MEETING WITH RESEARCHERS

DIEF Commissione Ricerca – International research office
Professor Luca Selmi – Irene Chini, PhD

30 MAY 2024 – 11 am – Sala Eventi Tecnopolo
AGENDA

01. Get ready for the meeting
02. Why this meeting on European funding?
03. How is UNIMORE doing?
04. How to?
05. Horizon Europe
06. Proposal template analysis
Get ready for the meeting
GET READY FOR THE MEETING

1. Get ready with your mobile or computer

2. Connect to slido.com with your computer or scan the QRcode with your mobile

3. Answer the questions

4. Keep the tab open for future questions
Did you ever participate to a European project?
Did you ever participate to a European project?

ℹ️ Start presenting to display the poll results on this slide.
Question 1

Have you ever written parts of an European project proposal?
Have you ever written parts of an European project proposal?
02
Why this meeting on European funding?
FUNDING YOUR RESEARCH

From previous meeting with DIEF researchers:

1. International
2. **European (EC – Horizon Europe)**
3. National
4. Nazionale
   i. PRIN (MUR)
   ii. Bilaterali (MAECI/MUR)
5. Regional
6. Fundation/Association
7. University: FAR
8. Department: FAR Dipartimentale
WHY? HIGH RISK, HIGH GAIN!!

- Broaden the horizon of your research, globalize yourself
- Understand how Europe works
- Learn from a demanding funder
  - Large variety of projects for almost every need
  - Very structured submission and evaluation system
- Think about your research from all aspects: context, excellence, impact, implementation
- Compete for new funding opportunities
- Make a step toward autonomy
- Take a leap in research quality, relevance and impact
03
HOW UNIMORE IS DOING?
Question 2
How many EU projects are currently active at UniMORE?
How many EU projects are currently active at UniMORE?
Question 3
What is the UniMORE ranking among the 184 institutions in the Region Emilia Romagna?
What is the UniMORE ranking among the 184 institutions in the Region Emilia Romagna?
Evolution of UNIMORE participation and contribution in EU funding (without third party roles)
UniMORE Funding per programme and geographical distribution of the partners

<table>
<thead>
<tr>
<th>Programme</th>
<th>Funding (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Industry Space</td>
<td>4,354,208</td>
</tr>
<tr>
<td>ERC</td>
<td>3,164,046</td>
</tr>
<tr>
<td>Climate Energy Mobility</td>
<td>2,102,500</td>
</tr>
<tr>
<td>MSCA</td>
<td>1,883,271</td>
</tr>
<tr>
<td>HEALTH</td>
<td>1,624,250</td>
</tr>
<tr>
<td>EIC PATHFINDER</td>
<td>540,000</td>
</tr>
<tr>
<td>KDT JU</td>
<td>241,789</td>
</tr>
<tr>
<td>Clean Hydrogen</td>
<td>153,016</td>
</tr>
<tr>
<td>EUROHPC</td>
<td>59,783</td>
</tr>
</tbody>
</table>
UNIMORE project keywords (without linked third party roles)

Materials engineering
Electrical engineering, Electronic engineering, Information engineering

Systems engineering, sensorics, actorics, automation
Transport engineering, intelligent transport systems

Numerical analysis, simulation, optimisation, modelling tools
Manufacturing and fabrication technology
Micro- and nanoelectronics, optoelectronics

Artificial Intelligence & Decision support
Surface modification
Data mining
Augmented Reality
Circular economy
Automotive

Air quality
Ecology
Nano-technology
Decarbonisation
Combinatorial chemistry
25 out of 5453
Rank among the organizations in Italy

2nd out of 184
Rank among the organizations in Emilia-Romagna Region

22% success rate
15.9% success rate of proposals. (11.9% in Horizon 2020)
04

HOW TO?

HELPFUL TIPS!
Question 4

How much time do you think it takes (on average) to write a full proposal?
How much time do you think it takes (on average) to write a full proposal?
CALL TIMELINE

DRAFT
About one year prior to the deadline

OPEN CALL
4 months before the deadline

WORK PROGRAMME
Lasts two years

CALL DEADLINE
Common deadline for all topics in a call
PROPOSAL STAGES

Stage 1
Consortium meeting
Aim of the project, research question, distribution of work 5-6 months before deadline

Stage 2
Proposal writing
Input from partners 4-5 months before deadline

Stage 3
First draft
Excellence, impact and implementation 3 months before deadline

Stage 4
IN or OUT
Final agreement 3 months before deadline

Stage 5
Full proposal completion
Proposal writing (including editing, proof reading and external review) Last two months

Stage 6
Project submission
Project submission DEADLINE!
I WANT TO BE

COORDINATOR

1. Define your idea/research
2. Find a funding opportunity
3. Write a proposal
4. Cross your fingers!

I WANT TO BE

PARTNER

1. Identify your skills
2. Promote yourself!
3. Join a consortium
4. Define your activity
Do you have adequate resources?  

Innovation capacity

Funding opportunities in the Work Programme

CONSULT:

✓ Patent database
✓ ILO office
✓ Previously funded project (e.g. CORDIS)
✓ Bibliography
✓ Google

IS YOUR IDEA INNOVATIVE?

THIS IS YOUR CORE IDEA!
PARTNER SEARCH

EVENTS AND CONFERENCES
  e.g. brokerage events, contact the officers

SPECIFIC WEBSITES:
  Funding & tender.eu

NATIONAL CONTACT POINTS
  e.g. APRE https://apre.it/

CORDIS DATABASE OF PAST AND RUNNING PROJECTS
  https://cordis.europa.eu/it

PERSONAL CONTACTS
  (EXISTING OR NEW)
  Scientifically excellent groups with exactly the right expertise
WRITING A SUCCESSFUL PROPOSAL IS TOUGH

• Connect to experiences partners

• Learn from the experts

• Learn from successful peers

• Always consult the latest templates and guidelines
<table>
<thead>
<tr>
<th>PEOPLE</th>
<th>RESEARCH TOPICS</th>
<th>COLLABORATION</th>
<th>TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Giulio Allesina</td>
<td>Biomass conversion processes and composting processes, waste valorisation in a</td>
<td>Simone Pedrazzi, Paolo Tartarini</td>
<td>PRIMA, GREEN</td>
</tr>
<tr>
<td></td>
<td>carbon negative-circular economy</td>
<td></td>
<td>DEAL</td>
</tr>
<tr>
<td>Michela Apruzzese</td>
<td>Design for Advanced Technology Development to Optimize Comfort and Safety of CAVs</td>
<td>Mauro dell'Amico, Alberto Vergnano</td>
<td>CL5</td>
</tr>
<tr>
<td>Davide Barater</td>
<td>Power electronics, electrical machine design, analysis and optimization</td>
<td>Giovanni Franceschini, Elena Bassoli, Sara Mantovani, Pierpaolo Palestri,</td>
<td>CL5, MSCA DN,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stefano Nuzzo</td>
<td>Clean sky</td>
</tr>
<tr>
<td>Claudio Bianchini</td>
<td>Electrical machines and drives, Additive Manufacturing</td>
<td>Elena Bassoli, Giovanni Franceschini, Davide Barater, Lucia Denti, Andrea Gatto</td>
<td>Pathfinder Open</td>
</tr>
<tr>
<td>Alessandro Bigi</td>
<td>XWIND onshore high wind energy source, atmospheric monitoring and modelling,</td>
<td>Grazia Ghermandi, Sergio Teggi, Francesca Despini, Sara Fabbri</td>
<td>JTI Clean Hydrogen</td>
</tr>
<tr>
<td></td>
<td>using both lagrangian, eulerian and gaussian dispersion models, along with</td>
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<td></td>
<td>environmental application of remotely sensed data.</td>
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<tr>
<td>Giovanni Bolelli</td>
<td>Thermal spray covering the different aspects of modelling, characterization and</td>
<td>Luca Lusvarghi, Elena Colombini, Paolo Veronesi, Alessandro d’Adamo</td>
<td>CL4, CETP</td>
</tr>
<tr>
<td>Claudia Canali</td>
<td>TS process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valeria Cannillo</td>
<td>Gender+ inclusive STE(A)M education, Gender equality, institutional change</td>
<td>Cristina Siligardi, Massimo Bertolini, Paolo Veronesi, Anna Maria Ferrari</td>
<td>CL4</td>
</tr>
<tr>
<td>Francesco Leali</td>
<td>Software design and production of software components for automotive sector,</td>
<td>Paolo Burgio, Alberto Vergnano, Marko Bertogna, Massimo Bertolini</td>
<td>CL5, CL2, KDT</td>
</tr>
<tr>
<td></td>
<td>smart mobility</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Craft heritage preservation, development of a conceptual model for technology</td>
<td>Francesco Gherardini, Enrico Dalpadulo, Andrea Petruccioli</td>
<td></td>
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<td></td>
<td>integration, definition of the physical layout to implement the immersive</td>
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<td></td>
<td>experience and standardisation of the workflow for different use cases.</td>
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<tr>
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<td>RESEARCH TOPICS</td>
<td>COLLABORATION</td>
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<td>-----------------------------------------------------------------------------</td>
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<tr>
<td>Luca Lusvarghi</td>
<td>Characterization techniques to investigate several properties of bulk metallic materials and engineered surfaces, thermal spray and cold spray coatings, starting from the microstructural analysis and up to the assessment of their mechanical and tribological properties</td>
<td>Giovanni Bolelli, Paolo Veronesi, Elena Colombini, Raffaella Capelli</td>
<td>CETP, CL4</td>
</tr>
<tr>
<td>Paolo Falcone</td>
<td>Autonomous and human-driven decision-making capabilities in IAS ecosystems</td>
<td>Marko Bertogna, Francesco Leali, Paolo Burgio, Alberto Vergnano</td>
<td>CL4</td>
</tr>
<tr>
<td>Elisa Ficarra</td>
<td>Pattern recognition, multimodal &amp; multimedia representation</td>
<td>Rita Cucchiara, Lorenzo Baraldi, Federico Bolelli</td>
<td>MSCA DN, CL4</td>
</tr>
<tr>
<td>Claudio Fontanesi</td>
<td>Asymmetric reactions, spin, chiral, electrochemistry, cryomagnetic photoluminescence/Raman, CPL laser source chiral plasmon Optical and electro-magnetic measurements on molecular surfaces, molecular surface fabrication, advanced surface characterization, rationalization of charge transfer processes and electrochemical sensing</td>
<td>Laura Pigani, Alice Ruini</td>
<td>Pathfinder Open, CL4, JTI Clean Hydrogen, Pathfinder Open</td>
</tr>
<tr>
<td>Giovanni Franceschini</td>
<td>Hydrogen storage and electrolyser manufacturing Advanced functional materials for supercapacitors, water-based electrolytes and innovative current collectors for supercapacitors development Chiral-recognition, enantiomeric-excess ee%, spin, asymmetric synthesis, chiral induction, handedness</td>
<td>Roberto Giovanardi, Marcello Romagnoli, Silvia Mittempergher, Stefano Lugli, Rossella Arletti, Francesco Rocchetti Cristina Siligardi, Andrea Marchetti, Roberto Giovanardi, Luca Pasquali, Beatrice Capelli</td>
<td>Pathfinder Open, CL4, JTI Clean Hydrogen, Pathfinder Open</td>
</tr>
<tr>
<td>Isabella Lancellotti</td>
<td>Development of eco-compatible building materials (ceramic tiles, bricks, ecological bodies, glass-ceramics, LWAs, etc.) using industrial, agricultural and urban waste.</td>
<td>Luisa Barbieri, Paolo Pozzi, Nora Maria Andreola</td>
<td>ERA-MIN 3</td>
</tr>
<tr>
<td>PEOPLE</td>
<td>RESEARCH TOPICS</td>
<td>COLLABORATION</td>
<td>TYPE</td>
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<td>-------------------------------------------</td>
</tr>
<tr>
<td>Francesco Pellicano</td>
<td>Experimental analyses, vibration field, for aerospace applications</td>
<td>Antonio Zippo</td>
<td>Science for Peace and Security - SPS NATO</td>
</tr>
<tr>
<td>Francesco Maria Puglisi</td>
<td>Ferroelectric-based processors for secure, energy efficient and intelligent edge computing</td>
<td>Paolo Pavan, Nicolò Zagni, Tommaso Zanotti</td>
<td>CL4</td>
</tr>
<tr>
<td>Carlo Alberto Rinaldini</td>
<td>Heat production and recovery, engine modelling, design and production</td>
<td>Enrico Mattarelli</td>
<td>CL4, CL5, European Defence Fund</td>
</tr>
<tr>
<td>Marcello Romagnoli</td>
<td>Device preparation and characterization, and the construction of electrocatalytic hydrogen production and fuel cell prototypes</td>
<td>Francesco Tassinari, Claudio Fontanesi, Paolo Emilio Snatangelo</td>
<td>Pathfinder Open</td>
</tr>
<tr>
<td>Cristina Siligardi</td>
<td>Microplastics, photocatalysis, life cycle assessment, biotechnological process</td>
<td>Erika Cedillo</td>
<td>ERC</td>
</tr>
<tr>
<td>Enrico Stalio</td>
<td>Turbulence theory, phenomena, and models</td>
<td>Andrea Cimarelli, Diego Angeli</td>
<td>MSCA DN</td>
</tr>
<tr>
<td>Alberto Verganno</td>
<td>Recycling technologies for circular Aluminium, Robust Design tools for a solid Paradigm Shift advancement</td>
<td>Paolo Veronesi, Francesco Leali, Roberto Giovanardi, Elena Colombini, Fabio Pini</td>
<td>CL4</td>
</tr>
<tr>
<td>Paolo Veronesi</td>
<td>Digital twin, energy-intensive industrial sectors, energy efficiency, energy flexibility, microwavebased heating, data-driven models</td>
<td>Cristina Leonelli, Isabella Lancellotti, Roberto Giovanardi, Elena Colombini, Fernanda Nora Andreola</td>
<td>CL4</td>
</tr>
<tr>
<td>Giorgio Maria Vitetta</td>
<td>Wireless networks, mmWave 5G technology, digital communications, localization algorithms, signal processing methods for radar systems</td>
<td>Pasquale Di Viesti</td>
<td>Pathfinder, MSCA DN</td>
</tr>
<tr>
<td>Barbara Zardin</td>
<td>Hydraulic compression for high capacity hydrogen refuelling station Demonstration, process simulation and sizing of the system.</td>
<td>Massimo Borghi</td>
<td>JTI Clean Hydrogen</td>
</tr>
</tbody>
</table>
How many Pillars form the Horizon Europe programme?
How many Pillars form the Horizon Europe programme?

ℹ️ Start presenting to display the poll results on this slide.
What does EIC stand for?

Question 6
What does EIC stand for?
HORIZON EUROPE

SPECIFIC PROGRAMME IMPLEMENTING HORIZON EUROPE & EIT*

Exclusive focus on civil applications

Pillar I EXCELLENT SCIENCE
- European Research Council
- Marie Skłodowska-Curie
- Research Infrastructures

Pillar II GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS
- Health
- Culture, Creativity & Inclusive Society
- Civil Security for Society
- Digital, Industry & Space
- Climate, Energy & Mobility
- Food, Bioeconomy, Natural Resources, Agriculture & Environment

Pillar III INNOVATIVE EUROPE
- European Innovation Council
- European Innovation Ecosystems
- European Institute of Innovation & Technology*

Joint Research Centre

WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA
- Widening participation & spreading excellence
- Reforming & Enhancing the European R&I system

EURATOM

Fusion
- Fission
- Joint Research Center

* The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme
<table>
<thead>
<tr>
<th>CALL</th>
<th>AIM</th>
<th>PARTNERS</th>
<th>PAGES</th>
<th>BUDGET</th>
<th>DURATION</th>
<th>DOC</th>
<th>SUPPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERC</td>
<td>Support investigator-driven frontier research across all fields. Bottom up.</td>
<td>Single applicant</td>
<td>5 + 14 pages</td>
<td>1.5 - 2.5 milions</td>
<td>5 years</td>
<td>Work programme Panel info Template</td>
<td>Budget 10% Proof reading 10%</td>
</tr>
<tr>
<td>ERC Synergy</td>
<td>Support for a small group of PIs to jointly address ambitious research problems that could not be addressed individually. Bottom up.</td>
<td>2 - 4</td>
<td>5+ 15 pages</td>
<td>10 milions</td>
<td>6 years</td>
<td>Work programme Panel info Template</td>
<td>Consortium management Budget Proof reading 10%</td>
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<tr>
<td>MSCA DN</td>
<td>Doctoral education through mobility (between countries, sectors and disciplines). Bottom up.</td>
<td>3 – 10 + associate partners</td>
<td>34 pages</td>
<td>Max 360 PM</td>
<td>Up to 4 years</td>
<td>Work programme Guide for applicants Template</td>
<td>Consortium management Proposal design Proposal reading 20%-25%</td>
</tr>
<tr>
<td>MSCA SE</td>
<td>Funds short-term international and inter-sectoral exchanges of staff members involved in research and innovation activities of participating organisations</td>
<td>3 – 20</td>
<td>30 pages</td>
<td>Max 360 PM</td>
<td>Up to 4 years</td>
<td>Work programme Guide for applicants Template</td>
<td>Consortium management Proposal design Proposal reading 20-25%</td>
</tr>
<tr>
<td>CALL</td>
<td>AIM</td>
<td>PARTNERS</td>
<td>PAGES</td>
<td>BUDGET</td>
<td>DURATION</td>
<td>DOC</td>
<td>SUPPORT</td>
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</tr>
<tr>
<td>CLUSTER</td>
<td>Cross-disciplinary, cross-sectoral, cross-policy and cross-border collaboration in pursuit of the SDGs. Top down.</td>
<td>Min. 3</td>
<td>45 pages</td>
<td>See the call</td>
<td>3 – 4 years</td>
<td>Work programme, Template, Destination, Evaluation criteria</td>
<td>Consortium management, Proposal design, Proof reading 30%</td>
</tr>
<tr>
<td>MISSION</td>
<td>EU Missions are a new way to bring concrete solutions to some of our greatest challenges. Top down.</td>
<td>Min. 3</td>
<td>45 pages</td>
<td>See the call</td>
<td>3 – 4 years</td>
<td>Work programme, Destination, Template, Evaluation criteria</td>
<td>Consortium management, Proposal design, Proof reading 30%</td>
</tr>
<tr>
<td>PARTNERSHIPS</td>
<td>Private and/or public partners together to address some of Europe's most pressing challenges through concerted research and innovation initiative.</td>
<td>Min. 3</td>
<td>45 pages</td>
<td>See the call</td>
<td>3 – 4 years</td>
<td>Work programme, Destination, Template, Partnership Agreement, Evaluation criteria</td>
<td>Consortium management, Proposal design, Proof reading 30%</td>
</tr>
<tr>
<td>CALL</td>
<td>AIM</td>
<td>PARTNERS</td>
<td>PAGES</td>
<td>BUDGET</td>
<td>DURATION</td>
<td>DOC</td>
<td>SUPPORT</td>
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</tr>
<tr>
<td><strong>EIC CHALLENGE</strong></td>
<td>Breakthrough technologies and disruptive innovations. Top down. TRL depending on the call.</td>
<td>3 – 5</td>
<td>25 pages</td>
<td>3 milions</td>
<td>3 years</td>
<td>Work programme Challenge guide Template Evaluation criteria</td>
<td>Consortium management Proposal design Proof reading 20–25%</td>
</tr>
<tr>
<td><strong>EIC TRANSITION</strong></td>
<td>Supports maturation and validation of novel technologies from the lab to the relevant application environments. Achieving TRL 5–6. Proposal must build on results already achieved within an eligible project that are, at least TRL 3 or 4.</td>
<td>Single applicants (SME, spin-off, start-up, RO, universities) or small consortia (2–5)</td>
<td>22 pages</td>
<td>2.5 milions</td>
<td>1 – 3 years</td>
<td>Work programme Template Evaluation criteria</td>
<td>Consortium management Proposal design Proof reading 20–25%</td>
</tr>
</tbody>
</table>
WHO CAN PARTICIPATE?

• Research institutions (universities, RTOs)
• Small and medium-sized enterprises
• Subcontractors and affiliated entities
• Large industrial, multinational and intercontinental groups
• Associate partners from non-EU countries
• Individual researcher
• Any entity that meets the requirements to be assigned a valid PIC code
WHERE TO FIND CALLS AND DOCUMENTS?

https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home
USEFUL DOCUMENTS

- WORKPROGRAMME
- CALL
- STANDARD APPLICATION FORM
- STANDARD EVALUATION FORM
- GUIDE FOR APPLICANTS (for MSCA Action)
STANDARD APPLICATION FORM

PART A
(TO BE COMPLETED ONLINE)

01. General information
02. Participants
03. Budget
04. Ethics and security
05. Other questions

PART B
(UPLOADED AS A PDF)

01. EXCELLENCE
   1.1 Objectives and ambition
   1.2 Methodology

02. IMPACT
   2.1 Project pathways towards the impact
   2.2 Measures to maximize the impact
   2.3 Summary

03. IMPLEMENTATION
   3.1 Work plan and resources
   3.2 Capacity of participants and consortium as a whole
Browsing a proposal template
• STANDARD APPLICATION FORM

• SAMPLE APPLICATION FORM

• SAMPLE PROJECT PROPOSAL – FORM A

• SAMPLE PROJECT PROPOSAL – FORM B

• SAMPLE EVALUATION SUMMARY REPORT
Thanks!

Do you have any questions?

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internationalresearch@unimore.it