



## WORKSHOP 5

Registries, Bio banks, Research:  
patients contribution to operational  
models of national and  
international initiatives





# The International Rare Diseases Research Consortium (IRDiRC) – a collaboration effort at global level



**Béatrice de Montleau**

**Board Member, EURORDIS  
Member of the Executive Committee  
of IRDiRC**



# STARTING POINTS

- **Rare Diseases - High unmet medical needs:**
- Vast majority of rare diseases remain untreated
- Delays in diagnosis – can vary from several months to even 30 years (*“The Voice of 12 000 Patients”*)
- **Rare Diseases – The facts:**
- Each disease patients’ population is small
- Expertise is scarce and widespread **BUT** exists!



# RARE DISEASES: HIGH COMMUNITY ADDED VALUE

- **Rare diseases – High community added value**

## Rarity requires to:

- **Pool patients and expertise**
- **Share common tools: registries, data, bio samples, guidelines**
- **Harmonise data**
- **Enhance dialogue amongst researchers, healthcare professionals, patient groups & policy makers**

# BUILDING COOPERATION: STRUCTURED & SUPPORTED NETWORKS

- EURORDIS (> 1997)
- ORPHANET (>1998)
- European Reference Networks for Rare Diseases (pilots since 2008 - expected expansion from 2014 until 2020)
- E-RARE 1 & 2 -Transnational funding for RD collaborative, multidisciplinary projects
- Clinical Research Networks (e.g. ECRIN 2006)
- Common Infrastructures on Biobanks (e.g. EuroBioBanks > 2001) and Registries (EPIRARE, 2012-2018)
- EUCERD Joint Action (2012-2015 +)
- **IRDiRC: International Rare Diseases Research Consortium (>2011)**

# The EU: A major player in funding health research in rare diseases

- Over two decades of investment in the area
- Over € 430 million invested in current programme
- More than 60 collaborative research projects ongoing
- Continued strong investment through the next funding programme foreseen



# BUILDING a VISION for RARE DISEASE RESEARCH

## The International Rare Diseases Research Consortium (IRDiRC)

**A mechanism to catalyse collaboration on RD research  
on a global scale**

**Two main objectives by 2020:**

**200 new therapies for rare diseases**

**Diagnosis for most rare diseases**

# WHY Research on RARE DISEASES?

- **The ethical and social justice imperative: “extra” vulnerability demands “extra” ordinary measures**
- **Public intervention to overcome a perceived lack of attractiveness**
- **Research on rare diseases brings wider benefits**
  - Research on RDs has proven to be very useful to **better understand the mechanism of common conditions**
  - RDs are at the forefront of **personalised medicine**
  - RDs are also a **laboratory for new health care policies**

EURORDIS position paper WHY Research on Rare Disease:

[http://www.eurordis.org/sites/default/files/publications/why\\_rare\\_diseases\\_research.pdf](http://www.eurordis.org/sites/default/files/publications/why_rare_diseases_research.pdf)





# WHY NOW?

## The time to collaborate in rare diseases research is now !

- **New knowledge thanks to advances in research**
- **Increased number of orphan drug designations need further research**
- **Drawing upon successful examples of international research collaborations**



# HOW? Patients Priorities and Needs for RD Research

- Allocate more funds to basic, translational and clinical research
- Support disease registries and biobanks as preconditions for research; harmonise data collection
- Understanding underlying mechanisms (genetic basis, molecular and pathophysiological mechanisms and the natural history)
- Reinforce multidisciplinary networks and integrated action (ERNs, international platforms e.g. **IRDIRC**)
- Long-term sustainability of RD research projects
- Empowering patients as full research partners

**Ultimate priority : translate research into therapies!**

EURORDIS position paper on Patients' Needs and Priorities:

[http://www.eurordis.org/sites/default/files/publications/what\\_how%20are\\_disease\\_research\\_0.pdf](http://www.eurordis.org/sites/default/files/publications/what_how%20are_disease_research_0.pdf)



# HOW?

## The International Consortium for RD Research: An initiative for global cooperation launched in April 2011

- Organisations investing in rare diseases research - each member commits to invest **10 million US\$ over 5 years**  
public health research institutes, universities, public health bodies, pharmaceutical companies, umbrella patient organisations, foundations
- Each organisation funds research its own way ...
- ...BUT funded projects adhere to a common framework

**25 members in  
May 2012**

## **23 committed members -**

### **Europe**

**European Commission**

**German Federal Ministry of  
Education and research**

**Italian Higher Institute of Health  
Research**

**Italian Telethon Foundation**

**French Association against  
Myopathies**

**French National Research Agency**

**Netherlands Organisation for  
Health Research and  
Development**

**Lysogene (FR)**

**Prosensa (NL)**

**Spanish Carlos III Health  
Institute**

**UK National Institute for Health  
Research**



### **North America**

**Canadian Institutes for Health  
Research (CA)**

**Genome Canada (CA)**

**Sanford Research (US)**

**Mendelian Disorders Genome  
Centres(US)**

**National Centre for Translational  
Therapeutics (US)**

**National Cancer Institute (US)**

**National Institute of Neurological  
Disorders and Stroke (US)**

**National Institute of Arthritis and  
Musculoskeletal and Skin  
Diseases (US)**

**National Institute of Child Health  
and Human Development (US)**

**National Eye Institute (US)**

**Office of Rare Diseases (US)**

### **Australia**

**Western Australian  
Department of Health**

# HOW?

## An International Consortium for RD Research: The strength of collaboration

- Mobilise the necessary **critical mass** of expertise and resources
- **Avoid overlaps** in research allowing for more diseases to be tackled
- Speed up the **uptake** of research efforts into **clinical practice**
- Deliver new **cures and diagnoses** to treat patients world-wide

# HOW will it work? The IRDiRC governance

**Executive Committee**



**Scientific Committees**

- Funding members
- 3 Patients' representatives: EURORDIS, NORD, Genetic Alliances
- Interim Executive Committee chaired by Dr. Ruxandra Draghia Akli

**Diagnostics**

*including sequencing and characterisation*

**Interdisciplinary**

*incl. ontologies, natural history, biobanking, registries*

**Therapies**

*incl. pre-clinical and clinical development*

- Top experts in various fields
- All stakeholders (academics, industry, patients, research bodies)
- Advise on research priorities



**Working Groups**

- Representatives of funded projects

**Sequencing**

**Ontologies**

**Model systems**

**Clinical**

**Registries**

**Natural history**

**Biomarkers**

**etc.**

# Patients' contribution in IRDiRC

- **EURORDIS involved in the IRDiRC since its conception and first meetings**
- **Active contribution to the definition of IRDiRC policy and governance**
- **EURORDIS has 1 representative at the Executive Committee (Béatrice de Montleau) – other patients' representatives are from GeneticAlliance (US), NORD (US), AFM (France)**
- **1 EURORDIS representative appointed at the THERAPIES Scientific Committee (Maria Mavris)**

# IRDiRC timeline



**Launch of  
IRDiRC**

**Scientific  
Committees**



**3000 diagnostics**



**6000 diagnostics**

**YEAR**

**2012**

**Working  
Groups**

**2015**

**50 new applications for  
market authorisation**

**2020**

**200 new applications for  
market authorisation**





# THANK YOU !

*“Nature is nowhere accustomed more openly to display her secret mysteries than in cases where she shows tracings of her workings apart from the beaten paths; nor is there any better way to advance the proper practice of medicine than to give our minds to the discovery of the usual law of nature, by careful investigation of cases of rarer forms of disease”*

William Harvey, English physician (1578-1657)

