

### **NEURON Cofund2**

Together for brain research

17th March 2025

# NetWorking Groups Call NWGC 2022 on Chronic Pain Final Seminar

# PRiSE: Defining a strategy for the future of European Pain Research

European Pain Federation EFIC
Scientific coordinator: Luis Garcia-Larrea





Scientific Coordinator (Partner 1 Luis Garcia-Larrea

Institution/Department: European Pain Federation EFIC & INSERM

#### **Budget Recipient** (if different from the scientific coordinator):

Institution/Department: INSERM – Institut National de la Santé et la Recherche Médicale

Funding organisation: ANR – Agence Nationale de la Santé (France)

Early career researchers: Mary O'Keefe, Nathan Skidmore

#### **Project Partners:**

Composition of the Networking Group		
Scientific Coordinator INSERM and Claude Bernard University Lyon 1(France)	Director of Research List Gardiel, arms is the EFIC's President Eact, will provide teadership to implement the Strategy at EFIC, is offer to Chief at the European Journal of Pain which will play a significant role in communication and implementation. Well provide expertise on protrieties relating clinical neurology and neurophysiology of pain in humans: psychophysios, electrophysiology (EMG, EEG, 17MS), functional lenging (MIRI, PEE-scan), and through being involved in resort and clinical practice, his contribution will aim at bridging the gap between these areast and identify lines of action with proteinalises of meaningful results in patients.	
University Hospital of Clermont-Ferrand (France)	Professor Gisele Pickering is Lead of the EFIC Pain Research Strategy, will provide leadership at the workshops, and will provide expertise on priorities relating to clinical trials, benefits and harms of analgesics, pharmacology, translational research, and assessment and treatment of pain in older adults.	
University College Dublin (Ireland)	Associate Professor Brona Fullen is current President of EFIC, will provide leadership to implement the Strategy through EFIC, and will provide expertise on non-pharmacological clinical research priorities, particularly relating to physiotherapy, health literacy, and self-management.	
European Pain Federation EFIC (Belgium)	EFIC will organise and coordinate the scientific activities of the networking group; and widely disseminate, communicate, and implement the Research Strategy; Dr Mary O Kneffle will ensure the inclusion of early career researcher perspectives and provide expertise on priorities relating to biopsychosocial management of chronic low back pain and other chronic musculoskeletal pain conditions.	
Aalborg University (Denmark)	Professor Thomas Graven Nielsen will provide expertise on priorities relating to neurobiology, translational pain research on neuroplasticity in musculoskeletal pain and human technological pain biomarkers and is Member of the EFIC Steering Group developing the European Pain Research Strategy.	
University of Galway (Ireland)	Professor David Finn will advise on preclinical and clinical research on reciprocal interactions between pain and mood disorders/stress/negative affect and endogenous cannabinoid and opioid systems and is a Member of the EFIC Steering Group developing the European Pain Research Strategy.	
King's College London (United Kingdom)	Dr Kirsty Bannister will provide expertise on priorities relating to bridging bench and bedside pain research, in particular back and forward translational experiments focus	

University of Antwerp (Belgium)	Professor Mira Meeus will provide expertise on priorities relating to physiotherapy, rehabilitation, exercise, and patient reported outcomes, and is a Member of the EFI Steering Group developing the European Pain Research Strategy.	
Pain Alliance Europe (Belgium)	Oeirdre Ryan will provide expertise on patients' wants, needs, and preferences, and is a Member of the EFIC Steering Group developing the European Pain Research Strategy.	
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University of Minho (Portugal)	Dr. Hugo Almeida will provide expertise on priorities relating to comorbidities, in particular cognitive-emotional, risk factors for chronic pain, and personalised care	
National Centre of Scientific Research "Demokritos" (Greece)	Dr leannis Sotiropoulos will provide expertise related to co-morbidities and risk factors (e.g., lifetime stress, depression, persistent pain, sax), and assessment and management of pain in people with dementia or cognitive impairment.	
University of Alcala (Spain)	Professor Jose Antonio Lopez-Garcia will provide expertise on priorities relating to measurement of mood disorders and pre-clinical neuropathic pain research.	
University of Groningen (The Netherlands)	Professor Michiel Reneman will provide expertise on non-pharmacological treatmen for chronic musculoskeletal pain, multimodal rehabilitation, return to work, and physical functioning.	
Catholic University of Croatia (Croatia)	Professor Livia Puljak will provide expertise on priorities relating to research methodology, mood disorders, evidence-based use of analgesics, and clinical epidemiology.	
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Universite catholique de Louvain (Belgium)	Prof Andre Mouraux will provide expertise on priorities relating to pain mechanisms, neuroscience, and translational research, and is a Member of the EFIC Steering Group developing the European Pain Research Strategy.	
Rambam Health care campus (Israel)	Professor Elon Eisenberg will provide expertise on priorities relating to clinical assessment and management of neuropathic pain, complex regional pain syndrome, cancer-related pain, as well as opioids and cannabinoids, and is a Member of the EFIC Steering Group developing the European Pain Research Strategy.	
University of Zurich (Switzerland)	Professor Suzanne Becker will provide expertise on priorities relating to psychobiological mechanisms of pain, the role of dopamine and endogenous opioids, functional neural correlates and brain circuitries, assessment of patient important outcomes, and is a Member of the EFIC Steering Group developing the European Pain Research Strategy.	

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Sapienza University (Italy)	Professor Andrea Truini will provide expertise on priorities relating to assessment and management of painful neuropathies.
University Medical Centre Maribor (Slovenia)	Professor Martin Rakuša will provide expertise on priorities relating to the assessment and management of cognitive impairment and dementia in chronic pain.
University of Finland (Finland)	Professo <mark>r Eija Kalso will provide expertise on priorities relating to opioid pharmacology; neuropathic and inflammatory pain mechanisms; clinical trials in chronic pain; chronic postoperative pain and chronic cancer pain.</mark>
Jagiellonian University (Poland)	Professor Magdalena Kocot-Kępska will provide expertise on priorities related to the clinical multimodal management of chronic non-cancer and cancer pain.
University of Novi Sad (Serbia)	Professor Snezana Tomasevic-Todorovic will provide expertise on priorities relating to outcome measures, assessment, and treatment of fibromyalgia, and comorbidities.
Queen's University Belfast (United Kingdom)	Professor Kevin Vowles will provide expertise on priorities relating to assessment of psychological factors, psychological interventions for children and adults with chronic pain, outcome measure development, and effective and appropriate opioid and analgesic use for chronic pain.





4/30/2025

## **Project Partners**





PRISE
Pain Research Strategy for Europe

**Project Coordinator:** 

Luis Garcia-Larrea, INSERM, France





#### **Project Partners:**

Mary O'Keeffe, European Pain Federation EFIC, Belgium

Brona Fullen, University College Dublin, Ireland Gisèle Pickering, University Hospital of Clermont-Ferrand, France

Thomas Graven-Nielsen, Aalborg University, Denmark

David Finn, University of Galway, Ireland Kirsty Bannister, King's College London, UK Andre Mouraux, Université catholique de Louvain, Belgium

Elon Eisenberg, Rambam Health Care Campus, Israel

Susanne Becker, University of Zurich, Switzerland Mira Meeus, University of Antwerp, Belgium Deirdre Ryan, Pain Alliance Europe

Felicia Cox, Royal Brompton and Harefield Hospitals Foundation Trust, UK Thomas R Tolle, Technical University of Munich, Germany

Hugo Leite-Almeida, University of Minho, Portugal loannis Sotiropoulos, The National Centre for Scientific Research "Demokritos", Greece

Jose Antonio Lopez-Garcia, University of Alcala, Spain

Patrice Forget, University of Aberdeen, UK Michiel Reneman, University of Groningen, The Netherlands

Livia Puljak, Catholic University of Croatia, Croatia Andrea Truini, Sapienza University, Italy Eija Kalso, University of Finland, Finland

Magdalena Kocot-Kepska, Jagiellonian University, Poland

Snežana Tomaševic Todorovic, University of Novi Sad, Serbia

Kevin Vowles, Queen's University Belfast, UK







# Why a European Research Strategy?

- Pain: the world's leading cause of disability and reduced quality of life
- Pain research remains underfunded and under targeted
- Need to identify areas that need urgent attention in the field:
  - To enable the setting of funding priorities
  - To reduce "research waste"
  - To improve the effectiveness of pain therapy

### **Objectives**

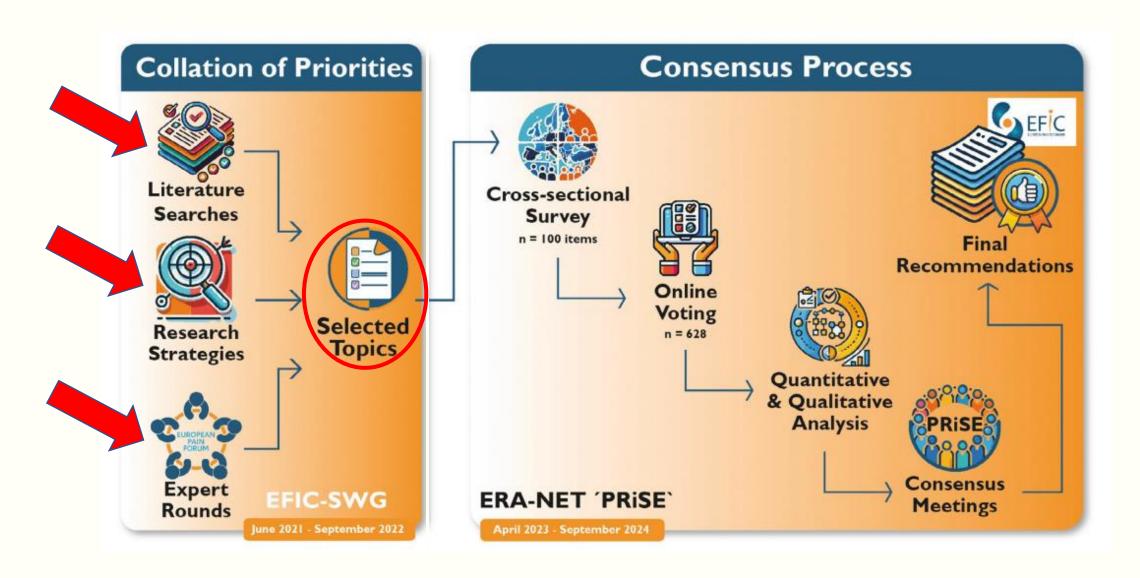
- Communicate a clear set of priorities to all research stakeholders
- Raise the profile of pain research in Europe
- Translate research into policy and practice





# **Strategy Development**

A multi-level approach guided by the EFIC Research Committee



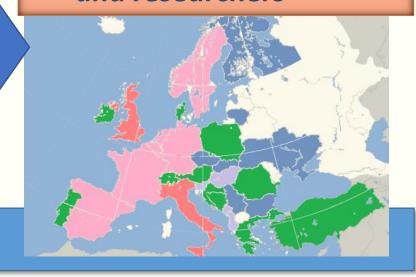


# **Strategy Development**

A multi-level approach guided by the EFIC Research Committee

100 proposals extracted
9 major themes
Non hierarchised

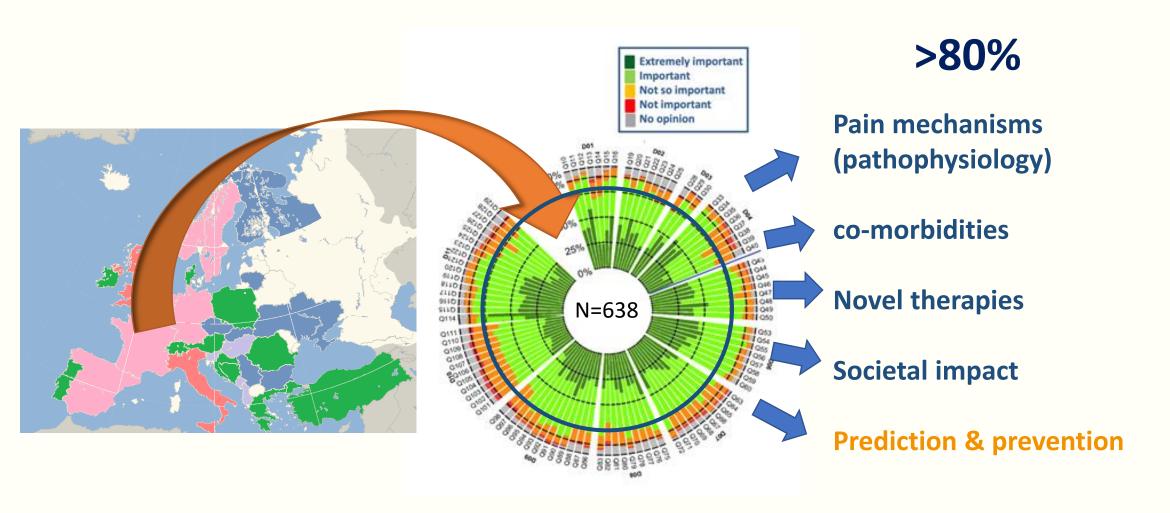
European survey
638 individual clinicians
and researchers



Final consensus meeting: 23 countries represented
Institutional support by ERA-NET NEURON
(Networking of European Funding for Neuroscience Research)



# The Survey: from organisations to individuals



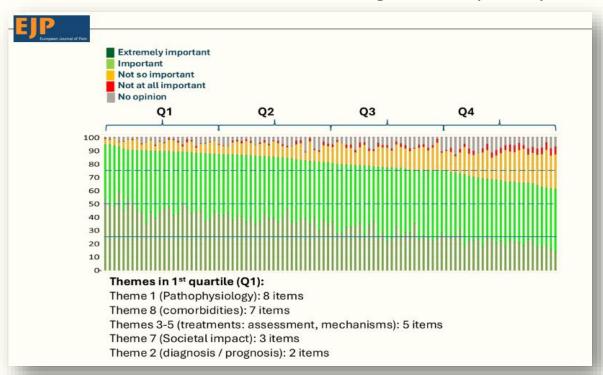


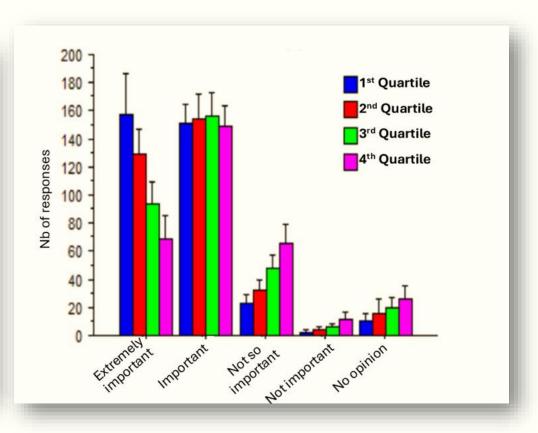
Themes qualified as « important » or « extremely important » in more than 80% of responses



# The Survey: from organisations to individuals

#### 100 Items classed in desdending order of priority





The progressive decrease of items categorised as 'extremely important' across quartiles was compensated by a parallel increase in 'not- so important' ratings, whereas the number of items rated as 'important' remained stable across quartiles.



# The highest ranked Priorities

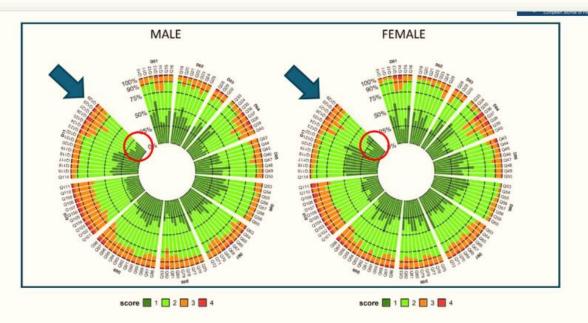
- 1. Understanding pain mechanisms
  - Because cure comes through knowledge
- 2. Addressing co-morbidities
  - Comorbidities destroy quality of life. Include in RCTs!
- 3. Critically assess current therapies & develop novel approaches
  - Pharmacological and <u>non-pharmacological:</u> equal importance
- 4. Explore the societal impacts of pain
  - The biopsychosocial model now anchored in the research community
- 5. Develop prediction & prevention of pain chronification
  - Need of biomarkers for personalised management!

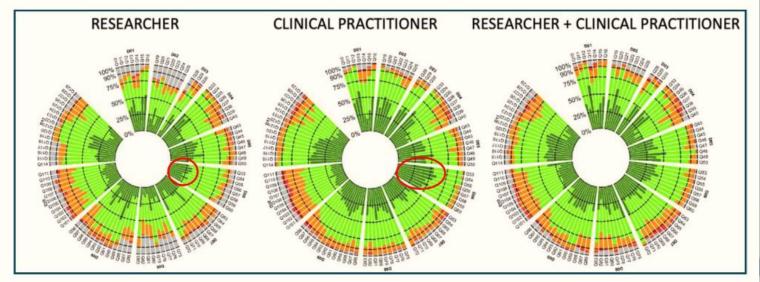


# The highest ranked Priorities

Female respondents rated items related to patient involvement, social support, marginal groups, and special populations as of higher priority than male respondents.

Similar distributions for clinicians and researchers, except for items related to the pathophysiology of neuropathic, musculoskeletal, cancer and postsurgical pain, noted higher by clinicians







#### **PROJECT REPORT**

- 1. Major achievements of the project.
- A set of research priorities on pain, derived through a uniquely combined, multi-stakeholder strategy.
- 75% of the priorities derived judged 'important' or 'extremely important' by ~95% of respondents.
- A set of 'absolute priorities' reflected urgent needs and ranked in the first quartile of the distribution.
  - understanding pain pathophysiology;
  - investigating and addressing **pain comorbidities** including in clinical trials
  - evaluating critically current therapies, developing new treatments
  - exploring biopsychosocial impacts of pain
- Top- ranked items prioritized equally by clinicians and researchers, and by men and women.

#### 2. Added value to the wider research community

Implementation of the Research Strategy will provide the scientific community and funding organizations with guidance for sustained investment, fostering strategic prioritization to address the most urgent needs in pain research over the coming decade. T



neuron

#### HIGHLIGHTS OF THE COLLABORATION

- 3. Added value of the multidisciplinary network and transnational collaboration
- The establishment of such a transnational network enabled the priority list to be drawn up taking into
  account the different societal environments in Europe, which has helped to nuance and clarify the
  discussions.
- Only multidisciplinary and transnational collaboration can ensure that the research priorities are implemented throughout Europe. The dissemination process will be able to reach a large number of European countries through national meetings and conferences.

#### **IMPACT**

4. How this networking activity might impact your own work and the scientific field?

Working with colleagues from such different countries has not only been instructive for everyone, but has paved the way for numerous collaborations (European pain schools, projects between laboratories, joint congress sessions) which are already having an impact on the participants' research.





#### CONTINUATION OF THE NETWORKING GROUP

5. Describe potential activities that will arise from this networking activities

The networking activities consolidated some existing relationships among members of the consortium, and developed others ex nihilo. A number of collaborations, actual and potential, are arising, of which we can highlight:

- A European EFIC pain school submitted on multidisciplinary pain management
- Working sessions and workshops at the European Congress on Pain (April 2025)
- Presentations of the Research Strategy at multiple national conferences on pain (Italy, Germany, France, Spain, Ireland so far... other will come)





#### **IMPACT ASSESSMENT**

#### 1. Scientific Publications and Communications

Type of publication	Total N°
Peer Reviewed Research Articles (acknowledging NEURON support)	1
Peer Reviewed Review Articles (acknowledging NEURON support)	
Books or Book Chapters	
Dissemination Articles (to lay audiences, news articles, press releases etc.)	5
Communications in Scientific Meetings	6
Dissertations	
White papers, prospective views, recommendations, guidelines, best practice framework	
Others (letters to the editor, comments, responses, etc.)	

European Pain Congress Budapest 2023; Lyon 2025 National Pain Congresses: Italy AISD 2024; Spain SED 2024, 2025; Serbia Novi Sad 2024; Ireland IPS 2024...





#### 1.2 Societal impact.

- The impact of the is developing across different societal circles:
- The Research Strategy was presented and extensively discussed at the Societal Impact of Pain (SIP) event, 'Pain Treatment, Management and Prevention Is Europe Providing Adequate Access?' held in Brussels in October 2024, it brought together leading policymakers, members of the Eurpean Parliament and the WHO, pain specialists, and patient representatives.





4/30/2025

#### PROBLEMS AND THEIR SOLUTION

2. Major problems encountered with regard to scientific aspects as well as to the collaboration between partners.

No major problem with regard to scientific aspects. Real logistic problems to reunite physically the whole group in two occasions because of geographical divergence. Zoom helped a lot for !

While dissemination of results is going in a quite straightforward manner, making things happen will be challenging given the regional differences in European countries with respect to medical, social, and political emergencies, including access to resources, potential for clinical / basic research, and autonomy of practice.





#### **CONTINUATION OF THE NETWORKING GROUP – Dissemination purposes**

#### **European Pain Research Strategy dissemination purposes**

**Purpose 1**: **Motivate and mobilise leading pain researchers** to carry out research projects that implement the priorities of the European Pain Research Strategy. Start with a scientific publication!

**Purpose 2**: **Convince policy makers and funders** (public and private) to understand the importance of pain research and shape future funding schemes in accordance with the European Pain Research Strategy

**Purpose 3**: **Promote ownership** of the European Pain Research Strategy by professional associations and partners of EFIC, to influence research priorities outside of the core pain science community

**Purpose 4: Partner with patients** to reflect on components of the European Pain Research Strategy that relate to the lived experience of pain and co-create future collaborative actions

A meeting was held in October 2024 to identify and explore certain strategic considerations of dissemination, reflecting on target audiences and purposes.





# Dissemination: scientific publication



- The content of the top research priorities' list reflects a holistic approach to pain research & management.
- Unraveling pathophysiology and addressing comorbidities in RCTs ranked as top priorities
- Alongside drug treatments, equal importance given to physical, psychological and social aspects
   → Need of a biopsychosocial- oriented research strategy.
- Expert panel → Need to emphasise prediction, prevention, self-management and personalized pain management

# Dissemination: European Parliament

### **European Day on Pain Awareness** 2024

Oct 14, 2024 | Advocacy, News



Presentation of the Research Strategy results during the "Pain Treatment, Management and Prevention" event organised by the EFIC and Pain Alliance Societal Impact groups, held at the University Foundation of Brussels on 16 October, with the participation of members of the European Parliament.

This event brought together diverse and influential participants, including representatives of the Societal Impact of Pain platform, EU policymakers (MEPs) with a strong interest in health, WHO representatives and leading pain experts from across Europe. This assembly of expertise fostered comprehensive discussions on the current state of pain management, identified gaps in accessibility, and explored innovative solutions to improve patient outcomes, including the Research Strategy presented and discussed extens



# What to do now...?



### What the European Pain Federation EFIC can do

- **Coordinate** the action of n=38 National Pain Societies members of EFIC to implement research priorities at national level
- Include research priorities in national pain conferences
- Adapt implementation to different Euroregions



## What Europe can do

- Orient European research calls toward critical research priorities
- Orient funding bodies to consider & privilege this agenda
- Change regulations that prevent the implementation of these priorities (e.g. non-invasive brain stimulation, NIBS)











Thank you!













