

Institution	1.1 Contact	1.2. Brief summary of the organization	1.3. Brief summary of the research & innovation capacities in relation with the Zika Virus Outbreak / related R&I.	1.4. Key words	Industry
<p>Alternative Gene Expression S.L. (ALGENEX) Website: www.algenex.com Address: Centro de Empresas. Parque Científico y Tecnológico de la UPM. Campus de Montegancedo. 28223 Pozuelo de Alarcón. Madrid – Spain</p>	<p>Name of researcher/s (technical/scientific contact): Dr. Romy M. Dalton (Operations manager) Previous experience in EU Framework Programme projects - YES (as partner) Email: romydalton@algenex.com Phone: +34 91 452 49 41</p>	<p>ALGENEX, a company founded in 2005, focuses on the development and commercialization of remarkably productive technologies for the manufacturing of high quality recombinant proteins for vaccine and diagnostic purposes. The company develops disruptive baculovirus-based technologies to produce recombinant proteins both in insect cells (Top-Bac® technology) and insects as living disposable bioreactors (CrisBioTM technology). ALGENEX develops and supply diagnostic reagents and vaccines for leading human and veterinary companies.</p>	<p>ALGENEX has the capability to develop any recombinant protein derived from Zika virus to be used as IVD reagents and also generate vaccine formulations in combination or not with immunopotentiating molecules property of the company. ALGENEX has the capabilities to generate in record times protein-based diagnostic or vaccine products, scale-up their production and reduce significantly the production costs. ALGENEX could be a partner in any consortium interested in developing new diagnostic kits based on antibody detection, in the development of a subunit vaccine or in studies of epidemiology providing some protein tools to diagnostic laboratories (reagents for serology).</p>	<p>Diagnostic reagents, subunit vaccines</p>	<p>Y</p>
<p>Applied research using Omic Sciences S.L Website:www.aromics.es Address:c/ Víctor Pradera 45, 08940 Cornellà de Llobregat, Barcelona, SPAIN</p>	<p>Name of researcher/s (technical/scientific contact): Carmen Plasencia Previous experience in EU Framework Programme projects - YES as coordinator and partner Email: info@aromics.es Phone:+34934407302</p>	<p>AROMICS is a development stage biopharmaceutical companies aimed to develop novel drugs and diagnostic methods to cover unmet medical needs. We mainly work currently over two areas: oncology and infectious diseases. Two of our lead programs (NAX35 compound for malignant mesothelioma treatment) and AB200 for coinfections in non-responder HIV patients coinfecting with hepatitis C, are undergoing preclinical path (close to IND).</p>	<p>On the therapeutic side: Our lead compound AB200, is a subcutaneous liposomal novel formulation of a Serine Protease Inhibitor. The new formulation has shown activity in front a wide range of virus including HIV, HCV, HBV, HSV or H1N1. It was also tested recently by NIH in other virus like Dengue, West Nile or Hepatitis B. Although results on Dengue or West Nile were not completely conclusive due to the technical assays used at NIH, it is clear that the potential of the drugs comes from its capacity to reinforce the host, irrespectively of the virus. The activity of the compound is linked instead, with an anti-inflammatory, immunomodulatory and antiviral activity exhibited, as demonstrated in HIV and HCV models (patent as well as publications exist for revision). Despite no experience in relation to Zika virus directly, being this virus of the family of Flaviridae, and being our compound active in virus of the same family, we hypothesized that may be an attractive therapeutic option for the treatment, so we are open to evaluate it.</p> <p>On the diagnostic side, I would also to point that AROMICS was leading an SME FP7 project (HILYSENS) focused on developing a diagnostic lab-on-chip for a tick-borne disease (Lyme). The project was successfully transferred to the SMEs involved, and is currently in roadmap to market, under DEMO FP7 project (Hilysens II) . The test was based on serological response of the patient in front of the infection, allowing a more accurate way of diagnosing the infection. Despite, more oriented to bacterial infections, AROMICS is open to put our strengths and capacity knowledge on diagnostic side, to possible consortium in order to improve the control of zika virus outbreak.</p>	<p>Therapy, host-target agent. Diagnostic, rapid tests.</p>	<p>Y</p>

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<p>Bionaturis (Bioorganic Research and Services, S.A.) Website: www.bionaturis.com Address: Avda. Desarrollo Tecnológico 11, Parque PCTA, 11591 Jerez de la Frontera, Cádiz, Spain</p>	<p>Name of researcher/s (technical/scientific contact): Juan José INFANTE-VIÑOLO, PhD Previous experience in EU Framework Programme projects - YES (as partner) Email: juanjose.infante@bionaturis.com Phone: +34 685 889 395</p>	<p>Bionaturis is a contract for development and manufacturing organization (CDMO) specialized in providing innovative biological drugs for partners in the pharmaceutical and veterinary industry. Human and animal vaccines, hormones, and feed additives. Second generation vaccines based mainly on virus-like particles or viral or bacterial subunits fused to carriers for targeting antigen-presenting cells and raising of a combined humoral and cellular response. Bionaturis has a proven record of delivering batches to pharmaceutical partners in Europe, Asia, and Latin America. Bionaturis has developed a proprietary version of a manufacturing platform for biologics, which uses the baculovirus expression vector technology in living linearly-scalable biofactories consisting in insect caterpillars.</p>	<p>Advances in expression technology for complex, enveloped virus-like particles (eVLPs) have created new opportunities to develop potent vaccines against pathogenic arboviruses like the Zika virus. There have been successes in eVLP production for members of the three major arbovirus families: Flaviviridae (e.g., dengue, West Nile, Japanese encephalitis); Bunyaviridae (e.g., Rift Valley fever); and Togaviridae (e.g., chikungunya). Results from pre-clinical testing are very good but there are still specific constraints to the large-scale manufacture and purification of eVLPs. Insect cells and caterpillars have shown to be ideal substrates for correct arboviral glycoprotein folding and posttranslational modification to yield high quality eVLPs. Bionaturis has produced eVLPs and VLPs and delivered batches to pharmaceutical partners in the USA, Brazil, Mexico, Europe, and Asia. The literature background and Bionaturis' experiences in scaling-up eVLPs in insect larvae under cGMP conditions (www.bionaturis.com) give Bionaturis a very realistic potential for manufacturing and delivering in less than 6 months a candidate vaccine against the Zika virus for preclinical testing.</p>	<p>Baculovirus expression technology, second generation vaccines, cellular response, linearly-scalable biofactories, virus-like particles, eVLPs,</p>	<p>Y</p>
<p>Centro de Biología Molecular "Severo Ochoa" Website: www.cbm.uam.es Address: c/ Nicolás Cabrera 1; Campus de Cantoblanco; Madrid; 28049 Spain</p>	<p>Name of researcher/s (technical/scientific contact): LUIS MENENDEZ ARIAS Previous experience in EU Framework Programme projects - YES (as partner), also supervisor of a CIG action (Marie Curie) Email: lmenendez@cbm.csic.es Phone: +34 911964494</p>	<p>The Centro de Biología Molecular Severo Ochoa (CBMSO) was founded in 1975, as a biological research facility, with joint staff from the Spanish Research Council (CSIC) and the Autonomous University of Madrid (UAM). CBMSO is a large institute with around 70 independent groups affiliated to five different departments: Cell Biology and Immunology, Development and Differentiation, Genome Dynamics and Function, Virology and Microbiology and Molecular Neurobiology. CBMSO effectively combines research (including BSL-2 and BSL-3 facilities for work with pathogens), and teaching activities at the undergraduate and graduate level.</p>	<p>Dr. Menéndez-Arias' group investigates on the role of retroviral enzymes, particularly HIV-1 reverse transcriptase (RT), with two major goals: (i) to understand nucleotide specificity and the molecular basis of fidelity in retroviral RTs, and (ii) to elucidate molecular mechanisms involved in drug resistance. It has a long-standing trajectory in the study of retroviral polymerases and would be interested in basic research projects related to the Zika virus (ZIKV) RNA polymerase as a target of antiviral intervention. The lab has experience in purification and characterization of viral enzymes, and the development of nucleotide incorporation enzymatic assays. However, he has no previous experience in studying the biology of ZIKV.</p>	<p>Viral polymerases, fidelity, antiviral research, drug resistance</p>	

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<p>CENTRO NACIONAL DE BIOTECNOLOGÍA</p> <p>Website: http://www.cnb.csic.es/index.php/es/investigacion/departamentos-de-investigacion/biologia-molecular-y-celular/infeccion-por-el-virus-de-la-hepatitis-c Address: CALLE DARWIN, 3 28049-MADRID (SPAIN)</p>	<p>Name of researcher/s (technical/scientific contact): PABLO GASTAMINZA</p> <p>Previous experience in EU Framework Programme projects - NO</p> <p>Email: pgastaminza@cnb.csic.es</p> <p>Phone: +34 915854561</p> <p>- Management office contact details: Name: Diana Pastor Email: dgpastor@cnb.csic.es Phone: +34 91 585 4701</p>	<p>CSIC is the largest Government-funded basic research organization in Spain.</p> <p>The CNB is dedicated to the study of fundamental biological processes in order to provide biotechnological solutions to society. CNB research is devoted to the development, among others, of diagnostic tools and therapies for major human diseases including viral diseases (influenza, SARS and MERS coronaviruses, hepatitis C virus, Chikungunya virus). CNB has recently been awarded with an Excellence Grant from the Ministry of Economy and it belongs to the Excellence Campus of UAM,</p>	<p>My laboratory is devoted to the study of viral and cellular determinants involved in the hepatitis C virus (HCV) replication cycle. We have also developed cell-based assays for the identification of antiviral molecules against HCV and identified dozens of novel antiviral compounds targeting several aspects of the virus replication cycle.</p> <p>I was co-responsible for the development of the first cell culture system for HCV infection 1 , which we have exploited to decipher major aspects of the biology and host-virus interactions for HCV 2-10. Thus, I believe we can participate in this program providing strong expertise and capabilities for the development of novel cell culture systems for the study of Zika virus. Genomic similarities of Zika virus with HCV may support this notion, as both belong to the Flaviviridae family of viruses.</p> <p>On the other hand, we are experts in assay development and antiviral molecule discovery 11-15. Thus, we believe we can contribute to this program with expertise in the development of cell-based screening systems for Zika virus.</p> <p>CNB provides outstanding core facilities that will ensure completion of the experiments including BSL2 and BSL3 facilities (currently used by us for HCV studies (http://www.cnb.csic.es).</p>	<p>Virus, Cell culture models, Antivirals, Cell-based screening assays</p>	

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<p>Fundación Rioja Salud/Hospital San Pedro Website: www.cibir.es Address: Piqueras St., 98, CIBIR Bldg. 3rd floor, 26006 Logroño, Spain</p>	<p>Name of researcher/s (technical/scientific contact): J. A. Oteo PhD. MD. Previous experience in EU Framework Programme projects - YES (as partner) Email: jaoteo@riojasalud.es Phone: +34 941 278 871 - Management office contact details: Name: Marcos Vilariño Email: mvilarino@riojasalud.es Phone: +34 941 278 770 ext. 84867</p>	<p>Fundación Rioja Salud (FRS) is a health organization as a foundation, nonprofit, linked to the Public Health System of the region of La Rioja (Spain). The address of the FRS lies in the Centre for Biomedical Research of La Rioja (CIBIR). Arthropod Vectors Unit is a laboratory of the Infectious Diseases Department (under the direction of J. A. Oteo, PhD., MD.) of the CIBIR. This unit is a Reference Centre of infectious diseases transmitted by arthropod vectors that provides capacity and training for research and diagnosis of infectious diseases with high containment laboratories up to BSL3 pathogens.</p>	<p>Our multidisciplinary research team has wide experience in microbiological, epidemiological and clinical studies of arthropods (ticks, fleas, mites) and arthropod-borne diseases. We have been able to describe new diseases (i.e. Dermacentor-borne necrosis-erythema-lymphadenopathy, DEBONEL) as well as new bacteria or Candidatus to new species (i.e. Rickettsia rioja, Rickettsia vini...). We have also performed epidemiological studies in vectors that have conducted to detect, for the first time in Spain, viruses or bacteria transmitted by ticks, such as Crimean-Congo hemorrhagic fever virus (CCHFV) or Candidatus Neoehrlichia mikurensis. We could provide human samples (if we had patients affected by Zika virus) as well as collaborate on the design of polymerase chain reaction (PCR) assays to support the diagnosis in the acute phase of the disease. Although Aedes aegypti is not present in our country, we could test these mosquitoes using molecular assays to know the prevalence of infection and asses the risk in an area. Our participation in national and international projects and networks demonstrates our skills and work capacity to meet new challenges in the field of "One Health".</p>	<p>Molecular assays, polymerase chain reaction (PCR), metagenomis, microbiome, virome, arthropods, ticks, fleas, mites, mosquitoes, serological assays, arthropod-borne diseases, arboviruses, Crimean Congo hemorrhagic fever virus, Rickettsia spp., rickettsioses, Borrelia burgdorferi, Coxiella burnetii, Borrelia miyamotoi, Francisella tularensis, Ixodes, Dermacentor, Hyalomma, Haemaphysalis, Rhipicephalus, Neotrombicula inopinata, Candidatus Neoehrlichia mikurensis, Lyme disease...</p>	
<p>FISABIO-Salud Pública, Univ. de Valencia Website: www.fisabio.es Address: Avda. Cataluña, 21. Valencia 46020</p>	<p>Name of researcher/s (technical/scientific contact): Prof. Fernando González Candelas Previous experience in EU Framework Programme projects - NO Email: fernando.gonzalez@uv.es Phone: 961925961 ; 963543653</p>	<p>This is a research centre on public health in which our group has been conducting research and providing counselling to public health and preventive medicine units in hospitals on molecular epidemiology of viruses and bacteria, most notably in outbreaks and nosocomial transmission cases of RNA virus such as hepatitis C virus and HIV. We are a very experienced team in the integration of epidemiological and nucleotide sequence data with in-house NGS capacity.</p>	<p>We can perform all the tasks in the molecular epidemiology analysis of samples containing Zika virus, from the extraction of RNA from biological material to the analysis and interpretation of molecular phylogenies and their integration with epidemiological information. In the context of Zika Virus outbreak we can provide expertise in any of these steps, most notably in the analysis and interpretation of sequence data. These capabilities can be applied to the detection and characterization of Zika virus in samples from different sources even in very low amounts of sample and virus concentration.</p>	<p>Nucleotide sequence, next generation sequencing, bioinformatics, molecular epidemiology, molecular evolution, molecular detection</p>	

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<p>GENETIC PCR SOLUTIONSTM Website: www.geneticpcr.com Address: CEEI – Elche. Polg. Ind. Carrús, Ronda Vall d’Uxó 125 03206-Elche (Alicante) Spain</p>	<p>Name of researcher/s (technical/scientific contact): DR ANTONIO MARTINEZ-MURCIA (CEO) Previous experience in EU Framework Programme projects - YES (as partner) Email: ammurcia@geneticpcr.com - Phone: +34-965429901 - Fax: +34-966661040</p>	<p>GENETIC ANALYSIS STRATEGIES S.L., under his trademark GENETIC PCR SOLUTIONS (GPSTM) is an innovative technology-based company (EIBT), hosted located at the European Centre for Innovative Companies of Elche (Alicante, Spain), which offers numerous applications genetic analysis in food sectors, water, environment, pharmaceutical, cosmetics, clinical diagnosis, veterinary, and other fields. GPSTM develops comprehensive validated DNA/RNA analytic procedures to detect, identify, and quantify, SPECIFIC GENES, or the organisms by using fast and reliable genetic technologies. The project of this biotech-linking company was promoted by a group of scientists from the University Miguel Hernández, Orihuela, Alicante (Spain), with more than 25 years’ experience on genetic analysis, mostly applied to bacterial phylogeny, evolution, taxonomy, typing, identification and molecular microbial ecology. GPSTM has assembled a portfolio of platforms to enable rapid and cost-effective automation of complex DNA detection, from sample preparation to multi-parametric DNA detection and quantification. The core of its activity, GPSTM aims the design, development, production, and validation of kits containing the PCR reagents for the detection of genes, organisms, or pathogens (bacteria, viruses, fungi and parasites), but also the evaluation of sample consumables and laboratory instruments for process automation.</p> <p>In the last 2 years GPSTM has developed, produced, validated and commercialized qPCR kits for >130 relevant targets in all sectors of application (clinical, veterinary, food, water, and environmental), surpassing all expectations. GPSTM has developed a new qPCR format called: MONODOSE qPCR. With this innovative product incorporate kits prepared for each individual reaction tubes, each tube contains dried reagents required for each qPCR assay; just needs adding the DNA sample and run the PCR. Ice during transport is not needed, the risks of cross-contamination is minimized, deterioration of the polymerase and the fluorophore by freeze-thawing are avoided, and it is easy and quick to be prepared, minimizing technical problems.</p> <p>GPSTM has developed the so-called GPSTM GenoStand, a genomic standard certificate (number of genomic copies known) for certain species of pathogenic bacteria, a deliverable of AQUAVALENS (FP7-project), used as reference within the consortium for validation. GPSTM is actively working in qPCR internal validations following guidelines of international standard norm EU-EN ISO 17025 for testing and calibration.</p> <p>Scientists from GPSTM have participated in international projects such as: CLINICALAIR project (New tools and strategies to monitor environment in hospital areas of risk), under Eureka program: EUREKA 3350/F1172; FP5-project AQUACHIP “Development and validation of a DNA-chip technology for the assessment of the bacterial quality of..”; and project HEALTHY-WATER, “Assessment of human health impacts from emerging microbial pathogens in drinking water by molecular and epidemiological studies” FP6-2005-FOOD-4-B. Actually, GPSTM participates in AQUAVALENS of FP7 2013-2018 (39 partners). “Protecting the health of Europeans by improving methods for the detection of pathogens in drinking water and water used in food preparation.”</p>	<p>A new qPCR test for Zika virus is under development at by GPSTM. Reagents incorporate relevant added value and improvements to the existing market (Differentiation):</p> <ul style="list-style-type: none"> - The design of primers and probes, in addition to a thermodynamic quality test, are based on an updated phylogenetic analysis (evolutionary criteria) taking into account all the sequences deposited in public databases to date, ensuring maximum specificity with the strains described taxon. - Chemical innovation: NEW reagents have been incorporated to improve technical, quality, easy and price: • Reagent stable at room temp "mastermix": allows transport on dry ice, lowering costs. • Selection of high-performance polymerase: improvement in sensitivity and reproducibility. • Incorporation of a more effective "quenching" in probes, reaching baseline background noise signal increasing assay (sensitivity). • Incorporate a pure synthetic standard (not cloned) for calibration (certified). - The kits are compatible with all commercially available thermal cyclers - The protocol and programming (temperature and time) of the qPCR are the same in all kits and consequently different pathogens can be detected in the same assay. <p>The proposal for a full validation of the methodology following international rules is intended. Full automated platform will be developed.</p>	<p>Diagnostic methods; genetic detection and quantification; polymerase chain reaction; qPCR;</p>	<p>Y</p>

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<p>Hospital La Paz-Carlos III</p> <p>Website:http://www.madrid.org/cs/Satellite?pagename=HospitalCarlosIII/Page/HCA_R_home&c=Page&sitename=HospitalCarlosIII Address: C/Sinesio Delgado nº 10, Madrid 28029 -</p> <p>Website:http://www.madrid.org/cs/Satellite?language=es&pagename=HospitalLaPaz/Page/HPAZ_home Address: Pº de la Castellana, 261. Madrid 28046</p>	<p>Name of researcher/s (technical/scientific contact): Dra. Marta Díaz Menéndez Previous experience in EU Framework Programme projects - NO Email: marta.diaz@salud.madrid.org Phone: +34678835273</p> <p>Name of researcher/s (technical/scientific contact): Dr Fernando de la Calle Prieto Previous experience in EU Framework Programme projects - NO Email: fcalle.prieto@salud.madrid.org Phone: +34628337899</p> <p>Name of researcher/s (technical/scientific contact): Dra Milagros García López Hortelano Previous experience in EU Framework Programme projects - YES (as partner) Email: mghortelano@salud.madrid.org Phone: +34 917277201</p> <p>Name of researcher/s (technical/scientific contact): Dr Jose Ramón Arribas Previous experience in EU Framework Programme projects - YES (as partner) Email: joser.arribas@salud.madrid.org Phone: +34 91 2071676</p>	<p>Hospital la Paz-Carlos III is a tertiary referral hospital located in Madrid. Our tropical medicine unit is a reference Centre of the National Health System for tropical diseases (adults and paediatric age), officialised by the Spanish National Ministry of Health. It is specifically dedicated to the prevention, diagnosis and treatment of tropical diseases, and the WHO accredited our Unit as an official Yellow Fever vaccination Centre. Core activities include medical care for travellers, immigrants, and refugees, with particular expertise in imported and parasitic infections. The team provides comprehensive pre-travel health assessment and medical advice, as well as attention to returning travellers with infections or other medical events. We operate as a multi-disciplinary team, including Infectious Diseases Clinicians, microbiologists, immunologists, paediatricians, gynaecologists or cardiologist. Our Microbiology Laboratory is updated with the newest diagnostic techniques, as a reference centre we count with diagnostic procedures to diagnose emergent viral diseases. Our laboratories include a P-3 (Level of Biosecurity 3) facility.</p> <p>Besides the laboratory dotation we also count with a high level isolation unit to manage patients affected with emerging imported viral diseases, and we have clinical experience in treating Ebola virus disease. Our institution is widely recognized for our achievements in the field of tropical medicine.</p> <p>We provide a comprehensive diagnostic service for a wide range of infectious diseases. These include: Malaria, Dengue and other haemorrhagic fevers, other arboviral infections, Typhoid and other enteric infections (giardiasis, dysentery), Parasitic infections (hydatid, schistosomiasis, larva migrans), CNS infections (meningitis, neurocysticercosis), Infectious skin diseases (leishmaniasis, leprosy, lyme disease), Respiratory infections (tuberculosis, legionellosis) and asymptomatic post-tropical screening. Our daily routine, include patients affected with suspected arboviral infections, as dengue or chikungunya.</p> <p>Our physicians are professors of the “Master in tropical medicine and International Health” of the Autónoma de Madrid University, providing post-graduate training to doctors specialising in Infectious Diseases & Tropical Medicine. Also postgraduate doctors specializing in Internal Medicine, Infectious diseases, Paediatrics, or General Practitioners are regularly receiving formation at our unit. We organize yearly courses of continued formation for doctors in vaccinology, Chagas diseases and emergent viral diseases.</p>	<p>In the last year 2015 we attended more than 10.000 travellers seeking for pre-trip medical advice and more than 4000 immigrants and returned travellers with symptoms. We have a well-structured database recording the most relevant information of all patients attended. Our country is the first European country receiving travellers and immigrants from Latin America, the actual geographical area with the highest incidence of Chikungunya, Dengue and Zika viral infections. As a national reference unit we attend a huge proportion of all these cases of imported arboviral infections.</p> <p>We are part of the National RICET network (Cooperative network in investigation in tropical diseases), which comprises workgroups in different research fields (clinical, microbiology, ecology, vectorial or climate change). We also collaborate with the National +Redivi network for surveillance of imported infections.</p> <p>We are participating in the investigation on experimental treatments for Ebola virus infection. We are also part of a clinical trial to develop a new Ebola vaccine, which is currently in phase II, and Healthy volunteers have already been recruited. One of our funded projects is “Identification and characterization of monoclonal antibodies against Ebola virus for diagnostic and therapeutic Applications”. We have worked with PAHO (Pan American Health Organization) on issues related to the management of patients infected with Ebola virus and we have experience in communication, application and processing of medication, etc with international organizations.</p> <p>Our investigation activity has resulted in first quartile publications in all areas regarding tropical diseases (virus, bacteria, parasites), including those of emerging viral diseases. We collaborate regularly in the draft of national guidelines in different tropical diseases. We are currently carrying out a clinical and epidemiological study on Chikungunya infection.</p> <p>Together with the National Health Ministry of Spain, we are currently elaborating a national guideline for the clinical approach to Zika virus (ZIKV) disease. In collaboration with gynaecologists and paediatricians, we are working in the national protocols to attend pregnant women infected with ZIKV. Purposely, considering the clinical data reported regarding the possible association of ZIKV infection during pregnancy with congenital brain malformations we are stressing our collaboration with paediatricians in order to attend and follow up children born from mothers with suspected active or past ZIKV disease.</p>	Imported disease, emerging viral disease, Zika virus, pregnancy	

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Hospital Ramón y Cajal. Address: Ctra. Colmenar Viejo Km 9, Madrid 28034, Spain.	<p>Name of researcher/s: F. Norman (1), R. López-Vélez(1), Juan Carlos Galán(2). Tropical Medicine Referral Unit. Infectious Diseases (1) and Microbiology Department (2). Hospital Ramón y Cajal, Madrid. Spain</p> <p>Previous experience in EU Framework Programme projects - YES (as coordinator). F. Norman and R. López-Vélez previously collaborated in the FP7 Dengue Tools Project.</p> <p>Email: rogelio.lopezvelez@gmail.com</p> <p>Phone: +34913368108</p>	<ul style="list-style-type: none"> • The Tropical Medicine Referral Unit (TMU) is a national referral centre for Tropical Diseases in Spain, belongs to the GeoSentinel Network, is a member of the Spanish Network of Cooperative Research in Tropical Diseases (RICET) and is the coordinating Center for the national network for imported diseases by travellers and immigrants (+Redivi). The TMU has a team of over 20 people including clinical assistants, laboratory technicians, physicians and fellows. • Researches of Microbiology laboratory belong to National Network of Biomedical research centre in Public Health (CIBERESP). The goal of CIBERESP is to enhance the transversal research and translational technical activity, between different groups with interests in public health. The Ramon y Cajal (RYC) Microbiology group includes seven senior researches working in different lineages such as evolution, HIV, antibiotic resistance, bioinformatics.... and served as a reference laboratory in influenza virus and collaborate with the guidelines, clinical or laboratory recommendations in emergence viruses. 	<ul style="list-style-type: none"> • The clinical and research group of the TMU includes four physicians, two researchers and a data manager. During 2014, there were over 3,300 consultations and compared with the previous year, there was an overall increase of 7.8% in the number of visits; 17.7% in new consultations and 5.4% in follow-up visits. Patients with suspected arboviral infections may be seen at the unit daily without appointment and out of hours may be evaluated by the infectious disease on-call specialist (on-site at the hospital 24/7). In the last five years, a mean of 6 projects or clinical trials focused on imported infectious diseases by immigrants and by travellers have been ongoing. Two physicians from the unit have participated specifically in the European FP7 Dengue Tools project. In 2014, 28 scientific articles have been published in high impact journals including 23 in international journals and 5 in national journals. • Our Microbiology laboratory has implemented an algorithm for the step-by-step diagnosis of arboviruses (Dengue, Chikungunya), following the PAO recommendations. Three strategies based on NS1-Ag, real-time PCR for DENV and CHIKV and serological approaches using available commercial kits approved in CE. Now, we have introduced the molecular diagnosis of Zika virus by real time PCR following the Lanciotti protocol. Moreover, our group has bioinformatic personnel with knowledge in evolutionary reconstructions using Phy-ML, Beast...programs. We are closely working with national reference laboratory in suspected cases of DENV, CHIKV and potentially Zika virus. 	Travelers, migrants, imported infectious diseases, travel medicine, diagnostic methods, virology	

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<p>Human Parasitic Disease Unit, Departamento de Parasitología, Facultad de Farmacia, Universidad de Valencia; WHO Collaborating Centre SPA-37; FAO-United Nations Reference Centre for Parasitology (focus on vector-borne zoonotic diseases)</p> <p>Websites: 1) http://www.uv.es/farmadoc/WHO%20CC%20Web%20Fac%20Farm%20(2).pdf ; 2) http://www.ricet.es/grupos-investigacion/valencia/dpuv ; 3) www.uv.es/master-enfermedades-parasitarias</p> <p>Address: Av. Vicent Andrés Estellés s/n, 46100 Burjassot, Valencia, Spain</p>	<p>Name of researcher/s (technical/scientific contact): SANTIAGO MAS-COMA</p> <p>Previous experience in EU Framework Programme projects - YES (as partner) – YES (as coordinator)</p> <p>Email: S.Mas.Coma@uv.es Phone: +34 660382605 / 07</p> <p>- Management office contact details: Name: Clemente Bañuls (Secretario)</p> <p>Email: Clemente.Banuls@uv.es Phone: +34 963544298</p>	<p>Centre of Excellence of the Network RICET (Red de Investigación Cooperativa en Enfermedades Tropicales) of the Health Ministry. The Valencia group participates in Work Package "Tropical, emerging and re-emerging viruses, vectors and reservoirs", in which M.D. Bargues of Valencia acts as IP (Coordinator). International Reference Centre (depending on WHO Geneva and FAO Rome) on vector-borne zoonotic diseases. Research collaborations with most countries of Europe, the Americas, Africa and Asia.</p>	<p>Large research expertise on vectors of infectious diseases, mosquitoes included, throughout Europe, the Americas, Africa and Asia. Research focuses on: (i) molecular characterization of vectors, (ii) epidemiology and risk assessment (mathematical modelling, remote sensing, GIS), and (iii) evaluation of insecticide products for disease control. The Valencia leader, S. Mas-Coma is the present President Elect of the International Federation of Tropical Medicine and a WHO Expert Member on NTDs (Geneva), which may help in international collaborations if needed.</p>	<p>Vectors, DNA, genetics, epidemiology, risk assessment, insecticide evaluation.</p>	

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<p>INFECTIOUS DISEASES UNIT. CONSORCIO HOSPITAL GENERAL UNIVERSITARIO DE VALENCIA (SPAIN). Address: AVENIDA TRES CRUCES S/N</p>	<p>Name of researcher/s (technical/scientific contact): MAGDALENA GARCIA RODRIGUEZ Previous experience in EU Framework Programme projects NO Email: magdala_rod@yahoo.es Phone:</p>	<p>Since 2002 the Infectious Diseases Unit of University General Hospital in Valencia, is Reference for diagnosis and treatment of emerging and re-emerging imported diseases Valencia Community since the same year (4328 DOGV of 04-09 -2002).</p> <p>The unit has 5 doctors specializing in infectious diseases of which one takes an exclusive care activity in patient care, immigrants and travelers with imported pathology. Our activity has presented an exponential increase in recent years the increment derived from imported pathology in our environment (14.663 consultations in the field of imported pathology).</p> <p>For the care of these patients the unit has a hospital ward, four outpatient rooms and day hospital where you can perform diagnostic tests and / or outpatient treatment in those patients who do not require hospitalization. Our hospital has services of a tertiary center (neurology, pediatrics, microbiology, preventive medicine...).</p> <p>The unit has also an international vaccination center since 2010, derived from the Management Commit Convention on international vaccination between the Ministry of Health and Social Policy from Spain and the Ministry of Health from Valencia (BOE -A-2010-7084), it forms part of the network of international vaccination centers of the Valencian Community, with a growing activity (21,465 travelers and managed a total of 56,634 vaccines).</p> <p>The experience gained in recent years in the field of prevention, diagnosis and treatment of imported pathology allows us to collaborate on actions that may arise from specific epidemiological situations such as the Zika virus.</p>	<p>By the activity of prevention, diagnosis and treatment of imported diseases that we do in our Unit and the experience gained over the last 14 years in these areas we can cooperate on issues such as:</p> <ul style="list-style-type: none"> - Surveillance of patients with imported pathology. - Information on visiting travelers to endemic areas. - Review post trip of these travelers. - Early diagnosis of imported cases of Zika virus. - Early differential diagnosis of patients with clinical imported viruses similar to Zika virus (dengue, chikungunya...). - Treatment and follow-up of patients diagnosed Zika virus. - Control of pregnant women and newborns with suspected involvement by Zika virus. <p>In the presence of Aedes albopictus in our geographic area we can, in collaboration with specialized institutions, report on this specific epidemiological situation.</p>	<p>Epidemiological surveillance. Diagnosis. Treatment. Complications combat. Treatment. Complications combat.</p>	

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<p>INGENASA Website:www.ingenasa.com Address:C/Hermanos García Noblejas, 41</p>	<p>Name of researcher/s (technical/scientific contact): Paloma Rueda Previous experience in EU Framework Programme projects - YES (as partner) – YES (as coordinator) Email: prueda@ingenasa.com Phone: 91 368 0501</p>	<p>INGENASA is a highly specialised SME Biotechnology company dedicated to research, development production and marketing of products designed to the diagnosis and prevention of infectious diseases, especially those affecting the Animal Health sector. The company based in Madrid has 30 years' experience in the development of recombinant proteins and monoclonal antibodies which have been used for the development of diagnostic test for many veterinary diseases, which are currently commercialized. INGENASA has extensive experience in European. Based on this research INGENASA has registered more than 80 patents and 82 publications</p>	<p>We are expert in viral zoonoses, with extensive background on West Nile fever. We have recently participated in the EU-funded project FP7-HEALTH-2010-261391 "EuroWestNile" (2010-14), working on the development of new assays for this disease based in recombinant proteins and monoclonal antibodies. As result of this work, currently, INGENASA commercialised two tests for detecting antibodies against West Nile. One detect IgM in horse and the second is suitable to be used in different species including humans.</p> <p>We are expert in expression and production of recombinant proteins, selection and production of monoclonal antibodies and development of diagnostic assays (molecular and serologic). All our experience and tools could be promptly adapted and applied to other related flaviviral diseases, including Zika virus.</p> <p>We can lead R&D related with new diagnostic.</p>	<p>Diagnostic methods, recombinant proteins, monoclonal antibodies</p>	<p>Y</p>
<p>INIA (CISA) Website: www.inia.es Address: Ctra Algete-El Casar s/n, 20130, Valdeolmos (Madrid), Spain</p>	<p>Name of researcher/s (technical/scientific contact): Miguel Ángel Jiménez clavero Previous experience in EU Framework Programme projects - YES (as coordinator- NOTE: deputy coordinator EuroWestNile project EU FP7-HEALTH-2010-261391) Email: majimenez@inia.es Phone: +34916202300 (ext 178) Management office contact details: Name: Víctor Briones Dieste Email: briones.victor@inia.es Phone: +34916202300 ext 111</p>	<p>The National Institute for Agricultural and Food Research and Technology (INIA) is the main public institute for research in agri-food sciences in Spain, including animal diseases and zoonoses. At INIA, the Animal Health Research Centre (CISA) was created in 1993 to implement R&D in animal health, with emphasis on emerging diseases. CISA holds the largest BSL-3 laboratory facility in Spain (11.000 m2 BSL-3 area), enabling animal experimentation (including large animals) with hazardous pathogens.</p>	<p>We are specialized in emerging viral zoonoses, with an extensive background on West Nile fever/encephalitis and related flaviviral diseases with zoonotic potential (Usutu virus, Bagaza virus). We work in the veterinary field under the "One-Health approach" perspective, in collaboration with relevant members of the human medicine and ecology fields. A recent example of this successful collaboration has been our participation in the EU-funded project FP7-HEALTH-2010-261391 "EuroWestNile" (2010-14) in which, we were deputy coordinators, coordinated the workpackage: "Animal models of disease", and actively participated in other workpackages (diagnostics, etc). Being a flavivirus, most tools in use in our laboratory can be easily adapted to Zika virus research. We can lead R&D in 1) the development of animal models for studying host-pathogen interactions, clinical and pathological characterization of Zika virus infection, therapeutics and vaccine efficacy studies; 2) the development of diagnostic tests, and 3) virus characterization studies (host range, phylogenomics, etc).</p>	<p>Diagnostic methods, animal models, virus-host interactions, reservoirs, sequence analysis.</p>	

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<p>Institut de Recerca de la SIDA irsiCaixa</p> <p>Website: http://www.irsicaixa.es/en</p> <p>Address: Hospital Universitari Germans Trias i Pujol Ctra. De Canyet s/n, 08916 Badalona (Barcelona)</p>	<p>Name of researcher (technical/scientific contact): Javier Martinez-Picado</p> <p>Previous experience in EU Framework Programme projects - YES (as partner)</p> <p>Email: jmpicado@irsicaixa.es Phone: 93 4656374</p> <p>Management office contact details (if needed):</p> <p>Name: Judith Dalmau</p> <p>Email: jdalmau@irsicaixa.es Phone: 93 4656374</p>	<p>IrsiCaixa sites one of the largest bio-safety level 3 laboratories dedicated to HIV research in Europe. The infrastructure in the BL3 facility includes 12 laminar flow hoods, two flow cytometers (one 10-colour), cell separator, Elispot processor, ultracentrifuges and CO2 incubators. In addition to the BL3 facility, there are 4 hoods for non-infectious materials, dedicated space for cryobiology including liquid N2 tanks, molecular biology facilities (standard PCR, RT-qPCR, and digital droplet PCR), sequencers, 454 sequence analyses, and bioinformatics analysis of sequences.</p>	<p>Basic research to understand ZIKA virus infection, replication, pathogenesis, and transmission:</p> <p>Our group has extensive experience in deciphering the molecular interactions between HIV-1 and myeloid antigen presenting cells, such as monocytes, macrophages and dendritic cells. Our work focuses on studying viral attachment, fusion, entry, replication and cell-to-cell transmission mechanisms; and this previous know-how could be easily translated into the study of Zika virus. Since myeloid antigen presenting cells initiate antiviral immune responses against invading viruses, our work with primary human lymphoid tissues could help to understand the interplay between Zika virus and these key myeloid cells isolated from relevant tissues. Thus, we could study the interplay between antigen presenting cells and Zika virus to identify factors modulating susceptibility to Zika infection and underscore possible immune subversion pathways related to the pathogenesis of this virus.</p>	<p>Infection, replication, pathogenesis, cell-to-cell transmission, myeloid cells, immune responses.</p>	
<p>Institut de Recerca i Tecnologia Agroalimentàries (IRTA) - CReSA</p> <p>Website: www.irta.cat and www.cresa.cat</p> <p>Address: Edifici CReSA, Campus de la Universitat Autònoma de Barcelona (UAB), 08193 Bellaterra (Barcelona, Spain)</p>	<p>Name of researcher/s (technical/scientific contact): Joaquim Segalés / Núria Busquets / Xavier Abad</p> <p>Previous experience in EU Framework Programme projects - YES (as partner) – YES (as coordinator) - NO</p> <p>Email: joaquim.segales@irta.cat Phone: +344674040 Ext. 1702</p> <p>- Management office contact details :</p> <p>Name: Erlantz Marín</p> <p>Email: erlantz.marin@irta.cat Phone: +344674040 Ext. 1113</p>	<p>IRTA is a public research institute and the Centre de Recerca en Sanitat Animal (CReSA) its research program on farm animal health and zoonoses. CReSA is located in the Edifici CReSA, at the campus of the UAB, which is a new and technologically advanced building, with conventional laboratories as well as biocontainment with level-3 biosecurity (BSL3) laboratories and animal and entomological facilities. Major expertise is on vector borne diseases as well as development of animal models for different diseases. Major focus includes research on pathogenesis, and diagnostic technique and vaccine development.</p>	<p>In order to prevent expansion of Zika virus (ZIKV) to Europe, knowledge on its ecology, and in particular, on the efficacy of autochthonous vectors to transmit the disease should be generated. Such information would allow representing risk maps to determine areas and seasons most favourable for ZIKV transmission, which would allow the implementation of more effective surveillance and control programs. CReSA has the capability to evaluate the susceptibility to ZIKV infection of different mosquito populations, including <i>Aedes albopictus</i> (tiger mosquito) and <i>Aedes aegypti</i> (ZIKV vector). CReSA has already carried out similar studies with West Nile virus within our BSL3 entomological facilities. Moreover, CReSA participates in arbovirus surveillance to detect Chikungunya or Dengue viruses from autochthonous mosquitos after the detection of viremic travelers. That surveillance could be easily extended to ZIKV suspicious cases. CReSA has also experience in the implementation of epidemiological studies for vector-borne diseases. Also, CReSA can participate in inactivation procedures and evaluation of virus survival in several environments. In addition, since ZIKV causes viremia, potential impact in safety of blood derivatives can be tested. Finally, CReSA can potentially be involved in the development of an animal model to reproduce the infection/disease.</p>	<p>Diagnostic methods, vectors and reservoirs, viral animal models, vaccine development, pathogenesis, viral inactivation, epidemiology, viral detection in vectors, vector competence assays, surveillance.</p>	

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<p>Instituto de Salud Carlos III (Carlos III National Health Institute Website: www.isciii.es Address: C/ Sinesio Delgado, 6.28029 Madrid</p>	<p>Name of researcher/s (technical/scientific contact): M^aPaz Sánchez-Seco Previous experience in EU Framework Programme projects - YES (as partner) – YES (as coordinator) - yes - Management office contact details (if needed): Name: Oficina de Proyectos Europeos. EU projects Office Email: jriese@eu-isciii-es</p>	<p>The Instituto de Salud Carlos III is the main Public Research Entity funding, managing and carrying out biomedical research in Spain. The Institute has been conducting research and providing key services in the life and health sciences for over 20 years. It is also the body responsible for managing Spain's Health Research and Development Strategy within the framework of the National R+D+I Plan. Its key mission is to support the development of scientific knowledge in the health sciences and to contribute to innovation in healthcare and the prevention of disease.</p>	<p>Specialized in arboviruses: Dengue, Chikungunya, West Nile. Partners in European projects focused on arboviruses: DengueTools, EDEN, EMERGE. Coordinators of the EuroWestNile project. Members of the SC of the European Network for the diagnostic of Imported Viral Diseases. Pls of national projects regarding these issues. NRL for viral zoonoses. Able to carry out diagnostics of Zika. IFA, PCR, isolation and neutralization capabilities. Several imported cases detected in our country by us. Experts in viral characterization (phylogenetic and serological analysis, NGS), development of molecular methods for differential diagnostic and viral studies in vectors Members of the Spanish RICET network where many tropical disease centres are included coordinating a WP where the research in arboviruses and the surveillance in travellers is actively carried out. Fluent collaboration with members of the veterinary, clinical and ecology fields. Coordinators of the Arbovirus branch of the ViroRed network (Central and South American countries plus Portugal and Spain included). Through this network we have supported Brazil and other countries to be able to detect Zika infections.</p>	<p>Arboviruse, diagnostic methods, surveillance in travellers, surveillance in vectors, phylogenetic analysis,</p>	

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<p>Instituto de Salud Carlos III, Madrid, Spain Website: www.isciii.es Address: Monforte de Lemos 4-5, 28029 Madrid, Spain</p>	<p>Name of researcher/s (technical/scientific contact): Agustín Benito Llanes Previous experience in EU Framework Programme projects - YES (as partner) Email: abenito@isciii.es Phone: +34 918222003</p>	<p>The Institute of Health Carlos III (ISCIII) is the National Health Research Institute and the National Funding Agency for Health Research in Spain. It hosts the National Cancer Research Centre, the National Centre for Cardiovascular Research, the National Research Centre for Neurological Diseases, the National Centre for Epidemiology, the National Centre for Environmental Health, the National Centre or Microbiology, the National Centre of Tropical Medicine, the National School of Public Health, the National School of Occupational Medicine and the Institute of Rare Diseases Research. The Institute of Health Carlos III employs a total staff of 1164, and has participated in 16 projects within the FP6, 31 in FP7 (8 as coordinator) and 26 within the DG-Sanco Programme.</p> <p>The Centro Nacional de Medicina Tropical was created by an order issued on 27 December 2001 (published in the Official State Gazette on 11 January 2002) in response to increasing international mobility (immigration and travel) and also because of greater Spanish presence in international cooperation programmes. Its aim was to strengthen medical attention, research and teaching in the field of tropical diseases and establish scientific and technical cooperation programmes with countries where these pathologies are found.</p> <p>Functions:</p> <ul style="list-style-type: none"> • To coordinate ISCIII activities related to tropical medicine and international health. • To support the National Health Service, the Autonomous Communities and other institutions in the prevention and monitoring of tropical pathologies. • To promote research into tropical medicine and illnesses related to international health in our country and abroad. • Development of teaching in aspects related to tropical medicine and emerging illnesses. • To promote the coordination of units specialising in tropical medicine in Spain and to establish agreements with public and private international organisations to promote and support relevant measures and research projects. <p>To promote projects for intervention and cooperation with other organisations in Spain and in developing countries.</p>	<p>The Centro Nacional of Tropical Medicine (ISCIII) coordinates, since 2002, the network of excellence RICET (Collaborative Research Network in Tropical Diseases- www.ricet.es) supported by the Strategic Action on Health Program has allowed researchers to group (basic and clinical) with common goals to promote research in Tropical Medicine.</p> <p>Within the network has formed a work program called "Tropical emerging and re-emerging viruses, vectors and reservoirs" .</p> <p>Goals</p> <ul style="list-style-type: none"> • To develop sensitive and specific methods for diagnosing, monitoring and control of the virus with the greatest potential impact on public health (Llovium virus and Crimean-Congo hemorrhagic fever) and viruses with greater potential risk of being endemic in the future in Spain (Rift Valley fever and hantavirus New World). • Describe arboviruses and vectors in a) developing countries and b) present in the non-peninsular Spanish territories (Canary and Balearic Islands) with different potential risks to emerging and re-emerging viruses. • Determine the potential animal reservoir of the virus and other phlebovirus Tuscany and to assess the degree of infection by West Nile virus and Lymphocoriomeningitis Tuscany and its participation as etiologic agents of viral infection of the central nervous system (CNS) in Catalonia. • Studying the distribution of vectors and molecular epidemiology (culicidae and sanfly) in Spain, studying two possible vectors of emerging diseases in the Canary Islands: Spanish Anopheles (Cinereus) (Theobald) and Culex pipiens (Linnaeus). <p>Furthermore, the network has important partners in Latin America and public institutions within their program of study of tropical diseases in endemic countries and also it maintains close contact with the network of arboviruses of Caribbean countries.</p>	<p>Diagnostic methods, vectors and reservoirs, viral models, therapy, pregnancy</p>	

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<p>Instituto Nacional de Investigación Agraria y Alimentaria (INIA) Website: http://www.inia.es/ Address: Crta. Coruña KM. 7.5, 28040 Madrid (Spain)</p>	<p>Name of researcher/s (technical/scientific contact): Juan Carlos Saiz and Miguel A. Martín-Acebes Previous experience in EU Framework Programme projects - YES (as partner) – Email: jcsaiz@inia.es; martin.mangel@inia.es Phone:+34 913471497</p>	<p>The National Institute for Agricultural and Food Research and Technology (INIA) is a Public Research Organization of the Ministry of Spanish Economy and Competitiveness. INIA carries out R&D&i activities in the agrifood sector through its Deputy Directorate General for Research and Technology and several Centres and Departments. Among them, the Animal Health Research Centre (CISA) and the Biotechnology Department are involved in animal health, with especial emphasis on emerging and zoonotic diseases, including diagnostic, vaccines, and antivirals development.</p>	<p>The Zoonotic and Environmental Virology group of the Biotechnology Dpt. has a wide experience in emerging arboviruses. Its research are mainly focused in flaviviruses (WNV and USUV) closely related to Zika virus. The team has produced several reagents, protocols, and methodologies, and has a strong background in genotypic and phenotypic characterization; genetic amplification and quantification; development of serological test; epidemiology; pathogenesis, transmission routes (including vertical transmission), and susceptibility to infection in animal models and natural host in BSL-3 facilities; manipulation of samples of animal and human origin; cloning, expression and characterization of antigens in heterologous systems; analysis of virus-host interactions (lipidomic analysis, stress cellular response, etc.); selection and characterization of mutants; antiviral search; and design and test of vaccine candidates (recombinant proteins, VLPs, cDNA, etc.), among others. See literature databases from the representative investigators.</p>	<p>Flavivirus, animal experimentation, pathogenesis, transmission, pregnancy, diagnostic, virus-host interactions, vaccines, antivirals</p>	
<p>Master Diagnóstica S. L. Website: www.masterdiagnostica.com Address: Avda Conocimiento 100. PT Salud</p>	<p>Name of researcher/s (technical/scientific contact): Asuncion Olmo Sevilla Previous experience in EU Framework Programme projects - NO Email: asuncion.olmo@vitro.bio Phone: +34958271449</p>	<p>Master Diagnostica SL is a biotechnology company founded in 1993, part of a group of Spanish biotechnology companies -Vitro group-, committed to progress in diagnosis and research in health sciences. The company is currently focused on the development, production and manufacturing of in vitro diagnostic innovative products based on multiplex PCR molecular technologies, for the detection of markers with diagnostic and predictive value in cancer diseases as well as for the identification of infectious agents and drug resistance markers. The company strategy is focused on expanding its portfolio of products and services with new molecular diagnostic kits within the oncology and infectious disease sector, based on PCR- multiplex technology. Master Diagnostica already sells its products in many countries and one of its priorities is to expand its market all around the world creating collaborations with new distributors. Our main objective is to export our innovative solutions to share our state-of-the-art techniques with other companies and final customers.</p>	<p>Master Diagnostica integrates a scientific team highly qualified in the field of Biotechnology, Microbiology and Molecular Biology and also has external collaboration with different Research Groups of Universities and Health Institutes, participating in the development of new products. Master Diagnostica is developing a new detection kit for tropical diseases. More specifically, we are developing a PCR multiplex kit for the simultaneous detection of different flavivirus, alphavirus, parasites and bacteria with origin and prevalence mainly in tropical countries. The Zika virus is one of the virus that the kit (in early stage of development) will detect, along with other flaviviruses such as dengue, Yellow fever virus, West Nile virus, etc ... This project will have the collaboration of the Spanish Institute of Health Carlos III through its spin -off Virnóstica , and the Brazilian Fiocruz Institute from Rio de Janeiro.</p>	<p>Multiplex-PCR, Flow-Through reverse dot blot, Tropical diseases,</p>	Y

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<p>Murcia Regional Health Council (Spain), Department of Environmental Health</p> <p>Website: www.murciasalud.es</p> <p>Address: Ronda de Levante, Número 11, Planta 4, Despacho 32, 30008, Murcia, Spain</p>	<p>Name of researcher/s (technical/scientific contact): Pedro F. Sánchez-López</p> <p>Previous experience in EU Framework Programme projects: NO</p> <p>Email: pedrof.sanchez2@carm.es</p> <p>Phone: +34 696464574</p>	<p>The Murcia Regional Health Council is a regional government organization intended to protect and improve the health of the population of the Región de Murcia, with more than 1.4 million inhabitants.</p> <p>The Department of Environmental Health, within this organization, aims to control the environment for protecting and improving the human health, and since 2012 works in the risk assessment and management related to the presence of the Aedes albopictus mosquito in the Region.</p>	<p>The Department of Environmental Health (DEH) have worked in collaboration with the University of Murcia in the Ae. albopictus mosquito surveillance, and with the Microbiology Service of the University Hospital Virgen de la Arrixaca (UHVA) of Murcia in the molecular epidemiology research of some RNA viruses.</p> <p>The DEH has environmental health officials throughout the Region for inspecting and sampling the facilities and environment which poses risks for the human health.</p> <p>Since 2014, the DEH has investigated the human cases of dengue and chikungunya in the Region, sampling mosquitoes in the environment of the cases.</p> <p>The University of Murcia has an entomological laboratory for the handling of insects, and the (UHVA) has a biosafety level 3 virus laboratory.</p>	<p>Molecular epidemiology, vectors and reservoirs, arboviruses, vector ecology</p>	
<p>National Center of Biotechnology (CNB)-CSIC</p> <p>Website: www.cnbc.csic.es</p> <p>Address: C/Darwin, 3. 28049, Madrid</p>	<p>Name of researcher/s (technical/scientific contact): Mariano Esteban Rodríguez</p> <p>Previous experience in EU Framework Programme projects - Yes (as a partner)</p> <p>Email: mesteban@cnb.csic.es Phone: +34915854553</p> <p>Name of researcher/s (technical/scientific contact): Juan Francisco García Arriaza</p> <p>Previous experience in EU Framework Programme projects -Yes (as a key scientific staff)</p> <p>Email: jfgarcia@cnb.csic.es Phone: +34915854560</p>	<p>The CNB is part of the Spanish Research Council (CSIC) and their aims are to develop high quality and competitive research in biotechnology, with emphasis on human and animal health, agriculture and environment, and to collaborate closely with industry. The CNB is structured in six departments, with many important research supporting services. There are over 600 workers and the total budget is 30 million euros per year. Scientists are also involved in teaching activities at Universidad Autónoma of Madrid. The CNB publish an annual number of about 200 papers with a mean impact factor of 6.</p>	<p>Development of a prophylactic vaccine against Zika virus, which causes a mild illness in humans known as Zika Fever, remains a major challenge in the control of this disease.</p> <p>The group of Dr. Esteban have a wide experience in the use of poxvirus vectors as vaccine candidates against human diseases, such as HIV/AIDS, hepatitis C, Chikungunya, Malaria, Leishmaniasis, prostate cancer, and other diseases. We have developed a vaccine candidate against Chikungunya based on the poxvirus vector, modified vaccinia virus Ankara (MVA), that showed excellent immunological profiles in animal models (mouse and macaques) and efficacy after virus challenge. Moreover, the Esteban's group has also developed several HIV vaccine candidates based on poxvirus vectors (MVA and NYVAC) that have entered phase I clinical trials, being safe and highly immunogenic.</p> <p>Thus, based in our previous knowledge, the main goal of this proposal will be to generate novel vaccine candidates against Zika virus based on MVA expressing immunogenic Zika virus antigens [Precursor membrane (prM) and envelope (E)], to produce long-term B and T cell responses, and prevented Zika virus infection.</p>	<p>Zika virus, MVA, poxvirus, vaccines, T-cell immune responses, antibodies, animal models.</p>	

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NEIKER - Basque Institute for Agricultural Research and Development Website: www.neiker.eus Address: Berreaga 1, 48160 Derio, Bizkaia, Spain	Name of researcher/s (technical/scientific contact): Ana L. García-Pérez Previous experience in EU Framework Programme projects - YES (as partner) Email: agarcia@neiker.eus Phone: +34944034312 - Management office contact details (if needed): Name: Gerardo Besga Email: gbesga@neiker.eus Phone: +34944034309	The Basque Institute for Agricultural Research and Development (NEIKER) is a non-profit state-owned company belonging to the Basque Government. The Animal Health Department is composed by a multidisciplinary team which develop R&D projects focused on epidemiological research, control, prevention and treatment of diseases of major economic impact affecting livestock, pets, wildlife species and humans. The main R&D areas are Mycobacteriosis, Safety at the food production chain, Zoonosis, Health surveillance of wildlife, and Vectors and vector-borne pathogens.	As mentioned above we are working on Vectors and vector-borne pathogens. Regarding Aedes spp. we started participating in the Spanish National Surveillance Programme of Aedes spp. in 2013 and for the last three years we have been doing samplings of A. albopictus eggs and adults, in several locations of the Basque country. In addition we have experience in epidemiology of ticks and tick-borne diseases and we have experience in developing techniques for diagnosis of vector-borne pathogens. NEIKER has also biosafety facilities level 3.	Vector and reservoirs, diagnostic methods	
Puerta del Mar Univ Hosp Website: www.puertadelmar.es Address: Avda Ana de Viya 21	Name of researcher/s(technical/scientific contact): Manuel Rodríguez-Iglesias Previous experience in EU Framework Programme projects - NO Email: manuel.rodriguez Iglesias@uca.es Phone: 34956002045	Clinical microbiology laboratory of a university tertiary hospital complex, with three hospitals (1200 beds) and a health reference area of 1.2 million people in southern Spain (Cadiz). Research laboratory in molecular techniques.	Prevalence studies of emerging viral infections (West Nile virus, Toscana virus, hepatitis E virus) in healthy population and groups of immunocompromised patients). Design and evaluation of molecular techniques by real time PCR.	Diagnostic methods Molecular methods Serological prevalence Pregnancy screening Virology	
SERGAS – HOSPITAL CLINICO UNIVERSITARIO DE SANTIAGO	Name of researcher/s (technical/scientific contact): FEDERICO MARTINON-TORRES Previous experience in EU Framework Programme projects – YES (as partner) – 4 ONGOING PROJECTS (PREPARE, EUCLIDS, POC_ID AND PERFORM) Email: Federico.martinon.torres@sergas.es Phone: + 981955093 / 981950610	- Worldclass clinical trial unit very experienced in trials with vaccines and antiinfectious agents in pediatric and also pregnant population - Extensive experience in host genomics and population genetics - Leadership in pediatric clinical networking (EUCLIDS clinical network, PREPARE pediatric clinical network, PERFORM clinical network, GENDRES, ESIGEM....	- We can try to assess if there are predisposing genetic host factors to this particular interaction - We can help in all phases of trials from CDP/TPP design to the performance of any trial with eventual vaccine/antiinfectious agents - We can help in the search of biomarkers for diagnosis/prognosis	Host omics – Clinical trials – Population genetics	

Institution	1.1 Contact	1.2. Brief summary of the organization	1.3. Brief summary of the research & innovation capacities in relation with the Zika Virus Outbreak / related R&I.	1.4. Key words	Industry
<p>Service of Microbiology, Hospital Universitario Donostia, Basque Service of Health</p> <p>Website: http://www.gub.es/servicios/microbiologia</p> <p>Address: Paseo Dr Begiristain s/n, 20014 San Sebastián (Spain)</p>	<p>Name of researcher/s (technical/scientific contact):</p> <p>Previous experience in EU Framework Programme projects - YES (as partner) - The Service of Microbiology has participated as a Partner in two projects:</p> <p>The last one: PORTFASTFLU-Portable automated test for fast detection and surveillance of influenza, Unión Europea VII Prog. Marco FP7-HEALTH-2007-A (02/01/2008-30/12/2010)</p> <p>Email: gustavo.cillaeguiluz@osakidetza.eus</p> <p>Phone: +34 943007046</p> <p>- Management office contact details:</p> <p>Name: Gustavo Cilla MD, PhD; Milagrosa Montes PharmD, PhD</p> <p>Email: gustavo.cillaeguiluz@osakidetza.eus</p> <p>Phone: +34 943 007046 (3183 and 3189)</p> <p>milagrosa.montesros@osakidetza.eus</p>	<p>The Service of Microbiology is situated in the Donostia University hospital (1100 beds) covering 450.000 inhabitants. Its Research Section is part of the BioDonostia Health Research Institute. Moreover, it assists the Primary Health Care Network of the province, covering 650.000 inhabitants. The Virology section routinely investigates in human clinical samples the presence of a wide variety of viruses (including Dengue and Chikungunya) using molecular and/or immunological methods, and/or cellular culture. Furthermore, it is the laboratory for the Basque influenza sentinel surveillance network.</p>	<p>The Service of Microbiology receives clinical samples from patients who have recently come from tropical countries, suffering from fever or other symptoms suggesting a viral infection like Dengue fever, Chikungunya fever, influenza and other (about 100 patients/year). In this context, blood samples (plasma, serum...) are collected and the corresponding viral RNAs are investigated using PCR methods. An in-house Zika PCR method following Faye O et al (One-step RT-PCR for detection of Zika virus, J Clin Virol 2008; 43: 96-101) has been added recently to the panel of PCR methods we use to investigate tropical viruses, which includes Dengue, Chikungunya, West-Nile, but at the moment, our experience with this method is very limited.</p>	<p>Surveillance, diagnostic methods (molecular) and molecular characterization.</p>	
<p>Univ. of Santiago de Compostela</p> <p>Website: http://www.usc.es/ciqus/es/grupos/molecular-virology</p> <p>Address: CIQUS-Campus Vida S/N. 15782-Santiago de Compostela- Spain</p>	<p>Name of researcher/s (technical/scientific contact): José M. Martínez-Costas</p> <p>Previous experience in EU Framework Programme projects - NO</p> <p>Email: jose.martinez.costas@usc.es</p> <p>Phone: +0034 881815733</p>	<p>The Center for Research in Biological Chemistry and Molecular Materials (CIQUS) was created on February 10th 2010 by the Governing Council of the University of Santiago de Compostela (USC).</p> <p>CIQUS is the first member of a network of singular research centres with a new model of scientific organization, which constitutes one of the R&D strategic axes of the CAMPUS VIDA project (Campus of International Excellence, MEC-MICINN, 2009). The mission of CIQUS is the development of transdisciplinary strategies to undertake some of the major current challenges in the fields of biological chemistry and molecular materials, under standards of quality and competitiveness.</p>	<p>We have developed a method to generate protein microspheres containing any antigen of interest that are potent inducers of the immune system. They work nicely as subunit vaccines without any adjuvant, are easily and quickly produced, purified and are very stable. The sphere and the coupling between the antigen and the sphere are both carried out by the cell by means of a molecular tagging method named "IC-Tagging". Although the published method and vaccine trial were done with microspheres produced in the cytosol of Sf9 cells, we have recently modified the method to work inside the endoplasmic reticulum, so it can be used for glycoproteins to mimic the surface of enveloped viruses (patent pending, unpublished). We can easily make protein microspheres containing Zika virus antigens in the cytosol or inside the ER. The antigens can be individually loaded onto the spheres or several antigens can be combined in the same sphere where they can interact and form complex quaternary structures.</p> <p>- Antiviral Research 110, 42–51 (2014).</p> <p>- Journal of Biotechnology 155, 284–286 (2011).</p> <p>- http://patentae.com/20151020/formar-inclusiones-métodos-usos</p>	<p>Vaccines, subunit vaccines, glycoproteins, endoplasmic reticulum, immunization</p>	

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<p>University of Barcelona Website: http://www.ub.edu/microbiologia_virology/ Address: Diagonal, 643,</p>	<p>Name of researcher/s (technical/scientific contact): Rosina Girones Previous experience in EU Framework Programme projects - YES (as partner) – YES (as coordinator) Email: rgirones@ub.edu Phone: +34 934021483</p>	<p>The laboratory has more than 20 years of experience in the study of the environmental dissemination and stability of viruses, especially viruses that may contaminate water. Recently the laboratory started the study of enveloped DNA viruses in water with the focus on the flavivirus family.</p>	<p>Studies on the environmental dissemination, stability of the virus excreted by humans in water, role of contaminated water in the infection of vectors. Collaboration with the Centre for Research into Animal Health (CRESA) in the Universitat Autònoma de Barcelona (UAB) and the Institute of Agri-food Research and Technology (IRTA), with level 3 biocontainment (NBS3) and expertise in vectors and other flavivirus.</p>	<p>Environment, stability, water transmission, excretion, vectors</p>	
<p>Universidad de Castilla – La Mancha Website: www.uclm.es Address: C/ Almansa 14</p>	<p>Name of researcher/s (technical/scientific contact): Antonio Mas, Rosario Sabariego, Pilar Clemente Previous experience in EU Framework Programme projects - YES (as partner) Email: Antonio.Mas@uclm.es Phone: (+34) 967 599 200, ext: 2279. - Management office contact details: Name: M. Llanos Carrión (European Projects Office) Email: MariaLlanos.Carrion@uclm.es Phone: (+34) 967 599 354, ext: 2263</p>	<p>From its foundation, UCLM has grown at a high rate, attracting qualified human resources and providing the people in the region with high education skills. Knowledge and Technology Transfer Office is the structure within the University that strongly collaborates in this task. A total of 17 R&D contracts were managed under the 6th Framework Programme (FP6), 36 approved projects under FP7 and CIP, as well as 11 H2020 granted projects. Other European and international programmes such as Interreg, JPEN, LIFE programme or COST, inter alia, all of which are managed under supervision and collaboration of the European Projects Office at UCLM.</p>	<p>Our laboratory has great experience in virology research including the ability to clone, overexpress in heterologous systems, and activity determination of proteins from viral origin, including viral polymerases. We have great experience working with polymerases from HIV and HCV. Actually, we have applied to a Plan Nacional grant with a project in which one of the objectives is to clone, express, purify and determine activity and host factor interactions of Zika virus polymerase. We also have great experience in molecular diagnosis using PCR-based techniques. We have used these technologies in the past to develop molecular diagnosis tools for HIV, JC, HAV, HCV, and HEV viruses among others. Members of our laboratory have worked in the past in BSL3 laboratories with HIV in cell culture, as well as we have isolated and described highly divergent HIV isolates. We have also studied the molecular epidemiology of water-transmitted viruses (HAV, HEV, JC virus, etc) developing molecular tools for detecting them.</p>	<p>Diagnostic methods, antiviral design, virus-host interactions, virus polymerase.</p>	

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<p>Universitat Politècnica de València - ITACA</p> <p>Website: www.sabien.upv.es</p> <p>Address: Camino de Vera s/n Valencia 46022 Spain</p>	<p>Name of researcher/s (technical/scientific contact): Prof. Vicente Traver</p> <p>Previous experience in EU Framework Programme projects - YES (as partner) – YES (as coordinator) - NO</p> <p>Email: vtraver@itaca.upv.es Phone: +34 637 51 60 50</p> <p>- Management office contact details:</p> <p>Name: Francisco Javier Soler Soriano</p> <p>Email: europcos@ctt.upv.es Phone: (+34) 96 387 74 09</p>	<p>UPV-SABIEN, with an extensive expertise in the application of ICT to the social and healthcare systems, not only dealing with the generation of indicators but also user and business centred data, including a long experience in using mobile technologies for health and social purposes has an ongoing partnership with researchers from Salumedia Tecnologías, a Spanish SME leading in the use of game-based techniques to increase the effectiveness of digital health interventions for both patients and professionals. Salumedia is involved in 3 EU funded projects in the area of eHealth. The key personnel of Salumedia includes:</p> <ul style="list-style-type: none"> • Luis Fernandez-Luque PhD (Google Scholar): He is an expert on eHealth with over 10 years of experience acquired in Norway, Spain and the USA. He has collaborated in international eHealth projects in Europe, Latin America (Mexico) and Africa (Sierra Leone). Among others he is advising the London School of Hygiene and Tropical Medicine on social media monitoring of communication issues of the Ebola crisis as part of the EBOLA+ (IMI2) called EBODAC. • Guido Giunti MD: He is a family doctor originally from Spain and expert in eHealth, especially in the use of game-based techniques for medical and patient education. He is advising in the deployment of the Personal Health Record for the region of Buenos Aires (Argentina) where game-based technique are used to improve the capture of patient-reported outcomes. <p>. From UPV-SABIEN, the key personnel includes:</p> <ul style="list-style-type: none"> • Vicente Traver Ph.D. (2004). Working in IT Health since 1998, he has participated in more than 30 EU funded projects (from IV till H2020), his research focus in integration of complex health care system, process mining, managed outcomes measurement, digital health literacy, and patient empowerment and the citizen as health co-producer <p>List of publications available in goo.gl/Wg2JZR</p>	<p>We propose the design of a mobile app for population education about the prevention of the Zika virus infection, including both environmental prevention measures (e.g. reduce of mosquito breeding zones) and personal primary and secondary prevention (e.g. early symptoms recognition, self-protection for mosquito bites). The app will also be used to monitor self-reported symptoms and environmental factors, thus using the users as “sentinelles” of the outbreak., at the same time that they get educated. There are successful similar experience for flu monitoring in the USA (e.g. https://fluinearyou.org/) lead by the Harvard Medical School. In this app the users can learn about flu at the same time than reporting symptoms they do have. Our proposed solution will go one step further to include the monitoring of environmental factors. Furthermore, the use of game-base techniques will be designed to increase the collection of data by the users.</p>	<p>Prevention, education, sentinel, mobile app</p>	

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<p>Universitat Pompeu Fabra (UPF) Website: https://www.upf.edu/virologyunit/</p>	<p>Name of researcher/s (technical/scientific contact): Prof. Dr. Juana Díez Antón, PI Previous experience in EU Framework Programme projects – YES as a partner Email: juana.diez@upf.edu Phone: +34 933160862 - Management office contact details: Name: Regina Lopez Aumatell Email: regina.lopez@upf.edu Phone: +34 93 316 0870</p>	<p>The University Pompeu Fabra (UPF) is the European 9th best University; 12th best university in the world among those under 50 years, and 1st Spanish university in quality of scientific production. The research excellence of the Department of Experimental & Health Sciences (DECXS) at UPF is widely acknowledged and awarded with the “Maria de Maetzu” distinction by the Spanish Ministry of Economy (MINECO). The DCEXS is integrated in the Barcelona Biomedical Research Park (PRBB), one of the most important research nodes in Southern Europe.</p>	<p>Our Virology Unit at DECXS-UPF is specialized in (i) testing and developing antiviral drugs against a variety of viruses including Flaviviridae like Hepatitis C virus (HCV), Denguevirus (DENV) and Zika virus (ZIKV) and (ii) developing novel and fast diagnostic based on detection of specific small non-coding RNAs. These studies resulted in patents on anti-flaviviridae antiviral drugs and miRNA-based diagnostics. Moreover, we keep active ongoing collaborations with clinical units worldwide, including countries with Zika virus epidemics as Thailand, India and Venezuela. These collaborations assure our access to serum from Zika-infected individuals.</p> <p>Prof. Dr. Juana Díez is the work package leader on antiviral drug development within the European Cost action CM1407 entitled “Challenging organic syntheses inspired by nature - from natural products chemistry to drug discovery” (http://www.cost.eu/COST_Actions/cmst/Actions/CM1407). She together with ICREA Professor Andreas Meyerhans heads the Virology Unit of the DECXS. They have extensive experience in viral infections from the level of the infected cell to the level of the infected host.</p>	<p>Therapy, rapid diagnostic methods</p>	
<p>University Hospital of Granada , the Andalusian Health Service (SAS)</p>	<p>Name of researcher/s: José A García-Salcedo; José María Navarro-Marí Previous experience in EU Framework Programme projects - YES (as partner) Email: jags@genyo.es; josem.navarro.sspa@juntadeandalucia.es Phone: + 34 679 187 751 - Management office contact details: Name: Sarah Biel Email: sbiel@fibao.es Phone: + 34 958 020183</p>	<p>The Andalusian Health Service (SAS), created in 1986, is an autonomous body attached to the Andalusian Regional Ministry of Health, with a budget for 2008 of 8.751.387 euros. Its mission is to provide health care to the citizens of Andalusia, offering quality public health services, ensuring its accessibility and fairness and the satisfaction of its users, and aspiring to be efficient and take maximum advantage of available resources.</p> <p>The SAS has a staff of 83.132 professionals (data from 1st January, 2007) distributed among 1.491 Primary Care centres and 29 hospitals</p>	<p>The Microbiology Unit of the University Hospital of Granada is reference Laboratory of the Andalusian Health Service for diseases with suspected viral etiology. Our activity covers reference diagnostics, public health surveillance and research activities on both autochthonous and imported vector borne viruses, including arbovirus such as dengue virus, chikungunya and west nile virus. Our laboratory is fully equipped with facilities for biosafety levels 2 and 3 required for handling of these viruses. We also dispose the cell lines that support the culture of Zika virus. We have developed a PCR diagnostic method that allows the specific identification of several flaviviruses including Zika virus.</p> <p>Recently, we have initiated a new research line supported by the Spanish Ministry of Economy and Competitiveness to develop new therapies (such as neutralizing antibodies) and diagnostic tools for respiratory and emerging viruses based on the nanobody technology. We have acquired this technology through our participation in Nanotrap, an EU-FP7 project coordinated by the group that discovered and developed the nanobodies. Thus, we are now able to apply this technology to fight Zika virus.</p>	<p>Arbovirus, therapy, diagnostic methods, neutralizing antibodies</p>	

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<p>University of La Laguna (ULL); University Institute for Tropical Diseases and Public Health of Canary Islands (IUETSPC) Website: http://www.ull.es/viaw/institutos/tropicales/Inicio/es Address: Unidad de Farmacología. Facultad de Medicina. Campus de Ofra s/n. 38071-La Laguna. Tenerife (Spain)</p>	<p>Name of researcher/s (technical/scientific contact): Agustin Valenzuela-Fernández Previous experience in EU Framework Programme projects - NO Email: avalenzu@ull.edu.es Phone: (+34)-617097932 ; (+34)-922 31 9646</p>	<p>The IUETSPC was created in 2001 with the objective to study, control, prevent, diagnose and participate in the development of research regarding tropical diseases, emergent diseases and diseases linked to poverty, public and international health, and biotechnology in order to benefit scientific research in general and to boost its socioeconomic aspect.</p>	<p>Lab capacities: We are able to apply our methods and tools relate to the study of the regulation of HIV-1 fusion, entry and infection to characterize the molecular al cellular events involved in Zika Virus infection to understand how this virus infect cells, tissues and the associated pathologies. We are one of the main research groups that have describe for the first time the mechanisms for HIV-1 pore fusion formation, entry and infection, the HIV-1-mediate cell signalling and the description o new restriction factors that controls HIV-1 infection and replication. We collaborate with national research groups at RIS-RETIC network, Pasteur Institute, CPBS (CNRS and Montpellier University), IBMC (CNRS-University of Strasbourg) and University of Verona. Our Institution and laboratory have the full equipment in Cell Culture, Confocal and TIRF microscopies, Biochemistry and Molecular Biology to drive projects to determine the mechanisms involved in viral early infection, entry and replication, including new BL3 and BL2 Biosafety laboratories. Central facilities of the Centre include flow-cytometry, proteomics, genomics and ultra-deep sequencing facilities.</p>	<p>Viral models for HIV infection and signalling (determining membrane and cytoskeleton dynamics), Immune responses (cell signalling, chemokines and cellular proteinases), Intrinsic Immunity (discovering new cellular restriction factors), and screening and characterization of new and natural anti-HIV-1 agents. Characterizing HIV-1 Elite Controller patients. Mechanisms for HCV infection.</p>	
<p>University of Zaragoza _Department of Animal Pathology_ Website Address: Calle Miguel Servet 177.- 50013 Zaragoza.- Spain</p>	<p>Name of researcher/s (technical/scientific contact): Javier Lucientes Previous experience in EU Framework Programme projects - YES (as partner) – - Management office contact details (if needed): Name: J. Lucientes Email: jlucien@unizar.es</p>		<p>We have, in the Department facilities, insectaries with colonies of Aedes albopictus from different areas of Spain. One of the insectary has a P3 security level.</p>	<p>Vectors, Experimental infection, Insectary P3</p>	

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<p>VACUNEK, S.L. Website: www.vacunek.com Address: Astondo bidea 612-1º, Derio</p>	<p>Name of researcher/s (technical/scientific contact): BEATRIZ LÁZARO OCIO Previous experience in EU Framework Programme projects - YES (as partner) Email: beatriz.lazaro@vacunek.com Phone: 946573565</p>	<p>The two business lines of Vacunek are the development of efficacious vaccines against animal mycobacteriosis in cattle and wildlife species and the production and commercialization of robust diagnostic tools for animal, plant and agrofood-related diseases. Regarding diagnostic tools Vacunek has the following working units: - Production and customized design of multiple NAATs (qPCR based) diagnostic tests. - Production and development of enzyme immunoassays (EIA) tests. - Protein Expression System Service (Escherichia coli, Mycobacterium smegmatis).</p>	<p>Vacunek's expertise is focused on diagnostic methods based on real-time PCR. Vacunek has a qPCR method available for detecting Zika virus RNA in plasma and serum. A BSL2 containment level is available at Vacunek's facilities to handle suspected samples. Vacunek offers technical solutions including design, development and optimization of customized (singleplex, multiplex) PCR assays and specific enzyme immunoassays in a broad area of fields (including human diseases) as well as previous nucleic acid extraction. Robust PCR-based assays, predominantly Real Time, and personalized and customized follow-up is provided by our technical services. Vacunek has robust background on the use and design of a wide range of fluorescently labeled probes for qPCR purposes. Complementary diagnostic tools for molecular detection of Dengue (DENV) and Chikungunya virus (CHIKV) under CE marking are available from Vacunek.</p>	<p>Diagnostic methods, real-time PCR, viral RNA extraction, ZIKV detection.</p>	<p>Y</p>
<p>VHIR/Hospital Vall Hebron (PROSICS) Website: www.vhir.org Address: Pº Vall Hebron 119, 08035 Barcelona</p>	<p>Name of researcher/s (technical/scientific contact): Israel Molina Previous experience in EU Framework Programme projects - YES (as partner) – YES (as coordinator) Email: imolina@vhebron.net Phone: 932746251/679337605</p>	<p>Vall d'Hebron University Hospital (HUVH) is a public sector institution that promotes and develops the biomedical research, innovation and teaching at. HUVH is the leading hospital complex in Catalonia and one of the largest in Spain, is comprised of four large centers and one Research Institute. In 2015 obtained the recognition of the European Commission HR Excellence. Wide range of top quality research facilities. Vall d'Hebron Hospital is a University Hospital associated with Autonomous Barcelona University (UAB)</p> <p>Vall d'Hebron University Hospital (HUVH) and Vall d'Hebron Research Institute (IR-HUVH) currently participate in 25 EC research projects and have built up a Consortium formed by the clinical group from the Departments of Public Health, Obstetrics, Pediatrics, Microbiology and Infectious diseases to work in close collaboration in maternal and newborn health projects.</p>	<p>Infectious Disease Department (adult and paediatric branch): Reference centre for both clinical management and diagnosis for tropical medicine and arbovirus of the International Health Program of the Catalan Health Institute. Member of national research nets: RICET (Tropical Medicine), REIPI (Infectious Diseases), and International research nets: TropNet (Tropical Medicine), SEIP (Spanish Infectious Disease Society), pTBred (Spanish Pediatric TB Research Network), IPFN (International Pediatric Fungal Network)</p> <p>Obstetrics Department: Regional referral Hospital for Maternal-Fetal Medicine. High Risk Clinic and Placental Insufficiency Research Unit. Accredited by the European Board and College of Obstetrics and Gynaecology (EBCOG) and the European Association of Perinatal Medicine (EAPM) as a training centre. More than 3000 deliveries per year, 30% are from Latin-American origin.</p> <p>Virology section in the Microbiology department. Reference centre for diagnosis for tropical medicine and arbovirus of the International Health Program of the Catalan Health Institute. The laboratory have all the facilities needed for clinical diagnosis of Zika Virus. Tissue culture lab with P2plus biosafety level. High throughput sequencing lab. Molecular biology applied on the virus diagnostic tools. Molecular epidemiology lab</p>	<p>Diagnostic Methods, genetic characterization, Therapy, Pregnancy and Neurological Complications</p>	<p></p>

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<p>Virored Website: www.cyted.org Address: Calle Amanuel, 4. 28015 Madrid (España)</p>	<p>Name of researcher/s (technical/scientific contact): Fernando de Ory Previous experience in EU Framework Programme projects - NO Email: fory@isciii.es Phone: 34 918223630</p> <p>Management office contact details (if needed): Name: Alexandra Mazoteras Email: smazoteras.cyted@gmail.com Phone: 34-91-531 63 87</p>	<p>Virored is a thematic network aimed on the coordination of Latin American (México, Guatemala, Nicaragua, Costa Rica, Panamá, Venezuela, Colombia, Ecuador, Brasil, Perú, Bolivia, Paraguay, Argentina and Uruguay) and European (Spain and Portugal) Public Health laboratories, with the focus on emerging viruses (arboviruses and respiratory viruses). Their objectives include the exchange of scientific and technique knowledge amongst participant labs, educational aspects and sharing knowledge.</p>	<p>Distribution of protocols for diagnosis of zika virus infections, including PCR, viral isolation, and serology (immunofluorescence and neutralisation), including new developed assays Establishment of algorithms for differential diagnosis with other arboviral infections (Chkungunya virus, Dengue virus, West Nile virus) Distribution of Quality Controls to harmonize diagnostic approaches for zika virus infections Availability of clinical (including congenital infections) and mosquito samples from participant countries to obtain virological data and to validate diagnostic methodology</p>	<p>Arboviruses, Diagnostic Methods, Surveillance in Vectors, Phylogenetic Analysis, Pregnancy; Congenital Infections</p>	