Medexprim

3 QUESTIONS TO CORALIE CARRON

As a Ph.D. holder in Cellular and Molecular Biology, Coralie Carron assumes the pivotal role of Product Owner for several Medexprim modules. She delves into her cross-disciplinary role and responsibilities.

What is your role at Medexprim?

AS ONE OF MEDEXPRIM'S PRODUCT OWNERS, I am responsible for optimizing the features and functionalities of three modules in the Medexprim Suite™ and ensuring that they meet the needs of our users: Orchestra™, Indexa™, and ezCRF™. My role is to specify the needs of the products and generate a roadmap to be implemented with the developers. I'm also involved in the construction of workflows, to optimize data storage and standardization. It provides me with a comprehensive overview of all aspects related to the transit of clinical data, from its extraction on site to its qualification for a cohort according to specific criteria. I'm priviledged to work at the interface of several teams, which encourages a cross-functional approach that gives us flexibility, a broad vision and a high level of responsiveness.

At the same time, as a researcher in cellular and molecular biology, I am a reference in these fields, as well as in genomics.

Finally, I'm also involved in data management, gradually building up a kind of data catalogue, which I'll expand on later on.

What are your main challenges?

MY JOB IS TO ENSURE that we have a fluid and reliable workflow for multimodal data, from on-site collection to the automatic pre-filling of eCRF forms to create cohorts. Given the highly heterogeneous and occasionally unstructured nature of data collected from our network of partner University Hospitals and Cancer Centers, our objective is to adeptly standardize and model this data, ensuring both interoperability and data quality remain uncompromised.

One of my challenges is to incrementally develop a data catalog, akin to creating Medexprim's data dictionary. For specific pathologies, like prostate cancer, we compile the necessary data for generating and structuring relevant multimodal datasets, including diagnosis, age, gender, biological data, patient follow-up information, and more.

This nomenclature is important for two reasons: firstly, it determines the type of data that will be aggregated to create cohorts, and secondly, it serves the construction of our software, ensuring the seamless translation of collected data into our langage.

Ultimately, our goal is to gradually build high-quality patient cohorts, that can be made available for controlled and ethical reuse by pharmaceutical laboratories and hospital researchers in their specific projects. We refer to this as the CIAN program, short for Cohort Imaging Analytics Network. We implement it organ by organ, enabling researchers to identify similarities and shared genetic, molecular, or clinical characteristics that may be relevant across a wide range of cancer types. Finally, these cohorts can address pan-cancer research issues.

> ***My role is highly cross-functional**. I leverage the requirements from data management projects to build Medexprim's data dictionary and then adapt them to enhance our product workflows.*

What are Medexprim's strengths?

ONE OF OUR STRENGTHS lies in the fact that our engineers spend a lot of time in the field, gaining firsthand insights into how our software operates on-site, and developing a comprehensive vision of hospital data. The complementary profiles within our team strengthen our interoperability proficiency. Finally, the digitalization of anatomopathology has begun, and Medexprim has jumped on the bandwagon.

Digital pathology streamlines data management, promoting global collaboration and knowledge sharing among pathologists. It enables advanced data analysis, supporting large-scale research, personalized medicine, and faster diagnostics. This will open up enormous potential in terms of clinical research, as we move towards increasingly personalized medicine. The years ahead are going to be exciting!