Primage Consortium Partners and Team Members

Clinical Partners

Health Research Institute and University-Polytechnic Hospital La Fe (Project Coordinator)

La Fe University Hospital, integrated within Spain´s national health system, is one of the largest teaching trusts in Spain, offers scientific and technological services and has more than 10,000 m2 of clinical and research laboratories to undertake research programmes based on state-of-the-art biomedical science.

PRIMAGE counts with the participation of two departments of La Fe Hospital, the ***Clinical Department of Medical Imaging and the Paediatric Oncology Unit.***

Clinical Department of Medical Imaging - Biomedical and Imaging Research group - GIBI2[30]

The ***Clinical Department of Medical Imaging*** is currently a clinical and research center of excellence, performing around 1500 imaging examinations per day including an active participation in more than 160 clinical trials. The Department is equipped with the latest generation technological equipment of more than 120 million euros based in a public-private contract that guarantee of technical non-obsolescence during the validity of the lease including a Platform of Experimental Radiology and Imaging Biomarkers (PREBI), where only clinical trials and research projects are performed. With more than 350 professionals, the unit incorporates the specialties of Radiology, Nuclear Medicine and Medical Physics. Both diagnostic and therapeutic processes are guided by imaging are performed daily at the institution.
The *Biomedical and Imaging Research* group (GIBI2[30]), led by Dr. Luís Martí Bonmatí, is part of the ***Health Research Institute La Fe*** and is responsible for the delivery of WP4 in PRIMAGE**.** GIBI2[30] aim is to promote and develop the use of imaging techniques and biomarkers extracted from images in order to optimize the diagnostic and therapeutic efficiency of the Medical image through a multidisciplinary approach and multimodality, both in clinical care research and in animal experimentation. The research group belongs to the Network of Biomedical Research in Bioengineering, Biomaterials and Nanomedicine (CIBER-BBN) and recently has been recognised as a node of the RedIB (Distributed Biomedical Imaging Network) within the National Scientific and Technical Singular Infrastructures (ICTS) of the Spanish government.

Dr. Luís Martí-Bonmatí (Coordinator), Head of the Medical Imaging Department of La Fe Polytechnics and University Hospital and Director of the Biomedical Imaging Research Group (GIBI2[30]),. He has also co-founded QUIBIM (Quantitative Imaging Biomarkers in Medicine), an innovative spin-off company from the Research Institute in Hospital La Fe, dedicated to medical image processing, analysis, extraction and measurement of radiomic data and imaging biomarkers to be used in clinical diagnostics, research projects and clinical trials. Dr Martí-Bonmatí has been principal investigator of several national R&D funded projects and has participated in an important number of European research projects. He is author of more than 250 journal manuscripts in the fields of abdominal radiology and applications of imaging biomarkers to the study of brain, heart, musculoskeletal system and different pathologies like cancer. His special areas of interest are

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mainly imaging biomarkers, image processing, imaging biobanks, and clinical innovations in medical imaging.

He is also professor of the Medical Studies degree at the University of Valencia. He is the current president of the European Society of Abdominal and Gastrointestinal Radiology (ESGAR) and has been president of other scientific societies like the European Society of Magnetic Resonance in Medicine and Biology (ESMRMB) in the period 2002-2003. He is also member of the Scientific Editorial Board of European Radiology (European Society of Radiology), the Editorial Board of Magnetic Resonance Materials in Physics, Biology and Medicine (MAGMA), the Editorial Board of EURORAD, the Editorial Board of Cancer Imaging and the Editorial Board of Diagnostic Imaging Europe.

Dr Leonor Cerdá

Experimental physicist, with contributions to several research projects in the fields of physics within and beyond the Standard Model. Her career started in 2013 at IFIC (University of Valencia - CSIC), working on the measurement of Higgs boson properties in the diphoton decay channel and searching for di-Higgs production in the gamma gamma b anti-b final state in the ATLAS experiment at the European Organization for Nuclear Research (CERN), where she obtained a PhD in High Energy Physics in 2018. Experience in data analysis, big data, artificial intelligence (machine learning, deep learning), statistics, algorithms development, operations, data acquisition, technical management, mentoring and outreach. Leonor is currently working at the Biomedical Imaging Research Group (IIS La Fe) as a Biomedical Engineer.

Xenia Gkontra

Polyxeni Gkontra received the Diploma in Electrical and Computer Engineering and the M.Sc. degree in Medical Informatics from the Aristotle University of Thessaloniki, Greece, in 2008 and 2013, respectively. She earned the Ph.D degree in Biomedical Engineering from the Universidad Politécnica de Madrid, Spain (2018). Her research lies in the area of Biomedical Engineering with particular focus on biomedical image processing and analysis. Her main research interests also include biomedical signal processing, mathematical modelling in biomedicine and machine learning.

Gracia Marti

Project Manager. Agronomist Engineer. Prince2 Practitioner. Gracia counts with more than ten years of experience working in the area of Innovation Management. This has given her the opportunity to work with diverse European R&D funding programmes and manage a large number of R&D projects from diverse scientific fields and sizes, from individual national projects to large international consortia. During the last five years, she has focused on the management of international projects in Human Health area. Gracia is the Project manager of PRIMAGE. She is responsible for the good performance and the eventual delivery of PRIMAGE, ensuring that the consortium complies with the objectives and goals set, as

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well as with the guidelines established by the EC.

Paediatric Oncology Unit (POU)

It is one of the 3 Reference Paediatric Oncology Units in Valencian Region. It is a National Health System Reference Unit (CSUR) for Neuroblastoma, Sarcomas and for Allogenic Bone Marrow Transplant. It has a consolidated research group: Research in clinical and traslational cancer, accredited since 2008 by San Carlos III Institute. Its main lines of investigation are: neuroblastoma, embryonic brain tumors, acquired cerebral injury, fertility, personalised medicine, and hereditary cancer. It counts with a Home Hospitalization Unit for Oncological Children (ADINO) since 1997. It is member of the ITCC (Innovative Therapies for Children with Cancer) since 2010 and collaborator in the EPTRI Project. It belongs to European Referencia Network (ERN) PAED-CAN as node in Spain.

Adela Cañete Nieto

Chief of Paediatric Oncology Unit La Fe since 2015 and of Haematology Unit since 2017. She is asssitant professor in Valencian University since 2009.

She participates actively in Neuroblastoma (vice president of neuroblastoma Group) and Brain tumors group in the Paediatric Oncohaematology Spanish Society SEHOP and in the European groups (SIOPEN, SIOP Brain Tumor Committee and SIOPE).Founding member of SIOPEN. She is the current Vicepresident of SEHOP. She is member of American Society of Clinical Oncology (ASCO). She is president of La Fe Hospital Ethics Committee since 2015. She is member of the Clinical and Traslational Research Group in the Investigation Institute of La Fe Hospital. Currently, she is principal investigator and european coordinator of LINES Clinical Trial for low and intermediate risk neuroblastoma patients and european coordinator for N-myc amplification neuroblastoma infants.

Blanca Martínez de las Heras

Pediatric Oncologist with almost 3 years of professional experience in Oncology. Recently incorporated to the Clinical and Traslational Research Group in Neuroblastoma. She participates actively in Rare Tumors Group in the Paediatric Oncohaematology Spanish Society SEHOP and she is becoming member of Neuroblastoma national group. She is member of SIOPE and becoming member of SIOPEN.

Children's Cancer Research Institute – St. Anna Kinderkrebsforschung

The CCRI was founded in 1988 with the overall aim to improve the treatment options for children suffering from cancer through basic and translational research. The CCRI is closely affiliated with

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the St. Anna Children's Hospital (the largest clinical haemato-oncological centre for the treatment of childhood cancer in Austria) and with Labdia Labordiagnostik GmbH (spin-off SME). Currently, the CCRI has 16 research groups focusing on a number of immune-therapeutic approaches and on a selected spectrum of paediatric oncological diseases such as Leukaemia, Neuroblastoma, Ewing Sarcoma, Osteosarcoma, Wilms' tumor, Lymphoma, Langerhans cell histiocytosis and secondary diseases relevant in immunocompromised patients such as mycosis and viral infections. The Clinical Trial Unit for Studies & Statistics for Integrated Research & Projects (S2IRP) is an important link between the CCRI laboratory research activities and the clinical application of trials at the St. Anna Children's Hospital. Essentially, S2IRP fosters clinical research in paediatric oncology by coordinating and facilitating international clinical trials. The CCRI has developed into the largest centre for research related to childhood cancer in Austria. Our comprehensive approach bundles all fields of childhood cancer research within a permanent cycle: basic, translational and clinical research, the improvement of diagnostic and prognostic methods, and immunological therapies. The CCRI is the international trial coordinating centre in 3 main areas: ALL stem cell transplantation (ALLSCT FORUM trial); Langerhans cell histiocytosis (LCH IV trial); and high-risk neuroblastoma (HR-NBL1/SIOPEN trial, LTI Trial).

The CCRI/St. Anna Children's Hospital is the coordinator of the European Reference Network on Paediatric Cancer (ERN-PAEDCAN), one of the 24 European Reference Networks (ERNs) that are virtual networks involving healthcare providers across Europe. They aim to facilitate discussion on complex or rare diseases and conditions that require highly specialised treatment, and concentrated knowledge and resources. In particular, (ERN-PAEDCAN) aims at reducing inequalities in childhood cancer survival by providing high-quality, accessible and cost-effective cross-border healthcare to children and adolescents with cancer, regardless to where they live. This network gathers some of the most influential stakeholders from 18 European Countries in the field of paediatric oncology.

Professor Ruth Ladenstein, MD, MBA, cPM is Head of the Studies and Statistics Department at the CCRI and a senior consultant in the St. Anna Children's Hospital. Chief investigator of the high risk neuroblastoma trial (HR-NBL-1/SIOPEN) with over 3000 patients enrolled. Past president of SIOPEN (SIOP Europe Neuroblastoma Group; 2007- 2011) and past president of SIOPE (2009- 2012) and Head of the Austrian Paediatric Oncology Group (AGPHO) and Chair of OKIDS (Austrian medicines for children network). She has 144 full publications in peer-reviewed journals and 20 published book chapters. She coordinated the ERN Pilot project ExPO-r-Net (European Expert Paediatric Oncology Reference Network for Diagnostics and Treatment, 2014 – 2017) and is now the Coordinator of the ERN PaedCan (European Reference Network for Paediatric Cancer).

Ulrike Pötschger is a lead statistician at the CCRI and has been working in the field of medical statistics since 1992 and since 1996 in the CCRI. She is the main responsible statistician of multiple international clinical studies in the field of paediatric oncology (since 2002 SIOPEN HR-NBL1 study, since 2004 ALL-SCT 2003, since 2007 ALL-SCT BFM International, since 1996 LCH-II-

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LCH-IV). Since 2008, she is Chairperson of the Information Management and Methodology Committee of the I-BFM-SG. In 2008, she started a collaboration with the Core Unit for Medical Statistics and Informatics of the Medical University Vienna in order to develop innovative approaches in the field of survival analysis focusing on long-term outcome.

Nuno Andrade, PhD, MBA is the head of the Research Support Office at the CCRI. He oversees the administrative management, implementation and reporting of the national and international grants running at the CCRI. He is experienced in the establishment of project management and procedures and contributed to numerous cooperative initiatives to acquire international-funded projects.

Zoltan Dobai, M.Sc. has a master's degree in economics with a diplomacy minor from the Corvinus University of Budapest, Hungary. He has been involved in healthcare and biotech related research projects since 2005 as a business development and project manager and has joined the St. Anna CCRI in 2014. Since then he has been involved in the acquisition and project management of large EU projects and he is currently the ERN-PAEDCAN network manager.

Vanessa Düster, MSc, cPMA studied biology and zoology at the RWTH Aachen and the University of Vienna. After some professional work experience in science and research, she successfully completed the certification as an IPMA® certified Project Management Associate. She joined the Studies and Statistics Department at the CCRI as clinical research associate in 2019 and acts as the PRIMAGE project manager for the CCRI.

Clinical University of Cologne

The University of Cologne is one of the leading national cancer centers of Germany. In 2007 the Universities of Cologne and Bonn joined to form the Center for Integrative Oncology (CIO) which has been significantly funded by the national Cancer program of the German Cancer Aid since. During the last 10 years the CIO has developed structures aiming to coordinate and harmonize the treatment of cancer patients as well as research activities in oncology. Important fields of clinical and molecular research are adult Hodgkin lymphoma, adult chronic lymphatic leukemia, lung cancer, hereditary breast and ovarian cancer, prostate cancer, and neuroblastoma. The Cologne University has all modern technologies such as genome wide sequencing, targeted sequencing, in vitro and in vivo testing available. In other words, neuroblastoma research is embedded in an unique academic environment. Neuroblastoma research in Cologne started back in 1986 when Frank Berthold, the former head of the German national neuroblastoma trials, came to Cologne. Since then, the national neuroblastoma trial protocols NB90, NB95S, NB97 and NB2004 were developed, and the German neuroblastoma screening project was successfully performed. The NB95S trial was the first international trial addressing regression in infant neuroblastoma patients, finally leading to the wait & watch strategy in a subgroup of favorable neuroblastoma, which

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spared a lot of patients unnecessary chemotherapy. Additional major clinical achievements of the trials include the successful introduction of the high-dose chemotherapy MEC regimen with autologous stem cell rescue and the first assessment of the anti-GD2 antibody ch14.18 in a large clinical trial. During the national neuroblastoma trials detailed clinical and molecular data of more than 4,000 neuroblastoma patients have been collected in the national neuroblastoma data base. Complementary, a large tumor tissue repository with more than 2,000 tumor samples corresponding to the clinical data in the clinical data base has been built up. The availability of clinical data and high quality biomaterial gives the unique opportunity for correlation of biomarkers, clinical characteristics and outcome. Within the clinical trials, the central review of bone marrow and imaging such as MRI, computed tomography, and nuclear medicine is done in Cologne for many years because the leading national experts in these fields are located in the University Hospital of Cologne. More recently the neuroblastoma team in Cologne has taken responsibility of the German national clinical trial on low- and intermediate risk neuroblastoma which will assess RNA expression based stratification patients. The Cologne center is working together very closely with the team of Angelika Eggert at the Charité Berlin who is the responsible national coordinator of the upcoming High-Risk Neuroblastoma Study 2 of SIOP-Europe-Neuroblastoma.

University of Pisa

The University of Pisa (UNIPI), founded in 1343, is among the oldest and most prestigious universities in Europe. The vitality of higher education and scientific research determines its strength: UNIPI is committed to promoting and supporting research in every field of knowledge, encouraging innovation and openness to new subjects and collaborations between different disciplines. Thanks to the quality of the research undertaken by its academic staff, individually or in teams, UNIPI holds a prominent position in the national and international scientific context. In recent international rankings (QS World University Rankings by subject 2017) UNIPI awarded a good ranking in 19 out of 46 disciplines evaluated by the agency, including all research fields. UNIPI awarded good position in several other relevant sectors including Mathematics (#101-150), Computer Science and Information Systems (#101-150), Engineering Electrical and Electronic (#151-200) Medicine (#151-200), among other.

According to the most recent Academic Ranking of World Universities (ARWU) 2017 released by the Shanghai JaoTong University (www.shanghairanking.com/), UNIPI ranks sixth among Italian Universities and among the top 300 universities in the world. UNIPI was involved in a large number of EU-funded projects, especially under the 7th Framework Programme, with 157 granted projects – 27 as coordinator - representing an EU contribution of 50 million Euros (17 million Euros as coordinator) and Horizon 2020 with 67 granted projects, 8 as a coordinator (19 million Euros - 4,5 million Euros as coordinator). UNIPI is currently involved in 77 Horizon 2020 projects.

In this project UNIPI is represented by the Department of Translational Research and New Technologies in Medicine and Surgery. It is one of the main departments of the medical area of UNIPI, with 91 faculty, 28 postdoctoral researchers and 53 office workers. The Department includes the following academic units: Clinical Oncology, Surgery, Pathology, Microbiology,

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Molecular Biology, Internal medicine, Radiology, Radiation Oncology and Clinical Pharmacology. Those academic units are also part of the Imaging Department of the Pisa University Hospital. The Imaging Department groups two Academic Units of Diagnostic Radiology and one Academic in Neuroradiology, one Academic Unit of Nuclear Medicine, one Interventional Radiology Unit and one Breast Unit. An Academic Unit of radiation Oncology Unit is linked with the Diagnostic Radiology and Nuclear Medicine in the management of oncologic patients.

Technical Partners

ANSYS France

ANSYS France SAS is a subsidiary of American company ANSYS Inc, the worldwide leader in engineering simulation market. ANSYS is the leading engineering simulation software developer based in 40 countries across the world employing more than 3,000 employees. Created in 1970, exclusively focusing on the development of engineering simulation software covering all necessary physics such as fluid, structure, electromagnetic and acoustic. Ansys provides full system and software modeling capabilities. The company primarily grew in the Nuclear, aeronautic and automotive industries more mature with the large scale adoption of engineering simulation across the product development process. During the last two decades, the medical device and pharmaceutical industries have progressively embraced simulation as part of the in silico evolution. Today, ANSYS software is used by 80% of the 50 largest biomedical companies including the top 15. ANSYS France SAS, with more than 150 employees, mainly provides technical support in simulation and also include a development team of 30 engineers. This development team leads ANSYS research in cloud computing, response surface, optimization, probabilistic and reduced order modelling techniques. Moreover the ANSYS France Research team is a centre of excellence for patient specific simulation.

Chemotargets

Chemotargets SL was founded in March 2006 as a spin-off from Dr. Mestres' Systems Pharmacology lab under the auspices of the IMIM, a leading academic center of excellence based in Barcelona. We offer validated and cutting-edge computational methodologies with top market predictive performance. Our goal is to help the biopharma industry fast-forward the process of bringing new medicines to market, speeding up drug discovery and development programs, and improving cost-efficiency and safety. Chemotargets is currently recognized as a global leader in predictive analytics solutions for pharmaceutical and biotechnology companies and research institutions.

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Dr. Jordi Mestres FRSC, CEO of Chemotargets

Dr. Elisabet Gregori-Puigjane. Team Leader at Chemotargets.

Cyfronet - Academic Computer Centre Cyfronet

is one of the largest supercomputing and networking centres in Poland, developing and managing the top High-Performance Computer in Poland, and delivering Krakow MAN network. We are a Centre of Excellence in the area of grid and cloud services. Our mission is to support the scientific community by providing researchers with computing power, large storage resources and advanced software, access to a super-fast computer network and numerous IT tools. The DICE (DIstributed Computing Environments) Team consists of scientists and IT experts working in the interdisciplinary research projects carried out in Cyfronet. They specialize in large-scale distributed computing and web, grid and cloud technologies. The team develops new methods, tools and computing environments and apply these solutions to the problems from different fields of science, healthcare and industry.

Marian Bubak, DICE Team leader. Marian coordinates PRIMAGE Cyfronet tasks.

Marek Kasztelnik, senior scientific programmer.

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Tomasz Gubała, chief system architect.

Institute of Instrumentation for Molecular Imaging (UPV-I3M-GRyCAP)

The Grid and High-Performance Computing Group (GRyCAP) from the Institute of Instrumentation for Molecular Imaging has a very strong background in Distributed, Cloud Computing and Data Management. The GRyCAP has strongly contributed to the development of tools and services for the management and configuration of virtual infrastructures in the cloud and the support of elastic computing models in serverless environments. The GRyCAP has also assisted user communities in the adoption of HPC, Grid and Cloud computing paradigms. GRyCAP has shared and extended its expertise through active participation in over 30 national and European R&D projects on HPC, Grid and Cloud technologies. These projects include HPCN-TTN Network, EUTIST-M and TT@MED – technology dissemination; EGEE-I, II, III, EGI- InSPIRE, EGI-ENGAGE and VENUS-C – e-infrastructures. The group took part in the International HealthGrid Association; has developed a roadmap on the use of grids in health (SHARE), and boasts a solid research line in the distributed storage of medical imaging data through the TRENCADIS platform (CVIMO project). Relevant GRyCAP expertise includes: the coordination of the cloud end-user community (27 applications, 20 coming from an Open Call) in the VENUS-C project, one of the first cloud projects to feature in the DAE ; the development of distributed and Grid-Computing platforms with Latin American countries: CyTED-GRiD, EELA and EELA-2, the EU-BrazilOpenBio Project, the EUBrazil Cloud Connect project and the EUBra-BIGSEA project (last two coordinated by the UPV), and development of high-level middleware components for cloud infrastructures in the Spanish Codecloud and CLUVIEM project) and coordination of the Spanish Network for e-Science to implement the Spanish National Grid Initiative (NGI). The UPV also participated in the INDIGO-DATACLOUD H2020 project on cloud middleware services development.

Currently, the UPV leads the ATMOSPHERE project and participates in EOSC-Hub and DEEP Hybrid-DataCloud H2020 projects.

Ignacio Blanquer Espert

Ignacio Blanquer is full professor of the Computer System Department at UPV involved in Parallel Computation and Medical Image processing, participating in more than 60 national and European Research Projects, has authored and co-authored 40 articles in indexed journals and book chapters and in more than 80 papers in national and international journals and conference proceedings. He has served as coordinator of the application area in the Spanish Network for e-Science. He has been the project coordinator of EUBrazilCloudConnect (FP7) and

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EUBra-BIGSEA (H2020) and currently he is the coordinator of ATMOSPHERE (H2020) and co-principal investigator in the BigCLOE national research project. He is currently the delegate of the Spanish Ministry of Science , Universities and Innovation in the e-Infrastructures Reflection Group (e-IRG).

J.Damian Segrelles Quilis

J. Damian Segrelles is full professor of the Computer System Department at UPV involved in Parallel Computation and Medical Image processing, He is a member of the Grid and High Performance Computing research group (GRyCAP) at the Institute for Molecular Imaging (I3M) since 2001. He has participated in more than 20 European and National projects and led regional research projects in the area of Cloud Computing. His research interests broadly lie in Cloud Computing and Scientific Computing.

MATICAL Innovation

MATICAL is an international consulting company specialised in R&D projects management and exploitation. MATICAL offers comprehensive support services for the planning, initiation, and implementation of international collaborative research and innovation projects with competencies in project, communication and innovation management. Its multifaceted service portfolio includes all aspects of project management: from strategic project planning to successful project implementation, IPR management and exploitation of research results.

Mario Aznar Granados

Degree in International Relations and Public Management. More than **14 years** of professional experience in project management, with a focus on large international R&D projects involving innovation management.

Core areas of expertise: Business strategy and innovation, Product development, Team training, Teaching · International projects ideation, coordination and exploitation, International projects assessment, evaluation and monitoring. Programmes design, preparation, implementation, evaluation.

Medexprim

Medexprim is an ICT SME whose mission is to unleash the potential of medical images archives and associated data for secondary use in research. Within PRIMAGE, Medexprim is mainly responsible for implementing the tools to efficiently identify, extract, anonymize and curate

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datasets that will be used to train the models. These tools will be built upon its existing award winning Radiomics Enabler® solution.

Karine Seymour is the founder and president of Medexprim. She acts as the PRIMAGE project manager for Medexprim.

Baptiste Houede is Medexprim's deployment and support manager. He is responsible for ensuring a smooth adoption of our solutions by all PRIMAGE partners.

Nicolas Dubost is Medexprim's business developer. He is involved in communication and dissemination activities within PRIMAGE.

Damien Degoulet is responsabible for quality processes and administrative affairs. He keeps track of times and resource allocation.

Quibim - Quantitative Imaging Biomarkers In Medicine

QUIBIM stands for QUantitative Imaging Biomarkers In Medicine and, as an innovative company is specially dedicated to medical image processing and extraction of imaging biomarkers for the medical imaging workflows. The company services are based on the development of software tools and computing techniques with medicine and health application, and the design of new workflows for disease diagnosis and treatment evaluation using image processing techniques. QUIBIM business model is focused on providing services as a core lab for medical image analysis through QUIBIM Precision platform, a web-based infrastructure for medical images uploading and analysis.

QUIBIM has a large experience in the analysis of quantitative imaging biomarkers and its integration in structured reports directly into the Picture Archiving and Communications System

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(PACS) or through our platform in the cloud. The company has developed and implemented innovative algorithms to analyze a wide spectrum of imaging biomarkers in different organs and pathologies. Imaging biomarkers analysis algorithms allow for the extraction of all the hidden data existing in medical images and contribute to the paradigm shift from conventional radiological reading, which is mainly qualitative, to a quantitative patient evaluation fostering the expansion of Precision Medicine. All the QUIBIM biomarkers have been validated in the clinical setting, turning into useful parametric information to the diagnosis and monitoring of the higher socioeconomic impact diseases, such as: osteoporosis, cancer, dementia, COPD and diffuse liver diseases, among others. QUIBIM's stepwise methodology of imaging biomarkers was adopted in 2013 by the European Society of Radiology (ESR) guidelines.

QUIBIM has CE MARK CERTIFICATION as active medical device (EU Directive in Medical Devices – MDD 93/42/EEC) corresponding to CE marking Class IIa (application no.: 15-0126).

Ángel Alberich-Bayarri, PhD. Telecommunications Engineer (Polytechnics University of Valencia, 2002,2007). Master in Biomedical Engineering and PhD (Polytechnics University of Valencia, 2010) by his research about the application of advanced image processing techniques to high resolution magnetic resonance images for the study of osteoporosis disease. He is CEO of QUIBIM SL and Scientific-Technical Director at the Biomedical Imaging Research Group (GIBI230) at La Fe Health Research Institute. From 2007 to 2014 he was the biomedical engineering coordinator in Quiron Hospitals Group, with an important dedication to image processing.
He has authored more than 25 scientific publications in important international scientific journals and has 2 patents. He is also the author of a high number of publications in international congresses and of 10 book chapters. He has participated in several competitive research projects and clinical trials. Currently is an active member of several scientific societies. In 2015 he was awarded by MIT under the program MIT Innovators Under 35. He is collaborator of the Polytechnics University of Valencia and has supervised several master thesis projects.

Ana Jiménez-Pastor, M.Sc. Telecommunications Engineer and Master in Biomedical Engineering from the Polytechnic University of Valencia. She is currently working as a researcher at QUIBIM SL, in the field of radiological medical imaging and artificial intelligence. Her research focuses on the development of advanced pattern detection algorithms for the classification and extraction of regions of interest from radiological images and their integration in the development of analysis methods for the extraction of image biomarkers from them, having presented this research at both national and international conferences.

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Ismael Gonzalez, PhD is a Chemical Engineer with a Master's Degree in Bioengineering and a PhD in Biomedical Engineering. Previously, he was part of the M2BE team (Aragon Institute of Engineering Research) managing complex and interdisciplinary problems in the in silico modelling and biomechanics field. Ismael has experience in chemical and biological laboratories, as well as extensive programming knowledge in various programming languages and the administration of high-performance computing systems and Linux servers. He is the Chief Information Officer and is in charge of designing development processes, infrastructures and looking for new technologies in Quibim. Moreover, he is author of several scientific articles and communications to international congresses.

SIOP Europe

The European Society for Paediatric Oncology is the only pan-European organisation representing all professionals working in the field of childhood cancers. With more than 1850 members across 35 European countries, SIOP Europe is leading the way to ensure the best possible care and outcomes for all children and adolescents with cancer in Europe. SIOP Europe's areas of activity include:

- Research, : aiming to facilitate the development of new drugs and treatments for children and adolescents with cancer, SIOPE supports strong and integrated research programmes from basic science to clinical research, serving as a common European platform for paediatric oncology clinical trials;
- Care: standards of care in paediatric oncology can differ substantially from country to country. SIOPE addresses the relevant organisational aspects to improve access to quality care and expertise across Europe;
- Education and Training: SIOPE is a hub for paediatric oncologists, health professionals and parent/patient advocates willing to be trained and kept updated about the newest treatments and therapies available;
- EU advocacy: to ensure that paediatric oncology remains at the top of the EU health and research policy agenda, effective, evidence-based policy activates must be carried out sharply and firmly. SIOPE monitors and acts to shape EU legislation and policies having important impact on the paediatric oncology community.

Team Members:

Samira Essiaf, CEO

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Anne Blondeel, Project Coordinator

University of Bologna

With documental evidences of its existence in 1088, Alma Mater Studiorum, is the oldest university in the Western world. Today over 200 degree-awarding programmes among its 32 Departments and 11 Schools are offered to over 81,000 students. 5,000 graduates are enrolled in PhDs and 3rd cycle programmes. In Global Rankings UNIBO occupies the top 10 national rank in major league tables such as QS World University Rankings, THE World University Rankings, ARWU World University Rankings. UNIBO is the second Italian university for the attractiveness of European funding for research, 37st in the European ranking of institutions of higher education.

Marco Viceconti is Full Professor of Industrial Bioengineering in the department of Industrial Engineering. Prof Viceconti is one of the key figures in the Virtual Physiological Human (VPH) research community, editor of the seminal VPH research roadmap, founder and now President of the VPH Institute, VPH Ambassador for the VPH Network of Excellence, and more recently coordinator of the Avicenna action that elaborated the first research roadmap on in silico clinical trials. Before joining the university of Bologna, he established and led for seven years the largest European institute entirely dedicated to in silico medicine, the Insigneo institute in Sheffield (UK).

In PRIMAGE Prof Viceconti's team will be responsible of multiscale orchestration of cancer model.

University of Konstanz – Data Analysis and Visualization Group

The Data Analysis and Visualization Group (DBVIS) from the University of Konstanz researches and develops Visual Analytics methodologies and techniques. Visual Analytics combines human domain knowledge with artificial intelligence and machine learning methods through interactive visual interfaces.

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Prof. Dr. Daniel A. Keim (https://www.vis.uni-konstanz.de/en/members/keim/)
Chair of Data Analysis and Visualization (DBVIS) at the University of Konstanz. He received his Ph.D. in Computer Science from the University of Munich and was subsequently assistant professor in that department before becoming an associate professor at the CS department of the Martin- Luther-University Halle. He is working in the area of visual analytics, information visualization, and data mining. He is on the program committees of major conferences, has published extensively and regularly gives keynote talks and tutorials at major venues such as VAST, SIGMOD, VLDB, and KDD. He is an editor of TKDE

Hanna Schäfer (https://www.vis.uni-konstanz.de/mitglieder/schaefer/)

Hanna is a research associate at the DBVIS group with expertise in visual interactive health recommender systems, persuasive systems, and motivational aspects through gamification.

Wolfgang Jentner (https://www.vis.uni-konstanz.de/en/members/jentner/)

Wolfgang is a research associate and doctoral student at the DBVIS group with expertise in Visual Analytics for structured data mining. His research focuses on interactive mining techniques, exploration, and visualization of mined patterns and rules.

University of Sheffield, UK – Department of Computer Science and Insigneo Institute of in silico Medicine

The University of Sheffield (USFD) is one of the most successful members of the UK's prestigious Russell Group of research-intensive institutions. The Department of Computer Science was established in 1982 and has since attained an international reputation for its research and teaching. In the 2014 Research Excellence Framework (REF) exercise, we were ranked 5th out of 89 departments in the UK for Computer Science research in areas as diverse as Speech and Hearing, Natural Language processing, Complex Systems Modelling and Computational Neuroscience.

The INSIGNEO Institute for in silico Medicine intends to realise the scientific ambition behind the Virtual Physiological Human, producing a transformational impact on healthcare. A joint initiative between the University of Sheffield and Sheffield Teaching Hospitals NHS Trust with more than 150 members, INSIGNEO performs cutting edge research in areas of fundamental and applied biomedical modelling, imaging and informatics.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 826494.

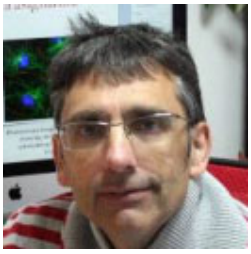
Dr Dawn Walker (USFD PI)is a Senior Lecturer with expertise in the development of agent-based models of biological cells and tissues, including epithelial homeostasis and wound healing, restenosis in vascular systems, fertilisation and colon cancer. She has integrated ABMs into multiscale tissue models and been involved in various EU-funded projects (EU FP6 CoAST, EU-FP7 CHIC) relating to the development of computational multiscale models and modelling frameworks.

Dr Paul Richmond (USFD co-PI) is a Senior Lecturer and Director of the Research Software Engineering group. The focus of his research work is in facilitating the use of emerging high-performance computing architectures such as Graphics Processing Units (GPUs) to accelerate scientific discovery, via complex systems simulation within computational science and engineering. He has a proven track-record of inter-disciplinary collaborations with biologists and bioinformaticians and is currently also co-PI on EU Ho2020 StriTuVad.

Dr Kenneth Wertheim (USFD Post-doctoral Research Associate on PRIMAGE) was trained in chemical engineering before transitioning to systems biology. He is particularly interested in developmental biology, immunology, and oncology. Within PRIMAGE, his main task is to build agent-based models to study tumour cell interactions.

University of Zaragoza

At the University of Zaragoza, the M2BE (Multiscale in Mechanical and Biological Engineering) group focuses on Computational Mechanobiology. Mechanobiology combines different aspects of Mechanical Engineering with Biological Engineering. Given the previous experience of the members of M2BE, our activity is mainly focused on the development of predictive computational models. The research activity of the group is structured, on the one hand, through the spatial and multiphysical scales that define our problem, and on the other hand in the different technological applications in which we work.



José Manuel García-Aznar

José Manuel García-Aznar serves since 2008 as Full Professor in the Mechanical Engineering Department of the University of Zaragoza.

His research interests focus on computational modelling of hard tissues mechanics, mechanobiology of skeletal tissue regeneration and tissue engineering, tissue growth and development and cell mechanics. Most recently his research work has also focused on the combination of computational models and

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microfluidics-based experiments in order to investigate the mechanisms that regulate tumour growth.

MªÁngeles Pérez-Ansón

María Angeles Pérez Ansón serves since 2009 as Associate Professor in the Mechanical Engineering Department of the University of Zaragoza.

Her research interests focus on computational modelling of hard tissues mechanics, design of prostheses and implants, tissue engineering and organ analyses in a multiscale approach. She has coordinated several Spanish National projects in previous research fields and a Spanish Excellence Network in Biomechanics. In fact, she is the President of the European Society of Biomechanics (ESB). Among other merits, she is author of over 40 JCR publications.

MªJosé Gómez-Benito

María José Gómez-Benito serves since 2008 as Associate Professor in the Mechanical Engineering Department of the University of Zaragoza.

She has coordinated several Spanish National projects related with computational modelling of fracture and wound healing and designing a multiscale in vitro and in-silico platform for microfluidic devices for tumoral extravasation. Among other merits, she is author of over 30 JCR publications.

Ana Mincholé-Lapuente

Ana Mincholé, PhD, graduated in Physics and obtained her MSc from the University of Zaragoza, Spain and Chalmers University of Technology, Gothenburg, Sweden, respectively.

After her PhD in 2011 focused on biomedical signal analysis at the University of Zaragoza and a short postdoc experience in European preDiCt project at the University of Oxford, UK, she was awarded a Marie Curie Intra-European Fellowship for Career Development at the University of Oxford. Her areas of expertise include multiscale computational modelling and simulation, biomedical signal analysis and machine learning techniques. Her research interests focus on developing integrative data-driven approaches where modelling and simulation are used to integrate biomedical data at different scales in the investigation of pathological conditions and optimal therapy selection.

Carlos Borau-Zamora

Industrial Engineer, PhD in computational mechanics.

Expertise in computational modelling. Currently working on image processing and statistical analysis. He can provide more than ten years of experience on computational mechanics, biomechanics, statistics and

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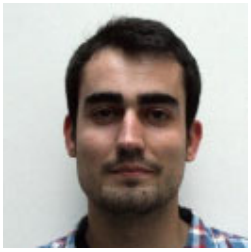
image processing, fields in which he continues working as a PostDoc. His research interest is specifically focused on cell mechanics modelling and quantification of cell migration parameters in microfluidic systems, with the final goal of unravelling the key processes governing cell behaviour.

Silvia Hervás-Raluy

Silvia holds a Bachelor's degree in Mechanical Engineering and a Master's degree in Biomedical Engineering. She is currently doing her PhD thesis at the University of Zaragoza. Previously, she worked in the field of cellular mechanobiology. Silvia has expertise in computational modelling and programming.



Diego Sainz-De Mena

Diego has a Bachelor's degree in Mechanical Engineering and a Master's degree in Biomedical Engineering. He has worked in the field of cellular mechanobiology, where he has acquired experience in computational modelling and FE analysis. His PhD thesis will focus on designing computational tools for cancer diagnosis and prognosis.

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