**HORIZON 2020**

**PARTNER SEARCH**

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| **Call Information** | |
| **Call title** | SFS-10-2017: Research and approaches for emerging diseases in plants and terrestrial livestock |
| **Call identifier** | SFS-2016-2017 |
| **Funding scheme** |  |
| **Deadline** | 14 February 2017 17:00, 13 September 2017 17:00 |
| **Partner search deadline** | N/A |

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| **Project Information** | |
| **Project title** | Immobilization of secondary metabolites as biological control tool |
| **Abstract of the project** | Biological control of plant pathogens is a potential alternative to the use of chemical pesticides, which have already been proved harmful to the environment. Utilization of secondary metabolites of microorganisms such as antibiotics or cell wall degrading enzymes presents a promising way to solve this problem. Immobilization of microbial cells and enzymes has become one of the most valuable tools in the field of biotechnology. Moreover, microbial entrapment gives prolonged metabolic activity when microbial cells are reused and protect the organism from inhibitory compounds or metabolites.  The aim of this project proposal is to preparation of immobilized secondary metabolites due to the several immobilization procedures and characterization of immobilized preparations. Our expertise lies mainly in immobilization of enzymes and their characterization like operational, thermal and storage stabilities, reusability, kinetics parameters or determination of immobilization efficiency. Further on, we are able to evaluate the nature of binding mechanisms of enzyme on using support.  We are looking for project consortium aiming at preparation of supports, the modification of material surfaces will be mostly required to change the character of the base support surface. |
| **Further information** | TRL of our sub parts is 1.  For more, please, see http://af.mendelu.cz/239 |
| **Proposal development stage** | N/A |
| **Requested funding** | App. 400 000 Euro |

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| **Proposer** | |
| **Type of organization** | University |
| **Role in the project** | Partner |
| **Previous FP experience** | MAS, Nanoelectronics for mobile AAL-Systems, 7 RP ENIAC (2009-2012)  Ultra-Fast Molecular Filovirus Diagnostics „FILODIAG, H2020-JTI-IMI2-2014-02-single, H2020 (2015-2016) |

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| **Target Partner(s)** | |
| **Type of organization** | Universities, Research Organization |
| **Required skills and expertise** | * Support preparation * Modification and characterization of material surface * Testing of prepared immobilized agents in biological control |
| **Role in the project** | * We are looking to be partner |
| **Preferred countries** | N/A |
| **Keywords** | Immobilization, secondary metabolites, biological control |

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