New COST Actions – Medicine and Health

(COST Actions approved by the Committee of Senior Officials on 23 June 2017)

List of Actions

CA16203 – Stem cells of marine/aquatic invertebrates: from basic research to innovative applications (Acronym: MARISTEM)

SUMMARY

The 'stem cells' discipline represents one of the most dynamic areas in biology and biomedicine. While adult marine/aquatic invertebrate stem cell (MISC) biology is of prime research and medical interest, studies on stem cells from organisms different from the classical models (e.g., human, mouse, zebrafish) have not been pursued vigorously. Marine invertebrates as a whole portray the largest biodiversity and the widest phylogenetic radiation on Earth, from morphologically simple organisms (e.g., sponges, cnidarians), to the more complex molluscs, crustaceans, echinoderms and protochordates. Likewise, they illustrate a kaleidoscope of MISC-types that participate in the production of enormous novel bioactive-molecules, many of which are of significant potential interest for human health (antitumor, antimicrobial). MISC further participate in aging and regeneration phenomena, including whole-body regeneration, the knowledge of which can be clinical relevant. Up to now, the European MISC community is highly fragmented and very scarce ties were established with biomedical industries to harness MISC for human welfare.

Thus, this COST action aims at:

- consolidating the fragmented European community working on MISC
- promoting and coordinating European research on MISC-biology
- stimulating young, early-stage researchers to approach research on MISC-biology
- developing, validating, training and EU networking of novel MISC tools and methodologies
- establishing the MISC discipline in the front interest of biomedical disciplines
- establishing collaborations with industries to exploit MISC as sources of bioactive molecules

This will be only achieved through networking activity including workshops, training schools, short-term scientific missions, meetings/symposia, public awareness and devoted websites.

SCIENTIFIC SCOPE

Areas of Expertise

- Biological sciences: Stem cell biology; Apoptosis; Systems evolution, biological adaptation, phylogenetics, systematics; Cell signalling and cellular interactions; Environmental and marine biology

Keywords: Aquatic/marine invertebrates; Adult stem cell; Regeneration; Cell cultures; Bioactive molecules

COST Countries

Main Proposer: Italy
Network of Proposers (14 COST countries): AT, DE, EL, ES, FR, HR, IE, IL, IT, NO, PL, PT, SI, UK

International Cooperation
Near Neighbour Country: Russian Federation

CA16205 – European Network on Understanding Gastrointestinal Absorption-related Processes (Acronym: UNGAP)

SUMMARY

Oral administration is the most common drug delivery route. Absorption of a drug from the gut into the bloodstream involves disintegration of the dosage form, dissolution of the API, and transport across the gut wall. The efficiency of these processes is determined by highly complex and dynamic interactions between the gastrointestinal tract, the dosage form and the API.

The fraction absorbed of the drug is affected by various factors including physiological variables, pathological conditions, local differences in gut permeability, the intraluminal behaviour of the formulation, and food effects. This complex interplay determines drug delivery performance and may cause large interindividual variability, but is poorly understood. Furthermore, comparison between drug absorption studies is hampered due to knowledge fragmentation and lack of standardisation across pharmaceutical subdisciplines. As a result, the available knowledge is underutilized in drug development and clinical treatment.

The European Network on Understanding Gastrointestinal Absorption-related Processes (UNGAP) is a multidisciplinary Network of scientists aiming to advance the field of intestinal drug absorption by focussing on 4 major challenges: (i) differences between specific patient populations, (ii) regional differences along the gastrointestinal tract, (iii) the intraluminal behaviour of advanced formulations, and (iv) the food-drug interface. The integration of knowledge, combined with the exchange of best practices across sectors and disciplines, will help improve our understanding of intestinal drug absorption and spur future developments in the field. The Action also aims to advance the career of young, talented researchers from across Europe, thereby strengthening Europe's leading position in pharmaceutical sciences.

SCIENTIFIC SCOPE

Areas of Expertise

- Basic medicine: Pharmacology, pharmacogenomics, drug discovery and design, drug therapy

Keywords: Gastrointestinal tract; Oral drug absorption; Individual variability; Methodology, technology and assays; (Patho)physiology

COST Countries

Main Proposer: Belgium

Network of Proposers (19 COST countries): BE, BG, CH, CZ, DE, DK, EE, EL, ES, FI, FR, HU, IE, NL, PT, RS, SE, SI, UK

International Cooperation

International Partner Country (IPC): Australia, United States

CA16207 – European Network for Problematic Usage of the Internet

(Acronym: EU-PUI)

SUMMARY

Problematic use of the internet (PUI) and its impact on the health and wellbeing of European citizens represents an emerging challenge for mental health research. The aim of this COST Action is to bring together a multidisciplinary and geographically diverse group of experts and opinion leaders under one European-led Network, to leverage the existing funded research into a more coherent programme to advance the understanding of PUI from a bio-psycho-social perspective, clarify the brain-based undergirdings and develop effective interventions.

The Network will invite experts in animal and human neuroscience, genetics, clinicians and the bio- and information-technology industries to join together with policy makers, health service planners, patients and carers in an integrated four-year work-plan designed to 1) share knowledge, interchange ideas and best practice to generate common science and technology programmes, 2) address training gaps and build research capacity, 3) strengthen science and technology communication, 4) foster integration of less research-intensive countries and 5) promote new trans-disciplinary, translational approaches to tackle PUI.

In so doing, this COST Action will deliver a platform to advance brain-based research into PUI and drive forward the development of (I) clinical tools and treatment-targets (II) therapeutic interventions that may be broadly applied and to improve health and wellbeing, (III) biomarkers to enable early detection of PUI in at-risk subjects before symptoms become apparent, leading to (IV) early intervention strategies to prevent progression, chronicity and the development of costly co-morbidities such as anxiety and depression, and (V) health promotion through public-patient involvement (PPI) and health and social policy advance.

SCIENTIFIC SCOPE

Areas of Expertise

- Health Sciences: Public and environmental health
- Clinical medicine: Psychiatric disorders
- Psychology: Neuropsychology; Cognitive and experimental psychology: perception, action, and higher cognitive processes
- Basic medicine: Behavioral neuroscience (e.g. sleep, consciousness, handedness)

Keywords: Internet usage; Compulsive and addictive use of internet; Mental health and well-being

COST Countries

Main Proposer: UK

Network of Proposers (7 COST countries): CH, ES, HU, IL, IT, NL, UK

International Cooperation

International Partner Country (IPC): Australia, Brazil, Canada, China, Japan, South Africa, United States

CA16210 – Maximising Impact of research in NeuroDevelopmental DisorderS

(Acronym: MINDDS)

SUMMARY

This Action focuses on patients with rare neurodevelopmental disorders (NDD) whose study have the potential for major impact on our understanding and treatment of NDD in general, including schizophrenia and Autism Spectrum Disorder (ASD). NDD affect 1 in 25 individuals in Europe, and have high impact on healthcare systems, economic development and society. Lack of mechanistic knowledge hampers development of improved treatments. New knowledge from psychiatric genomics provides for the first time a route to identify neurobiological mechanisms underlying NDD. The key challenge is to link genetic risk to altered brain biology.

Although highly informative, substantial variability and severity of psychiatric symptoms means that genomic studies based on the general NDD patient population experience significant difficulties in assigning individual gene mutations to clinical phenotype. A solution to this challenge is the study of subgroup of NDD patients where deletions or duplications of DNA segments (Copy Number Variants, CNV) alter gene dosage and have a strong causal relationship with NDD. These pathogenic CNV present a major opportunity to establish mechanistic understanding and develop new therapies. However, NDD patients with these CNV are rare and require a coordinated, international collaboration to find and study them in large numbers.

MINDDS will create a pan-European network of clinical scientists, preclinical researchers and patient representatives to advance studies of NDD patients for these pathogenic CNV. It will create a legal and ethical framework for effective transnational NDD patient cohort building; develop standardized protocols and establish effective mechanisms for effective data sharing and knowledge exchange.

SCIENTIFIC SCOPE

Areas of Expertise

- Clinical medicine: Psychiatric disorders
- Basic medicine: Genetic epidemiology; Neuropsychology; Stem cell biology

Keywords: Neurodevelopmental disorders (NDD); Autism Spectrum Disorders (ASD); Schizophrenia; Psychiatric genomics; Copy Number Variants

COST Countries

Main Proposer: UK

Network of Proposers (12 COST countries): BE, BG, CH, DE, DK, FR, IE, NL, RO, RS, SE, UK

International Cooperation

International Partner Country (IPC): Canada

CA16216 – Coordination and Harmonization of European Occupational Cohorts (Acronym: OMEGA-NET)

SUMMARY

Occupation and paid employment is an essential component of adult life and a major determinant of health and healthy ageing. However, in recent years there has been very limited coordination and promotion of European health research on occupation and employment. Europe currently has some of the most valuable occupational, industrial, and population cohorts worldwide. The lack of integration of these cohorts hampers the optimal exploitation of these resources, essential to underpin evidencebased interventions and policy. The overarching concept of the Network on the Coordination and Harmonization of European Occupational Cohorts (OMEGA-NET) is to create a network to optimize the use of occupational, industrial, and population cohorts at the European level. OMEGA-NET will advance i) collaboration of existing cohorts, with extensive contemporary information on employment and occupational exposures, ii) coordination and harmonization of occupational exposure assessment efforts, and iii) facilitation of an integrated research strategy for occupational health in Europe. We will inventory numerous cohorts with occupational information in Europe; implement an online interactive tool with detailed information on existing cohorts; facilitate work on harmonization of occupational exposure and health outcome information and new protocols for data collection; connect scientific communities on occupational health in Europe and beyond; and provide networking, leadership, and training opportunities for early career researchers in occupational epidemiology and exposure assessment. The work will provide a foundation for an enhanced evidence base for the identification of health risks and gains related to occupation and employment to foster safe and healthy preventive strategies and policies.

SCIENTIFIC SCOPE

Areas of Expertise

- Health Sciences: Occupational medicine; Epidemiology; Public and environmental health

Keywords: Cohort studies; Epidemiology; Occupational health; Exposure assessment; Population

COST Countries

Main Proposer: Norway

Network of Proposers (16 COST countries): AT, CH, CY, DE, DK, EE, ES, FI, FR, IT, NL, NO, PL, PT, SE, UK

CA16217 – European network of multidisciplinary research to improve the urinary stents (Acronym: ENIUS)

SUMMARY

The indwelling of the urinary stents represents a very frequently used method within the urological practice, in order to ensure the drainage of the urine. Regardless of its composition, polymeric or metallic, it is associated with a high morbidity. Stented patients have functional impairment in many aspects of everyday life, including anxiety, sexual disfunction and desire, loss of labor days, and significant impact in patients' quality of life. This decrease in quality of life increase have a significant negative economic impact, with further cost for medical consultations, hospitalizations, increase the antibiotic, analgesic and alpha-blockers intake to mitigate the side effects of these prothesis.

Therefore, prime objective of this Action is to create a multidisciplinary group to identify the inherent problems in urinary stents, related to its design, composition, biomaterials, coatings, encrustation, interaction between urinary tract-stent and fluid dynamics, physiology effects on urinary tract, assessing the problem from different points of view.

Action members as part of clinical, experimental and bioengineering field, will evaluate the applications of Nanotechnology, biodegradable materials, coatings, metal stents, drug-eluting biodegradable designs, and tissue-engineered stents for use in future urinary stents.

This action will provide an extensive, interdisciplinary training program including scientific/technical, market and social skills contents; this will contribute to strengthen the interactions within the Action consortium and improve the chances of early-career researchers on the job market. Overall, success in this Action will contribute to improved healthy-quality of patients, reduction in health care costs, and increase the competitiveness of the European medical device industry.

SCIENTIFIC SCOPE

Areas of Expertise

- Clinical medicine: Urology
- Medical engineering: Medical engineering and technology
- Materials engineering: Biomaterials, metals, ceramics, polymers, composites; Fluid dynamics (physics) for materials engineering applications

Keywords: Urinary stent; Stents morbidity; Computational simulation and in silico; Drug eluting stent; Urinary tract disorders

COST Countries

Main Proposer: Spain
Network of Proposers (27 COST countries): AT, BE, BG, CH, CZ, DE, DK, EE, EL, ES, FI, FR, HR, HU, IE, IL, IT, LT, MK, NL, NO, PL, PT, RO, SE, TR, UK

International Cooperation
Near Neighbour Country: Russian Federation
International Partner Country (IPC): Canada, India, South Korea, United States

CA16223 – Leukemia Gene Discovery by data sharing, mining and collaboration (Acronym: LEGEND)

SUMMARY

Childhood acute lymphoblastic leukaemia and lymphoma account for ~30% of all childhood cancers, but the causes remain largely unknown. Recently, both low and high impact genetic risk factors for familial and non-familial childhood leukaemia/lymphoma have been identified. Studying patients with distinct rare genetic predisposition to leukaemia/lymphoma is crucial, because the underlying biologic mechanisms are likely to be relevant for leukaemogenesis and lymphomagenesis in general. Also, patients with leukaemia/lymphoma due to genetic factors will often need an adapted treatment strategy because of poor treatment response and/or an increased risk of severe toxicities. To learn as much as possible from and for these patients, international collaboration between leukaemia and lymphoma experts is crucial. Accordingly, a group of paediatric oncologists, geneticists, and scientists from multiple countries in- and outside Europe plan to meet on a regular basis to exchange research strategies and plan joint research and therapeutic activities addressing patients with leukaemia/lymphoma predisposition. Due to improving and less costly genome and epigenome mapping technologies, the field is rapidly changing, and we foresee that through the proposed collaboration we can strengthen our expertise in the areas of leukaemia/lymphoma aetiology, biology, epidemiology, treatment, toxicity risk management, patient and family psychology in a highly significant manner. This international application is a first step in order to promote these broad and critical activities that will be crucial for childhood leukaemia/lymphoma research and improved health care.

SCIENTIFIC SCOPE

Areas of Expertise

- Basic medicine: Genomics, comparative genomics, functional genomics; Genetic epidemiology
- Clinical medicine: Oncology

Keywords: Paediatric lymphoid malignancy predisposition; Genotype-phenotype-clinical correlations; Whole genome profiling; Functional models; Candidate gene identification by data sharing and mining

COST Countries

Main Proposer: Netherlands
Network of Proposers (18 COST countries): AT, BE, CZ, DE, DK, ES, FI, FR, HU, IL, IT, LT, NL, PL, RS, SE, TR, UK

International Cooperation
Near Neighbour Country: Lebanon, Russian Federation
International Partner Country (IPC): Japan

CA16225 – Realising the therapeutic potential of novel cardioprotective therapies (Acronym: EU-CARDIOPROTECTION)

SUMMARY

Ischemic heart disease (IHD) and the heart failure that often results are the leading causes of death and disability in Europe and worldwide. As such, new treatments are required to protect the heart against acute ischemia/reperfusion injury (IRI) in order to preserve cardiac function and prevent the onset of heart failure – a strategy termed 'Cardioprotection'. Yet, despite intensive research, there are currently no effective cardioprotective therapies in clinical practice. The challenge has been to successfully translate novel cardioprotective therapies discovered in the laboratory setting into the clinical arena for patient benefit.

The proposed COST Action (EU-CARDIOPROTECTION) will address this challenge by setting up a pan-European Research Network of leading experts in cardioprotection, to jointly develop innovative strategies for translating novel cardioprotective therapies into the clinical setting for patient benefit. This will be achieved through 4 main objectives (each linked to a Working Group [WG]):

1) To use innovative strategies to discover novel targets for cardioprotection (WG1 NEW TARGETS).
2) To investigate the effects of combination therapy directed to multiple targets as an innovative cardioprotective strategy (WG2 COMBINATION THERAPY).
3) To use more clinical relevant animal models for testing novel cardioprotective therapies which take into account the confounding effects of co-morbidities and co-medication (WG3 CONFOUNDERS).
4) To set up a European network of research centers for: (a) Multi-center preclinical testing of novel cardioprotective therapies using small/large animal and human models of acute myocardial IRI; and (b) Proof-of-concept clinical testing of novel cardioprotective therapies in patients with IHD (WG4 CONSORTIUM).

SCIENTIFIC SCOPE

Areas of Expertise

- Basic medicine: Pharmacology, pharmacogenomics, drug discovery and design, drug therapy
- Clinical medicine: Cardiovascular diseases

Keywords: Cardioprotection; Myocardial infarction; Ischemia and reperfusion injury; Animal models; Ischemic conditioning

COST Countries

Main Proposer: UK

Network of Proposers (23 COST countries): AT, CH, CZ, DE, DK, EE, EL, ES, FR, HU, IE, IT, LT, LV, NL, NO, PL, PT, RO, RS, SE, SK, UK

CA16226 – Indoor living space improvement: Smart Habitat for the Elderly

(Acronym: SHELD-ON)

SUMMARY

By 2050, the number of people in the EU aged 65 and above is expected to grow by 70% and the number of people aged over 80, by 170%, which will increase demand and costs for healthcare. Integrating ICT solutions into habitats, along with improved building design, will allow us to live at home and stay active and productive for longer despite cognitive or physical impediments.

Improving accessibility, functionality, and safety at home, at work and in society in general requires combining many disciplines together to develop solutions that integrate ICT, ergonomics, healthcare (psychological and physical), building and community design.

The furniture sector plays an incredibly important role. Not only is it a critical part of the European economy, it also can significantly improve the accessibility of the built environment for the elderly by integrating ICT solutions, ergonomic design, and taking into account the health needs of the elderly more completely.

The present Action will be a science and technology network where relevant actors from academic, research and industry sectors will utilise networking tools and activities to address the aging population challenges facing Europe, helping to reduce redundancy in RDI efforts, ensure solutions are developed with a broader set of expertise, and help refine the efforts of diverse group of researchers.

SHELD-ON aims to foster knowledge exchange and the development of a joint research agenda in terms of design and development of multifunctional indoor environments to meet the requirements of Europe´s aging population while promoting healthy and safe ageing.

SCIENTIFIC SCOPE

Areas of Expertise

- Electrical engineering, electronic engineering, Information engineering: Sensors and sensor systems
- Health Sciences: Health services, health care research
- Mechanical engineering: Product design, ergonomics, mechanical engineering aspects of man-machine interfaces

Keywords: Furniture; Elderly; ICT; Habitat; Healthcare

COST Countries

Main Proposer: Spain

Network of Proposers (16 COST countries): AT, BE, CZ, DE, EL, ES, FI, FR, HU, IT, NO, PL, PT, RO, RS, SI

International Cooperation

Near Neighbour Country: Ukraine

CA16227 – Investigation and Mathematical Analysis of Avant-garde Disease Control via Mosquito Nano-Tech-Repellents (Acronym: IMAAC)

SUMMARY

IMAAC aims at investigation and mathematical analysis of the effect of avant-garde control measures in vector-borne diseases involving day-time active mosquitos transmitting diseases like dengue, Zika, chikungunya and yellow fever. The control measures involve new technologies in textile and paint products based on nano- and micro-particles releasing repellents or pesticides in well portioned dosage. The study will also be expanded to scenarios using vaccines in combination with mentioned control techniques. The main focus will be on dengue fever transmitted via Aedes-aegypti and Aedes-albopictus mosquitoes in synergy with existing EU-projects, but the application will have also positive effects on other vector-borne diseases.

Nano- and micro-particles are used in textile production for various purposes, and can be used to release chemicals like repellents and insecticides in a well-controlled rate. First attempts in this direction have been made, but no efficacy studies could be performed yet. The spectrum of combinations of nano- or micro-particles, repellents, insecticides and types of textiles (or paint) has not been well studied. Especially, efficacy studies in cases using these control measures in combination with vaccines are unchartered territories and mathematical modelling has to be developed.

This Action aims to bring together experts from epidemiology, biostatistics, mathematics, biology, nanotechnology, chemical and textile engineering to implement new techniques to combat mosquito transmitted vector-borne diseases. The key question remains, in how far such avant-garde measures can help to reduce the disease burden, eventually in collaboration with existing vaccines which turned out to have only limited efficacy on their own.

SCIENTIFIC SCOPE

Areas of Expertise

- Mathematics: Statistics
- Biological sciences: Biostatistics
- Chemical engineering: Medicinal chemistry, drug synthesis
- Materials engineering: Nanophysics for materials engineering applications

Keywords: Epidemiology and Modelling; Disease Control Measures; Vector-borne Diseases; Mosquito; Dengue Fever

COST Countries

Main Proposer: Portugal
Network of Proposers (8 COST countries): DE, FI, HR, IT, NL, PT, RO, UK

International Cooperation

International Partner Country (IPC): Canada, India, Indonesia, Tanzania, United States

CA16231 – European Network of Vaccine Adjuvants (Acronym: ENOVA)

SUMMARY

This Action aims to bring together experts and stakeholders from the three main areas of vaccine research: human infectious disease, cancer, and animal disease in order to address one of the most critical steps in vaccine development: the use of adjuvants in vaccine formulations. The ultimate goal is to establish a platform to discuss, share and synergize available knowledge on adjuvants and vaccine formulation, and to coordinate their translation into successful, safe and innovative vaccines. Significant effort will be placed on bridging these three separated vaccine fields. This network will significantly strengthen ongoing EC-funded activities and provide a platform for accelerating the development of affordable and effective vaccines in Europe. In addition, as well as sharing their experiences with each other, the Action participants will also engage the general public, providing impartial, balanced and scientific information on adjuvants and vaccines. This Action will contribute to the strengthening of Europe's position as a global leader in vaccinology, and will increase knowledge across the currently separated fields of vaccine development, as well as providing a repository of information for the European public about vaccines and vaccination.

SCIENTIFIC SCOPE

Areas of Expertise

- Health Sciences: Infectious diseases
- Clinical medicine: Oncology
- Veterinary science: Veterinary medicine (miscellaneous)
- Clinical medicine: Prevention and treatment of infection by pathogens (e.g. vaccination, antibiotics, fungicide)

Keywords: Adjuvant; Vaccine; Formulation; Delivery system

COST Countries

Main Proposer: Switzerland
Network of Proposers (11 COST countries): CH, DE, DK, FR, IE, IS, NL, PL, RO, SE, UK

CA16234 – European Cleft and Craniofacial Initiative for Equality in Care

(Acronym: ECCE)

SUMMARY

The main aim of the Action is to ensure that children born with orofacial clefts and other craniofacial conditions receive optimum multidisciplinary care enabling them to grow up like any other child and attain equal status within their societies. Estimates indicate that there are over 1,000 000 individuals with clefts in Europe – a significant figure, especially when one considers that not only the patients but also their families are affected in terms of psychosocial adjustment and having to endure the burden of a long treatment pathway.

The Action, in particular, will work with Target Inclusiveness Countries where limited or no national protocols exist in cleft and craniofacial care and will, via healthcare research, develop health-integrated networks which will manage and oversee the development of cleft and craniofacial services. Europe currently lacks a harmonised approach to evaluate the current provision of care, the impacts on key areas of the affected families and society at large.

This Action will co-ordinate and increase research across Europe and will forge crucial links between researchers, practitioners and policy-makers, offering the potential for significant benefits to the families affected by orofacial clefts and other craniofacial conditions in Europe.

SCIENTIFIC SCOPE

Areas of Expertise

- Health Sciences: Health services, health care research; Public and environmental health
- Clinical medicine: Paediatrics
- Sociology: Social structure, inequalities, social mobility, social exclusion, income distribution, poverty

Keywords: Health Care Research; Equality and Policy; Public Health; Medicine; Process – outcome studies

COST Countries

Main Proposer: Netherlands
Network of Proposers (13 COST countries): BG, EE, EL, HR, IL, LV, MK, NL, NO, RO, RS, SI, TR

International Cooperation
Near Neighbour Country: Ukraine

New COST Actions June 2017 – Full list

Action N°	Proposal Title
CA16201	Unraveling new physics at the LHC through the precision frontier
CA16202	International Network to Encourage the Use of Monitoring and Forecasting Dust Products
CA16203	Stem cells of marine/aquatic invertebrates: from basic research to innovative applications
CA16204	Distant Reading for European Literary History
CA16205	European Network on Understanding Gastrointestinal Absorption-related Processes
CA16206	Empowering the next generation of social enterprise scholars
CA16207	European Network for Problematic Usage of the Internet
CA16208	Knowledge conversion for enhancing management of European riparian ecosystems and services
CA16209	Natural Flood Retention on Private Land
CA16210	Maximising Impact of research in NeuroDevelopmental DisorderS
CA16211	Reappraising Intellectual Debates on Civic Rights and Democracy in Europe
CA16212	Impact of Nuclear Domains On Gene Expression and Plant Traits
CA16213	New Exploratory Phase in Research on East European Cultures of Dissent
CA16214	The multi-messenger Physics and Astrophysics of neutron Stars
CA16215	European network for the promotion of portable, affordable and simple analytical platforms
CA16216	Coordination and Harmonization of European Occupational Cohorts
CA16217	European network of multidisciplinary research to improve the urinary stents
CA16218	Nanoscale coherent hybrid devices for superconducting quantum technologies
CA16219	Harmonization of UAS techniques for agricultural and natural ecosystems monitoring
CA16220	European Network for High Performance Integrated Microwave Photonics
CA16221	Quantum Technologies with Ultra-Cold Atoms
CA16222	Wider Impacts and Scenario Evaluation of Autonomous and Connected Transport
CA16223	Leukemia Gene Discovery by data sharing, mining and collaboration
CA16224	European Raptor Biomonitoring Facility
CA16225	Realising the therapeutic potential of novel cardioprotective therapies
CA16226	Indoor living space improvement: Smart Habitat for the Elderly
CA16227	Investigation and Mathematical Analysis of Avant-garde Disease Control via Mosquito Nano-Tech-Repellents
CA16228	European Network for Game Theory
CA16229	European Network for Environmental Citizenship
CA16230	Combatting anthelmintic resistance in ruminants
CA16231	European Network of Vaccine Adjuvants
CA16232	European Energy Poverty: Agenda Co-Creation and Knowledge Innovation
CA16233	Drylands facing change: interdisciplinary research on climate change, food insecurity, political instability
CA16234	European Cleft and Craniofacial Initiative for Equality in Care
CA16235	Performance and Reliability of Photovoltaic Systems: Evaluations of Large-Scale Monitoring Data