## clinical Research Input - Output

**EU** versus USA (per capita)

Two to three fold higher public \$\$ investments in biomedical research in US

generates two fold higher output in comparison with EU

#### Biomedical and clinical research

- 1. Public investments in biomedical and clinical research are low in comparison with health care expenditure
- 2. USA is outperforming EU in global biomedical and clinical research investments and output
- 3. This has implications
  - 1. for scientists and clinicians-scientists
  - 2. for progress in knowledge
  - 3. For optimal health care
  - 4. For optimal spending of health care \$/€
  - 5. For private investments in health (pharma/biotech companies/medical devices

## Biomedical and clinical research output

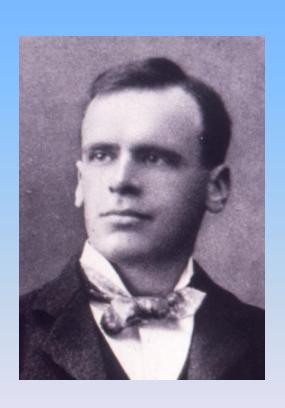
#### Questions

do we want to improve biomedical and clinical research in the EU?

If so: what is best strategy?

How to bring this on the policy agenda? at the national or EU level?





**Ernst H. Starling to the British Research Council in 1924:** 

"Find the best of men, give them what equipment you can afford, and leave them alone"

(Discovery of the hormone together with Bayliss, the capillary diffusion & Starling's heart law)



# **Solutions:**

**Adequate Research Funding &** 

Use of "Best Practice" in R&D



# Recommandations for strenghtening medical research in Europe (EMRC 2012)

- 1. Best practice for funding and performing research
- 2. Collaboration (well funded groups are willing to cooperate if it is in their mutual interest and spare scientists from complex international grant applications whenever possible)
- 3. Revision of EC Directives (Clinical trials and patent laws: now (2015) done!!)
- 4. Equal opportunities for performing research
- 5. Doubling of public funding to 0.25 % of GDP

# Biomedical and clinical research 10 yrs Agenda

### **Suggestions R Bouillon 2015**

- 1. Long term strategic planning for Biomedical Research in Europe
  - 1. Regions countries EU: respect for subsidiarity
  - 2. Public private investments medical insurance companies patient organisations
  - 3. basic translational clinical applied/implementation research

# Biomedical and clinical research 10 yrs Agenda: Suggestions R Bouillon 2015

- 1. Long term strategic planning for Biomedical Research in Europe
- 2. €€€ or £££ or \$\$\$
  - 1. For basic research: regions countries >> EU
  - 2. For translational clinical research: regions countries & EU & insurance companies

including a solution for funding international ACADEMIC clinical research projects including support by medical insurance companies at 0.1 - 1% of health care costs:

Essential role for EU-wide ERC-like NIH-like Translational/Clinical Research Funding Institution

Example of ECRIN funding system proves that such joint EU-national funding is contra productive

3. NO STOP – GO funding

# Biomedical and clinical research 10 yrs Agenda: Suggestions R Bouillon 2015

- 1. Long term strategic planning for Biomedical Research in Europe
- 2. €€€ or £££ or \$\$\$

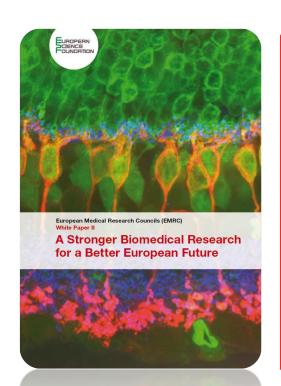
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4. High quality international peer review for all funding

- 5. Long term career planning for all biomedical scientists with special attention for
  - interdisciplinary research teams
  - clinical scientists or MD-PhD as endangered species



#### **Biomedical Research - Recommendations**



- Citizens and patients should be closely engaged with biomedical research
- 2. The results of biomedical research should be rapidly and efficiently brought to the patient
- Biomedical research should be conducted with high quality in an open, honest and transparent way
- European biomedical research should be conducted within a global context
- 5. Investment should be increased to create the right worldclass biomedical research

EMRC statement published in *Science Business* in November 2012: "EMRC statement on medical research in the EU: why we need a new strategy for health research in Europe. Quousque tandem…"



#### **Health Research Funding in Europe**

• EMRC statement published in *Science Business* in November 2012: "EMRC statement on medical research in the EU: why we need a new strategy for health research in Europe. Quousque tandem…"

Signatories: EMRC Standing Committee members and Alliance for Biomedical Research in Europe (<a href="https://www.biomedeurope.org">www.biomedeurope.org</a>)

 EMRC statement updated in March 2013 by the SRG-MED, co-signed by Science Europe Medical Scientific Committee (SE MED) chaired by Professor Richard Frackowiak (Lausanne, CH)

Signatories: SRG-MED and SE MED members

**ACTION:** create a MASTER ACTION PLAN to cover the next 10 years.