

# Nano2Clinic

Cancer Nanomedicine - from the bench to the bedside



## COST Action CA 17140

MC meeting  
on-line, 8/10/2020

# Verification of the presence of two-thirds of the Participating COST Countries

- Albania
- Austria
- Belgium
- Bosnia and Herzegovina
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Israel
- Italy
- Latvia
- Luxembourg
- The Netherlands
- North Macedonia
- Norway
- Poland
- Portugal
- Romania
- Serbia
- Slovakia
- Slovenia
- Spain
- Sweden
- Switzerland
- Turkey
- United Kingdom

34 countries

$2/3=23$  countries

(31 countries)

## COST Near Neighbour Countries

| Institution Name   | MC Observer              |
|--|--------------------------|
| Clinics at the MAZ Company   | Dr Natallia Shcharbina ▼ |
| Institute of Chemical Biology and Fundamental Medicine                               | Dr Evgeny Apartsin ▼     |
| Russian National Research Medical University   | Dr Maxim Abakumov ▼      |
| Chuiko Institute of Surface Chemistry of the National Academy of Sciences of Ukraine | Dr Liudmyla Storozhuk ▼  |
| Institute of Bioengineering, ITMO University, St Petersburg                          | Prof Neelov Igor ▼       |

## COST International Partner Countries

| Institution Name                            | MC Observer             |
|---|-------------------------|
| Monash Institute of Pharmaceutical Sciences | Prof Nicolas Voelcker ▼ |
| Université du Québec à Montréal             | Prof ROY René           |
| Université du Québec à Montréal             | Dr Leila Mousavifar     |

# Adoption of agenda

Approval of minutes of the last  
MC meeting in Riga (15/10/2019)  
– e-voting

Prof. Rana Sanyal will prepare  
minutes of this meeting

# Update from the Science Officer

Dr. Lucia Forzi

# Update from the Action Chair

# Status of the Action

 **CSO Approval date** - 13/04/2018

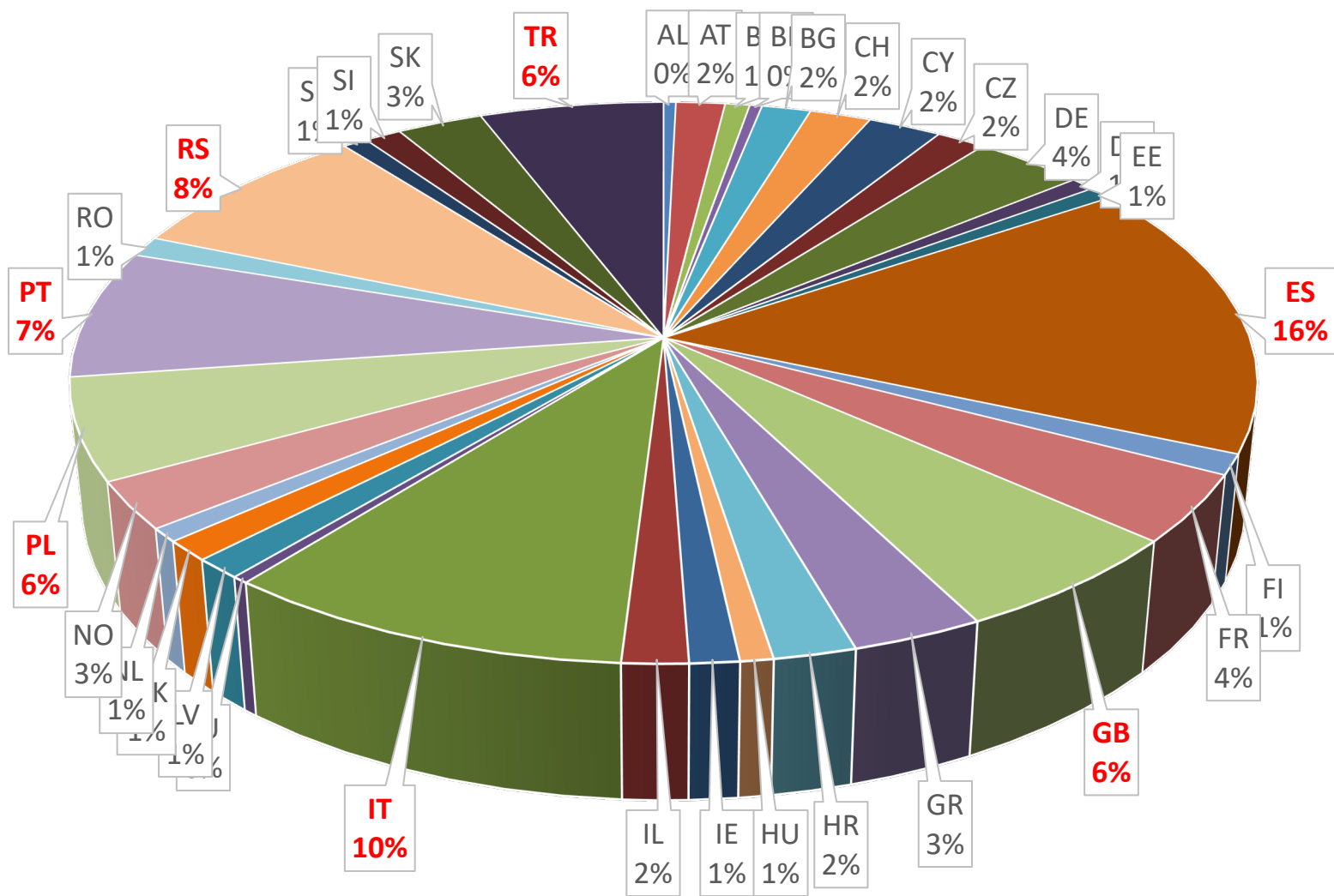
 **Start of Action** - 28/09/2018

 **End of Action** - 27/09/2022

**114** MC members and MC substitute members from **34** COST countries  
(37 secondary proposers from 21 COST countries and 3 from 2 NNC)

**141** WG members





## COST Near Neighbour Countries

| Institution Name   | Country            |
|--|--------------------|
| Clinics at the MAZ Company   | Belarus            |
| Institute of Chemical Biology and Fundamental Medicine                               | Russian Federation |
| Russian National Research Medical University   | Russian Federation |
| Chuiko Institute of Surface Chemistry of the National Academy of Sciences of Ukraine | Ukraine            |
| Institute of Bioengineering, ITMO University, St Petersburg                          | Russian Federation |

## COST International Partner Countries

| Institution Name                            | Country   |
|---|-----------|
| Monash Institute of Pharmaceutical Sciences | Australia |
| Université du Québec à Montréal             | Canada    |
| Université du Québec à Montréal             | Canada    |

# Update from the STSM Coordinator

Prof. Maria Francesca Ottaviani

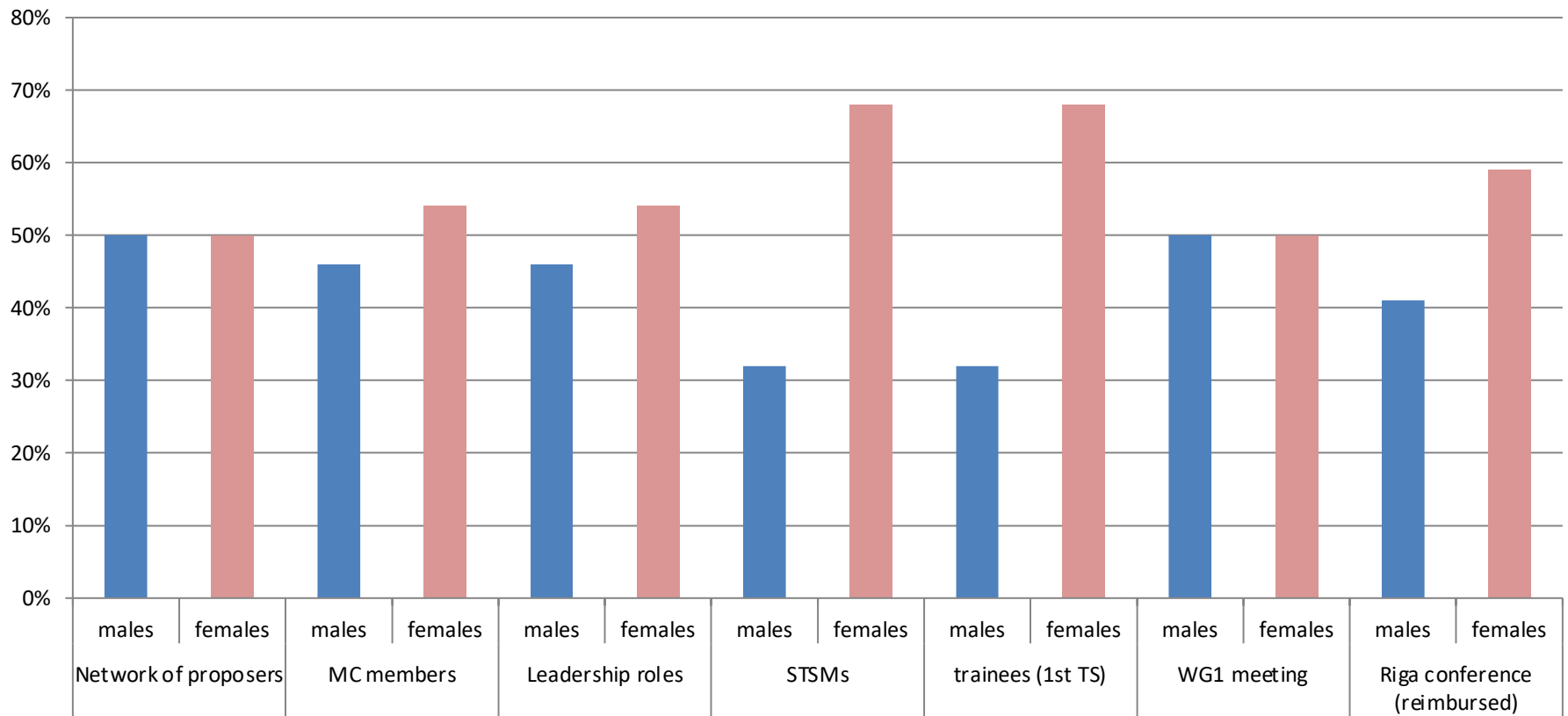
# Update from the Grand Holder Scientific Representative: Action budget status

Ms. Joanna Korczynska  
University of Lodz

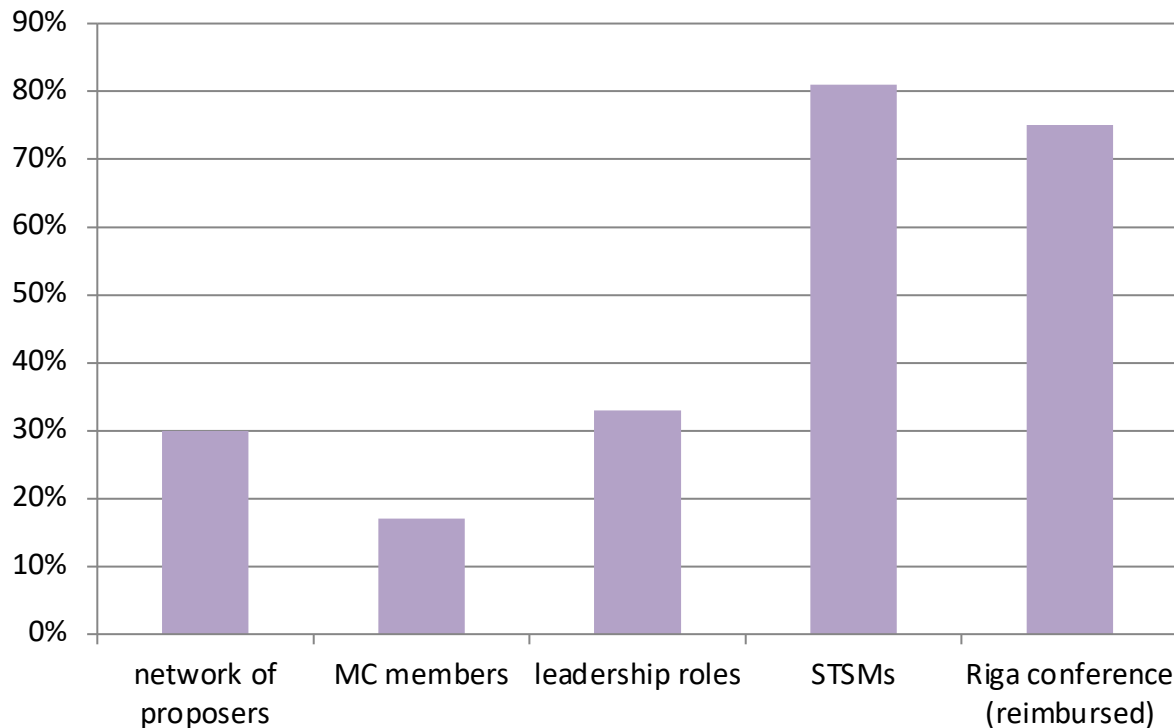


# Implementation of COST policies

# Promotion of gender balance



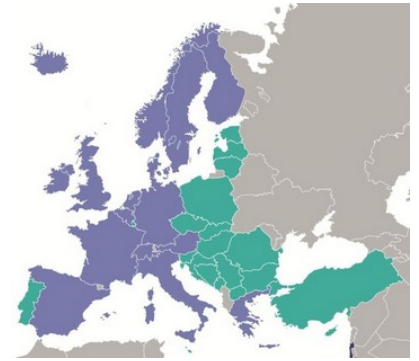
# Promotion of Early Career Investigators



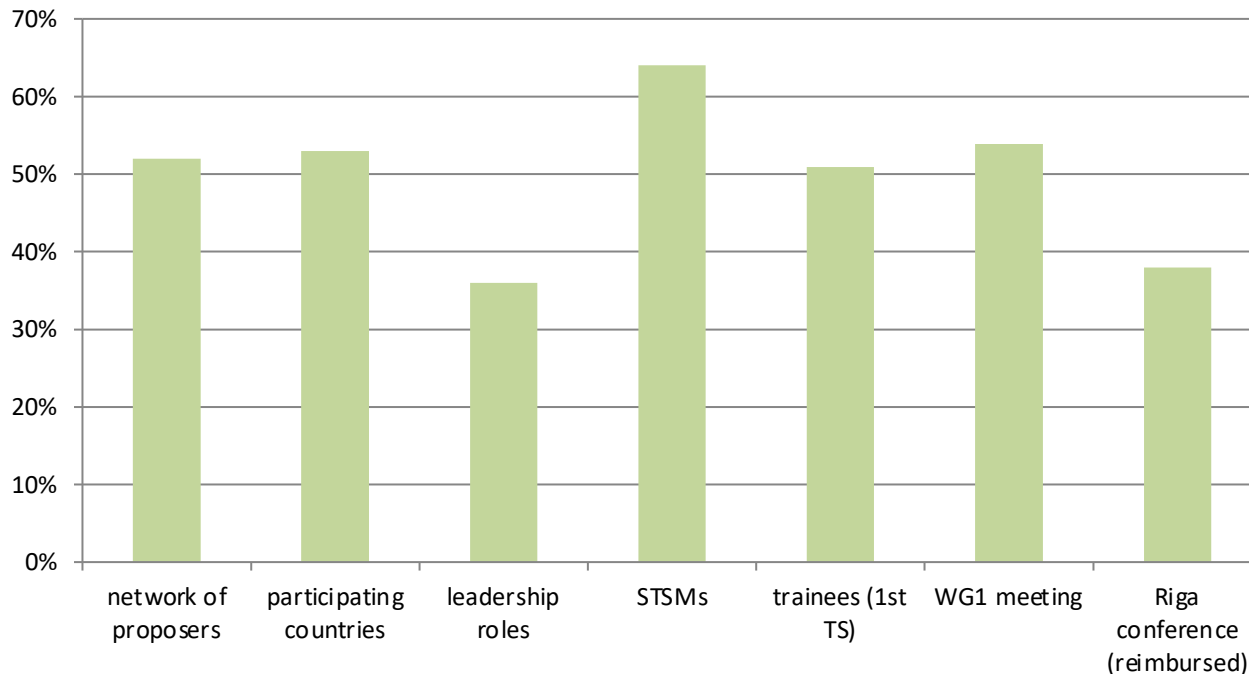
## Vice-leaders:

- WG1 - Tomáš Strašák (CZ)
- WG2 - Evgeny Apartsin (RU)
- WG3 - Ulf Kahlert (DE)
- WG4 - Enrico Catalano (IT)

# Inclusiveness Target Countries



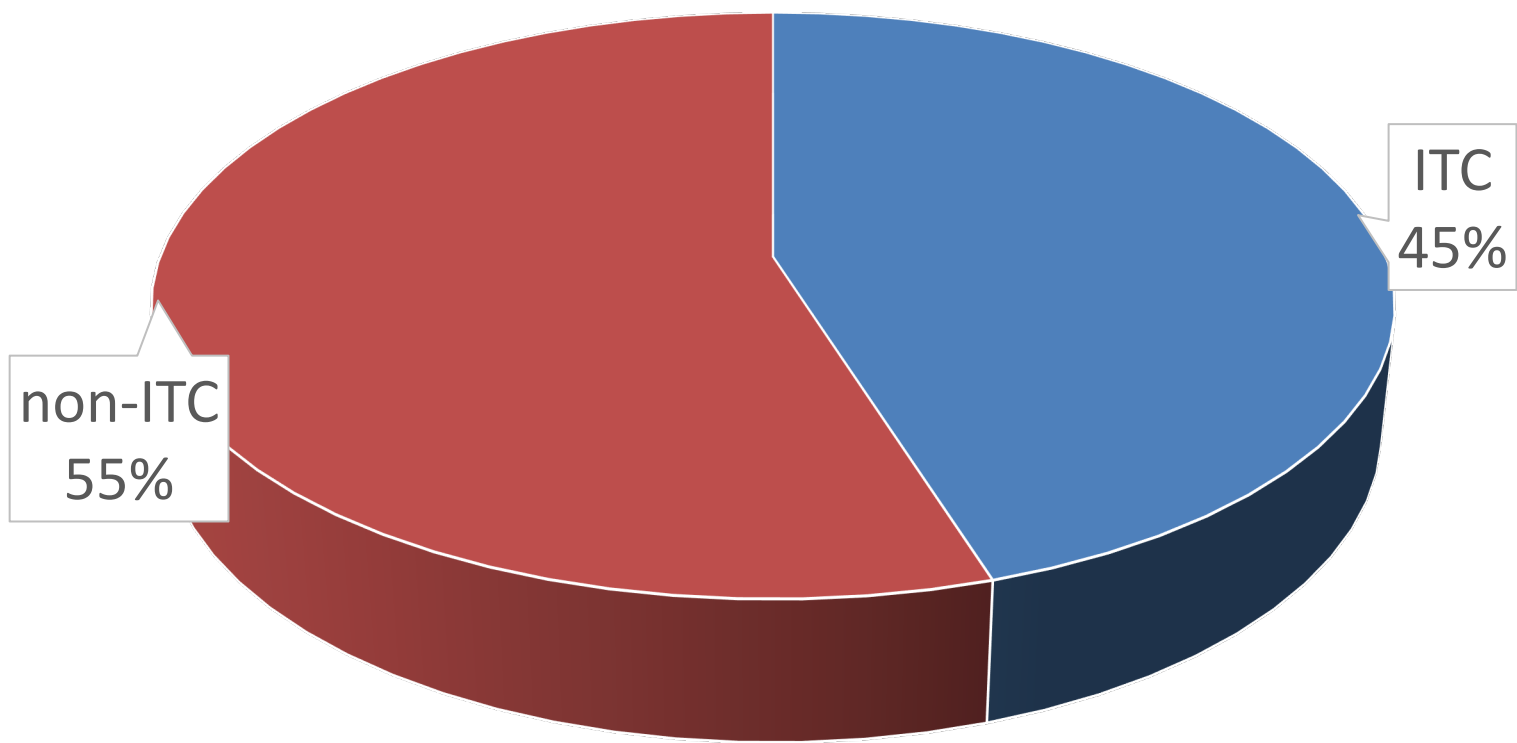
Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Luxembourg, Malta, Montenegro, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Turkey, North Macedonia



Location of events:

- Portugal (WG1 meeting)
- Latvia (MC meeting+1st COST conference)





Follow-up of MoU objectives:  
progress report of working groups

# Memorandum of Understanding

## Challenge

To develop nanosystems carrying anticancer drugs from their initial design, pre-clinical testing of efficacy, pharmacokinetics and toxicity to the preparation of protocols needed for the first phase of their clinical studies

## Secondary objectives:

- Promoting and fostering active and multidisciplinary **collaborations between industry and academia** on each aspect of the design, development, and translation of cancer nanomedical agents
- **Fostering synergies between complementary EU groups** of excellence, thereby expanding the network beyond existing collaborations between Action partners, with particular attention to the strong, active involvement of SMEs, regulatory agencies, academic clinical research centers, clinical research organizations, and other public/industrial entities
- Promoting cross-pollination of competencies and transferring results within the EU actors belonging to public and private sectors by extensive **exchange of PhD students, young researchers and senior scientists, meetings and workshops, and collaborative scientific publications and patents.**
- **Disseminating results to all potential stakeholders**, including public organisms, funding agencies, patients associations and the general public to increase EU citizen awareness of the social benefits of the Action results.
- **Creating strong partnership between academia and industry** by the equal participation of these two groups.
- **Training and mentoring of young generations of researchers** working in academia and industry to pave their way towards autonomous research leadership
- Ensuring equal opportunities by providing equal access to COST activities, respecting **balanced gender distribution.**
- Involving participants from less research active countries according to the **inclusiveness policy of COST.**

# Working Groups:

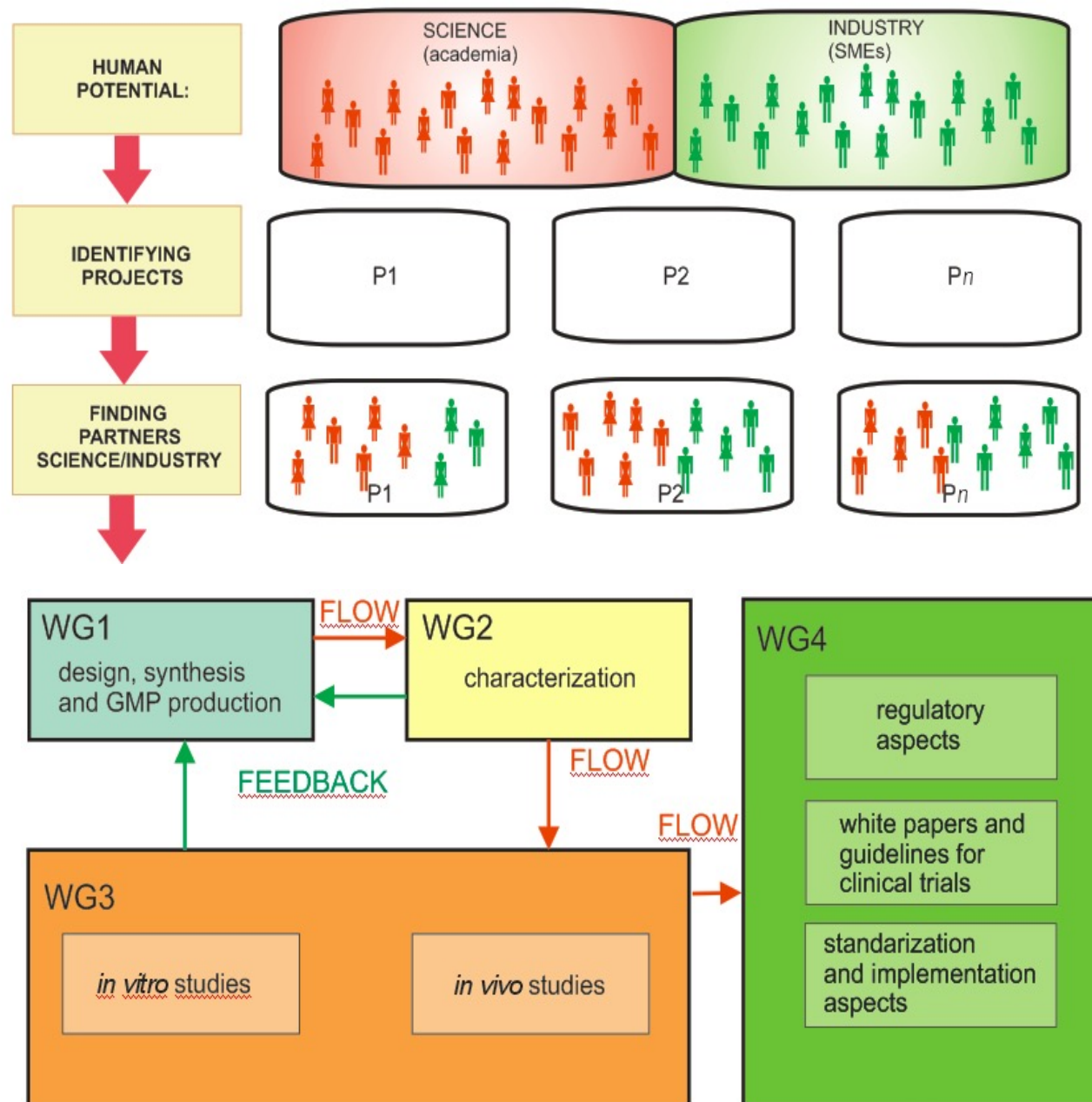
WG 1 – manufacturing nanodrugs

WG 2 – physico-chemical characterization of nanodrugs

WG 3 – preclinical studies of nanodrugs

WG 4 – guidelines for clinical trials and regulatory aspects  
of nanomecines

# The main idea:



# 1<sup>st</sup> year deliverables

<https://www.nano2clinic.eu/wg1-deliverables>

WG 1

Protocols and recipes for **computer-assisted design/optimization** of new/existing chemical entities and/or nanomaterials.



**Chemical protocols, pathways and mechanisms** for the synthesis of new chemical entities and/or nanomaterials.

Roadmap and consensus **protocols for cost reduction, yield optimization and reproducibility** of the chemical entities and/or relevant nanomedicines



Roadmap and **consensus protocols for GMP production** of chemical entities and nanomedicines.

# WG1 meeting



Funchal, **PORTUGAL**, 13-14 July 2019  
**Cost Action CA17140 - WG 1 MEETING**  
**Nano2Clinic**

Cancer Nanomedicine - from the bench to the bedside



# Acknowledgements

- Prof. Rana Sanyal (WG 1 Leader)
- Prof. Sabrina Pricl
- Prof. Kostas Karatasos
- Prof. Nazende Günday-Türeli

# 2<sup>nd</sup> year deliverables

WG 2

**Consensus protocols for full physico-chemical characterization** of new/existing chemical entities and/or nanomaterials.



deadline:  
26th of Oct.



deadline:  
26th of Oct.

**Roadmap and consensus protocols for controlling** of selected new/existing chemical entities and/or nanomaterials.

# Update from the WG2 Leader

Prof. Ivana Vinković Vrček

**1st COST Conference – Riga, 15-16 Oct. 2019**  
**Organizer: Prof. Maria Issagouliantis**



# Scientific planning

# 3<sup>rd</sup> year deliverables



**WG 3**

**Consensus protocols for in vitro testing of  
new/existing chemicals entitles and/or  
nanomaterials**

**Consensus protocols for in vivo testing of  
new/existing chemical entitles and/or  
nanomaterials**

# Update from the WG3 Leader

Prof. Carlo Catapano

# Action Budget Planning and Long-term Planning



X.2018

X.2019

X.2020

X.2021

X.2022

1st year

2nd year

3rd year

4th year

V.2019

V.2020

V.2021

V.2022

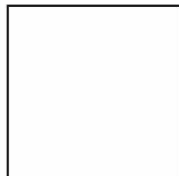
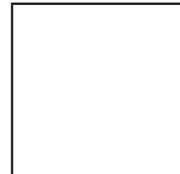
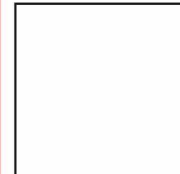
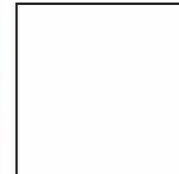
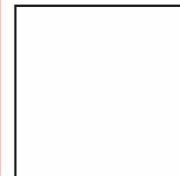
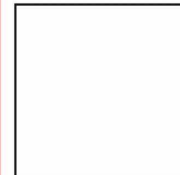
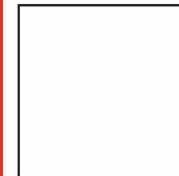
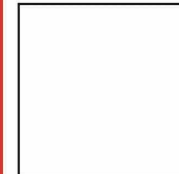
1st BP

2nd BP

3rd BP

4th BP

5th BP

IX.2018  
MC kick-off  
meetingIV.2019  
CG meeting  
Trieste, ITIV.2019  
ITS  
Trieste, ITVII.2019  
WG1  
meeting  
Funchal, PTX.2019  
MC meeting  
Riga, LVX.2019  
I conference  
Riga, LVIX.2020  
CG meeting  
Granada, ESV.2020  
WG2  
meeting  
Zagreb, HRIX.2020  
MC meeting  
Granada, ESVII.2020  
II TS  
Warsaw, PLVI.2021  
CG meeting  
location YVI.2021  
WG3  
meeting  
location YIV.2022  
CG meeting  
location ZIV.2022  
WG4  
meeting  
location ZVI.2022  
MC meeting  
Lodz, PLVI.2022  
II conference  
Lodz, PLVI.2022  
STSM  
workshop  
Lodz, PL

# Original plans:

11-12 May - WG2 meeting, Zagreb, Croatia, Organizer: Ivana Vinković Vrček

14-17 July - 2nd Training School, Warsaw, Poland, Organizer: Ewa Sawosz-Chwalibóg

10 September - CG meeting, Granada, Spain, Organizer: Rosario Maria Sanchez Martin

11 September - MC meeting, Granada, Spain, Organizer: Rosario Maria Sanchez Martin



1. 50960 EUR from organizing meetings to funding STSMs,
2. 37485 EUR from organizing the Training School to funding ITC conference grants.

X.2018

X.2019

X.2020

X.2021

X.2022

1st year

2nd year

3rd year

4th year

V.2019

V.2020

V.2021

V.2022

1st BP

2nd BP

3rd BP

4th BP

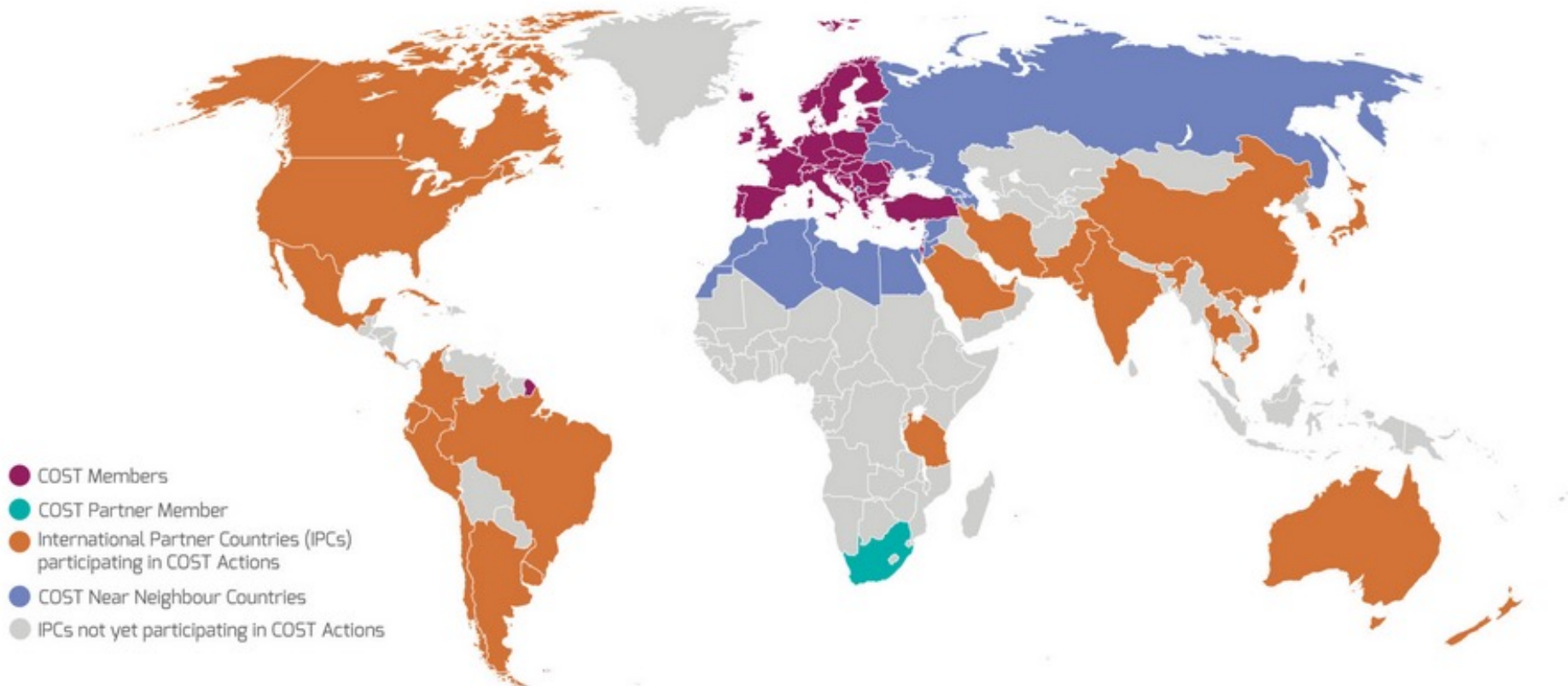
5th BP

IX.2018  
MC kick-off  
meetingIV.2019  
CG meeting  
Trieste, ITVII.2019  
WG1  
meeting  
Funchal, PTX.2019  
I conference  
Riga, LVIV.2019  
I TS  
Trieste, ITX.2019  
MC meeting  
Riga, LVX.2020  
CG meeting  
on-linePOSTPONED  
WG2  
meeting  
Zagreb, HRX.2020  
MC meeting  
on-linePOSTPONED  
II TS  
Warsaw, PLVI.2021  
CG meeting  
location YVI.2021  
WG3  
meeting  
location YIV.2022  
CG meeting  
location ZIV.2022  
WG4  
meeting  
location ZVI.2022  
MC meeting  
Lodz, PLVI.2022  
II conference  
Lodz, PLVI.2022  
STSM  
workshop  
Lodz, PL

# Action budget planning (4th BP)

- Organizing on-line events (Training School, WG meetings, CG meetings) – Local Organizing Support (LOS)
- **ITC conference grants for ECIs** (conference fees for attending on-line events)  
ITC countries: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Luxembourg, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Turkey, North Macedonia
- STSMs
- OA publication charges (co-authored by Action Participants representing **at least 3 different Participating COST Full Members / COST Cooperating Members**)

# Action budget planning (4th BP)



Dissemination planning

Science Communication Manager

Prof. Sabrina Prigl

# Dissemination reminder

- **ONLY** those publications featuring authors belonging to **AT LEAST 2 different CA17140 countries** can be considered as COST-related publications
- Do not forget that **each CA17140 publication must report the following official sentence in the acknowledgment section:**

**This article/publication is based upon work from COST Action CA 17140 "Cancer Nanomedicine from the Bench to the Bedside" supported by COST (European Cooperation in Science and Technology)**

- This sentence is available on the homepage of our website <https://www.nano2clinic.eu/>

discussion

AOB

summary of MC decisions  
(Prof. Rana Sanyal)