

PRBB Intervals Course Proposal

Course Title

Business opportunities: from science to impact

Proposed date(s)

28th October, 4th and 11th November. All days from 9:30 to 13:30

Course Language

English

Course Leader(s) and very brief summary of relevant qualifications and experience (no more than 2 lines for each trainer)

Ismael Ávila

Ismael Ávila is the Head of Impact at Hospital del Mar Research Institute. In this position he is responsible for activities in the areas of quality and intelligence, tech transfer and translation, business development and engagement & outreach.

Rationale for course (why is this course of interest for the PRBB staff?)

Biomedical research is increasingly expected to generate societal, clinical and economic impact beyond scientific publications. Researchers are therefore required to understand not only how excellent science is conducted, but also how discoveries can be translated into healthcare innovations, collaborations with industry, public engagement and evidence of impact. This course introduces participants to the innovation ecosystem and provides practical tools to navigate technology transfer, research valorisation, strategic partnerships and impact generation throughout the research lifecycle.

Course aim – general

Participants will gain an understanding of how biomedical research can create impact through quality-driven research, technology translation, patents, venture capital, business development and effective engagement with healthcare, industry and society.

Specific learning outcomes (what new skills, knowledge &/or attitudes will participants to take away from the course?)

- Identify research results with translational and commercial potential.
- Gain a practical understanding of intellectual property, technology transfer and translational pathways.
- Learn how to engage with industry, healthcare stakeholders, patients and society throughout the innovation process.
- Understand the fundamentals of business development, market validation and value proposition design.
- Develop an impact-oriented mindset applicable to academic and non-academic careers.
- Getting to know the life science sector
- Learning how to read patents and search patent data bases for research relevant information
- Understanding different types of financing from venture capital to crowdfunding
- Elements of a business plan and how to develop commercial ideas

Course contents (outline of topics to be covered)

Quality & Intelligence

- Research assessment beyond publications.
- Business Intelligence and Technology Surveillance (benchmarking and strategic indicators).

Tech Transfer & Translation

- From research results to innovation.
- Intellectual property, patents and licensing.
- Translational pathways for drugs, diagnostics, medical devices and digital health.
- Regulatory roadmaps.
- Technology readiness levels (TRLs) and validation.

Business Development

- Identifying unmet clinical needs and market opportunities.
- Value proposition and stakeholder mapping.
- Industry collaborations and partnership models.
- Commercialisation strategies and funding opportunities.

Engagement & Outreach

- Communicating research for different audiences.
- Patient and public involvement.
- Building collaborations across academia, healthcare, industry and society.
- Developing impact narratives for funding applications and research projects.

Training methods

- Interactive lectures
- Real case studies from biomedical research and innovation
- Group discussions and collaborative exercises
- Stakeholder mapping and translational pathway workshops
- Short practical exercises to apply concepts to participants' own research projects

Target group in PRBB (Senior scientists, postdocs, predocs, management/admin staff, all residents)

All residents, with particular relevance for PhD students, postdoctoral researchers, clinicians and research support professionals interested in research translation and impact.

Number of participants (maximum)

15

Total course hours (Please specify: a) direct training with instructor present b) required self-study.

Note: only the direct training hours will be included in the post-course certificate.

- a) 12 hours
- b) 3 hours

Distribution of course (hours/days)

3 sessions of 4 hours each

Pre-course preparation and/or between sessions?

Between sessions, participants will apply the concepts covered in class to their own research project by:

- Identifying potential translational opportunities.
- Mapping key stakeholders.
- Developing an impact pathway and value proposition.
- Reflecting on potential technology transfer, collaboration or engagement strategies.

Material participants need to bring (laptops, etc...)

Laptop recommended for interactive exercises and group activities.

Relevant background reading/ audiovisual/websites or other materials

- <https://www2.deloitte.com/tr/en/pages/life-sciences-and-healthcare/articles/life-sciences-and-health-care-predictions-2022.html>
- Espacenet Patent Database: <https://worldwide.espacenet.com/>
- Biocat Report (Catalonia Life Sciences & Health Ecosystem) <https://report.biocat.cat/>
- Business Model Canvas: <https://strategyzer.com/canvas/business-model-canvas>
- NIH Office of Technology Transfer resources.
- Horizon Europe Programme Guide (Impact section).
- Selected case studies and supporting material provided during the course.