<u>Title</u>: Sviluppo servizi progetto AlmaHealthDB: interoperabilità, qualità dei dati e anonimizzazione

Tutor: Prof Marco Viceconti - https://www.unibo.it/sitoweb/marco.viceconti/en

## **Funding source:**

 Convenzione Istituto Ortopedico Rizzoli (IOR) per finanziamento 4 assegni di ricerca nell'ambito del Progetto AlmaHealthDB cod. GAAC 730669 - Rep. DIN 32/2022 del 21/02/2022 - Responsabile Scientifico Prof. Marco Viceconti

## **Research Project**

AlmaHealthDB (AHDB) will develop an information technology and organizational infrastructure that supports the entire data lifecycle. AHDB was conceived by UNIBO and the three research hospitals in Bologna, IRCCS Istituto Ortopedico Rizzoli, IRCCS Istituto delle Scienze Neurologiche, and IRCCS Azienda Ospedaliero-Universitaria, both for a centralized and a federated model, with a shared infrastructure for ensuring the highest interoperability level for multi-center studies in compliance with legal, organizational, and regulatory requirements.

As part of the team of AHDB the candidate will work on: i) the design and implementation of interoperability services between hospital information systems and the AHDB infrastructure; ii) data quality assessment; and iii) methods of anonymization and pseudo-anonymization for structured and unstructured data.

The ideal candidate for this position holds a degree in biomedical engineering, good spoken and written English, documented experience in data management and in information engineering.

## Activity plan

The applicant will be trained on:

- AHDB hosting, hardware, and computational resources
- Hospital Information Systems
- Clinical trial management
- Data protection and anonymization and pseudo-anonymization methods

During his-her contract the applicant will:

- Work on interoperability profiles
- Manage data and data quality in clinical studies
- Provide support to the clinicians/researchers in clinical studies
- Apply anonymization and pseudo-anonymization methods

<u>Place of work</u>: all activities will take place at the institutional sites of the department DIN, or at the istituto ortopedico Rizzoli (Bologna).

<u>Sede di svolgimento delle attività</u>: le attività si svolgeranno presso le sedi istituzionali del DIN e presso l'istituto ortopedico Rizzoli (Bologna).