

# **COST Actions approved by the Committee of Senior Officials on 24 March 2020**

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## CA19101 - Determinants of Physical Activities in Settings

### SUMMARY

The COST Action “Determinants of Physical Activities in Settings” (DE-PASS) is unique in focus, extent, constitution and as an effective Knowledge Transfer Platform (KTP). DE-PASS will focus exclusively on identifying, understanding and measuring the determinants which promote, maintain or inhibit Physical Activity Behaviours (PABs) across the lifespan and in different settings and translating this knowledge to assist policy makers to achieve greater health impact. European and global society is now largely physically inactive. The health, economic and social benefits of a more active society are enormous. DE-PASS will illuminate why individuals and/or societies adopt a physically active or inactive lifestyle. To date enormous energy has been invested by researchers in answering this question, however, the knowledge gained and the impact achieved through this investment is fragmented, not readily translatable and rarely transcends the state of the art. DE-PASS will achieve the following: 1) Use a settings approach (home, school, work etc.) to bridge the knowledge and translation gap; 2) enact a multi-disciplinary, Pan-European, international network (35 nations, 100+ proposers) of established, young and Early Career Investigators (ECIs) and policy makers; 3) exploit, consolidate and further integrate existing relevant expertise, evidence, resources and influence; 4) develop capacities and careers for ECIs; 5) provide a new European PABs conceptual framework, a best evidence statement and implementation guidelines for policy makers; 6) define and standardise European measurement protocols; 7) establish a new, high functioning, open access European database of determinants of PABs with a cohort extension and 8) define an evidenced based and aspirational Pan-European research harmonisation and implementation strategy.

### SCIENTIFIC SCOPE

Areas of Expertise	Keywords
<ul style="list-style-type: none"> <li>● Health Sciences: Epidemiology</li> <li>● Health Sciences: Public and environmental health</li> <li>● Health Sciences: Sport and fitness sciences</li> </ul>	<ul style="list-style-type: none"> <li>● Determinants, Correlates</li> <li>● Physical Activity Behaviours</li> <li>● Research and Measurement Harmonisation</li> <li>● Health Risk Behaviours</li> <li>● Life-span, settings</li> </ul>

### COST Countries

Main Proposer: IE

Network of Proposers: BA, BE, BG, CH, CY, DE, DK, EL, FI, FR, HR, HU, IE, IT, LT, LU, LV, ME, MT, NL, NO, PL, PT, RO, RS, SE, SI, UK

Main and secondary proposers: 33% ECI / 57% Women / 54% ITC

### International Cooperation

**International Partner Country:** Australia, Brazil, Canada, Singapore, Taiwan, United States

### Industrial Dimension

**SMEs:** Ireland

## CA19104 - Advancing Social inclusion through Technology and Empowerment

### SUMMARY

Social inclusion is an important element of well-being for people with Autism Spectrum Disorder (ASD) and/or Intellectual Disability (ID). Research has highlighted that social inclusion is facilitated through access to education and employment. Despite this, people with ASD and/or ID have low rates of participation in these domains. Research has demonstrated that Assistive Technology (AT) shows great promise in increasing participation in education and employment. Notwithstanding recent technological advances, there are low rates of adoption of AT throughout Europe by service providers, educators, employers and policymakers. There are several areas of unmet need including: high abandonment rates of AT, lack of inclusion of people with ASD and/or ID in the research process, lack of interdisciplinary and intersectoral collaboration and poor match between technology and the individual with ASD and/or ID.

The aim of the COST action is:

Build an interdisciplinary, intersectoral pan EU and beyond, network which will enhance social inclusion and empowerment of individuals with ASD and/or ID.

This will be achieved by:

Evaluating the development of novel AT by providing an interdisciplinary and intersectoral collaboration between all stakeholders using a translational approach to establish standardised practice guidelines for design, development and deployment of AT.

Creating knowledge, by providing a database of current AT technologies and their match to employment and educational contexts for users with ASD and/or ID.

Promoting the adoption of evidence-based guidelines in relation to use of AT across settings and populations and propagating the use of inclusive design and rigorous research approaches.

### SCIENTIFIC SCOPE

Areas of Expertise	Keywords
<ul style="list-style-type: none"> <li>● Health Sciences: Health services, health care research</li> <li>● Psychology: Developmental psychology</li> <li>● Educational sciences: Education to gifted persons and to those with learning disabilities</li> </ul>	<ul style="list-style-type: none"> <li>● Social Inclusion</li> <li>● Assistive Technology</li> <li>● Intellectual Disability</li> <li>● Autism</li> <li>● Empowerment</li> </ul>

### COST Countries

Main Proposer: IE

Network of Proposers: AT, BA, BE, BG, CH, CY, DE, ES, FR, HR, HU, IE, IL, IT, LT, LV, MK, NL, NO, PL, PT, RO, RS, SE, SI, TR, UK

Main and secondary proposers: 29% ECI / 53% Women / 52% ITC

### International Cooperation

**International Partner Country:** Colombia, United States

### Industrial Dimension

**SMEs:** Belgium, Israel, Serbia, Spain, United Kingdom

**Large companies:** United States



## CA19105 - LipidNET- Pan-European Network in Lipidomics and Epilipidomics

### SUMMARY

Lipids represent a wide variety of molecules that play different biological roles such as energy resources, structural components or signaling molecules that regulate metabolic homeostasis. Most notably, lipids and oxidatively modified lipids have been found to be involved in regulating important mechanisms mediating tissue injury, inflammation, and related noncommunicable diseases, which are responsible for near 70% of all deaths in developed countries.

Lipidomics and Epilipidomics are the most promising strategies for the progress in the knowledge of lipids, aiming at biomarker discovery for the prevention, early diagnosis, monitoring, evaluation of diseases therapeutics. These approaches involve the use of complex protocols, different instrumentation and processing huge amounts of data. Effectiveness, while reducing the high costs associated with these technologies, requires a harmonized multidisciplinary approach involving coordinated actions from pan-European centres of lipidomics investigation. This will avoid unnecessary redundancy, improving reproducibility and ensuring efficient and productive research.

LipidNET aims to build and maintain a multidisciplinary Pan European network of researchers, clinicians and enterprises working in the field of lipidomics and epilipidomics to boost a hub of research excellence, advanced knowledge and technology transfer, to promote high level of training for young researches and facilitate clinical translation. LipidNet will include five interactive working groups covering analytical methods and computational approaches in (epi)Lipidomics, clinical significance and applications, lipid signaling and mechanisms of action, dissemination and outreach. LipidNET will foster inclusive networking, promoting new opportunities for collaborative research projects, knowledge and technology transfer, dissemination, caring for young scientists and scientists from target countries, keeping gender balance.

### SCIENTIFIC SCOPE

Areas of Expertise	Keywords
<ul style="list-style-type: none"> <li>● Chemical sciences: Analytical chemistry</li> <li>● Biological sciences: Metabolomics</li> <li>● Biological sciences: Biochemistry</li> <li>● Basic medicine: Metabolomics</li> <li>● Clinical medicine: Non-communicable diseases</li> </ul>	<ul style="list-style-type: none"> <li>● Lipids</li> <li>● Mass spectrometry</li> <li>● Omics</li> <li>● Lipids in health and disease</li> <li>● Clinical translation</li> </ul>

### COST Countries

Main Proposer: PT

Network of Proposers: AT, BE, BG, CZ, DE, EE, ES, FI, FR, HR, HU, IT, MK, NL, PL, PT, RO, RS, SE, SI, SK, TR, UK

Main and secondary proposers: 16% ECI / 45% Women / 57% ITC

### International Cooperation

**International Partner Country:** Japan, Singapore, United States

### Industrial Dimension

**SMEs:** Finland, Germany, Italy, Sweden, United Kingdom, United States

**Large companies:** Germany, Netherlands, United States

## CA19106 - Multi-Sectoral Responses to Child Abuse and Neglect in Europe: Incidence and Trends

### SUMMARY

In Europe, millions of children experience abuse or neglect at the hands of those who should care for them. Yet, how many of these children get help, which services they receive by which agency remains largely unknown. Moreover, countries are hardly aware which maltreatment turns fatal. This constitutes a major knowledge gap that is likely due to inconsistent ways of surveying and reporting on child maltreatment services across Europe. Without this information, we cannot know how the systems work, what additional preventive efforts are required, if the interventions fit the victims' needs or if the most vulnerable groups are properly identified. The proposed project addresses this gap by creating a network of experts in child maltreatment and relevant stakeholders and links them in working groups, in order to promote the development of a rigorous, consistent, and comparable methodology for the collection of surveillance data on child maltreatment and maltreatment-related fatalities. Researchers, policymakers, administrators and practitioners will identify best-practice methods of surveillance and recommend efficient ways of implementing them across Europe. Importantly, this network will invite youth and adult survivors of child maltreatment to collaborate in all working group decision-making processes. The four working groups within this network will focus on: 1) definition and operationalization of child maltreatment; 2) promoting secondary analyses; 3) participatory approaches to child maltreatment surveillance; and 4) implementation and dissemination. Final products of these projects will include guidelines for implementation of best practices in child maltreatment surveillance across Europe.

### SCIENTIFIC SCOPE

Areas of Expertise	Keywords
<ul style="list-style-type: none"> <li>● Health Sciences: Public and environmental health</li> <li>● Political Science: Social policies, welfare state</li> <li>● Health Sciences: Health services, health care research</li> <li>● Psychology: Clinical Psychology</li> </ul>	<ul style="list-style-type: none"> <li>● Child abuse and neglect</li> <li>● Child maltreatment</li> <li>● Child protection</li> <li>● Epidemiology</li> <li>● Surveillance</li> </ul>

### COST Countries

Main Proposer: DE

Network of Proposers: AT, BA, BG, CH, CY, DE, EE, EL, FR, HR, HU, IT, NO, PL, PT, RO, SE, SI, TR, UK

Main and secondary proposers: 14% ECI / 60% Women / 55% ITC

### International Cooperation

**International Partner Country:** United States

## CA19113 - The European Researchers' Network Working on Second Victims

### SUMMARY

Patient Safety is a Priority in Europe. However, unfortunately every year between 8 and 12% of the people admitted to hospitals and around 6% of those in primary care suffer from an adverse event (AE) while receiving healthcare. When an AE does occur, there is a domino effect with healthcare professionals (second victims of these events) also suffering from the knowledge of having harmed their patients (first victims). This second victim phenomenon increases the likelihood of further errors and suboptimal care as consequences of emotional disturbances in the hours after the patient safety event.

The overall aim of this Action is to facilitate discussion and share scientific knowledge, perspectives, legislation and rules, and best practices concerning AEs in healthcare institutions to implement joint efforts to support second victims, and to introduce an open dialogue and discussion among stakeholders about the consequences of the second victim phenomenon based on a cross-national collaboration that integrates different disciplines and approaches, including legal, educational, professional, and socio-economic perspectives.

This Action will yield innovative solutions through enhancing our understanding of decision-making after patient safety events, ideas for caring for the care provider as a prerequisite for safety and quality of care, promoting debate among stakeholders involved in the understanding of clinical errors and creating new approaches to break the taboo around mistakes, enriching our knowledge of the factors that might contribute to transparency after mistakes, capturing the multi-dimensionality of the second victim phenomenon, and proposing recommendations and interventions useful for the European countries and overseas.

### SCIENTIFIC SCOPE

Areas of Expertise	Keywords
<ul style="list-style-type: none"> <li>● Health Sciences: Health services, health care research</li> </ul>	<ul style="list-style-type: none"> <li>● Patient Safety</li> <li>● Second Victims</li> <li>● Adverse Events</li> <li>● Quality of Care</li> <li>● Well-being at work</li> </ul>

### COST Countries

Main Proposer: ES

Network of Proposers: BA, BE, CZ, ES, IE, IT, LT, NL, PL, PT, RO, SK, TR

Main and secondary proposers: 19% ECI / 52% Women / 62% ITC

### International Cooperation

**International Partner Country:** Japan, United States

## CA19114 - Network for Optimized Astatine labelled Radiopharmaceuticals

### SUMMARY

Cancer is a major health concerns for European citizens. Thus, the main research aim of this Network for Optimized Astatine labeled Radiopharmaceuticals (NOAR) COST Action is to successfully demonstrate that one of the most promising radionuclides for Targeted Alpha Therapy (TAT), namely astatine-211, can become the European standard for treatment of certain cancerous pathologies. To this end, an efficient networking is essential among all European stakeholders interested in promoting astatine-211 for medical applications.

NOAR COST Action brings together European and international excellence labs, astatine-211 production centers, hospitals, industry and patient associations from more than 20 countries, thus covering the whole value chain of innovation: production, chemistry, radiochemistry, biology, preclinical and clinical research and delivery of radiopharmaceuticals to patients.

A European web portal will be created containing information for patients, practitioners, researchers, Industry and as a contact point for National and European patient associations. The idea is to gather forces at the European level in order to implement actions to leverage hurdles to the development of this powerful radionuclide and to identify pathologies in which it will be particularly relevant.

A special emphasis will be given to train a new generation of young researchers and PhD students, promoting interdisciplinary competences through international and inter-sectoral mobility.

The long-term goal of this project is to make Astatine-211 technology available to all European citizens.

### SCIENTIFIC SCOPE

Areas of Expertise	Keywords
<ul style="list-style-type: none"> <li>● Clinical medicine: Radiology, nuclear medicine and medical imaging</li> <li>● Chemical sciences: Nuclear chemistry</li> <li>● Physical Sciences: Databases, data mining, data curation, computational modelling</li> <li>● Clinical medicine: Oncology</li> <li>● Health Sciences: Health services, health care research</li> </ul>	<ul style="list-style-type: none"> <li>● Astatine-211</li> <li>● Alphatherapy Network</li> <li>● Oncology</li> <li>● Nuclear Medicine</li> </ul>

### COST Countries

Main Proposer: FR

Network of Proposers: BE, CZ, DE, DK, FR, MK, NL, NO, PL, PT, RO, RS, SE, SI

Main and secondary proposers: 10% ECI / 44% Women / 50% ITC

### International Cooperation

**International Partner Country:** Australia, Japan, South Africa, United States

### Industrial Dimension

**SMEs:** Australia, Belgium, France

**Large companies:** Belgium

## CA19115 - Network for blood pressure research in children and adolescents

### SUMMARY

Hypertension (HTN) is now responsible for 7.1 million deaths per year worldwide, and largely contributes to cardiovascular and renal diseases such as ischemic heart disease, stroke and chronic kidney disease. Cardiovascular and renal diseases linked to high blood pressure (BP) are the first cause of mortality in Europe with an economic impact cost of approximately 1 billion euros per year. In fact, although most of the adverse outcomes occur in adulthood it has become clear that high BP is a life course problem that can become evident in early life.

While few would dispute the importance of taking effective steps to identify and manage this condition in middle-aged and older people, relatively little attention has been paid to the problem of high BP in children and adolescents.

As a consequence, despite the latest advances and the wide literature on BP in children and adolescents, the solutions to relevant questions are still pending. Thus, scientific and clinical community, as well as decision-makers, stakeholders and the overall society, must face some critical problems related to the high BP in children and adolescents as a cardiovascular risk factor.

The COST Action HyperChildNET is aimed at establishing a European sustainable and multidisciplinary network of internationally renowned researchers, clinicians, early career investigators, health economists, decision-makers, patients, regulatory bodies, nutrition & pharma companies and medical devices manufacturers focusing on acquiring a holistic understanding of the factors affecting high BP in children in order to propose and implement corrective and preventive actions both globally and locally.

### SCIENTIFIC SCOPE

Areas of Expertise	Keywords
<ul style="list-style-type: none"> <li>● Clinical medicine: Paediatrics</li> </ul>	<ul style="list-style-type: none"> <li>● blood pressure</li> <li>● children and adolescents</li> <li>● origin, impact and prevention of high blood pressure</li> <li>● clinical guidelines, policies and action plans for high BP</li> </ul>

### COST Countries

Main Proposer: ES

Network of Proposers: BA, CH, CY, CZ, DE, DK, EE, EL, ES, HR, HU, IT, LT, NL, NO, PL, PT, SI, TR, UK

Main and secondary proposers: 11% ECI / 42% Women / 55% ITC

### International Cooperation

**International Partner Country:** United States

### Industrial Dimension

**Large companies:** Germany, Italy, Netherlands, Spain, United States

## CA19117 - Researcher Mental Health

### SUMMARY

ReMO will focus on wellbeing and mental health within academia, a theme of strategic importance for the European Research Area. Previous research shows that low levels of wellbeing and mental health problems have a negative impact on individual, team and organizational performance, triggering significant costs. In addition, institutional context, organizational structure and culture, as well as managerial practices have significant impact on wellbeing and health of employees. Therefore, general insights on the causes of workplace wellbeing and mental health need to be refined with contextual specifics (i.e. in academia) in order to develop tailored, effective and efficient prevention and action programs.

ReMO wants to address these limitations using a threefold approach: (1) We aim at developing a conceptual framework and tools that are tailored to the academic context taking into account the specifics and challenges of academia and academic work (e.g. performance management of academics, an increasingly competitive landscape for recruiting and retaining talented employees, increasing challenges of dealing with diversity and internationalization, job insecurity, etc.); (2) We take a multilevel perspective on problems and problem generating mechanisms, but also on positive organizational behavior in support of meaningful work and wellbeing; (3) We use a diversity of methods with short feedback loops between theory and practice.

The proposers of ReMO are academics, practitioners, policy makers and consultants for higher education institutions. They represent an international mix of scientific knowledge and practice on researcher mental health and a much needed interdisciplinary (e.g. psychology, sociology, business administration), multilevel (individual, organizational, system) and intercultural perspective.

### SCIENTIFIC SCOPE

Areas of Expertise	Keywords
<ul style="list-style-type: none"> <li>● Sociology: Sociology of science</li> <li>● Psychology: Social psychology</li> </ul>	<ul style="list-style-type: none"> <li>● Researcher Mental Health</li> <li>● Academia</li> <li>● Research policy</li> <li>● Wellbeing</li> </ul>

### COST Countries

Main Proposer: DE

Network of Proposers: BE, BG, CZ, DE, DK, EE, EL, ES, HR, HU, IE, IL, IT, LT, MK, NL, PL, PT, RO, RS, SI, SK, TR, UK

Main and secondary proposers: 16% ECI / 62% Women / 58% ITC

### Industrial Dimension

**SMEs:** Hungary, Israel, Portugal, Spain



## CA19121 - Network on Privacy-Aware Audio- and Video-Based Applications for Active and Assisted Living

### SUMMARY

Europe faces crucial challenges regarding health and social care due to the demographic change and current economic context. Active and Assisted Living (AAL) are a possible solution to face them. AAL aims at improving health, quality of life, and wellbeing of older, impaired and frail people. AAL systems use different sensors to monitor the environment and its dwellers. Cameras and microphones are being more frequently used for AAL. They allow to monitor an environment and gather information, being the most straightforward and natural ways of describing events, persons, objects, actions, and interactions. Recent advances have given these devices the ability to 'see' and 'hear'. However, their use can be seen as intrusive by some end users (assisted persons, and professional and informal caregivers.)

The General Data Protection Regulation (GDPR) establishes the obligation for technologies to meet the principles of data protection by design and data protection by default. Therefore, AAL solutions must consider privacy-by-design methodologies in order to protect the fundamental rights of those being monitored.

The aim of GoodBrother is to increase the awareness on the ethical, legal, and privacy issues associated to audio- and video-based monitoring and to propose privacy-aware working solutions for assisted living, by creating an interdisciplinary community of researchers and industrial partners from different fields (computing, engineering, healthcare, law, sociology) and other stakeholders (users, policy makers, public services), stimulating new research and innovation. GoodBrother will offset the "Big Brother" sense of continuous monitoring by increasing user acceptance, exploiting these new solutions, and improving market reach.

### SCIENTIFIC SCOPE

Areas of Expertise	Keywords
<ul style="list-style-type: none"> <li>● Electrical engineering, electronic engineering, Information engineering: Computer vision</li> <li>● Computer and Information Sciences: Ethics of computer and information sciences</li> <li>● Computer and Information Sciences: Cryptology, security, privacy</li> <li>● Clinical medicine: Geriatrics and gerontology</li> </ul>	<ul style="list-style-type: none"> <li>● Active and healthy aging</li> <li>● Privacy</li> <li>● User acceptance</li> <li>● Computer vision</li> <li>● Audio signal processing</li> </ul>

### COST Countries

Main Proposer: ES

Network of Proposers: AT, BE, BG, CY, DE, DK, EL, ES, FR, HR, HU, IE, IL, IT, LT, LV, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, TR, UK

Main and secondary proposers: 17% ECI / 48% Women / 50% ITC

### International Cooperation

**International Partner Country:** Brazil, Canada, Japan, United States

### Industrial Dimension

**SMEs:** Austria, France, Germany, Ireland, Italy, Latvia, Lithuania, Netherlands, Spain, Turkey

**Large companies:** Greece

## CA19127 - Cognitive decline in Nephro-Neurology: European Cooperative Target

### SUMMARY

Fragmentation between neurological and nephrological expertise has frustrated research into the mechanism of cognitive decline secondary to kidney disease. By for the first time bringing these fields together in CONNECT we establish a novel multidisciplinary field to improve patient diagnosis and care. The developed world is experiencing a growing number of patients with chronic kidney disease (CKD), a complex systemic and potentially fatal disease. With improved long-term life expectancy as the result of kidney replacement therapies, more attention has been given to comorbidities, including cognitive impairment. In CKD patients, both the central and peripheral nervous system are frequently affected. Eventually, this decreases quality of life and eventually dementia with loss of independence in everyday activities. CONNECT aims to coordinate research on cognitive impairment in CKD. This requires exchanging clinical information between nephrologists and neurologists, and between neuroscientists and kidney physiologists, guided by big data analysts. This collaborative network will define new experimental paradigms, their translational value and, in turn, focus on new interventions in the field of cognitive impairment.

At the core of this COST Action lie activities that bridge the gaps between these fields and prepare early-stage researchers and clinicians to start new research lines. The interdisciplinary consortium from 22 countries will focus on 1) Pre-clinical research, 2) Clinical trials, 3) clinical practice, 4) Data management and analytics, and 5) Inclusiveness and dissemination of the Action. This COST Action will alleviate disparities in CKD patient care and enable breakthrough research enabling patient diagnosis and early treatments.

### SCIENTIFIC SCOPE

Areas of Expertise	Keywords
<ul style="list-style-type: none"> <li>● Clinical medicine: Nephrology</li> <li>● Clinical medicine: Clinical neurology</li> <li>● Basic medicine: Metabolism, biological basis of metabolism related disorders</li> <li>● Basic medicine: Neuropsychology</li> <li>● Health Sciences: Epidemiology</li> </ul>	<ul style="list-style-type: none"> <li>● Renal disease</li> <li>● Cognitive impairment</li> <li>● Big Data analysis</li> </ul>

### COST Countries

Main Proposer: IT

Network of Proposers: AL, BA, BG, CH, CZ, DE, DK, EL, ES, FR, HU, IT, LT, MK, NL, PL, PT, RO, SE, TR, UK

Main and secondary proposers: 11% ECI / 33% Women / 52% ITC

### International Cooperation

**International Partner Country:** United States

### Industrial Dimension

**SMEs:** Italy

**Large companies:** Sweden

## CA19132 - European Network to Advance Best practices & technology on medication adherence

### SUMMARY

Due to an ageing society, there is a steady increase in chronic diseases and multi-morbidity in the EU. This rise of chronic diseases and multi-morbidity requires a multidisciplinary response, which often involves lifestyle changes combined with lifetime medication use.

Medication non-adherence affects however up to half of the chronic medication users, poses considerable challenges in managing chronic diseases, and is associated with almost 200,000 deaths and €80-125 billion of potentially preventable direct and indirect costs in the EU. Technological advances (e.g. smart pillboxes, digital inhalers, tracking devices, e-injection pens, e-Health, big data), have significant potential to support healthcare professionals and empower patients in detecting and managing non-adherence.

Awareness of healthcare professionals on the availability and implementation of adherence enhancing technology is limited and there is a lack of collaboration between stakeholders. Successful EU-wide implementation of adherence enhancing technology is further hampered by a lack of insight in different European healthcare systems, reimbursement pathways and policy regulations that significantly differ between countries. This affects not only patients and healthcare professionals, but also manufacturers of technology (mostly SMEs) in their innovation capacity and competitiveness.

To address these challenges, the European Network to Advance Best practices & technoLogY on medication adherence (ENABLE) aims to (1) raise awareness of adherence enhancing technological solutions, (2) foster and extend multidisciplinary knowledge on medication adherence at patient, treatment and system levels, (3) accelerate translation of this knowledge to useful clinical application and (4) work collaboratively towards economically viable implementation of adherence enhancing technology across European healthcare systems.

### SCIENTIFIC SCOPE

Areas of Expertise	Keywords
<ul style="list-style-type: none"> <li>● Health Sciences: Health services, health care research</li> <li>● Clinical medicine: General and internal medicine</li> </ul>	<ul style="list-style-type: none"> <li>● Medication adherence</li> <li>● eHealth</li> <li>● Implementation</li> </ul>

### COST Countries

Main Proposer: NL

Network of Proposers: BE, BG, CZ, DE, DK, EE, EL, ES, FR, HR, HU, IE, IT, LT, LV, NL, PL, PT, RS, SE, SK, UK

Main and secondary proposers: 24% ECI / 41% Women / 50% ITC

### Industrial Dimension

**SMEs:** France, Hungary, Italy, Serbia

## CA19133 - Fostering and Strengthening Approaches to Reducing Coercion in European Mental Health Services

### SUMMARY

FOSTREN is an Action designed to establish a sustainable, multidisciplinary network of researchers and practitioners focused on reducing the degree to which mental health services use coercion in hospital and community mental health services. Many people receiving mental health care are subjected to coercive practices such as outpatient commitment in the community and physical restraint in hospital. Such practices can violate human rights and there is a growing international policy momentum to reduce reliance on them. Given the biopsychosocial complexity of mental health service delivery, successful initiatives in this area require sustained multilevel interventions which can be implemented effectively in the long term. Clinical practice in this area is extremely variable across Europe and relevant research activity is highly fragmented. The FOSTREN network will address these issues by enabling research and practice expertise to be exchanged in order to create an integrated framework for mental health service transformation.

The network objectives are: to advance understanding of successful interventions to reduce coercion within an implementation science paradigm by building a stable interdisciplinary network of European researchers and practitioners; and to apply this understanding by articulating and communicating best practice to key stakeholders responsible for mental health service delivery. This will be achieved through networking activities organized along four themes: risk factors; alternative interventions; outcomes & recovery; and implementation science. Key deliverables such as a framework for shared datasets and a coercion reduction implementation model will contribute to a pan-European effort to enhance human rights for vulnerable people with mental health problems.

### SCIENTIFIC SCOPE

Areas of Expertise	Keywords
<ul style="list-style-type: none"> <li>● Health Sciences: Health services, health care research</li> <li>● Sociology: Work and professions</li> <li>● Psychology: Social psychology</li> </ul>	<ul style="list-style-type: none"> <li>● Coercion</li> <li>● Mental Health</li> <li>● Violence</li> <li>● Organizational change</li> </ul>

### COST Countries

Main Proposer: NO

Network of Proposers: CH, DK, HR, IE, IT, ME, NL, NO, PL, PT, RO, RS, SE, SK, TR, UK

Main and secondary proposers: 32% ECI / 45% Women / 50% ITC

### Industrial Dimension

**SMEs:** Netherlands

**Large companies:** Denmark

## CA19136 - International Interdisciplinary Network on Health and Wellbeing in an Age-friendly Digital World

### SUMMARY

To promote social inclusion, independent living and active and healthy ageing in society, the main aim of NET4AGE-FRIENDLY is to establish an international and interdisciplinary network of researchers from all sectors to foster awareness, and to support the creation and implementation of smart, healthy indoor and outdoor environments for present and future generations. NET4AGE-FRIENDLY further aims to overcome fragmentation and critical gaps at both conceptual and pragmatic innovation level on responsive, age-friendly and sustainable environments in order to address the research-policy future requirements of Europe.

The main approach of NET4AGE-FRIENDLY is the establishment of new local or regional ecosystems or by expanding existing ones in each European COST country involved, to work on health and wellbeing in an age-friendly digital world. The ecosystems will consist of citizens, public authorities, businesses/NGOs and research and will be supported by five thematic Working Groups (User-centred inclusive design in age-friendly environments and communities, Integrated health and wellbeing pathways, Digital solutions and large-scale sustainable implementation, Policy development and funding forecast, and Cost-benefit evaluation and market opportunities). The outcomes of the five thematic Working Groups will be obtained in the work of one dedicated Working Group to create a synergised output as Reference Framework. NET4AGE-FRIENDLY will be used as a connector for involving and hosting regular themed sessions with local and regional stakeholders and users' representatives from various countries and backgrounds and for fostering the knowledge among researchers and to promote the involvement of Early Career Investigators, Inclusiveness Target Countries and entrepreneurs.

### SCIENTIFIC SCOPE

Areas of Expertise	Keywords
<ul style="list-style-type: none"> <li>● Health Sciences: Public and environmental health</li> <li>● Computer and Information Sciences: Artificial intelligence, intelligent systems, multi agent systems</li> <li>● Environmental engineering: Environmental and geological engineering</li> </ul>	<ul style="list-style-type: none"> <li>● smart</li> <li>● health</li> <li>● age-friendly</li> <li>● environments</li> <li>● wellbeing</li> </ul>

### COST Countries

Main Proposer: PT

Network of Proposers: AL, AT, BA, BE, BG, CH, CY, CZ, DE, DK, EE, EL, ES, FI, FR, HR, HU, IE, IL, IS, IT, LT, LU, LV, MD, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, TR, UK

Main and secondary proposers: 23% ECI / 48% Women / 56% ITC

### International Cooperation

**International Partner Country:** Australia, Brazil, Canada, Japan, Mexico, United States

**European RTD Organisation:** Poland

### Industrial Dimension

**SMEs:** Austria, Belgium, Cyprus, France, Germany, Italy, Japan, Luxembourg, Malta, Netherlands, North Macedonia, Romania, Serbia, Slovenia, Turkey, United Kingdom

**Large companies:** Croatia, Greece, Israel



## CA19137 - Sudden cardiac arrest prediction and resuscitation network: Improving the quality of care

### SUMMARY

Sudden cardiac arrest (SCA) causes 2 million deaths each year in Europe alone. Since SCA strikes unexpectedly and is lethal within minutes if untreated, solving this problem requires (1) recognizing individuals at risk and designing preventive strategies, (2) providing timely and effective treatment. Because SCA mostly occurs out-of-hospital, SCA victims rely on first-response treatment provided by citizens, firefighters and emergency medical services. There are large regional differences in SCA survival rates across Europe (1-30%). This suggests that regional differences in individual risk prediction, prevention and treatment have a major impact on the chance to survive. To improve survival rates across Europe it is imperative to study: 1) inherited, acquired, and environmental risk factors of SCA across European regions; 2) regional differences in preventive measures and first-response treatment strategies and their effectiveness. The PARQ Action will facilitate this research by forming a pan-European network of excellence in SCA and resuscitation science. This network includes investigators from different disciplines including cardiology, molecular biology, resuscitation science, emergency medicine, general practice and health economics. The main objectives of the project are to promote development of standards for collection of clinical data and biological samples and to harmonize data analysis. This will aid in development of risk prediction models based on inherited, acquired and environmental risks. The PARQ action will focus on European differences in first-response treatment and develop guidelines. In summary, the PARQ Action investigators will enable breakthrough developments to decrease the incidence of SCA and improve survival, while reducing the vast regional European differences in survival rates.

### SCIENTIFIC SCOPE

Areas of Expertise	Keywords
<ul style="list-style-type: none"> <li>● Clinical medicine: Cardiovascular diseases</li> <li>● Clinical medicine: Critical care medicine and Emergency medicine</li> <li>● Health Sciences: Health services, health care research</li> <li>● Basic medicine: Databases, data mining, data curation, computational modelling</li> </ul>	<ul style="list-style-type: none"> <li>● sudden cardiac arrest</li> <li>● risk prediction</li> <li>● resuscitation</li> <li>● first response treatment</li> <li>● biomarkers</li> </ul>

### COST Countries

Main Proposer: NL

Network of Proposers: BE, CZ, DK, EE, FR, IT, LU, NL, RO, RS, SE, TR

Main and secondary proposers: 39% ECI / 41% Women / 50% ITC

### Industrial Dimension

**SMEs:** Netherlands