



### Invited(Speakers

- ✂ *Accelerator techniques for medical isotope production:*  
**Dr. FORTON, Eric** (IBA, Brussels, BE)
- ✂ *Devices and Engineering for Radioisotope Handling:*  
**Dr. CUTLER, Cathy** (Brookhaven National laboratory, New York, USA)  
**Dr. KERSHAW, Keith** (CERN, Geneva, EU)
- ✂ *Methods for production of novel radioisotopes for theranostics:*  
**Prof. HADDAD, Ferid** (Arronax, Nantes, FR)  
**Prof. SEVERIN, Gregory** (MSU, Michigan, USA)
- ✂ *Radioisotope beams in hadron therapy.*  
**Dr. KITAGAWA, Atsushi** (NIRS, Chiba, JP)  
**Prof. DURANTE, Marco** (GSI, Darmstadt, DE)
- ✂ *Preclinical research and development of new radiopharmaceuticals*  
**Dr. BORGNA, Francesca** (PSI, Villigen, CH)  
**Prof. HABERKOM, Uwe** (University of Heidelberg, DE)
- ✂ *Molecular imaging and immunotherapy in patients with cancer*  
**Prof. De VRIES, Elisabeth** (BNL, Groningen, NL)



### Important(dates(

- **Start of registration and Hotel reservation:** 21<sup>st</sup> January 2019
- **Deadline for Contributed Abstracts:** 28<sup>th</sup> February 2019
- **Notification of abstract acceptance:** 28<sup>th</sup> March 2019
- **Early Bird Registration fees deadline:** 31<sup>st</sup> March 2019
- **Deadline for Registration:** 15<sup>th</sup> April 2019
- **Deadline Proceedings submission:** 15<sup>th</sup> September 2019

### Participation Fee

Categories(	Payment before( March,31 <sup>st</sup> 2019	Payment after(March, 31 <sup>st</sup> 2019
Students/Post-docs	500 €	600 €
Regular participants	700 €	800 €
Accompanying persons	600 €	600 €

### Conference( Secretariat

Cristina Ferrari  
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<http://medicis-promed.web.cern.ch>

MEDICIS' Promed a project from the European Union's Horizon/2020/research and/innovation/programme/under Grant/Agreement/No./642889./

# Report from MEDICIS Collaboration



7<sup>th</sup> Supervisory Board



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# 2<sup>nd</sup> Collaboration board - 3<sup>rd</sup> October 2018

## Participants:

### *Present:*

Frédéric Bois (replaces Martin Walter), Geneva University Hospitals (HUG)  
Manuela Cirilli, Knowledge Transfer - Medical Applications, CERN  
Thomas Cocolios, Professor, KU Leuven  
Clemens Decristoforo, Professor, Innsbruck Medical University  
Valentin Fedosseev, EN-STI-LTP, CERN  
Ferid Haddad, Director, GIP Arronax  
Simone Gilardoni, EN-STI Group Leader, CERN  
Dante Gregorio, FAP-External Funding, CERN  
Gerda Neyens, ISOLDE Spokeperson, CERN  
Alice D'Onofrio (replaces Antonio Paulo), MEDICIS-Promed Early Stage Researcher, C2TN IST Lisbon  
Joao Pedro Ramos, MEDICIS Run Coordinator, CERN  
Jan Pruim (replaces Wim Oyen), EANM  
Nathalie Michel, GIP Arronax  
Fabio Pozzi, HSE-Radiation Protection, CERN  
Maija Radzina, Rīga Stradiņš University (RSU)  
Vitālijs Skrīvelis, Rīga Nuclear Medicine Centre  
Ilmārs Stonāns, Rīga Stradiņš University (RSU)  
Thierry Stora, MEDICIS Project Leader, CERN  
Nick Van der Meulen, Paul Scherrer Institut  
Nhât-Tân Vuong, MEDICIS-Promed Early Stage Researcher, CERN & EPFL

### *By remote connection:*

Roberto Formento Cavaier, MEDICIS-Promed Early Stage Researcher, GIP Arronax, AAA, Univ. Nantes  
Ulli Köster, Institut Laue-Langevin, Grenoble  
Peter Ivanov, National Physics Lab, UK  
Carlos Salgado García, FABIS  
John Prior, Lausanne University Hospital CHUV  
José Sánchez Segovia, FABIS

MoU signed by principal partners  
RSU has joined  
Discussions on implications for isotope use in clinics (MEDICIS is not GMP)  
(input from Prof De Cristoforo)



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## 2(3) projects concluded- 3 New projects approved

**Concluded : MED011 – R. Formento (169Er from ILL) & MED007 T. Cocolios (S. Stageman 11C) MEDICIS-Promed ; MED006 (contest → video for Promed : done)**

### **New Projects :**

#### **MED-014 – Guy Bormans, SCK-CEN**

Labeling of heat-sensitive biomolecules with terbium radionuclides for imaging and treatment of (micro)metastatic CEA-positive colorectal cancer: selecting the optimal match between chelator and radiometal

Request: 4-6 deliveries of 200 MBq per delivery of  $^{155}\text{Tb}$  over 1 year.

#### **MED-015 – Maija Radzina, Riga Stradins university**

$^{44}\text{Sc}$  production with 18MeV cyclotron and study of scandium-labeled peptide based ligands for clinical use

Request:  $^{44}\text{Sc}$  and  $^{47}\text{Sc}$  /  $^{47}\text{Sc}$  Approved

#### **MED-016 – Carlos Salgado-Garcia, Huelva**

Theranostic radiolabelled nanoparticles for ovarian cancer by folate receptor targeting

Request:  $^{149}\text{Tb}$ ,  $^{155}\text{Tb}$  /  $^{149}\text{Tb}$  unlikely during LS2



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## CERN Long Shutdown 2 (LS2)

MEDICIS is probably one of the few facilities at CERN that runs during LS2

- $^{169}\text{Er}$  from ILL in Grenoble
- $^{152,155}\text{Tb}$  from Arronax in Nantes
- $^{47}\text{Sc}$  from NMC in Riga

Operation of 1 to 2 weeks per month

Plan of 2 technical stops – for maintenance and upgrades

- MELISSA, radiochemistry, others...



J. P. Ramos | 6<sup>th</sup> of December 2018  
ISOLDE Workshop and Users meeting 2018

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# MEDICIS Technical Stops

## Follow CERN facilities Schedule

Plan technical stops, commissioning and operation phases

### Technical stop 1

07/01/2018 -> 01/03/2018

- Laser installation and commissioning
- Gas system upgrade (molecular beams)
- Separator magnet upgrade
- Radiochemistry fume hood installation
- Targets to ISR
- Frontend maintenance

### Technical stop 2

(TBD)

- Thermocouple controls install
- Gas system controls install
- Collection chamber vacuum upgrade
- Laser 2<sup>nd</sup> set of optics installation
- Tasks not done from technical stop 1



J. P. Ramos | 6<sup>th</sup> of December 2018  
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# Initial discussions INFRA-2-2020 call 1<sup>st</sup> Meeting at CERN 14<sup>th</sup> Jan 2018

- Information EU project office CERN +

**Research Infrastructures activities in Horizon 2020**

**Work Programme 2018-2020**

Philippe Froissard

Deputy Head of Unit  
Research Infrastructures Unit  
European Commission – DG Research & Innovation



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# Idea to create a community around facilities for medical isotopes by mass separation



## Call 3 – Integrating and opening RIs of European interest

To open up **key** national and regional research infrastructures to all European researchers and to ensure their optimal use and joint development:

*Emphasis on sustainability, widening, skills, innovation and data management in compliance with the EOSC*

1. Integrating activities for **Advanced communities**
2. Integrating activities for **Starting communities** (2020)
3. **Pilot for a new model** of IA : new ways for opening and integrating at EU level RIs of European interest (2020)

### INFRAIA-02-2020: Integrating Activities for Starting communities

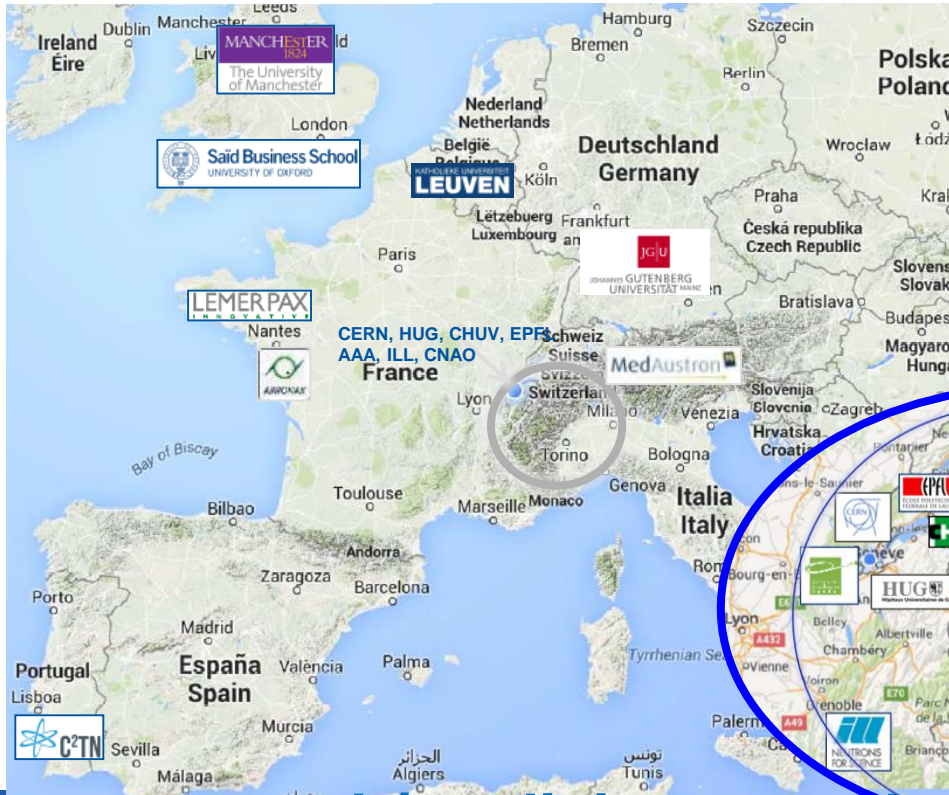
RI Communities never supported for their integration under EU FPs

- **Two-stage call:** 1<sup>st</sup> stage 2019, 2<sup>nd</sup> 2020. **Bottom-up** approach
- Emphasis on **networking**, standardisation and **common access procedure, complementarity** and coherence with the existing European RI landscape

Research Infrastructures	2018	2019	2020	Total	Single grant	Deadlines
CALL H2020-INFRAIA-2018-2020	101.5	125	155	381.5		
INFRAIA-01: IA - advanced communities	101.5	125		226.5	Up to 10 M€	22 Mar 2018 20 Mar 2019
INFRAIA-02: IA – starting communities					up to 5 M€	end 2019 + mid 2020
INFRAIA-03: Pilot for a new model of IA			155	155		

**5MiEuro → budget for ~ 30 projects (split between H2020-02 and -03 ?)**

# The MEDICIS-Promed network



[www.cern.ch/medicis-promed](http://www.cern.ch/medicis-promed)



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# Initial discussions -

- Non-conventional medical radioisotopes by mass separation in Europe

**INFN-ISOLPHARM** (IT 2021) : 40 MeV mass separation

**ILL** (FR/EU) : high flux reactor

**ARRONAX** (FR) : 70MeV no mass sep

**Institute for Energy Technology** (NO) : cyclotron, no mass sep

Poland or Latvia (not asked, but likely to accept)

**JRC-Karlsruhe** (EU) : alpha isotopes generators

**ISOL@Myrrha** (BE)



## H2020 proposal preparation

For the preparation of a proposal, SCIPROM will support you in the project conception and the construction of the consortium. We will write parts of the proposal, offer practical help with the administrative aspects of the project and help you address the research policies that are at the origin of the targeted call. SCIPROM will assist you in turning your ideas into a proposal of highest quality which will be very well written and presented and which fulfils all the various EC requirements.

Typical SCIPROM services for the preparation of a collaborative project are given along the proposal structure. Our definite service offer will be developed in conjunction with the consortium.

### Proposal Part A

#### Form A1: General information

Completion of formal parts, proposal of relevant keywords, comments on abstract.

#### Forms A2: Participants

Verification or collection of administrative data of all partners

#### Forms A3: Budget

Completion of forms with budget agreed by all.

### Proposal Part B

#### Whole proposal

Customised template of full proposal, professional layout & consistent formatting, adaptation to formal EC requirements, proof-reading in style and content, compilation of the individual parts of the proposal.

#### Section 1 - Excellence

Objectives, relation to the work programme, concept and approach, ambition: Support in conception and structure, readability, verification of relevance to the call, novelty, and focus. Preparation and/or revision of tables, figures and schemes (customised tables, illustrational figures for objectives and SOTA parts, schematic view of project concept).

#### Section 2 - Impact

First draft identifying the main lines of argumentation. Finalisation based on partner contributions (specific impact, communication strategy, dissemination channels, exploitation tracks, IPR rules and agreements).

# Sciprom, located in Lausanne (former colleagues in physics and Biochemistry)

### Related services

- Budget preparation
- Schedule and to do lists
- Internal communication tools (contact details, mailing lists, wiki-type website, file repositories).
- Electronic submission of proposal parts A and B.
- Consulting: legal aspects (IPR handling, letters of intention, confidentiality agreements), building of consortium, EC funding rules.

channels, exploitation tracks, IPR rules and agreements).

#### Section 3 - Implementation

- 3.1 Work plan—Work packages, deliverables and milestones. Support in work plan strategies. Templates for all tables. Customised work package (WP) tables, PERT-like chart, Gantt chart. Drafts for WPs Management and Dissemination.
- 3.2 Management structure and procedures: Proposal of management structure adapted to the project, complete draft of section. Conception of risk management and related table
- 3.3 Consortium as a whole: Draft description of consortium incl. figures and tables, completion of section based on consortium input.
- 3.4 Resources to be committed: Draft based on budget as agreed by all.

#### Section 4 - Members of the consortium

- 4.1 Individual participants: Template for partner descriptions, revision of descriptions provided by partners, gender statistics.
- 4.2 Third parties: Compiling information provided by partners

#### Section 5 - Ethics and security

- Completion of ethical issues table. Assistance in identifying ethical issues. If ethical issues apply, advice on how to tackle them and first draft of section to be completed by partners.

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# Structuring as TNA, NA, JRA

- Past experience with ENSAR, ERAMMIT
- Structuring as TNA (Transnational Access, Networking Activity, Joint Research Activity)
- How to fit in 11C for hadrontherapy (JRA, NA?)



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