

Horizon Europe: R&D Consortium Partnership Offering

Work Programme 2026-2027

CLUSTER 1: HEALTH

WHO ARE WE

BioSistemika is a Slovenian SME specializing in custom software development and digitalization for life sciences, biotechnology, pharmaceuticals, diagnostics and medical devices. Our interdisciplinary team of scientists, software engineers and domain experts delivers end-to-end digital solutions.

We develop high-performance data analytics, scalable data-management systems and advanced software, including GMP-compliant solutions for regulated environments.

With extensive experience in both single beneficiary and multi-partner consortia, BioSistemika brings strong proposal success rates, technical leadership, and reliable delivery from concept through to implementation and impact.



CALLS OF INTEREST IN CLUSTER 1

BioSistemika is looking for consortium partnership in the following calls:

Development of cell-free protein synthesis platforms for discovery and/or production of biologicals

[HORIZON-HLTH-2027-01-IND-01](#)

Deadline: 13 April 2027

Development of predictive biomarkers of disease progression and treatment response by using AI methodologies for chronic non-communicable diseases

[HORIZON-HLTH-2027-02-TOOL-01-two-stage](#)

Stage 1 deadline: 13 April 2027; Stage 2 deadline: 22 September 2027

Portable and versatile Point-of-care diagnostics

[HORIZON-HLTH-2027-02-IND-02-two-stage](#)

Stage 1 deadline: 13 April 2027; Stage 2 deadline: 22 September 2027

Virtual Human Twins (VHTs) for integrated clinical decision support in prevention and diagnosis

[HORIZON-HLTH-2027-03-TOOL-04](#)

Deadline: 22 September 2027

THE TASKS BIOSISTEMIKA CAN CONTRIBUTE TO IN CLUSTER 1

01 Diagnostic and Medical-Device Software

- Software for point-of-care and connected diagnostic devices
- Data acquisition, signal processing, result interpretation and reporting
- Connectivity with instruments, LIS, LIMS and healthcare systems
- User-friendly interfaces for professional and decentralized settings

02 AI and Scientific Data Platforms

- AI and algorithm development for biomarker discovery and predictive analytics
- Data harmonization, visualization and FAIR data management
- Integration of computational and predictive models into scalable software platforms
- Secure and interoperable architectures for sensitive health data

03 Laboratory Automation and Biomanufacturing

- Software for high-throughput laboratory and production workflows
- Integration with instruments, automation systems and pilot-scale equipment
- Experiment management, process monitoring and quality control
- Traceable and reproducible data workflows for research and production

04 Regulatory Compliance, Validation and Cybersecurity

- IVDR/MDR and EU AI Act support, with IEC 62304, ISO 13485 and ISO 14971
- Usability and cybersecurity aligned with IEC 62366-1 and IEC 81001-5-1
- Privacy and data governance aligned with GDPR, EHDS and FAIR principles
- GMP/GxP-ready workflows, 21 CFR Part 11, validation, audit trails and traceability

POTENTIAL CONSORTIUM ROLES IN CLUSTER 1

WORK-PACKAGE LEAD

Software development and digitalization work packages.

TASK LEADER

For laboratory and device connectivity, integration and digital architecture.

TECHNOLOGY PARTNER

Analytical, AI-enabled and decision-support software.

LONG-TERM SOFTWARE PROVIDER

Maintainable software assets beyond the funded project.

COMPLIANCE CONTRIBUTOR

Regulatory strategy, validation, risk management and cybersecurity.

SUBCONTRACTOR

Clearly defined development, integration, testing or consulting.

WHY INVITE BIOSISTEMIKA

- **Extensive experience** in EU-funded R&D projects
- **Strong communication and collaboration skills**, with a solid understanding of EU funding mechanisms
- **Expertise in developing high-quality proposal content** and contributing to competitive project proposals
- **Strong track record** and valuable assets, including references, awards, patents, SME status and other credentials that strengthen project proposals
- **Based in Slovenia, a Widening country**, enabling broader regional reach and strengthening geographical balance and Widening participation in consortium projects
- **Innovative**, user-friendly software solutions for research and diagnostic laboratories

TRACK RECORD IN COMPETITIVE EUROPEAN GRANTS

- **PEARL-DNA** (Horizon Europe – EIC Pathfinder) | **Coordinator**
Development of an end-to-end platform for DNA-based digital data storage built on interoperable systems for block-by-block assembled DNA. (2023-2026)
- **DATANA** (H2020 - EIC Accelerator) | **Single Participant**
Development of novel DNA data writing technology by utilizing DNA for the storage of data. (2021-2023)
- **RAPID-COVID** (IMI/H2020) | **Partner**
Development of a point-of-care molecular diagnostic tool for the rapid and cost-effective diagnosis of COVID-19 and 30 other common pathogenic respiratory bacteria and viruses. (2020-2021)
- **GeneH** (Horizon Europe) | **Partner**
Establishment of the center of excellence in gene therapy through strategic cross-sector partnerships. (2025-2029)
- **AutoMTP** (Austrian Life Sciences Programme 2022) | **Partner**
Development of the production of in vitro 3D tissues for clinical trials. (2023-2025)
- **NATO-DIANA GuarDNA** (NATO DIANA) | **Single Participant**
Demonstration of data storage technology including successful storage and retrieval of cryptocurrency wallets and other critical information. (2025)
- **GuarDNA** (Eurostars) | **Coordinator**
Development of an innovative platform for safe and sustainable data storage, leveraging the deoxyribonucleic acid biomolecules as a medium. (2025-2028)
- **Auto3dMSC** (Eureka) | **Partner**
Development of the first robotized and centralized platform for automated 3D mesenchymal stem cell culture. (2020-2023)

We are interested to participate as a partner in R&D calls and we are looking for project consortiums.

Let's explore how BioSistemika can contribute.

Mirjana Oblak

Head of Project Office

☎ +386 1 23 505 20

🌐 biosistemika.com

✉ grants@biosistemika.com