

**Title:** Sviluppo dell'infrastruttura informatica del progetto AlmaHealthDB: sull'estrazione, gestione e trattamento dei dati non strutturati e integrazione con servizi esterni

**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-centre 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 with a focus on transport, content, and document standards in healthcare; ii) data quality assessment, and iii) the Definition and management of metadata.

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

**Activity plan**

The applicant will be trained on:

- AHDB hosting, hardware, and computational resources
- Non-structured data from Hospital Information Systems and Clinical Trials
- External HPC services at Regional and National level

During his-her contract the applicant will:

- Work on transport, content, and document standards in healthcare;
- Work on the definition and management of metadata;
- Manage data and data quality in clinical studies.

**Place of work:** all activities will take place at the institutional sites of the department DIN, or at the Istituto Ortopedico Rizzoli (Bologna).

**Sede di svolgimento delle attività:** le attività si svolgeranno presso le sedi istituzionali del DIN e presso l'Istituto Ortopedico Rizzoli (Bologna).