Webinar | IMI2 – Call 12
FAIRification of IMI and EFPIA data
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

- A webinar on rules and procedures will take place on Monday 17 July, 14:30-16:00
- Register [here](#)
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 2 budget (2014 – 2024)

IMI 2 total budget €3.276 billion

EU funding goes to:
- Universities
- Hospitals
- SMEs
- Mid-sized companies
- Patient groups

€1.638 bn

Other €213 m

€1.425 bn

EFPIA companies receive no funding, contribute to projects ‘in kind’

Associated Partners e.g. charities, non-EFPIA companies

EFPIA companies receive no funding, contribute to projects ‘in kind’
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.
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
Typical IMI project life cycle

1. **Topic definition**
   - Industry

2. **Identification of topics and willingness to collaborate**

3. **Call launch**
**Typical IMI project life cycle**

- **Topic definition**
  - Identification of topics and willingness to collaborate

- **Stage 1**
  - Applicant consortia submit short proposals
  - Evaluation
    - Academics
    - Hospitals
    - Mid-size enterprises
    - Regulators
    - SMEs
    - Patients’ organisations

- **Call launch**
Typical IMI project life cycle

**Stage 1**
- Identification of topics and willingness to collaborate
  - Applicants' consortia submit short proposals
    - Academics
    - Hospitals
    - Mid-size enterprises
    - Regulators
    - SMEs
    - Patients' organisations

**Stage 2**
- Full consortium submit full proposal

**Evaluation**
- Merger: applicants & industry
Typical IMI project life cycle

Stage 1
- Identification of topics and willingness to collaborate
- Applicant consortia submit short proposals

Stage 2
- Full consortium submits full proposal

Evaluation
- Full Proposal Consortium

Call launch
- Merger: applicants & industry

Industry
- Academics
- Hospitals
- Mid-size enterprises
- Regulators
- SMEs
- Patients’ organisations
Typical IMI project life cycle

**Topic definition**
- **Stage 1**: Identification of topics and willingness to collaborate
  - Industry
  - Applicants' consortia submit short proposals
  - Evaluation
  - Merger: applicants & industry

**Stage 2**: Full consortium submits full proposal
- Evaluation
- Grant Preparation
- Project Agreement
- Grant Agreement
- Project launch!
Submitting a proposal

Proposal Template

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

Title of Proposal

List of participants

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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: [www.imi.europa.eu](http://www.imi.europa.eu)
- 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 Programme Office (NOT topic writers): [infodesk@imi.europa.eu](mailto:infodesk@imi.europa.eu)
Common mistakes

- Admissibility/Eligibility criteria not met:
  - submission **deadline** missed
  - minimum of **3 legal entities** from **3 H2020 member & associated states** 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:
  - IMI [http://www.imi.europa.eu/content/partner-search](http://www.imi.europa.eu/content/partner-search)
  - German NCP version: [http://www.imi-partnering.eu](http://www.imi-partnering.eu)
  - Fit for health: [http://www.fitforhealth.eu/](http://www.fitforhealth.eu/)
- Get in touch with your local IMI contact point: [www.imi.europa.eu/content/states-representatives-groups](http://www.imi.europa.eu/content/states-representatives-groups)
- Talk to your Health National Contact Point (NCP)
- Network on social media (e.g. IMI LinkedIn group)
SME Participation

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

For example, being closer to the market, SMEs can drive the tangible outputs of the project, and help ensure these outputs are sustained beyond the project lifetime and therefore help lead to faster impact on healthcare.

Therefore, where possible, include SMEs in your Short Proposal
Topic 2: FAIRification of IMI and EFPIA data
Need for public-private collaboration

- The highly complementary expertise between academia, SMEs and industry in the field of data management
- FAIR principles implementation in databases is widely applied by SMEs and academia
- Major role of the pharmaceutical industry in the definition of data sources most relevant to drug discovery research and with most added value queries
- Creation of a broad acceptance and usability of the data produced in IMI projects alongside with the ones existing in EFPIA database, allowing the access at the metadata level
- Speed up the process of drug discovery and development
Objectives of the full project

- To allow the maximal use of IMI and EFPIA databases following issues must be addressed:
  - Use of standard vocabularies, taxonomies, and ontologies to describe the entries in all databases
  - Placing the data in a database that is accessible through a user interface and a computer interface (a documented API - application programming interface), while taking into account personal data protection and confidentiality aspects as well as the intellectual property (IP) conditions for access rights to results
  - Identify sustainable solutions for hosting the data to help ensure the long term sustainability of the data by developing a strategy for hosting, curation, maintenance, and integration of the databases.
Pre-competitive nature

- Many pharma companies have silo databases that are poorly accessible and not integrated with other data sources.
- This project will bring together scientific domain experts, FAIR data experts, and IT experts to jointly develop best practices and processes for making these databases FAIR.
- Higher efficiency of database FAIRification.
- Joint development of metadata requirements will improve interoperability with other databases.
- Exchange of non-proprietary expertise will bring everyone to a higher level of expertise.
Expected impact

- The scientific community can maximally leverage data from legacy and current IMI projects
- Increase the value of the public and IMI data as it can be used more effectively together with pharma data
- Strengthening the capacity of creation, curation, and stewardship of FAIR databases within IT communities
- Better understanding of the complexity, structure, and breadth of pharmaceutical data: Allow the SME community to make their data, analysis tools and services better connected and aligned to pharma
- Building skills and increasing competitiveness for SMEs in Europe
- Interoperability of the databases will allow sophisticated data analysis in all phases of drug discovery, including advanced analytical methods such as computer reasoning and inferencing
- A long-lasting value-adding impact on effective scientific data usage
Suggested architecture of the project

- **Work package 1**: Identification of project data sources for FAIRification and sustainable data hosting platforms
- **Work package 2**: Development of FAIRification process for selected data sources and implementation
- **Work package 3**: Identification of and implementation of data on sustainable data hosting platforms
- **Work package 4**: Communication and outreach to FAIR data user community
- **Work package 5**: Project management, coordination, dissemination and sustainability
Expected contributions of the applicants

Appropriate expertise* in the following domains:

- pharmaceutical research scientific subject matter
- scientific data vocabularies and ontologies, the existing database landscape
- legal expertise in database access
- FAIR data principles, data stewardship, database management, computer programming, data hosting organisations and solutions
- general project management and professional communication expertise
- expertise in building and delivering sustainable solutions for facilitating continuation beyond the duration of the action

* SMEs are mainly targeted as potential applicants
Expected (in kind) contributions of industry consortium

- **Industry consortium**: Janssen (lead), Bayer, GlaxoSmithKline, Eli Lilly, AstraZeneca, Novartis, Boehringer Ingelheim

- **Indicative budget**
  - EFPIA in kind of 3 730 000 euro
  - max. EU contribution: 4 000 000 euro

- **Expertise in**:
  - pharmaceutical research scientific domains
  - ontologies and vocabularies, database management
  - database content, data interoperability
  - database technology experts, IT experts, legal experts
What’s in it for you?

- The benefits of this particular project for:
  - academic researchers
    - Improved access to IMI databases and ability to analyse across databases
    - Improved understanding of pharma data
    - Increase expertise in FAIRification of databases
  - SMEs
    - Improved access to IMI databases
    - Improved understanding of pharma data and needs
    - Increase expertise in FAIRification of databases
  - patients’ organisations
    - Improved access to IMI databases
    - Higher quality scientific analysis improving disease understanding and drug discovery
Key deliverables of the full project

- Development of transparent criteria for the selection of data sources within completed and ongoing IMI projects for FAIRification
- Development of transparent criteria for the selection of data sources within pharmaceutical industry participants
- Development of minimum metadata information standards for data from industry and IMI relevant scientific domains
- FAIR transformation of databases from at least 20 IMI projects to make them compliant with FAIR principles
- Multiple FAIR database transformations per EFPIA company
- Publication and dissemination of guidelines, advice, and detailed processes to make databases compliant with FAIR principles and allow integration with internal data systems and public databases
- Dissemination of a data catalogue that lists all FAIRified databases handled by the consortium (optional for EFPIA databases)
Thank you

Contact the IMI Programme Office
infodesk@imi.europa.eu • www.imi.europa.eu
SME participation

Iwona Jablonska
IMI webinar • 06.07.2017
SME Participation

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

In particular, in this topic, SMEs can participate by bringing expertise in:

- Scientific data vocabularies and ontologies.
- Legal expertise in database access,
- FAIR data principles, data stewardship, database management, computer programming, data hosting organisations and solutions.