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| Date |  |  |  | Deadline |  |  |

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| **CONTACT** |

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| **Organisation** | Luxembourg Institute of Health | **Department** | Department of Precision Health |
| **Contact person** | Dr. Guy Fagherazzi | **Email** | [Guy.Fagherazzi@lih.lu](mailto:Guy.Fagherazzi@lih.lu) |
| **City** | Strassen | **Website** | https://www.lih.lu/en/ |
| **Country** | Luxembourg |  |  |

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| **Organisation type** |

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| **Research organisation type** | ☒ Research Organisation  ☐ University  ☐ Company  ☐ Other | **Is your company a Small and Medium Sized Enterprise (SME\*)?**  **Number of employees:** | ☐ YES ☒ NO |

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*](http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en)

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| **Short introduction of key areas of institute’s research:**  Luxembourg Institute of Health is a public biomedical research organisation focused on precision health and is invested in becoming a leading reference in Europe for the transformation of scientific excellence into meaningful benefits for patients.  Using technology like artificial intelligence on real-world patient-derived data, we create disease relevant knowledge, which can be tangibly translated into clinical applications through a bed to bench to bed approach. |

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| **Former participation in an FP European project?**  **Project title / Acronym:**  **Activities performed:** | ☐ NO |

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| **Expertise / Commitment offered** |

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|  | **Description of your expertise:** | Our research is focused at the interface between digital epidemiology, data science and clinical research. The Deep Digital Phenotyping Research Unit led by Dr. Fagherazzi is leveraging digital data and technologies to improve the prevention and management of chronic diseases. A patient-centered approach is key in our research. We use digital technologies to carry out research “with” or “by” patients/study participants rather than “about” them. We use innovative methods for study participation improvement: mixed methods, qualitative approaches, recordings to improve study participation rate and minimise attrition over time.  A specific area of research interest is the identification and validation of digital vocal biomarkers for enhanced remote patient monitoring. By using advanced signal processing and machine learning methods, we can identify signatures in our voice that correlate with certain health outcomes (vocal biomarkers). Vocal biomarkers can be used in remote patient monitoring, screening, and as novel clinical endpoints for early markers of treatment effectiveness. In our research we combine clinical outcomes, patient reported outcomes and voice data collection to identify vocal biomarkers for monitoring mental health and diseases such as cancer, chronic respiratory diseases, cardiovascular disorders, diabetes and other metabolic conditions.   In the context of this IHI call, we can contribute to a consortium with our patient-centric vocal biomarker approach to address two of the key outcomes of this call: Lung cancer and obesity. Specifically we can contribute with our expertise in any of the following areas:   * Clinical research * Clinical epidemiology * Diabetes research * Digital biomarkers and novel clinical endpoints * Project drafting and management * AI for health research |
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|  | **Keywords specifying your expertise:** | Digital epidemiology, vocal biomarkers, chronic diseases, cancer, diabetes, obesity, patient-centered research, artificial intelligence, minimally disruptive clinical research |
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|  | **Commitment offered:** | ☒ Research ☐ Demonstration ☐ Training  ☒ Technology ☐ Dissemination ☐ Other: |

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| **Interested in participation in project types:** | ☒ Research & Innovation Action | ☐ Innovation Action | ☐ EIC Pathfinder |

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| **Work Programme research areas: indicate your interest** |

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| Health |

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| **Call topic(s):** Topic 4 : Patient-centred clinical-study endpoints derived using digital health technologies |

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| **Profile of partner sought** |

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| **Role** | ☒ technology development | ☒ research | ☐ training |
|  | ☐ dissemination | ☒ demonstration | ☐ other \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **Country /region** | ☐ | | |
| **Expertise required** | We are looking for partners building a consortium for the IHI call Topic 4 : Patient-centred clinical-study endpoints derived using digital health technologies with expertise in the other priority disease areas of the call. | | |

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