

# **Visions and Horizons of IMI**

**Perspective of the Scientific Committee**

**Christian R. Noe**

**Chairman of the Scientific Committee**

**Workshop on the Innovative Medicines Initiative**

**Vienna, April, 30th, 2013**

I am an Austrian!



?





**Friedrich August von Hayek**  
1899 - 1992  
Flagship of Neoliberalism



**Alois Schumpeter**  
1883 – 1950  
Flagship of Entrepreneurship





# The Fall of the United States of Central Europe

A lesson learnt by  
Hayek and Schumpeter

Finance  
driven economy

Entrepreneurship  
driven economy





# Post-industrial Europe – A Vision

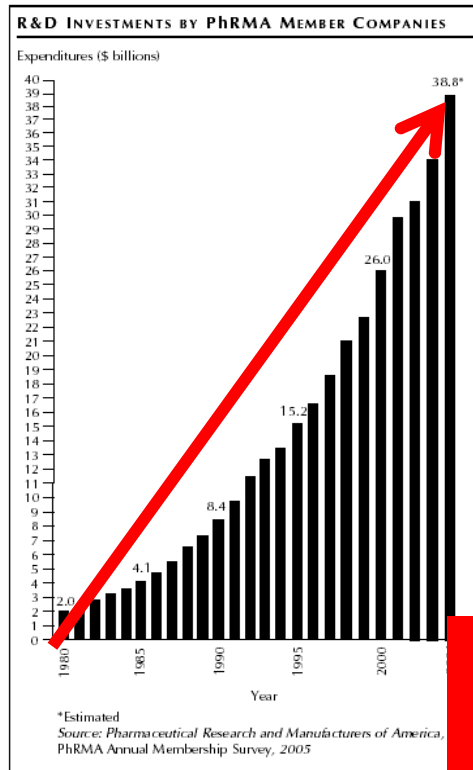


# Innovation follows production!

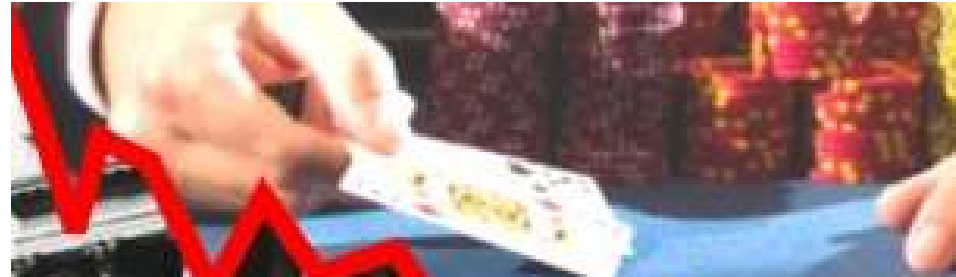
**Europe has to be re-industrialized.**



# IMI and the „Crisis of Innovation“



?



**The crisis of the finance markets  
2008  
A singular event**



**IMI has now a socioeconomic and political impact!**



**IMI – A story of success:  
Tool for project financing  
and entrepreneurial stimulus**



**Strategy:**

- **Motivating competitors to co-operate**
- **Creating a unique PPP in R&D**
- **Connecting academia to the industrial sector**
- **Connecting SMEs to big Pharma**

**Achievements:**

- **Changing the R&D landscape**
- **Improving the global and European R&D environment**
- **Opening up new Fields of Research through projects**

# **IMI in Horizon 2020 - Keep the Equilibrium!**



## **Main Objectives**

- |               |   |
|---------------|---|
| <b>EFPIA</b>  | <b>Improve general conditions for R&amp;D</b><br><b>Promote innovation in target areas</b><br><b>More efficient industry – academia co-operation</b>  |
| <b>Public</b> | <b>Promote Pharma Entrepreneurship in Europe</b><br><b>Re-industrialise Europe</b><br><b>Promote European position in global competition</b><br><b>Strengthen European co-operation on all levels</b> |

# IMI – The Business Model

IMI is a novel approach of co-operation in pharmaceutical sciences, in which organized by the **European Commission, industry, academia and regulatory** are connected.

**The business model has achieved a lot,  
but deserves some optimisation**

▪

# IMI: The Public Private Partnership



Partnership in a competitive environment requires rules for fairness!

Recommendation:

## Strengthen the Public Side!

- Structure the States Representative Group!
- **Activate the academic public!**
- Keep the SC as content managing tool!



**Recommendation:**

## **Structuring the SRG**

**The SRG represents the Pharma fields.  
(Full coverage on the national level)**

<b>Academia</b>	<b>-</b>	<b>Ministries of Science</b>
<b>Industry</b>	<b>-</b>	<b>Ministries of Industry</b>
<b>Regulatory</b>	<b>-</b>	<b>Ministries of Health</b>

- **Setting up of inter- and intra- sectional panels**
- **Probing the “policy making” potential**
- **The SRG as European Meeting point**
- **The SRG as competent “voice”.**
- **The scientific committee as tool**

**Recommendation:**

## **The Scientific Committee**

**Represents the public in IMI operations**

**Reports first of all to the SRG**

**Keeps its advisory role**

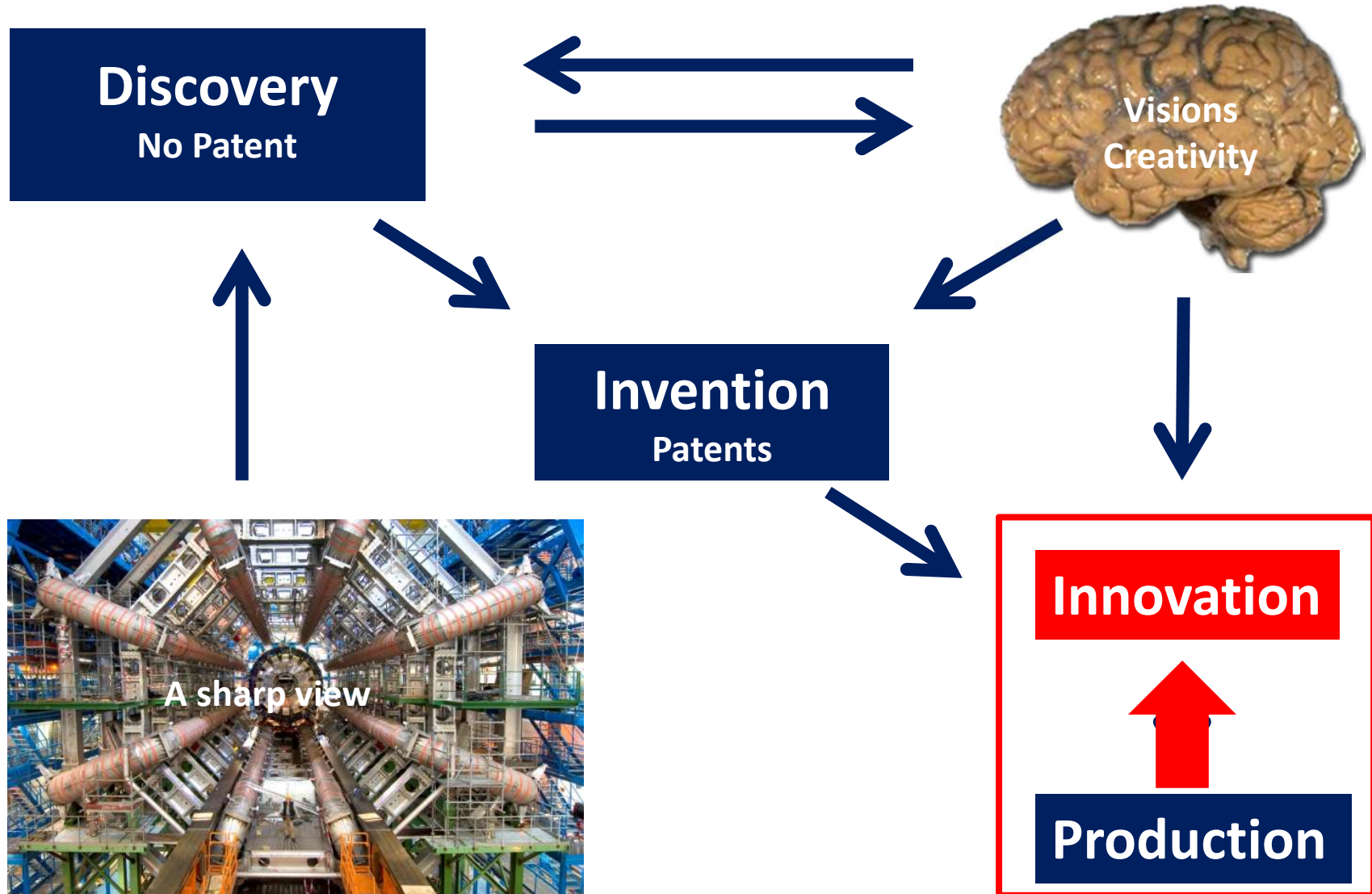
**Obtains veto right in specific issues**

**Has a broad coverage of competence**

### **Member profile:**

- **Experienced with broad views**
- **No specialists, nevertheless “deep” competence**
- **No active role in National Funding Bodies**
- **No personal interest in promoting specific networks**
- **Enthusiasm for science**

# „Innovation“: From Idea to Market!



# Innovation – The central task of IMI

Innovation – precise goals, not aiming at verification or falsification of hypotheses.

**IMI projects have concrete „deliverables“!**

Implementation of novel „tools“  
Development and validation of methods  
Implementation of materialbanks and databanks  
Harmonisation of methods  
Recommendation to regulatory tasks  
Proposal for „best practices“  
Design of training courses  
etc.



# Focusing on Innovation

Recommendation:

**Re-Industrialization of Europe as long-term goal!**

“Innovation” means to get new things in!  
Renewal can only take place, where something exists to be renewed.”

**Strengthening existing European facilities**

**New Business Models for Renewed Pharma Sector in Europe**

**Sustainable Start-ups**

**PPP in time limited project companies**

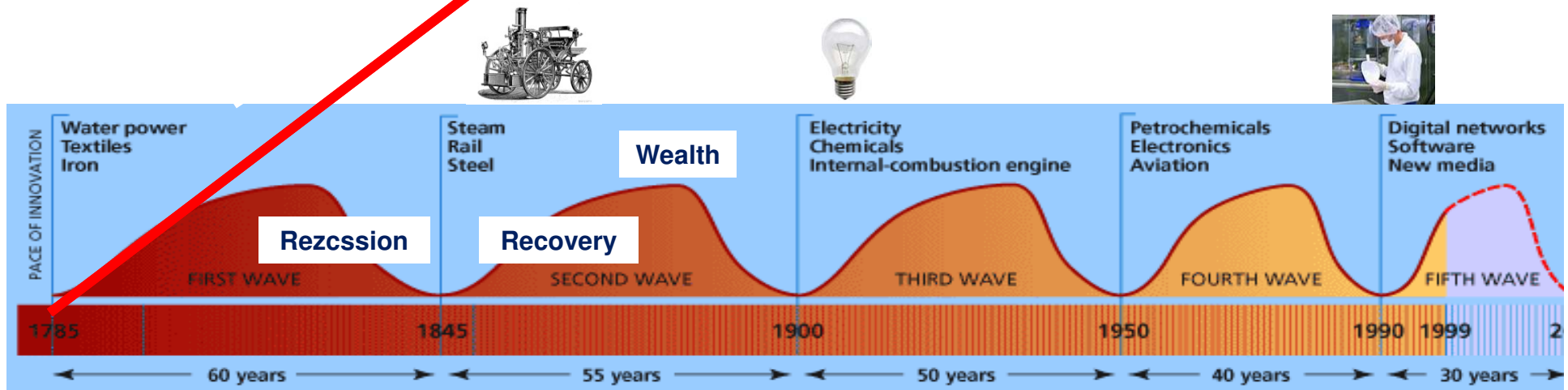
# Innovation: An Evolutionary process

**Die European Economic Crisis**

China, India

**Problem:  
Inhabitants of innovative  
regions do not  
benefit from their  
scientific achievements.**

Europe/USA



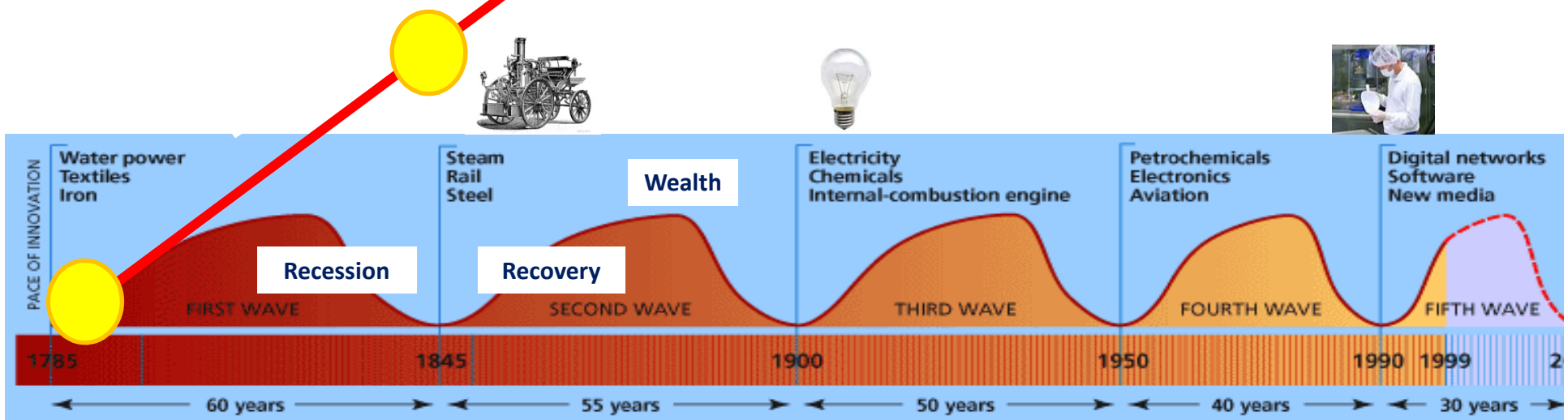


**Innovation  
Competition  
Co-operation**

**Creative  
Distruction**

„The „better“ is the enemy of the „good“

**Innovation ist intrinsisally competitive!**  
A contest of ideas.



**Pre-competitive = Before the contest!**

**Regulatory science has to be an indispensable element of IMI.**

**Improved rules in the research environment strengthen co-operation!**



**Rules for teams and players  
„academia – industry – regulatory“**



# The Research Environment

## Recommendation:

**The political task:**

**Improve general conditions  
for R&D in Europe**

- **Legal framework**
- **Economic framework – taxation**
- **Education**

# **Knowledge Generation and Invention: Pre-competitive Aspects**

## **Recommendation:**

### **Knowledge Generation:**

- **Joint activities with ERC and other institutions**
- **Platform with leading European Research Institutions**
- **Regular thematic Academia-Industry Meetings**

### **Invention:**

- **Provide fair business models for young inventors!**
- **Co-operate with translational institutions!**
- **Check models for legal status of IMI projects!**

# Funding of Competitive Innovation

The present model of industrial in kind contributions is sub-optimal.

Recommendation:

**Expand IMI financing to typical industrial innovation promotion tools, which exist on the national level.**

- Tax preferences for R&D
- European Loans (EIB)
- Complementing direct financial contributions
- PPP Academic R&D Institutions

**Goal: Boosting the financial power of IMI**

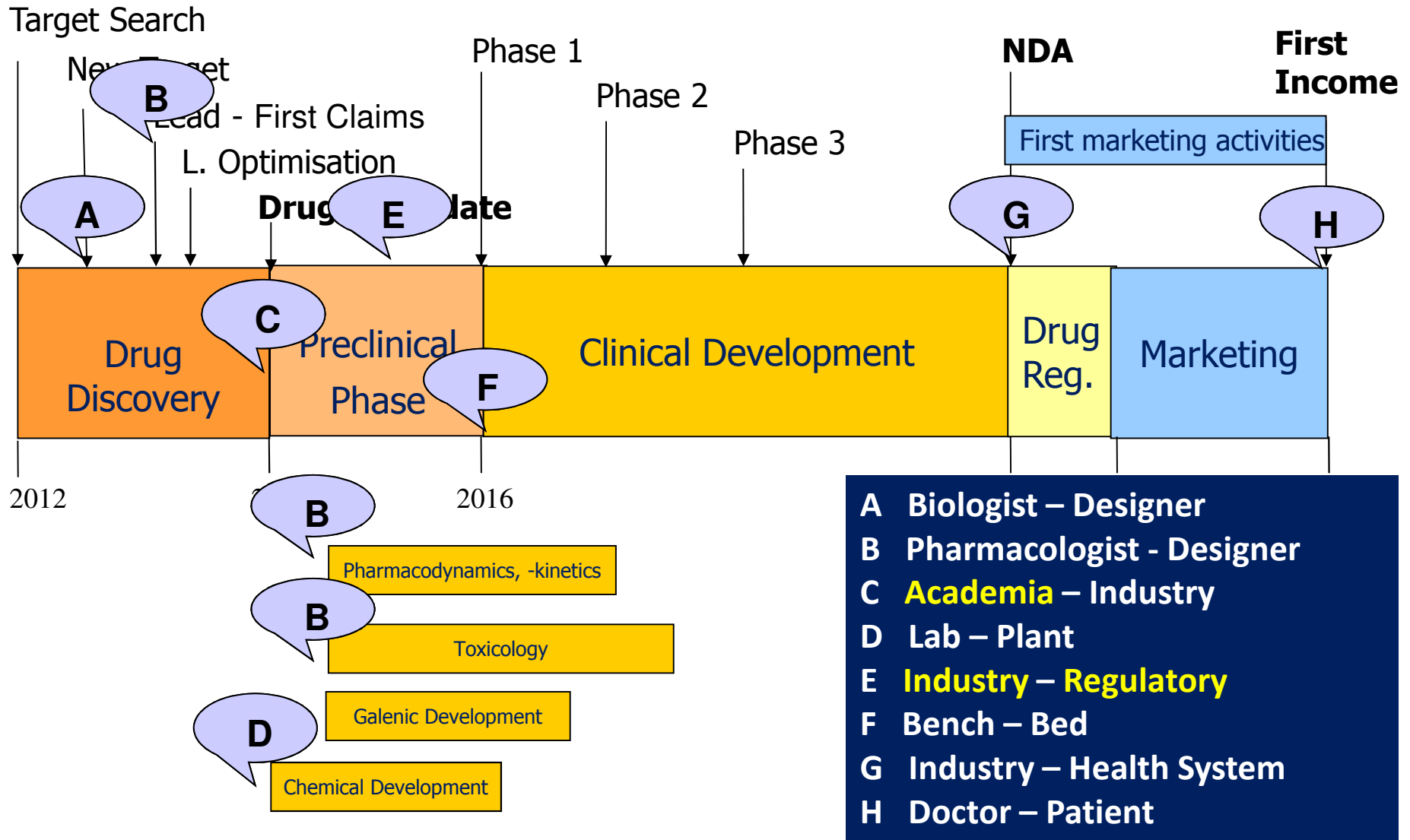
## Co-operation secures survival



**IMI is a co-operative undertaking.**



# „Cultures“ in Translational Sciences



**IMI promotes co-operation across the whole field.**

# Fields of Drug Research

**Areas of unexploited and growing research demand**



**Clinical  
Development**

**„Flow technology“  
„Green chemistry“  
Processes  
Formulation  
Process simulation  
etc.**

**Pharmakogenomics  
Pharmakogenetics  
Stratification  
Personalised Medicine  
Pharmacoepidemiology  
Pharmakovigilance  
Pharmakoeconomics  
HTA  
Compliance  
etc.**

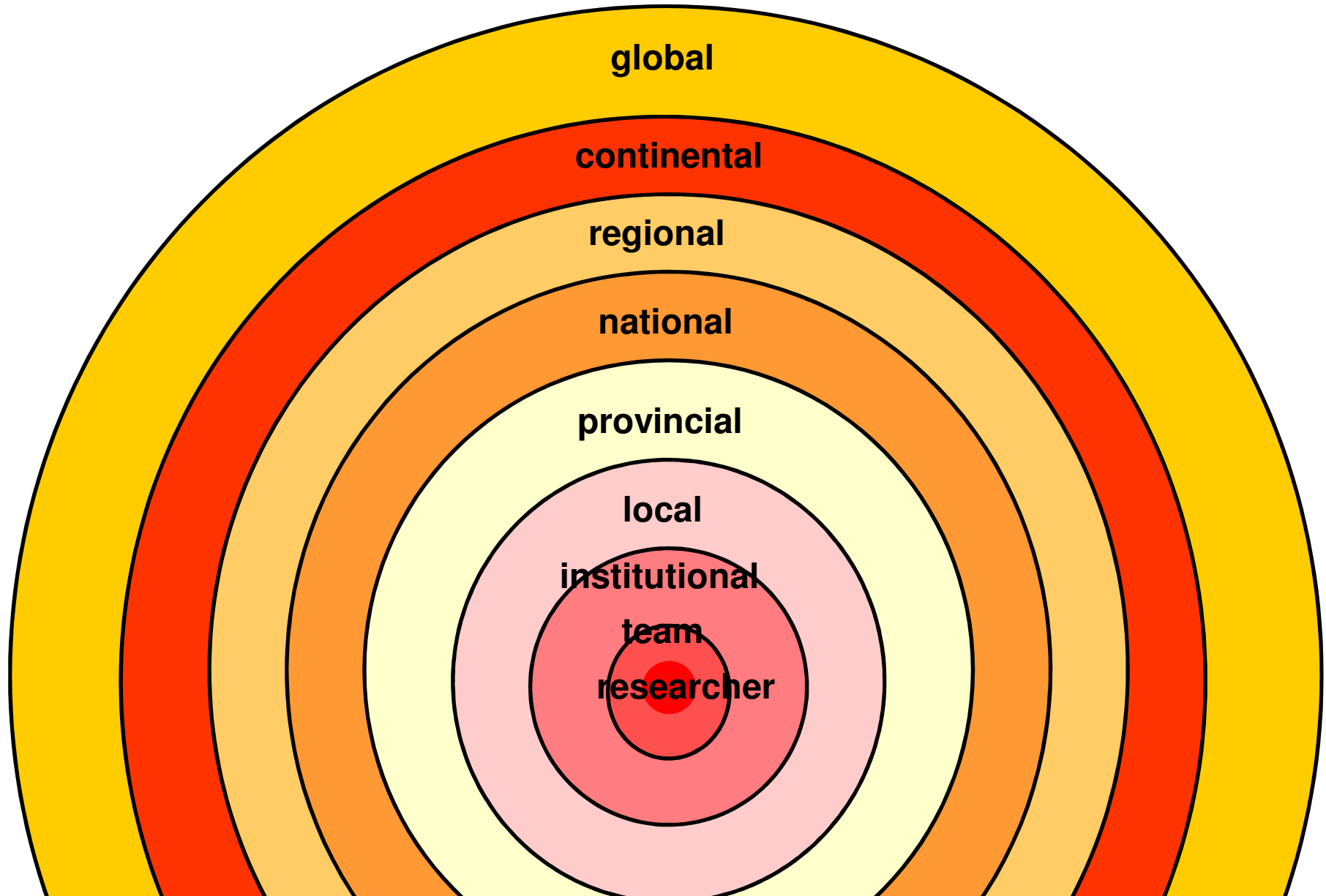


# **Global Role of IMI – A Conflict of interests?**

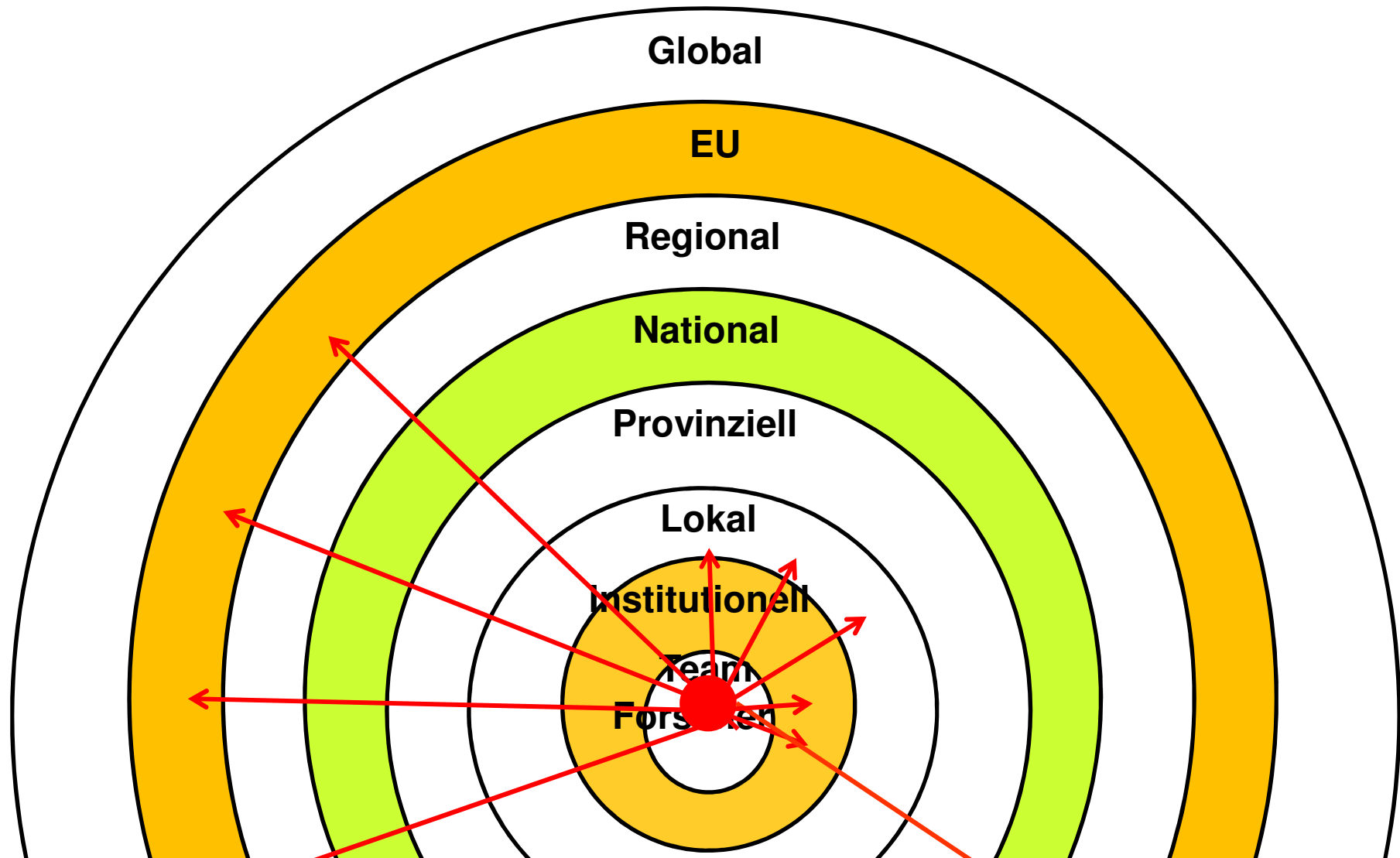


**Europe for Europe  
or Europe for the world?**

# Stratification of Co-operation

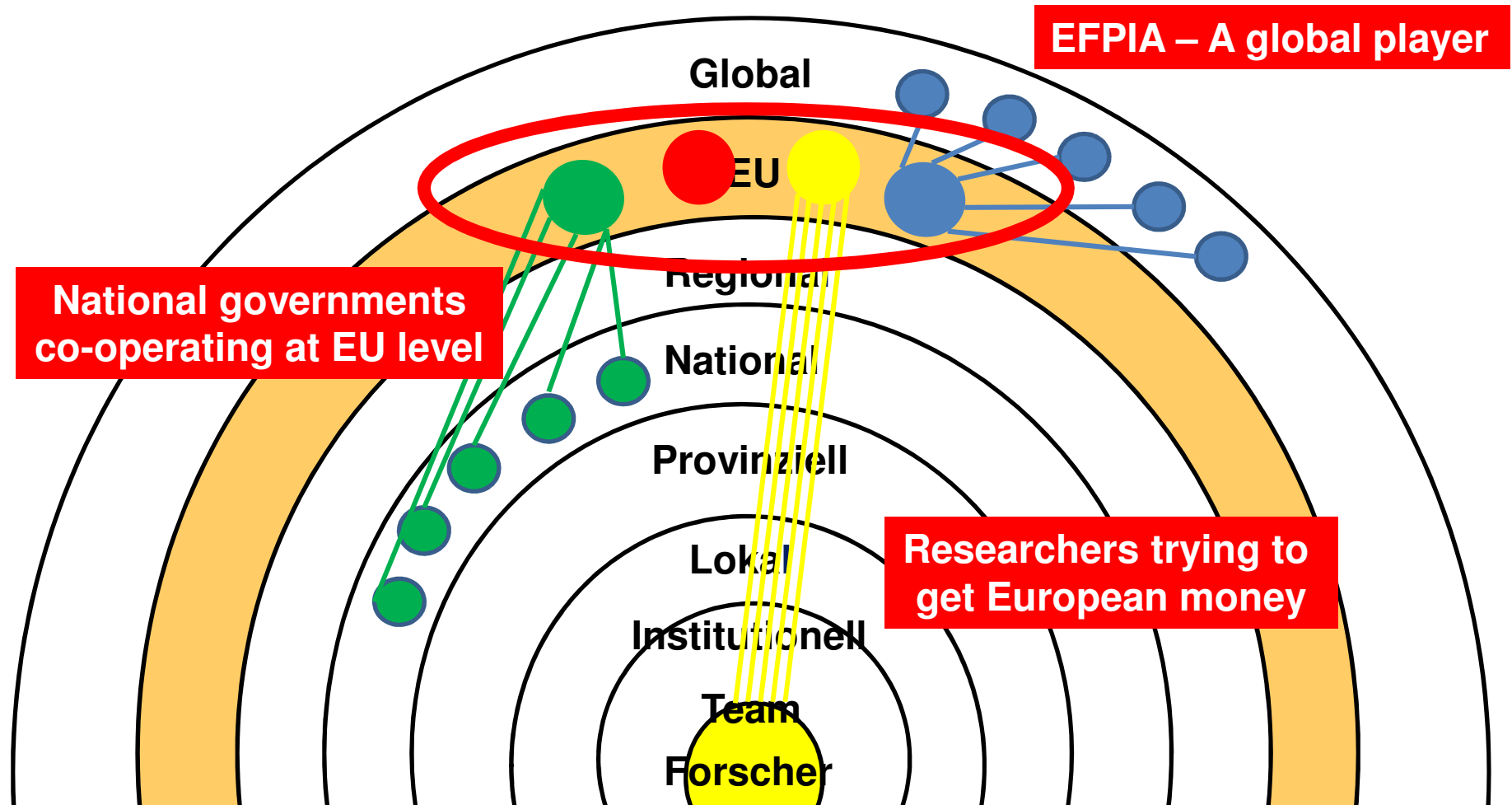


**The number of possible co-operative interactions is limited.**



**New co-operations change the setting.**

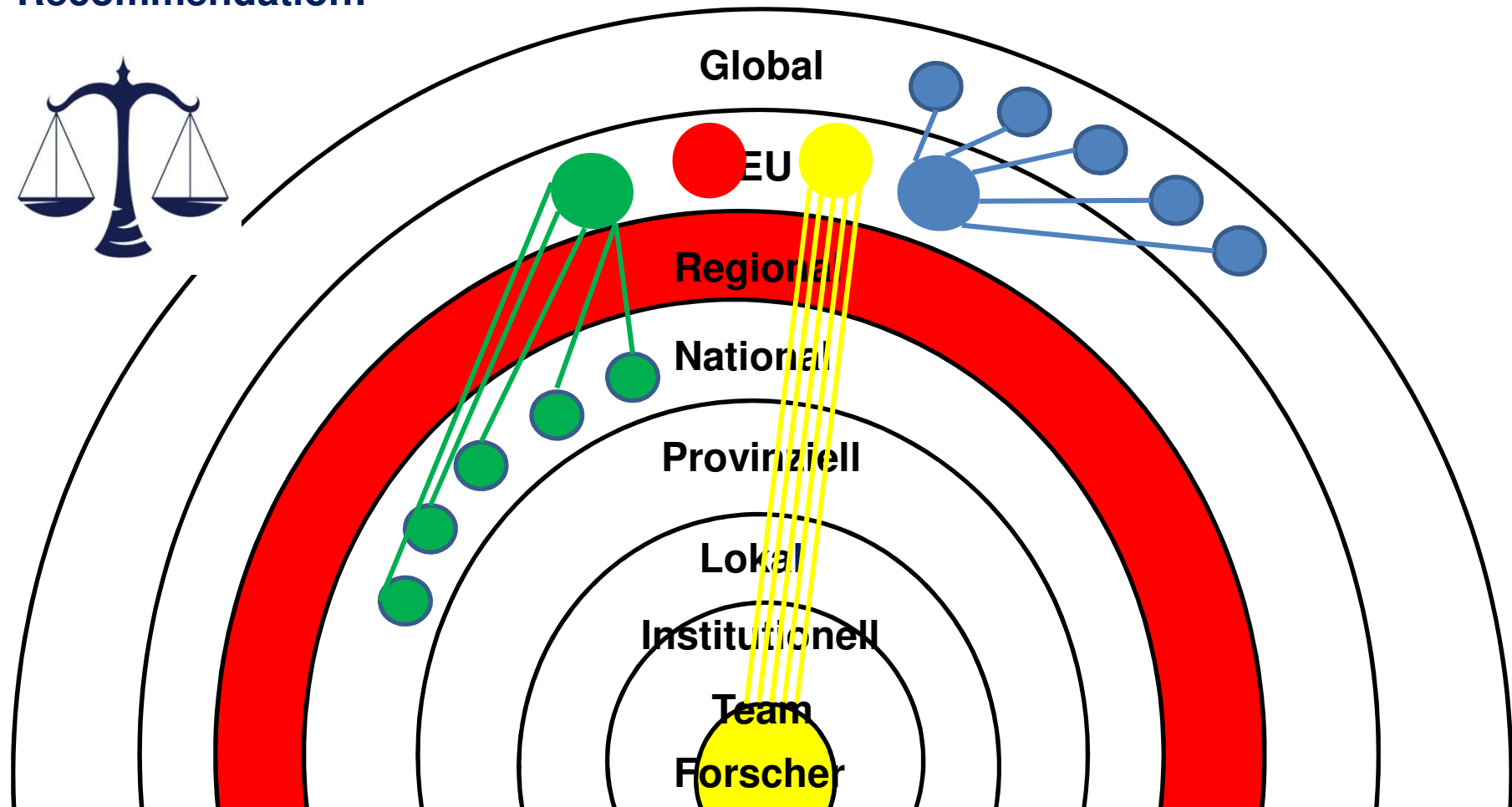
# IMI: Stratification of Partner Interest



**The intra-European focus is legitimate!  
The global impact is also legitimate!**

# IMI: Balancing the global focus by regional activities

Recommendation:



**Complementing regional „medicines initiatives“ will strengthen the intra-European „motor“ role of IMI.**



# Platforms

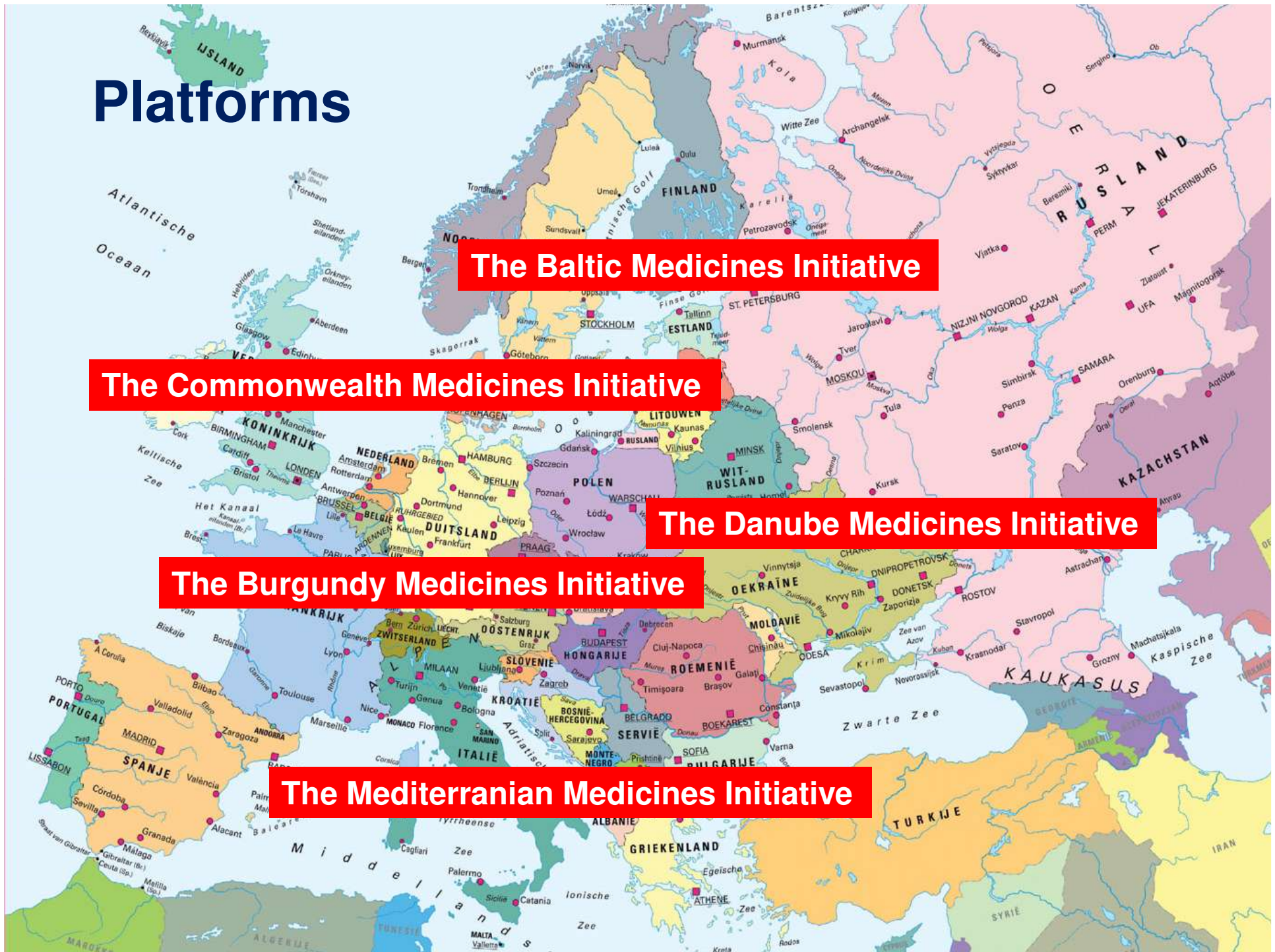
The Baltic Medicines Initiative

The Commonwealth Medicines Initiative

The Danube Medicines Initiative

The Burgundy Medicines Initiative

The Mediterranean Medicines Initiative





*That's all Folks!*