

		Date	22/05/2019			Deadli	ne		
CONTACT									
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Country		France							
oountry									
Organisation type									
Research organisation type	□ Research Organisation □			Is your company a Small and Medium Sized Enterprise (SME*)? Number of employees:		□YES ⊠ NO	⊠ NO		
	☑ University☐ Company					/ees:			
	Other								
Your enterprise is an SME if: - it is engaged in economic activity - it has less than 250 employees - it has either an annual turnover not exceeding €50M, or an balance sheet total not exceeding €43M - it is autonomous For the definition of SMEs, look at: http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en									
Short introduction of key areas of institute's research:									
The team can bring into the collaboration:									
-expertise in –omics data analysis									
-genomics data with associated curated clinical data in the field of autoimmune/inflammatory diseases									
-clinical expertise and access to patient's samples and data in the field of autoimmune/inflammatory diseases									



Former participation in an FP European project?

☑ YES □ NO

Project title / Acronym:

« TRIDIAG – Nouveaux outils diagnostiques en transplantation », Interreg Rhin Supérieur

Activities performed:

The aim of this cross-border project is to validate technologically and clinically two diagnostic tests based on MIC molecules:

- a molecular test to determine the compatibility of donors/recipients at the DNA level during bone marrow transplants
- a serological test to measure the amount of anti-MIC antibodies in kidney transplant patients.

Expertise / Commitment offered

Description of your expertise:

Our Molecular ImmunoRheumatology team has more than 100 staff including researchers, clinicians, engineers and technicians. The team's main focus is the genomics of autoimmunes and autoinflammatory diseases. We have an in-house Next-Generation Sequencing facility and have sequenced close to 1000 exomes so far (e.g. (Carapito, Paul et al. 2014; Carapito, Isidor et al. 2015; Carapito, Paul et al. 2015; Carapito, Goldenberg et al. 2016; Carapito, Konantz et al. 2017)). We are also experienced in multiomics stratification of patients including genomics, transcriptomics and proteomics (Carapito, Carapito et al. 2018; Fornecker, Muller et al. 2019).

Our team is heading the national Laboratory of Excellence TRANSPLANTEX dedicated to genomics of Transplantation (10 members, academic and private, 100 staff), a local hospital-university federation OMICARE dedicated to multi-omics stratification of autoimmune patients (staff 500) and a patient-centered institute for immune-mediated inflammatory diseases (http://www.ihu-pacific.eu/, staff 200).

The team has a strong expertise in multi-layer omics data analysis and integration; with a focus on the extraction of clinically relevant and actionable data for personalized treatment (see recent report in ARD: (Carapito, Carapito et al. 2018)). For such projects, expert mathematicians and statisticians of the team can bring in their expertise in the field (Vallat, Kemper et al. 2013; Jung, Bertrand et al. 2014).

Clinicians from the team are heading one of the four national reference centers for rare autoimmune diseases (http://www.chrustrasbourg.fr/Les-centres-de-reference/Maladies-auto-immunes-

Keywords specifying

Commitment offered:

your expertise:

Interested in

participation in project types:



rares) and are member of the two European Reference Networks (ERN) RITA and ReCONNET. In 2016, the clinical departments associated to the team totalized 7483 day of hospitalizations and well over 10000 outpatient visits. About 900 new patients/year are seen by these same clinical departments with a total patient population of 8000 (active file). In addition, several cohorts are managed by team members with 20000 biological samples already biobanked. The diseases of interest of the team include: Rheumatoid Arthritis (RA). Spondylarthropathies (SpA), Systemic Lupus Erythematosus (SLE), primary Sjögren's syndrome (pSS), Systemic Sclerosis (SSc), Vasculitis (VS), Inflammatory Myopathies (IM), (Auto)immune Nephropathies (AN) and Multiple Sclerosis/Demyelinating diseases (MS). Genomics, autoimmunes and inflammatory diseases, -omics data, clinical expertise, multi-omics stratification, transcriptomic, proteomics, personalized medicine □ Research Demonstration Training Dissemination Other: Technology □ Research & Innovation Innovation Action ☐ SME Action Instrument Work Programme research areas: indicate your interest Call - Better Health and care, economic growth and sustainable health systems Call – Trusted digital solutions and Cybersecurity in Health and Care **Call topic(s):** We are looking for a consortium interested in the SC1-BHC-06-2020 call on Digital diagnostics – developing tools for supporting clinical decisions by integrating various diagnostic data and in the DT-TDS-04-2020: AI for Genomics and Personalised Medicine call. We are also looking for any other consortium to other calls looking for our expertise. We have a large transnational partnership.

Profile of partner sought

Do you have other

partners for this topic (which partners/country)?



Role	★ technology development	□ research □	☐ training			
	□ dissemination	□ demonstration	other _coordination_			
Country /region	☐ All countries					
Expertise required		e looking to join a consortium of the Working programme which can ete our expertise and set-up a complex project for a H2020 call.				

I agree with the publication of my contact data:
☐ NO