



**FUNDING RESOLUTION**  
**3rd Multi-Thematic Joint Call 2017/2018 involving Research Infrastructures**  
**Short description of 14 confirmed projects.**

Important facts:

The total granted budget for all 14 projects amounts to: EUR 6.491.552

The self-financed budgets for all 14 projects amounts to: EUR 2.123.592

Total project volume: EUR 8.615.144

Number of participating countries: 21

Number of participating funding organizations: 22

Call opened: Monday, 20 November 2017

Call closed: Thursday, 8 March 2018

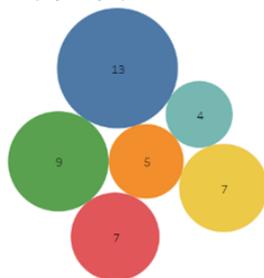
Topics: BDS -BIODIVERSITY; BRF-BIOECONOMY/BIOREFINERY; HLH-HEALTH; ICT; ICT2; ERY-ENERGY

**Table 1. Short description table**

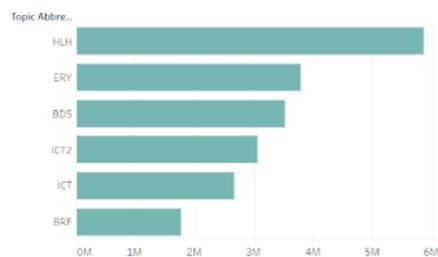
	Nº of projects	Costs (€)	Total Funded (€)	Self-financed budgets (€)
Funded projects	14	8.615.144	6.491.552	2.123.592
No funded projects	44	27.397.656	0	27.397.656

## Submitted projects report

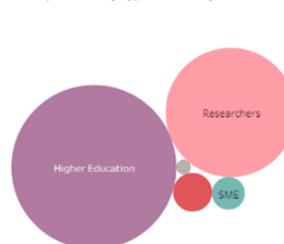
Nº of projects by topic



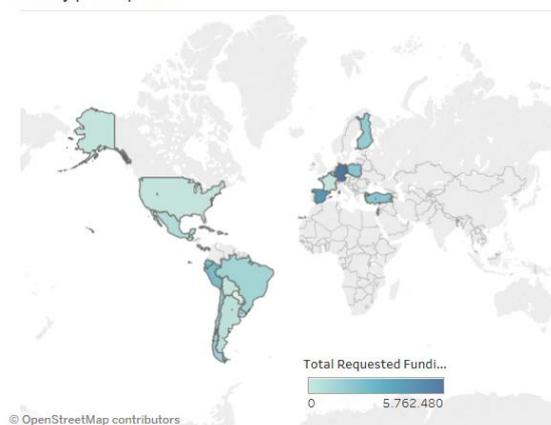
Total requested by Topic (€)



Nº of partners by type of activity



Country participation

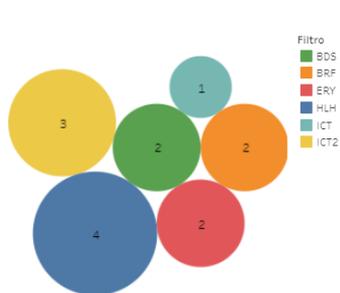


Country coordinator

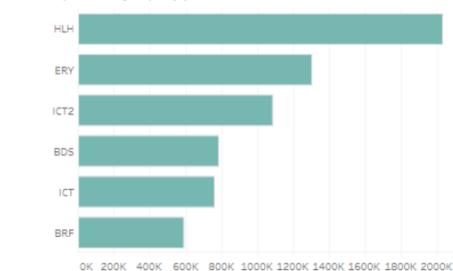


## Funded projects

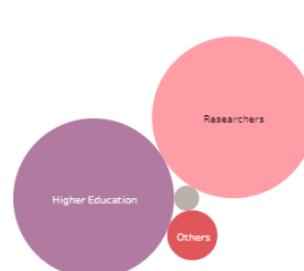
Nº of projects by topic



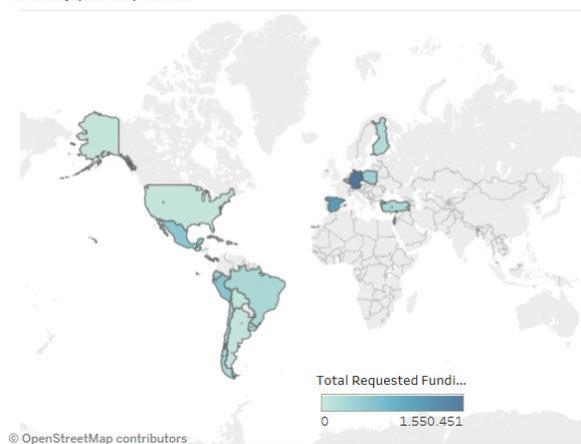
Total requested by Topic (€)



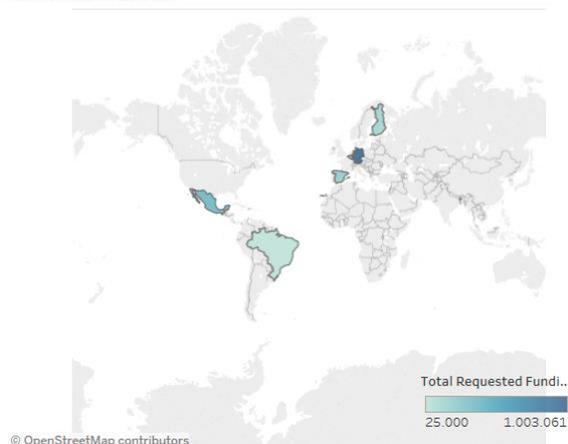
Nº of partners by type of activity



Country participation



Country coordinator



More details: <https://www.eucelac-platform.eu/statistics>

**Table 2. Nº of submitted projects, requested funding, total projects costs and total funding by country**

Country	Nº of projects Submitted	Requested Funding (€)	Costs (€)	Total Funding (€)
Argentina	5	251.500	515.710	0
Belgium	8	610.004	677.904	262.117
Bolivia	5	108.195	569.218	38.195
Brazil	25	952.096	1.728.481	208.299
Chile	16	1.159.980	1.350.192	192.168
Costa Rica	5	344.595	567.087	140.000
Cuba	7	146.300	203.565	33.800
Dominican Republic	10	939.224	1.022.030	373.151
Ecuador	25	2.263.820	3.126.944	351.725
Finland	5	1.407.677	2.010.965	156.821
France	1	0	296.600	0
Germany	43	5.762.480	6.848.124	1.550.451
Guatemala	4	226.025	282.375	146.025
Israel	5	678.412	818.469	278.412
Mexico	5	549.200	857.399	463.000
Panama	10	499.141	982.255	50.000
Peru	24	2.302.398	3.167.831	492.550
Poland	21	1.733.938	1.858.930	323.684
Spain	31	4.199.495	6.200.386	1.041.145
Turkey	16	1.839.676	1.995.251	210.134
United States of America	2	0	60.000	0
Uruguay	15	615.668	873.084	179.875

## Short description of confirmed projects

### ERANet17/BDS 0249 - TAO

#### **From Data to Decision: Collecting, Mobilizing, and Harmonizing Tropical Andes Observatory Data for Improved Conservation Planning**

Effective and timely conservation and sustainable development policy relies on high quality biodiversity information. Yet the capacity to generate, integrate and deliver this information in user-friendly formats is a particular challenge in biodiversity hotspots such as the Tropical Andes. Existing efforts suffer from taxonomic, spatial and temporal biases and inadequate integration, and often remain within the academic context thereby limiting their access and utility to policymakers.

Recent advances in biodiversity informatics, communication tools and observation network design, combined with petabytes of satellite information, offer a unique opportunity to improve efficiency and impact of biodiversity observatories in the region. The challenge is to harness these advances through the establishment of a network of harmonized, efficient national observatories that can not only improve change detection capacity, but also inform effective conservation and policy. We propose to address this challenge through the applied integration of:

- Biodiversity Observation Network design approaches developed by GEO BON
- State of the art data collection & management systems promoted by GBIF and iNaturalist
- NatureServe data analytics and visualization capacity for powerful, and userfriendly Biodiversity indicators

By developing a sustained, userdriven, locallyoperated, harmonized and scalable regional BON in the Tropical Andes, connecting data to decisions, we will achieve the following concrete outputs:

- Early warning and surveillance systems employing state of the art predictive models that can inform prevention, detection and mitigation of threats (e.g. invasive species, emerging zoonoses) to human wellbeing and local and regional economies
- Sustained regional biodiversity observation capacity, built on existing data and efforts, combined with advanced data management and analytics systems from global partners, that will improve the discoverability, access and utility of information
- A Biodiversity Indicators' Dashboard for the Tropical Andes allowing continual visualization of biodiversity indicators to support nations' ability to achieve and track domestic and international conservation targets and sustainable development goals.

Country	Research Institute	Funding Organization
Germany	Coordinator: Martin-Luther-Universität Halle-Wittenberg	BMBF
Peru	Asociación para la Conservación de la Cuenca Amazónica	CONCYTEC
Ecuador	Instituto Nacional de Biodiversidad	SENESCYT
Spain	University of Córdoba	MINECO
Bolivia	Asociación Boliviana para la investigación y Conservación de Ecosistemas Andino Amazónicos	No funding agency

## ERANet17/BDS 0065 – GLOBIOS

### Global observatory network for freshwater biodiversity in high mountain streams

High mountain streams are expected to show significant future modifications on freshwater biodiversity (e.g. loss of vulnerable species) due to climate change. Therefore, there is an urgent need to know current freshwater biodiversity patterns, to assess species vulnerability to climate change, and to identify potential refuge areas to halt biodiversity loss.

The GLOBIOS Project aims at (1) characterizing genetic, taxonomic and functional biodiversity of aquatic invertebrates in high mountain streams in the Andes (Peru), Talamanca (Costa Rica), the Pyrenees (Spain) and the Alps (Austria), (2) identifying potentially vulnerable species, (3) predicting changes in distribution patterns of vulnerable species to climate change, and (4) identifying current and future priority areas to be protected to halt genetic, taxonomic and functional biodiversity loss. The target freshwater organisms will be Chironomidae (Diptera) and Trichoptera, considered to be highly sensitive to temperature and flow regime patterns, and very abundant and diverse in high mountain streams.

Main deliverables of the project include: An atlas of global genetic, taxonomic and functional biodiversity for vulnerable species in high mountain regions; an online database of critical temperature thresholds, biological and ecological traits of species in high mountain streams; maps of genetic, taxonomic and functional biodiversity under future climate change scenarios; current and future maps of areas to be protected using systematic planning tools; and a dissemination strategy of the main results. The GLOBIOS Project will set the foundations of a global observatory network to halt freshwater biodiversity loss in high mountain streams.

Country	Research Institute	Funding Organization
Spain	University of Barcelona	MINECO
Germany	Senckenberg Research Institute and Natural History Museum	BMBF
Costa Rica	University of Costa Rica	MICITT
Peru	Cayetano Heredia University	CONCYTEC

## **ERANet17/BRF 0005 – GreenMol**

### **Development of Green Molecules from Lignocellulosic Biomass for Renewable Chemistry**

The GreenMol Project is dedicated to the development of building block, intermediate and end use molecules derived from lignocellulosic biomass to promote a full valorization of agroindustrial residues. The target molecules are levulinic acid from cellulose, xylose fatty acid esters from hemicellulose, and a molecular nanosupport for controlled release of bioactive molecules from lignin. These molecules should have a highvalue potential, which will be obtained by means chemocatalytic, enzymatic and physicochemical routes.

The Project will be executed in order to study the three lignocellulosic fractions (cellulose, hemicellulose and lignin) to obtain renewable chemicals with high innovation potential. A R&D consortium based on highlevel experts was constructed with institutions from Brazil (Brazilian Agricultural Research Corporation – National Research Center for Agroenergy and National Research Center for Environment), Germany (Forschungszentrum Jülich), Uruguay (Faculty of Chemistry/University of La República), and Poland (Cracow University of Technology). Raw materials to be used are agroindustrial residues as beet and sugarcane bagasse and woodymaterials from eucalyptus from paper and pulp industry.

<b>Country</b>	<b>Research Institute</b>	<b>Funding Organization</b>
<b>Brazil</b>	<b>Brazilian Agricultural Research Corporation</b>	<b>CNPq</b>
Poland	Cracow University of Technology	NCBR
Germany	Forschungszentrum Jülich ("Jülich Research Centre")	BMBF
Uruguay	University of La Republica	MEC
Brazil	Brazilian Agricultural Research Corporation	No funding agency

## ERANet17/BRF 0126 - carboxAiD

### Valorisation of agricultural residues via anaerobic digestion: from biogas to carboxylates

Approximately one third of the greenhouse gas emission is associated to agriculture, from fertilizer manufacture, improper agricultural waste handling to food storage and packaging. Nonproper treatment of agricultural waste is assumed to be a major factor. Anaerobic digestion (AD) is considered to be an excellent technology for agricultural waste stabilization/treatment and renewable energy carrier production. However, the overall economic value of the produced methane is rather low, especially compared to the potential value of the waste streams. In this project, various agricultural waste products and different strategies will be investigated to enable a shift in the treatment process from AD to anaerobic fermentation, which will lead to the production of carboxylates with a higher economic value.

The transition of conventional AD to stable carboxylate production by means of anaerobic fermentation requires addressing several challenges, i.e. methanogenesis inhibition, substrate recalcitrance, product specificity and product inhibition; which will be the main focus of the carboxAiD project. Biomimicry of the gut system of animals specialized on fiber-rich diet, such as ruminants and insects, will provide additional hints and solutions for the biorefinery concept of carboxAiD.

Country	Research Institute	Funding Organization
Germany	Helmholtz Centre for Environmental Research UFZ	BMBF
Ecuador	ESPOL Polytechnic University	SENESCYT
Brazil	Federal Institute of Goiás	CNPq
Turkey	Istanbul Technical University	TUBITAK

## ERANet17/ERY 0168 - COOSW

### Transnational cooperation for development of a solution for saving energy and water in small near coast facilities using simple devices harnessing the ocean energy.

The proposal consists in the utilization of temperature and waves of seawater for desalination and refrigeration use of small facilities near coast. For this, we combine the use the three technologies: (i) the use of WEC (Wave Energy Converters) that obtain energy of waves and that we use for pumping colder seawater of deeper layers, (ii) the use of this cold water from the sea for refrigeration with SWAC (Seawater Air Conditioning) technology and; (iii) the use of gradient of temperature between colder pumping water and the heated water by means SWAC for their use in a desalination technology (COOL STEAM, a Lowtemperature thermal desalination method). Another possibility that we explore in the project is the use of WEC technologies to provide energy for deaireation and warmer shallow waters pumping in the process of seawater evaporation of COOLSTEAM using a floating pipeline collector facility arranged on the marine surface.

Two sites of action are proposed for proof concepts: an installation in Puerto Plata (Dominican Republic) and another installation in the Canary Islands (Gran Canaria, Spain) in the facilities of the ICTS PLOCAN. The installation of Puerto Plata has one of the best conditions in the Caribbean for SWAC technology facility. In this particular, one of objectives of the project is building a system that allows the extraction of water from the sea to an optimal depth and see the viability of the system to acquire data validate the relevant computer models. Additional feasibility studies are oriented for wave energy storage using hydrogen or the use of GNL as additional colder source and the GN as energy supply.

The benefits of COOSW proposed solutions are enormous, and its development will increase the autonomy of small facilities saving energy in the production of water. The use of COOSW proposed solution will allow reduce the impact on the landscape and biodiversity of the deployment of global supply facilities, and reduce the risk for climate events which are less vulnerable due to their less spatial extension.

Country	Research Institute	Funding Organization
Spain	International Center for Numerical Methods in Engineering	MINECO
Germany	Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V.	BMBF
Mexico	Instituto de Ingeniería de la Universidad Nacional Autónoma de México	CONACYT
Spain	Plataforma Oceánica de Canarias	MINECO
Dominican Republic	Pontificia Universidad Católica Madre y Maestra	MESCYT
Spain	Universitat Autònoma de Barcelona	MINECO

## ERANet17/ERY 0222 - SUSME

### Laboratory testing and knowledge transfer for the development of sustainable strategies for marine energy harvesting

The development of marine energy technologies requires the use of specialized infrastructure to test and optimize energy harnessing devices in operation conditions as close to the real ones as possible. It is desirable to have access to the more advanced equipment, to large marine conditions data series and other tools in order to simulate sea conditions and analyze the response of the devices to them. Research, then, is essential to the future evolution of renewable energy industry, specifically to assist the developers at early TRLs to continue with their technology development pathway. Only by proving the devices performance under real sea environment, can developers truly progress to commercial projects. In turn, verified performance data will build confidence amongst the investment community and a global clean energy market could be set. The general objective of this proposal is to numerically and physically test marine energy devices to move them from TRL 23 to TRL 34.

This objective will be achieved through completing the particular objectives of:

- Gather and characterize marine energy potential available at the coasts of Mexico, Uruguay, Costa Rica and Canarias. Construct available power matrices.
- Study the response of the devices available to marine conditions and overlap the power output with the power matrices of the different countries. Evaluate the possible environmental impact of each device and of a farm of them.
- Develop numerical analyses of the detailed response of the devices to sea conditions including materials resistance to corrosion.
- Perform experimental tests of small scale devices focused on the design of the PTO and the possibilities for network connection and energy storage.
- Train human resources with courses in modeling and simulation (downscaling).

Through an increased rate of deployment we will be able to accrue a higher level of certainty of the performance of the technologies and will help define learning rates identifying cost reduction areas that fit with the continuous development of wave energy technologies in order to attract the private investment. Currently the development status of the technology is associated with the high levelised cost of energy (LCOE) compared to both traditional and other renewable energy sources. The need for competitive marine energy technologies in relation with other energy technologies requires actions to reduce the LCOE in order to be commercially viable. The barriers and challenges still to be faced by the ocean energy sector will require significant collaboration, as the one proposed herein, in aspects related with the cost reduction of the technology. The path to this necessarily goes through innovation and learning by doing, allowing new solutions (such as materials) to emerge and improving the efficiency in energy capture from individual devices.

It is expected that increasing the scale of the devices (lower cost/capacity) and the number of them (lower installation cost per device), will reduce production and engineering support costs. The previous and produced knowledge will be transferred and disseminated assuring availability of results for future users and as a potential for increasing collaboration between the participants and other investment corporations interested. The consortium is also committed to contribute in the current innovation and scientific literature, with the participation in journals and international conferences.

Country	Research Institute	Funding Organization
Mexico	Universidad Nacional Autónoma de México	CONACYT
Uruguay	Universidad de la República de Uruguay	MEC
Spain	Universidad de Granada	MINECO
Spain	Escuela Universitaria de Diseño e Ingeniería de Barcelona	MINECO
Germany	Fraunhofer Gesellschaft	BMBF
Spain	Universidad de Cantabria	MINECO
Spain	The Oceanic Platform of Canary Islands	MINECO
Costa Rica	Universidad de Costa Rica	MICITT

## ERANet17/HLH-0142- Cochaco

### Identification and validation of biomarkers to improve the control of congenital Chagas disease

The project aims to improve the control of congenital Chagas disease (CCD) by identifying a profile of biomarkers highly associated with congenital transmission of *T. cruzi* and detectable in the blood circulation of *T. cruzi*-infected pregnant women. We propose to identify a profile of biomarkers comprising genetic single nucleotide polymorphism and differential expression of genes previously identified as candidates, as well as to investigate new biomarkers based on extracellular vesicles (EVs), microRNAs (miRNA), immunological markers and molecular features of the parasite. EVs and miRNA are emerging as important regulators of host-pathogen interactions. We will study the modulatory effect of EVs and miRNA derived either from the parasite itself or from the placenta (mainly from trophoblasts, the cells that constitute the placental barrier) on the placental *T. cruzi* infection and immune response and in parallel make the profile of these EVs and miRNA by proteomic and molecular approaches. Parasite and/or host EVs and miRNA will then be studied quantitatively and qualitatively in the plasma of *T. cruzi*-infected women having or not transmitted the parasite to their baby. We will also seek for additional biomarkers related to the maternal immune response, to the biological features and the genotype of the parasite they harbour and to the parasite load.

This project takes advantage of the capacity of the Argentinean and the Spanish teams to collect biological samples from *T. cruzi*-infected pregnant women and their newborns / infants (necessary to identify those that are congenitally-infected, and thereby the mothers that are transmitting or not the parasite). The Chilean team is specialized in the study of placental infection with *T. cruzi*, the Uruguyan and the Argentinean teams are specialists in molecular biology of *T. cruzi*, and the Belgian one in immunological studies. Our consortium comprises all skills needed to achieve this project.

Altogether, the data obtained from these approaches should lead to identify a profile of biomarkers detectable in the plasma of infected pregnant women, allowing to discriminate those that are more at risk to congenitally transmit the parasite to their fetus. It will also increase our knowledge on the modulation of the transplacental passage of *T. cruzi*. This should allow to more efficiently identify women at risk of congenital transmission and thus to focus diagnostic efforts on babies from these mothers. This new strategy would be complementary to the current ones that are not sufficient to control congenital Chagas disease, i.e. treating infected women before pregnancy or diagnosing and treating congenitally-infected newborns after birth..

Country	Research Institute	Funding Organization
Belgium	Université Libre de Bruxelles*	F.R.S-FNRS
Spain	University Hospital Virgen de las Nieves - Foundation FIBAO	ISCIII
Uruguay	Institut Pasteur de Montevideo	ANII
Chile	Universidad de Chile	CONICYT
Spain	University of Granada	ISCIII
_No funding agency_ (N/A)	Consejo Nacional de Ciencia y Tecnologia	

## ERANet17/HLH 0231 - ArboFusion

### Arbovirus science based on blood transfusions

**ArboFusion** is a multidisciplinary consortium investigating emerging arboviruses, involving beneficiaries from Germany, Israel, Belgium, Perú, Ecuador, Dominican Republic and Brazil with background in clinical science, public health, virological diagnostics and transfusion. The project joins expertise from Latin American and European scientists with Roche Molecular Diagnostics to develop novel diagnostic tools for ultrafast diagnostics and realtime genomic characterization of emerging flaviviruses and alphaviruses, focusing on blood safety and patient diagnostics. Additional serological investigations will allow reestimating agestratified and ecoepidemiological analyses of the burden of the emerging Zika and Chikungunya viruses.

Technical workshops and external quality assessments will facilitate harmonization of testing, and international transdisciplinary conferences involving national and supranational public health stakeholders will enable enhanced surveillance recommendations for arbovirus emergence in Europe and Latin America.

Country	Research Institute	Funding Organization
Germany	Charité - Universitätsmedizin Berlin	BMBF
Dominican Republic	Centro de Prevención y Control de enfermedades transmitidas por vectores y zoonosis, Ministry of Health	MESCYT
Israel	Public Health Services, Israel Ministry of Health	MoH
Ecuador	Universidad Central del Ecuador	SENESCYT
Germany	Universitätsklinikum Heidelberg / Heidelberg University Hospital	BMBF
Belgium	University of Liège	F.R.S. - FNRS
Peru	Universidad Peruana Cayetano Heredia	CONCYTEC
Brazil	University of São Paulo	CNPq
Ecuador	Cruz Roja Ecuatoriana	No funding agency
	Roche Molecular Systems, Inc.	No funding agency

## ERANet17/HLH 0271 - WildEmerg

### Diagnosis and surveillance of vectorborne viruses and hemoparasites across the human wildlife interface in the Amazon Basin

Vectorborne diseases are an important and reemerging public health problem in Latin America, particularly in the highly biodiverse Amazon Basin. In highly biodiverse ecosystems, vectorborne pathogens, such as arbovirus and some malaria species, are maintained in a large variety of zoonotic cycles involving arthropod vectors and wildlife animal reservoirs. However, there are no sensitive diagnostic tools for the surveillance and diagnosis of zoonotic pathogens in the Amazonian wildlife, due to logistic and financial restrictions, as well its challenging, remote settings and complex multihost ecosystems.

We propose a monitoring system for vectorborne diseases in tropical regions based on the development of an innovative next generation sequencing diagnosis approach and a lowcost, multispecies collection strategy for wildlife biological samples. Specific objectives:

1) Standardization and validation of a novel PacBiobased diagnostic test in Peruvian and Brazilian Amazon wildlife, 2) Risk analysis of the pathogen transmission cycle in wildlife animal reservoirs, vectors and susceptible human population, and 3) Characterization of the epidemiology and monitoring of circulating pathogens in the Peruvian and Brazilian Amazon Basin by the evaluation of biological samples collected in FTA filter paper, which has been proven to be a costeffective method for surveillance in remote tropical regions. This approach will address one of the main challenges faced in the disease surveillance in large tropical rainforest: the high cost of monitoring remote, isolated areas.

This project will design a lowcost and appropriate monitoring system adapted to the difficult and isolated conditions of these remote Amazonian settings and reduces the need for cold chain during storage and transport in tropical settings that allows carrying out research and surveillance of emerging diseases. We will validate a novel diagnosis platform focused on a broad range of infectious pathogens, and elaborate an epidemiological framework that includes the interfaces of wildlife, vectors and humans in the same area from a synchronic and diachronic point of view. Finally, the project will largely improve the research competencies in Peru and Brazil to carry out surveillance of emerging diseases.

Country	Research Institute	Funding Organization
Germany	Forschungsverbund Berlin e.V. für Leibniz Institut für Zoo und Wildtierforschung	BMBF
Spain	Institute of Global Health of Barcelona	ISCIII
Brazil	Universidade Federal Rural da Amazonia	CNPq
Peru	Universidad Peruana Cayetano Heredia	CONCYTEC
Spain	Universidad Autónoma de Barcelona	ISCIII

## ERANet17/HLH-0145 - Development of New Diagnostic Options for enteroaggregative *Escherichia coli* as an important diarrheal pathogen

Entero-aggregative *E. coli* (EAEC) causes persistent diarrhea in children from endemic areas, incl. large regions in Latin America, as well as persistent diarrhea in HIV patients, and is an important causative agent of traveler's diarrhea. Although EAEC has been associated with diarrhea, it has been difficult to determine the specific mechanisms of EAEC pathogenicity, which has made assessments of the clinical relevance of this microorganism difficult. Accordingly, there is a strong need for improved understanding of the role of EAEC during diarrheal disease and the further development of diagnostic and typing approaches for EAEC.

The overall scientific objective of this transnational, collaborative project is to understand the genomic diversity of the EAEC population and to identify novel markers for DNAbased EAEC typing and detection. Our understanding of EAEC pathogenicity will also benefit from the identification of indicative bacterial taxa in the intestinal microbiome specifically associated with EAEC infection and disease type. Our unbiased comparative EAEC genome and human microbiome analyses will translate into (i) the definition of discriminative markers for EAEC detection and typing, (ii) the development of an EAEC biosensor, and improved EAEC diagnostic assays, as well as (iii) the definition of host microbiome factors associated with EAEC-associated diarrhea and thus facilitate EAEC typing and diagnosis.

Country	Research Institute	Funding Organization
<b>Germany</b>	<b>University of Muenster</b>	<b>BMBF</b>
Brazil	Instituto Butantan	FAPESP
Israel	Tel Aviv University	MoH
Chile	Universidad de Chile	CONICYT
Brazil	Instituto Butantan	No funding agency

## ERANet17/ICT2 0059- CITADINE - Citizen Science and Nature-based solutions for improved disaster preparedness

The aim of the proposed project is to develop an ICT tool and an organizational concept for collecting existing knowledge in the population on low-frequency, high impact disasters, and to make this knowledge and experience usable for risk and crisis communication, urban planning, and discussions with relevant decision makers, such as politicians.

A focus of the project is to analyze what such disasters actually meant for the everyday lives of the citizens: what was the concrete damage caused by the disaster, how did this impact people's safety, their wellbeing, and their economic activities, what type of help was needed (and missing) when the disaster struck, how could people have better prepared themselves, how did the affected population cope with the disaster, what were successful (or unsuccessful) coping strategies.

In order to achieve the project goals, a software will be designed and implemented that can be used to enrich existing quantitative information on disasters with qualitative experiences in the form of live cases narrated by survivors, and historic (multi) media documentations such as texts, photographs and films on disasters. In order to make this information usable, relevant meta data needs to be provided for each contribution, and the information needs to be archived in an easy to use data base, that allows for an intuitive (visual) presentation of its inputs. In order to assure that a critical amount of input is generated (and used) in all participating regions, an organizational concept involving educational institutions like schools, and universities, as well as volunteer organizations, will be developed and tested. The expected advantage of the proposed approach is that it will become clearer to all stakeholders what a disaster actually means for the everyday lives of the population. Instead of just relying on disaster statistics, the impact of a potential disaster becomes audible and visible. Multimedia materials from the system can be used to create exhibitions on the local relevance of disasters, which can be used to communicate existing risks to (younger) citizens, as well as politicians and other decision makers, such as urban planners. An additional benefit will be that the information available can be used to support the revitalization process of degraded or abandoned areas, so that lessons from past disasters can be learned and planning mistakes of the past can be mitigated or avoided. Best practices based upon experiences with and from nature can be identified and taken into consideration during the planning process.

Country	Research Institute	Funding Organization
Germany	Jade Hochschule Wilhelmshaven	BMBF
Dominican Republic	Instituto Tecnológico de Santo Domingo in consortium with Instituto Dominicano de Desarrollo Integral	MESCYT
Chile	Universidad de La Frontera	CONICYT
Argentina	Universidad Nacional de La Plata	MINCYT
Poland	Uniwersytet Warszawski	NCBR

## ERANet17/ICT-0076- SELI Smart Ecosystem for Learning and Inclusion

The overall objective of the SELI project is to develop and implement an open access set of ICT-based tools and environments to encourage the digitization of the learning ecosystem by revitalizing education, and improving inclusion and accessibility across the EU and LAC regions. Following a sustainable capacity building approach, the specific objective of the project is to use the expert knowledge of the consortium to (1) identify the challenges in the use of ICT as a tool for learning and inclusion (2) initiate broad stakeholder dialogue and consultation to screen potential educational, technical and business solutions for the challenges, (3) implement knowledge transfer of the solutions identified by a 'teaching the teachers approach' and finally (4) conduct validation tests with trained teachers who will apply their knowledge to teach disadvantaged groups such as migrants, the elderly, the physically challenged, and the deaf and dumb, in order to increase their inclusion in society. The expected results encompass (a) a digital platform providing access to scientific, educational and multimedia materials for learning in order to support e-accessibility, and e-inclusion, (b) the improved capacity of educators to make use of digital learning environments to support inclusion, (c) a catalogue of best practice guidelines for increased accessibility for people who have difficulties in acquiring ICT skills.

Country	Research Institute	Funding Organization
<b>Finland</b>	<b>University of Eastern Finland</b>	<b>AKA</b>
Poland	Pedagogical University of Cracow, Faculty of Education	NCBR
Panama	Universidad Tecnológica de Panamá	SENACYT
Guatemala	Universidad Galileo, Guatemala	CONCYT
Bolivia	Universidad Mayor de San Simón	MINEDU
Uruguay	Universidad de la República	ANII
Ecuador	Universidad del Azuay	SENESCYT
Turkey	Hacettepe University	TUBITAK
Brazil	Universidade Presbiteriana Mackenzie	FAPESP
Dominican Rep	Federico Henríquez y Carvajal University	MESCyT
Cuba	Universidad Central "Marta Abreu" de Las Villas	(FONCI)

## ERANet17/ICT2 0196 – DIGIRES

### Digital-enabled green infrastructure for sustainable water resources management

Despite the abundance of natural water resources, urban areas of Latin America and the Caribbean (LAC) are facing major shortcomings in the delivery of basic services such as safe water supply. The cause is manifold and includes the spatial and temporal heterogeneity of water resources, the negative water balance caused by overexploitation, and the insufficient human capacities and governance. The conventional solutions based on built “grey” infrastructure do not cope with the basic needs of the population so we urgently need appropriate, locally accepted technical options.

In this project, managed aquifer recharge (MAR) is proposed for replacing traditional water infrastructure with greener, nature-inspired solutions that allow for a more equitable water provisioning. The overall goal is the development and utilisation of ICT-based tools, coupled with citizen science observations for the design and implementation of MAR as nature-inspired component of sustainable water resources management in LAC region. The efficiency of the solutions proposed will be demonstrated through success stories, by designing and implementation of small-scale, demonstrative MAR schemes with active participation of stakeholders and developing capacities for sustainable urban development.

Country	Research Institute	Funding Organization
Germany	Technische Universität Dresden	BMBF
Cuba	University of Cienfuegos	FONCI
Brazil	Federal University of Pernambuco	CNPq
Belgium	University of Mons	F.R.S. - FNRS
Guatemala	University of San Carlos of Guatemala	CONCYT
Guatemala	Universidad del Valle de Guatemala	CONCYT
Germany	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH	No funding agency
Dresden	UNU Institute for Integrated Management of Material Fluxes and of Resources	No funding agency

## ERANet17/ICT2-0272 – CWetlandData Towards the Constructed Wetlands Knowledge Platform for sustainable development

80% of all wastewater worldwide is released untreated into the environment, leading to deteriorating water quality. Achieving universal access to sanitation while improving water quality by halving the proportion of untreated wastewater and increasing its safe reuse are targets 6.2 and 6.3 of the Sustainable Development Goals (SDGs). Constructed Wetlands (CWs), a Nature-based Solution (NbS), can contribute to these targets. Currently, there is little knowledge about the contribution of CWs to the global amount of treated wastewater. UNUFLORES has initiated the process of establishing a global Constructed Wetlands Knowledge Platform (CWKP). As a first step, a user requirements analysis was carried out through a two-step expert survey distributed globally through social media and target networks. This allowed defining key parameters, information and functions to be implemented in the platform. From this, a preset data infrastructure, highlighting about 70 CWs parameters, was derived and implemented in a pilot level GIS based platform In collaboration with CentroGeo.

The aim of this project is to raise the CWKP to the next level of becoming the one-stop shop solution provider for CW-related data and mechanisms for fostering research, policy development and financing, empowering Civil Society Organizations (CSOs) and practitioners to implement NbS for sustainable development. This will be achieved through the following objectives:

1. Co-create a stable, comprehensive and attractive platform for CELAC stakeholders to understand and apply NbS solutions for their contexts;
2. Collate high-quality data through multiple pathways including semi-automated extraction of information from peer-reviewed journal articles as well as citizen science;
3. Support the platform development with a dedicated transdisciplinary team that can derive critical products from design specifications of CWs to policy implications for the region.

Country	Research Institute	Funding Organization
<b>Germany</b>	<b>United Nations University Institute for Integrated Management of Material Fluxes and of Resources</b>	<b>BMBF</b>
Poland	AGH University of Science and Technology	NCBR
Uruguay	Cultura Ambiental	MEC
Peru	Universidad Nacional Agraria La Molina	CONCYTEC
Guatemala	University of San Carlos of Guatemala	CONCYT
Mexico	Centro de Investigación en Ciencias de Información Geoespacial	No funding agency