

Research: Clinical evaluation for disruptive radiology assistant

Apply through www.sycaitechnologies.com or send us your CV to info info@sycaitechnologies.com

SycAi Technologies is a young biotech startup focused on increasing the detection of early-stage cancer and improving patient's life quality applying AI-based algorithms to medical image tests.

Our first product helps radiologists to detect, localize and classify pancreatic cystic lesions on CT scans. Combining the information of the images and data from the clinical history of the patient it predicts the probability of each lesion to evolve into pancreatic cancer, the 4th leading cause of death by cancer in Europe with a median survival time from diagnosis of 5 months.

Currently, the application of technology to healthcare services is opening many new opportunities. More specifically, AI has helped doctors saving time and resources, improving diagnosis, personalizing treatments and better interpreting the patients' reactions to drugs or therapies.

The project aims to identify and classify cystic lesions on abdominal CT scans through quantitative medical imaging and to evaluate their malignant potential combining this information with the clinical history of the patient.

We are looking for a candidate that will act as a translational catalyst between computational imaging science and clinical cancer research by integrating image analysis, pattern recognition and data mining in clinically relevant cancer imaging applications. This position offers an opportunity to participate in a cutting-edge multidisciplinary project.

This opening proposal will be financed through an H2020 action, so the economic conditions of the position will be extremely competitive. The starting data will be April 2021. We are offering a position to find and select the best profile to apply together to the grant. The project will be part of a structured, long-term personal career development plan that is coherent with past achievements and clearly defines the future aims of the researcher.

Objectives and Tasks:

In this project we will develop and validate artificial intelligence techniques for detection and classification of cystic lesions on abdominal CT scans. A large part of the research will consist on the clinical evaluation of the automated tools developed in house with the aim of enhancing early detection and improving lesion classification.

What you will do:

- Work in cooperation with our technical team, who will develop automated tools for image evaluation (mainly CT scans) and cancer detection.
- Evaluate how these tools can be used in clinical practice and what extent they improve the performance of radiologists with different level of experience.
- Quantitative analysis of multi-modality imaging data and clinical records using statistical tools.

- Integrate multi-omic data with medical imaging to improve stratification of the screening population.
- Help determining risk factors and comorbidities which may affect the progression of each cystic lesion to cancer (beginning with pancreatic cystic lesions that can evolve to pancreatic cancer).
- Continuously learn more about our product and what's driving results for our customers.
- Work towards the clinical translation of AI in precision cancer screening.
- Front-line research, with the possibility to publish papers in the top scientific literature.
- Map, understand and engage with key centers for management of patients with conditions.
- Identify and establish strong scientific relationships with opinion leaders.
- Disseminate scientific data to opinion-leaders, healthcare professionals, academic institutions and professional organizations.

Who you are:

- You are driven, analytical and have an entrepreneurial spirit.
- You are a quick learner with an intuitive mindset, excellent problem-solving skills, and you are able to stay a step ahead at all times.
- You are a highly motivated self-starter who works well both independently and as a team member.
- You have exceptional written and verbal English and Spanish communication skills: the ability to translate technical concepts into an easily understandable language is a plus!
- You are able to manage multiple, shifting priorities in a fast-paced atmosphere with positivity and a calm demeanor.
- You have the ability to network and partner with stakeholders.

Level of experience:

- You must hold a PhD in life sciences with 2 additional years of full-time research experience after obtaining the PhD or have at least 6 years of full-time equivalent research experience.
- Knowledge and preferably experience in data management and statistics. Familiarity with modern database systems and information systems technologies.
- You have not carried out your main activity (work, studies) in Spain for more than 12 months in the 3 years immediately prior to the deadline for the submission of applications.

What we can offer:

- Full time 2-Years contract as researcher with competitive salary (35K-39K, EU grant)
- A young flexible and innovative work environment in contact with other entrepreneurs and start-ups. As we are being accelerated by EIT Health, Tecnocampus and Barcelona Activa through different programs and activities, right now our work centre is located at the Barcelona Activa Incubator in the centre of Barcelona (Spain).
- Flexible work-life balance, balancing working hours and home office.
- Growing together: we are an early stage company with a multidisciplinary team.
- Equal employment opportunity: we proudly pursue a diverse workforce and we do not make any hiring or employment decisions that could be discriminatory in any way.
- To begin in April 2021