong Data Management practices.
- The contribution of SMEs would be considered especially beneficial in the context of professional data management and orchestrating data collection, analysis and availability to the rest of the consortium in a centralised, scalable and sustainable manner.



### **Patient participation**

**Expected impact** on clinical, healthcare practices and ultimately on patients' lives:

Understanding of early life events and environmental influences over disease progression and severity will support improvement in physician recommendations and management of patients.

#### **Need for patients participation**

Patients and caregivers, as well as advocacy groups related to these diseases, provide important inputs into the real-world issues related to inflammatory skin diseases



*"The patient, doctor and researcher – each is a different kind of expert."* 

### Interactions with regulators

- Consider having a plan for interaction with relevant milestones, resources allocated
- You may need to go through a formal regulatory process to ensure regulatory acceptance of project results (e.g. qualification procedure for biomarkers)
- Get familiar with services offered for dialogue (e.g. at EMA through qualification advice, Innovation Task Force, briefing meetings)
- If regulators are not project participants, consider including them in an advisory board
- Consider also a plan for dialogue with HTA bodies / payers if relevant

To maximise impact of science generated by projects

Engage in dialogue with regulatory authorities

More info: 'Raising awareness of regulatory requirements: A guidance tool for researchers'

www.imi.europa.eu/sites/def ault/files/uploads/documents/ apply-for-funding/calldocuments/imi2/RegulatoryR equirementsGuide.pdf

### Regulators

#### **Expected impact on regulatory aspects:**

Regulatory Pathways and Health Technology Assessment: establishment of comprehensive disease endophenotyping will improve directed care decisions and future clinical trial design, including biomarkers, quality of life considerations, and patient enrolment suitability.







### Questions



