Backing visionary entrepreneurs

EurA Workshop: EIC Funding Programs for Life Science Research and Business Development

EIC Pathfinder and Transition Funding Opportunities with focus on Life sciences

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Contents

- European Innovation Council (EIC)
- EIC Pathfinder Evaluation scheme
- EIC Pathfinder 2021 Challenge Calls in Health
- EIC Transition eligibility criteria
- EIC Transition 2021 Challenge Call

European Innovation Council

Europe's most effective catalyst of breakthrough science into disruptive innovation

€10 bn programme to identify, develop and scale up breakthrough technologies and disruptive innovations in Europe

Three financial instruments:

Pathfinder, Transition, Accelerator

EIC deep-tech VC Fund (over €3 bn)

Portfolio approach, Challenge Calls, Programme Managers

EIC Pathfinder

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For advanced research to underpin breakthrough / game-changing technologies

Mainly open ("bottom up"), but also Pathfinder challenges (for emerging health, energy and digital technologies)	Mainly collaborative (3 or more partners)	Grants up to €3/4 Mt €3/4 million	Management of portfolios of projects by Programme Managers

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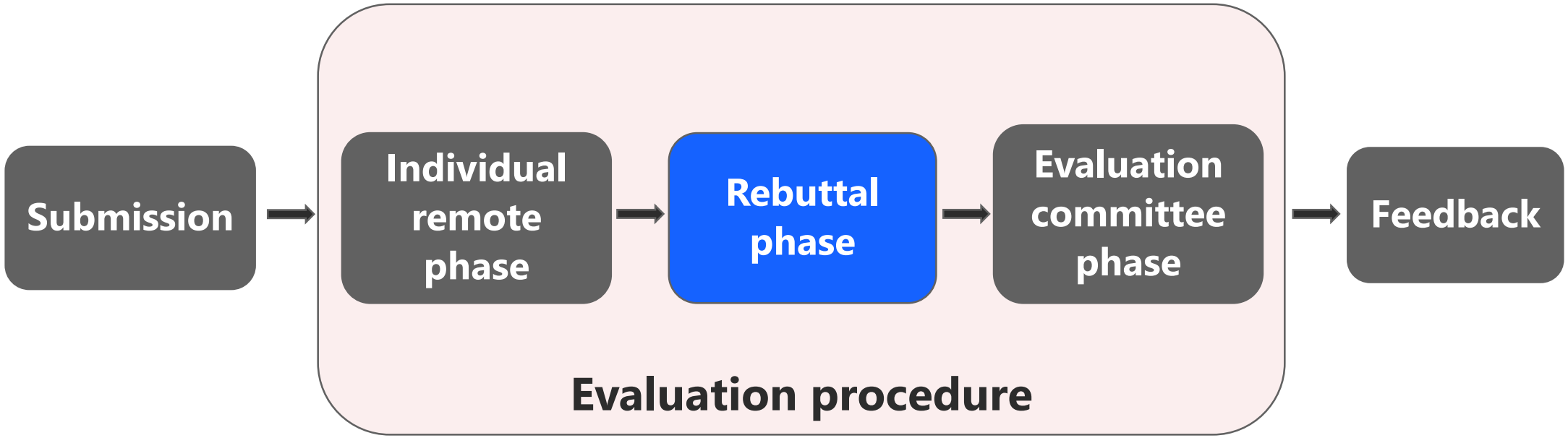
Pathfinder Open proposals evaluation scheme

Applicant has the right to address evaluators' comments



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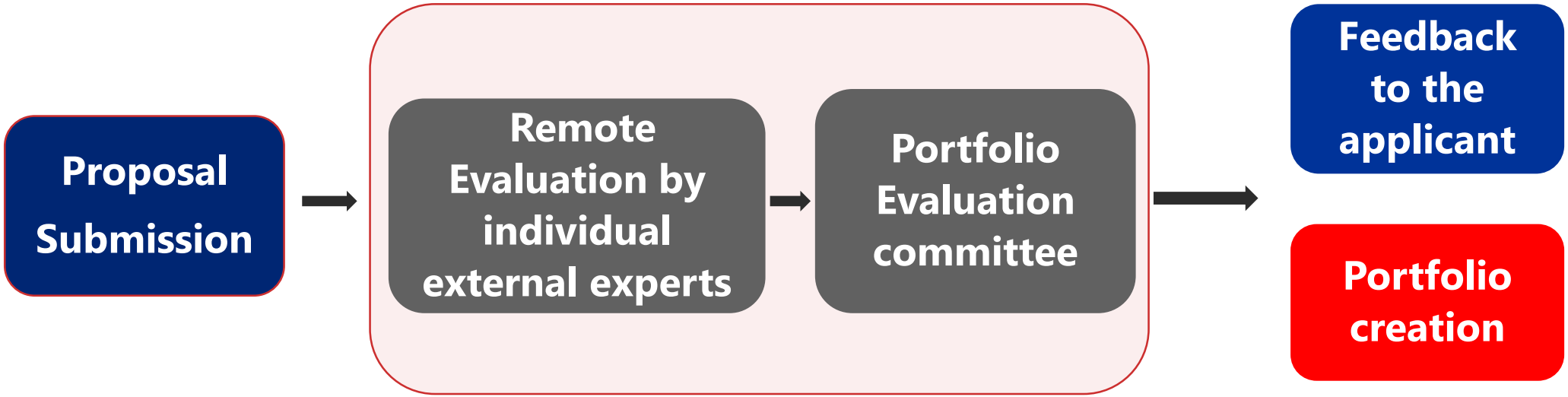
Pathfinder Challenge proposals evaluation scheme leading to the creation of portfolios



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EIC Pathfinder Challenge Call 2021 in Health & Biotechnology

EMERGING TECHNOLOGIES IN CELL AND GENE THERAPY

(Programme Manager for Health & Biotechnology: Iordanis Arzimanoglou)

EIC Pathfinder Challenge Call 2021 in Medical Devices

TOOLS TO MEASURE AND STIMULATE ACTIVITY IN BRAIN TISSUE

(Programme Manager for Medical Devices and Medical Technologies: Enric Claverol)

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EIC Pathfinder Challenge Call 2021

ENGINEERED LIVING MATERIALS

(Acting Programme Manager: Barbara Gerratana)

Integration of expertise in:

Synthetic biology/Morphogenesis, Materials engineering,

Control Engineering/AI

Additional opportunities for Pathfinder projects

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Projects or their beneficiaries funded through EIC Pathfinder are eligible

to receive additional **Ad hoc grants** (up to 3 per project or more if duly justified) with fixed amounts of up to €50,000 :

a) for complementary activities to explore potential pathways to commercialization

b) for portfolio activities.

to submit a proposal to the **EIC Transition** for transforming their research results into innovation opportunities;

to submit an **EIC Accelerator** proposal via the **Fast Track** scheme;

to receive free access to a wide range of **Business Acceleration Services**

EIC Transition

European Innovation Council

For transforming research results into innovation opportunities

New funding scheme to bridge gap between research phase (proof of concept) and innovation application	Mainly open (“bottom up”), but also Transition challenges (for medtech, energy storage)	Single applicants or small collaborations (max. 5 partners)	Grants up to 2.5M	In first phase, only for follow up to results from EIC Pathfinder and ERC PoC

EIC Transition

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Eligibility time wise :

- Pathfinder projects and ERC Proof of Concept. Start date of the grant is more than 12 months before the date of the Transition call deadline and end date of the grant for the eligible project is less than 24 months from the date of the Transition call deadline

IP status:

- You do not have to be the owner of the IP or one of the original beneficiaries, but have the right to use the IP or know-how generated in the initial project.

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EIC Transition Challenge Call 2021:
Medical Devices: From Lab to patient
(Programme Manager Enric Claverol)

EIC Transition Challenge 2022:
RNA-based therapies and diagnostics for complex or rare genetic diseases
(Programme Manager Iordanis Arzimanoglou)

TOPIC ID: HORIZON-EIC-2022-TRANSITIONCHALLENGES-03
EIC Transition 2022 (HORIZON-EIC-2022-TRANSITION-01)

Opening date:
01 March 2022 CET

Deadline dates:
04 May 2022 17:00 CET
28 September 2022 17:00 CET

EIC Transition Challenge
RNA-based therapies and diagnostics for complex or rare genetic diseases (I)

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Introduction and scope

- The number of RNA drugs under development, and in clinical trials, is growing rapidly, and so is the number of biotech start-ups and academic groups in the field with transformative ideas
- The advantage of the RNA-based therapeutics relies on the potential to be used for precise and individualized therapy and enable patients to produce therapeutic proteins in their own bodies without struggling with the comprehensive manufacturing issues associated with recombinant proteins
- Issues regarding drug delivery and other challenges remain

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mRNA-based therapeutics
Challenges

Synthesis and optimization (Size of mRNA is significantly larger than other types of RNAs)

Stabilisation of mRNA under physiological conditions

Novel delivery strategies providing more effective and safer delivery of mRNA to targeted cells, are needed

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EIC Transition Challenge
Other than mRNA types of RNA
Challenges

Transfer RNA (tRNA)

- Suboptimal delivery

Small interfering RNA (siRNAs)

- Expression of disease-causing genes in tissues outside the liver and kidney has been reported

Micro RNAs (miRNAs)

- Possible induction of off-target effects

EIC Transition Challenge
RNA-based therapies and diagnostics for complex or rare genetic diseases (II)

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Specific Objectives

- Enable effective and safe delivery of mRNA into the cells
- Design, develop and preclinically validate novel RNAs therapeutics (miRNA lncRNA, tRNA or siRNA-based) for complex or rare genetic diseases
- Develop and validate novel RNA-based diagnostics and RNA-based predictive biomarkers to allow for more accurate diagnosis and post-treatment prognosis

Source: European Innovation Council (EIC) Work Programme 2022

EIC Transition Challenge
RNA-based therapies and diagnostics for complex or rare genetic diseases (III)

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Expected outcomes and impacts

- **More effective and safer RNA delivery methods** applicable to a wide range of non-infectious diseases
- Utilisation of RNAs to **molecularly classify sub-types** of different solid tumours that would allow for **stratification of patients** leading to **more effective and precise treatments** in complex diseases with high-unmet medical needs
- Novel and sound ideas for the **development and validation of RNA-based therapeutic platforms and drugs**