

Prof Alejandro F Frangi

DIAMOND JUBILEE CHAIR IN COMPUTATIONAL MEDICINE · DIRECTOR

2 Brookside Bar, S40 3PJ Chesterfield, United Kingdom

☎ +44 785-4463066 | ✉ a.frangi@leeds.ac.uk | 🏠 www.cistib.org/afrangi | 🌐 [in/alejandro-frangi](https://in.alejandro-frangi) | 🐦 @affrangi |

📠 C-6500-2008 | 📞 0000-0002-2675-528X | 📧 afrangi | Nationality: Italian, Spanish, Argentinian | Marital Status:

Married, eight children



Suaviter in modo, fortiter in re – C Acquaviva (1543-1615)

Executive Summary

Alejandro (Alex) was born in La Plata, Argentina. In 1991 he moved to Barcelona, Spain, where he obtained his undergraduate degree in Telecommunications Engineering from the Technical University of Catalonia (Barcelona) in 1996. Then he carried out research on electrical impedance tomography for image reconstruction and noise characterization at the same institution under a CIRIT grant. In 1997, he obtained a grant from the Dutch Ministry of Economic Affairs to pursue his PhD in Medicine at the Image Sciences Institute of the University Medical Center Utrecht on model-based cardiovascular image analysis. During this period, he was visiting researcher at the Imperial College in London, UK, and in Philips Medical Systems BV, The Netherlands. Prof Frangi is Diamond Jubilee Chair in Computational Medicine at the University of Leeds, Leeds, UK, with joint appointments at the School of Computing and the School of Medicine. He leads the [Center for Computational Imaging and Simulation Technologies in Biomedicine](#).

Prof Frangi has main research interests lay at the crossroad of medical image analysis and modeling with emphasis on machine learning (phenomenological models) and computational physiology (mechanistic models). He has particular interest in statistical methods applied to population imaging and *in silico* clinical trials. His highly interdisciplinary work has been translated to the areas of cardiovascular, musculoskeletal and neuro sciences. He been principal investigator or scientific coordinator of over 25 national and European projects, both funded by public and private bodies. During 1/2006-3/2010 he was coordinator of the [@neurIST: Integrated Biomedical Informatics for the Management of Cerebral Aneurysms](#), a 12.6M€ European Integrated Project, during 1/2006-12/2009 he was scientific co-PI for the Spanish CENIT Technology Platform CDTEAM funded with 15.7M€ by the Spanish Ministry of Science and Innovation through CDTI, in 2009-2012 he participated of the euHeart Integrated Project, in 2009-2012 in the Virtual Physiological Human Network of Excellence, and in 2009-2012 he was Scientific Coordinator of the CENIT Technology Platform cvREMEDI funded with 13.6M€ by the Spanish Ministry of Science and Innovation through CDTI. He coordinates the € 13.3m-Integrated Project funded by the European Commission entitled [VPH-DARE@IT Dementia Research Enabled by IT](#), led by the University of Sheffield and involving other 19 European organizations. Finally, he has been recently awarded a £ 1.3m grant as Principal Investigator from the UK Engineering and Physical Sciences Research Council (EPSRC) for the project [OCEAN: One-stop-shop Microstructure-sensitive Perfusion/Diffusion MRI: Application to Vascular Cognitive Impairment](#). He is also one of the 5 co-investigators in the recently awarded EPSRC-NIHR HTC Partnership Award *Plus*: Medical Image Analysis Network (MedIAN) led by Oxford.

Prof Frangi has edited several books, published 7 editorial articles and over 200 journal papers in key international journals of his research field and more than over 200 book chapters and international conference papers with an h-index 53 and over 20,100 citations according to [Google Scholar](#). He has been three times Guest Editor of special issues of IEEE Trans Med Imaging, one on IEEE Trans Biomed Eng, and one of Medical Image Analysis journal. He was chair of the 3rd International Conference on Functional Imaging and Modelling of the Heart (FIMH05) held in Barcelona in June 2005, Publications Chair of the IEEE International Symposium in Biomedical Imaging (ISBI 2006), Programme Committee Member of various editions of the Intl Conf on Medical Image Computing and Computer Assisted Interventions (MICCAI) (Brisbane, AU, 2007; Beijing CN, 2010; Toronto CA 2011; Nice FR 2012; Nagoya JP 2013), International Liaison of ISBI 2009, Tutorials Co-Chair of MICCAI 2010, and Program Co-chair of MICCAI 2015. He was also General Chair for ISBI 2012 held in Barcelona and General Chair of MICCAI 2018 held in Granada, Spain.

Prof Frangi is Chair of the Editorial Board of the MICCAI-Elsevier Book Series (2017-2020), is Associate Editor-in-Chief of Progress in Bioengineering (IOP Press), and serves as Associate Editor of IEEE Trans on Medical Imaging, Medical Image Analysis, SIAM Journal Imaging Sciences, Computer Vision and Image Understanding journals. Prof Frangi was foreign member of the Review College of the Engineering and Physical Sciences Research Council (EPSRC, 2006-10) in UK, is a recipient of the IEEE Engineering in Medicine and Biology Early Career Award in 2006, the ICT Knowledge Transfer Prize (2008) and two Teaching Excellence Prizes (2008, 2010) by the Social Council of the Universitat Pompeu Fabra. He also was awarded the UPF Medal (2011) for his service as Dean of the Escuela Politècnica Superior. He was awarded the ICREA-Academia Prize by the Institució Catalana de Recerca i Estudis Avançats (ICREA) in 2008. Prof Frangi is an IEEE Fellow (2014), EAMBES Fellow (2015), SPIE Member, SIAM Member, MICCAI Member, and elected member to the Board of Directors of the Medical Image Computing and Computer Assisted Interventions (MICCAI) Society (2014-2018). Prof Frangi serves in the Scientific Advisory Board of the European Institute for Biomedical Imaging Research (EIBIR) and as Chair of the Fellows Committee of the IEEE EMBS (2017).

Under his leadership, CISTIB develops [GIMIAS \(Graphical Interface for Medical Image Analysis and Simulation\)](#), an open-source platform for rapidly developing pre-commercial software prototypes in the areas of image computing and image-based computational physiology modelling, and [MULTI-X \(Health Data Analytics and Modelling As a Service Platform\)](#), a cloud-based platform for computational phenomics, *in silico* medicine, and *in silico* clinical trials. The research and development conducted in his research group led to two spin-off companies (Clintelis SA 2009 and GalgoMedical SA 2013).

Work Experience

University of Leeds

DIAMOND JUBILEE CHAIR IN COMPUTATIONAL MEDICINE

- Professor, [School of Computing, Faculty of Engineering](#)
- Professor, [Leeds Institute of Cardiovascular and Metabolic Medicine, Faculty of Medicine and Health](#)
- Director, [CISTIB Centre for Computational Imaging & Simulation Technologies in Biomedicine](#)

Leeds, UK

Aug 2018 - today

Beijing Institute of Technology

ACADEMIC MASTER

- Academic Master, Program 111 for Introducing Talents of Discipline in Medical Optics and Medical Imaging

Beijing, CN

Feb 2018 - today

Chinese Academy of Science

PRESIDENTIAL INTERNATIONAL FELLOW

- Cixi Institute of Biengineering

Ningbo, CN

Feb 2019 - Apr 2020

Zhejiang University of Technology

HONORARY PROFESSOR

- Institute of Computer Vision, College of Computer Science and Technology

Hangzhou, CN

Sep 2018 - Aug 2021

University of Sheffield

PROFESSOR ON BIOMEDICAL IMAGE COMPUTING

- Professor, [Electronic and Electrical Engineering Department](#)
- Director, [CISTIB Centre for Computational Imaging & Simulation Technologies in Biomedicine](#)
- Academic Director, [MSc Bioengineering: Imaging & Sensing](#)

Sheffield, UK

Oct 2011 - Jul 2018

Universitat Pompeu Fabra

ASSOCIATE PROFESSOR

- Associate Professor, [Information & Communications Technologies Department](#), 2007-2012
- Director, [CISTIB Centre for Computational Imaging & Simulation Technologies in Biomedicine](#), 2004-2011
- Dean (by Election), [Escuela Superior Politécnica](#), 2008-2011
- Dean (Acting), [Escuela Superior Politécnica](#), 2008-2008. Designated by the Rector.
- Dean of the Studies of Telecommunications Engineering, [Escuela Superior Politécnica](#), 2007-2008. Designated by the Rector.
- Ramón y Cajal Research Fellow, 2004-2007

Barcelona, Spain

Aug 2004 - Sep 2011

Institucio Catalana de Recerca i Estudis Avançats

ICREA-ACADEMIA RESEARCHER

- Selected by the ICREA-Academia Program to carry out intensive research with very reduced teaching.

Barcelona, Spain

Jan 2009 - Sep 2012

University of Zaragoza

RAMÓN Y CAJAL RESEARCH FELLOW

- Ramón y Cajal Research Fellow, [Electronic and Communications Department](#), Oct 2003 – Sep 2004
- Group Leader, [Computer Vision Lab](#), [Electronic and Communications Department](#), Sep 2001 – Aug 2004
- Assistant Professor, [Electronic and Communications Department](#), Sep 2001 to Sep 2003
- Post-doctoral researcher, [Electronic and Communications Department](#), May 2001 to Sep 2001

Zaragoza, Spain

May 2001 - Aug 2004

Imperial College London

VISITING GRADUATE SCHOLAR

- Visiting PhD Student in the groups of Prof D Rueckert and Prof Dave Hawkes.

London, UK

Jul 2000, Sep - Dec 2000

Education & Habilitations

Spanish Ministry of Education and Sciences

FULL PROFESSOR HABILITATION

- National Habilitation in Signal Theory and Communications

Madrid, Spain

2010

Spanish Ministry of Education and Sciences

ASSOCIATE PROFESSOR HABILITATION

- National Habilitation in Signal Theory and Communications

Madrid, Spain

2005

Utrecht University

PHD MEDICINE

- PhD in Radiology and Imaging Sciences, [Utrecht University Medical Center](#), 1997-2001
- PhD Thesis on *Three-dimensional model-based analysis of vascular and cardiac images*

Utrecht, The Netherlands

2001

Technical University of Catalonia

BSc/MSc TELECOMMUNICATIONS ENGINEERING

- BSc/MSc in Electronics Speciality with Bioengineering, 1992-1996
- MSc Thesis on *Quantification and Noise Modelling in Electrical Impedance Tomography*

Barcelona, Spain

1996

Scholarships & Fellowships

2004-2007	Ramón y Cajal Research Fellowship , Universitat Pompeu Fabra; funded by Spanish Ministry of Science and Technology.	Barcelona, Spain
2003-2004	Ramón y Cajal Research Fellowship , Universidad de Zaragoza; funded by Spanish Ministry of Science and Technology.	Zaragoza, Spain
2000	Innovatiegericht Onderzoek Programma (IOP) Visiting Scholar , Department of Computing, Imperial College London; funded by the Dutch Ministry of Economic Affairs.	London, UK
1997-2001	Predocctoral Scholarship (Assistant in Opleiding) , Image Sciences Institute, Department of Radiology and Nuclear Medicine, University Medical Center, Utrecht University; funded by Innovatiegericht Onderzoeks Program (IOP). Dutch Ministry of Economic Affairs.	Utrecht, The Netherlands
1997	Predocctoral Scholarship for Training of Future Scientists , Department of Electronic Engineering, Technical University of Catalonia; funded by the Commission for Universities and Research, Government of Catalonia.	Barcelona, Spain
1996-1997	Undergraduate Researcher , Department of Electronic Engineering, Technical University of Catalonia; funded by Spanish Ministry of Education and Culture.	Barcelona, Spain
1993-1996	Undergraduate Studies Scholarship , Technical University of Catalonia; funded by Spanish Ministry of Science and Education.	Barcelona, Spain

Languages

Spanish	excellent level written, spoken, reading and understanding – mother tongue
German	can read and understand – Zertifikat Deutsch als Fremdsprache (ZdaF), Goethe Institut, 1990
Catalan	can read and speak fluently, write basic – lived in Catalonia 10+ years, 1992
English	excellent level written, spoken, reading and understanding – Cambridge First Certificate, 1994
English	excellent level written, spoken, reading and understanding – Test of English as Foreign Language, 1996
Dutch	basic reading, speaking, understanding, lived in NL ca. 4 years – A1 and A2 levels, Boswell Instituut, 1997

Honors & Awards

INTERNATIONAL

2014	IEEE Fellow, IEEE Engineering in Medicine and Biology Society , “for contributions to medical image analysis and image-based computational physiology”. The IEEE Grade of Fellow is conferred by the IEEE Board of Directors upon a person with an outstanding record of accomplishments in any of the IEEE fields of interest. The total number selected in any one year cannot exceed one-tenth of one- percent of the total voting membership. IEEE Fellow is the highest grade of membership and is recognized by the technical community as a prestigious honour and an important career achievement.	New York, USA
2013	EAMBES Fellow, European Alliance for Medical and Biological Engineering & Science , the division of EAMBES Fellows is formed by individuals who have distinguished themselves by identifiable contributions or accomplishments in Medical and Biological Engineering and Science.	Brussels, BE
2006	Early Career Award, IEEE Engineering in Medicine and Biology Society , “for outstanding contributions to medical image computing, especially, cardiovascular and cerebrovascular image analysis using model- and registration-based methods”. The award is presented annually to an individual who has made significant contributions technologically or theoretically to the field of Biomedical Engineering within ten years of completion of his or her highest degree. These contributions must represent meritorious achievement, exemplary technical contribution, or educational contribution to the field as evidenced by innovative research, design, product development, patents or publications.	New York, USA

DOMESTIC

2011	Universitat Pompeu Fabra , University Medal “for the Service as Dean of the Escuela Politècnica Superior”	Barcelona, Spain
2010	Universitat Pompeu Fabra , Social Council Prize Teaching Initiative Prize to the Escuela Politècnica Superior. “For the development of a mentorship program within the EnginyCat initiative to attract and retain engineering vocations”. This prize was awarded to the Escuela Politècnica Superior of UPF whose Dean was Prof Frangi and was given by the maximum board of the University whose responsibility is to secure and oversee the social implication of the University and its community. The prize was awarded in 2010 <i>ex-aequo</i> with Verónica Moreno, Davinia Hernández and Vanessa Daza, members of the same leadership team.	Barcelona, Spain

2009	Institució Catalana de Recerca i Estudis Avançats , ICREA-Academia Prize. ICREA-Academia is a 5-year prize comprising a grant of 250k€ half of which is a personal salary complement and the remainder is intended for UPF to cover for a substantial teaching reduction during the 5-year period to focus and consolidate the own research program. This prize was awarded in 2008 to 40 outstanding and full-time tenured academics from all disciplines of sciences who develop their activity.	Barcelona, Spain
2008	Universitat Pompeu Fabra , Program of Research Intensification (Programa I3). UPF awarded me the first of three positions among the tenured faculty of the University by which I could have a 100% reduction of my teaching load during a first year and up to 66% reduction during the second and third years. The Program I3 is meant to award and stimulate outstanding research dedication.	Barcelona, Spain
2008	Universitat Pompeu Fabra , Social Council Prize Knowledge Transfer Prize in the areas of Communication and Information Technologies. “For performing applied research in the ICT domain, in computational analysis and modelling from biomedical images, with a demonstrated practical value through relevant international projects, including industrial involvement and applicability to the improvement in disease diagnosis and their treatment”. This prize was awarded by the maximum board of the University whose responsibility is to secure and oversee the social engagement of the University and its community.	Barcelona, Spain
2008	Universitat Pompeu Fabra , Social Council Prize Teaching Initiative Prize to the Escuela Politécnica Superior. “For the Introduction to the University Course, introducing first-year students to the structure, organization and services of the School and the University; to the working methodology, to study techniques and problem-solving strategies and to their professional prospects”. This prize was awarded to the Escuela Politécnica Superior of UPF whose Dean was Prof Frangi and was given by the maximum board of the University whose responsibility is to secure and oversee the social implication of the University and its community. The prize was awarded in 2008 ex-aequo with the Escuela de Ciencias de la Salud y de la Vida.	Barcelona, Spain
2004	Official College of Telecommunications Engineers , ADESLAS Prize on New Technologies in Communications applied to Health and Medicine	Madrid, Spain
2002	Royal Academy of Medicine Prize , for work on endothelial function	Zaragoza, Spain
2002	Official College of Telecommunications Engineers , ADESLAS Prize on New Technologies in Communications applied to Health and Medicine	Madrid, Spain

Professional Societies

MEMBERSHIP

2014-	IEEE Fellow , Institute of Electrical and Electronic Engineers.	Piscataway, NJ, USA
2015-	EAMBES Fellow , European Alliance of Medical and Biological Engineering and Science .	Brussels, Belgium
1996-	SPIE Member , Society of Photographic Instrumentation Engineers .	Bellingham, WA, USA
1998-	MICCAI Member , Medical Image Computing and Computer Assisted Interventions .	London, Canada
2011-	SIAM Member , Society for Industrial and Applied Mathematics.	Philadelphia, PA, USA
2011-19	EIBIR Member , European Institute for Biomedical Imaging Research.	Vienna, Austria

ROLES

2014-18	Elected Member , Board of Directors of the MICCAI Society.	London, Canada
2018-19	Ex Officio Member , Board of Directors of the MICCAI Society.	London, Canada
2013—	Elected Member , Scientific Advisory Board of EIBIR.	Vienna, USA
2017-18	Society Fellow Electing Committee Chair , IEEE Engineering in Medicine and Biology Society.	Piscataway, NJ
2018	Ad Hoc Committee on S/TC-FEC Best Practices , IEEE Fellow Committee.	Piscataway, NJ

Editorial Roles

EDITORIAL LEADERSHIP

2017-	Editorial Board Chair , MICCAI-Elsevier Book Series	Elsevier
2018-	Associate Editor-in-Chief , Progress in Bioengineering	Institute of Physics

EDITORIAL BOARDS

2003-	Associate Editor , IEEE Trans on Medical Imaging	IEEE
2006-	Associate Editor , Medical Image Analysis Journal	Elsevier

2007- **Associate Editor**, International Journal for Computational Vision and Biomechanics
2014- **Associate Editor**, Computer Vision and Image Understanding
2012-18 **Associate Editor**, SIAM Journal of Imaging Sciences

Francis & Taylor
Elsevier
SIAM

Advisory, Leadership & Organisation

ACADEMIC ROLES

2018-	Director , CISTIB Centre for Computational Imaging & Simulation Technologies in Biomedicine, www.cistib.org	University of Leeds
2011-18	Director , CISTIB Centre for Computational Imaging & Simulation Technologies in Biomedicine, www.cistib.org	University of Sheffield
2017-18	Academic Coordinator, Creator , MSc Bioengineering: Imaging & Sensing, www.sheffield.ac.uk/eee/pgt/bioengineering	University of Sheffield
2018-21	REF2021 Mock Panel Member for EEE , Departmental REF2021 Mock Panel for EEE, www.ref.ac.uk	University of Sheffield
2012-15	External Examiner , MSc in Physics & Engineering in Medicine, Department of Bioengineering and Medical Physics	University College London
2012-15	Member (per nomination) , Senate	University of Sheffield
2011-14	External Examiner , MRes on Medical Image Computing (MIC) stream, Department of Bioengineering and Medical Physics	University College London
2012-15	External Examiner , MRes on Biomedical Engineering and Medical Imaging (BEMI) stream, Department of Bioengineering and Medical Physics	University College London
2011-14	Member , Policy Committee, Department of Mechanical Engineering	University of Sheffield
2011-14	Mechanical Engineering Representative , Study Board of the Biomedical Engineering BEng/MEng Degrees	University of Sheffield
2009-11	Dean (per election) , Escuela Superior Politécnica, www.upf.edu/esup	Universitat Pompeu Fabra
2004-11	Director , CISTIB Centre for Computational Imaging & Simulation Technologies in Biomedicine, www.cistib.org	Universitat Pompeu Fabra
2007-11	Member (as Dean of the Escuela Superior Politécnica) , Government Council	Universitat Pompeu Fabra
2008-09	Dean (per Rector designation) , Escuela Superior Politécnica, www.upf.edu/esup	Universitat Pompeu Fabra
2007-08	Director of the Studies of Telecommunications (per Rector designation) , Escuela Superior Politécnica, www.upf.edu/esup	Universitat Pompeu Fabra
2007-10	Chair of the Committee , Research Committee, Department of Information & Communications Technology	Universitat Pompeu Fabra
2007-11	Member , Teaching Committee, Department of Information & Communications Technology	Universitat Pompeu Fabra
2007-11	Member , Faculty Selection Committee, Department of Information & Communications Technology	Universitat Pompeu Fabra
2007-10	Representative for the Department of Information & Communications Technology , Space and Infrastructures Committee for the Campus Ca l'Aranyo	Universitat Pompeu Fabra
2005-07	Representative for the Department of Information & Communications Technology , University Convalidation Committee	Universitat Pompeu Fabra

ADVISORY ROLES

2018-	Scientific Advisory Board Member , Cixi Institute of Biomedical Engineering, Ningbo Institute of Industrial Technology (CNITECH)	Chinese Academy of Science
2014-18	Board Member (per general election) , Board of Directors, Medical Image Computing and Computer Assisted Interventions (MICCAI)	MICCAI Society
2013-15	Member (per nomination) , Senate Equality & Diversity Board	University of Sheffield

ORGANISATIONAL ROLES

16-20/09/2018	General Chair , Medical Image Computing and Computer Assisted Interventions (MICCAI)	Granada, Spain
2006-present	Program Committee Member , SPIE Medical Imaging, Image Processing Conference	various, USA
5-6/09/2016	Track Chair , Track on Biomedical Imaging & Image Analysis, MEIbioeng16	Oxford, UK
17-21/10/2016	Workshop Chair , Satellite Workshop SASHIMI'16 Simulation and Modeling in Medical Imaging, Satellite Workshop MICCAI 2016	Athens, Greece
5-9/10/2015	Program Co-Chair , Medical Image Computing and Computer Assisted Interventions (MICCAI 2015)	Munich, Germany

22-26/09/2013	Program Committee Member , Medical Image Computing and Computer Assisted Interventions (MICCAI 2013)	Nagoya, Japan
11-13/09/2013	Scientific Committee Member , International Conference on Computational Bioengineering (ICCB13)	Leuven, Belgium
1-5/10/2012	Program Committee Member , Medical Image Computing and Computer Assisted Interventions (MICCAI 2012)	Nice, France
2-5/05/2012	General Chair , Intl Symposium on Biomedical Imaging: From Nano to Macro (ISBI 2012)	Barcelona, Spain
13-14/06/2010	Program Committee Member , IEEE Workshop on Mathematical Methods in Biomedical Image Analysis (MMBIA 2010)	San Francisco, CA, USA
31/08-04/09/2010	Track Co-chair , IEEE Engineering in Medicine and Biology Conference (EMBC 2010)	Buenos Aires, Argentina
20-24/09/2010	Tutorials Co-Chair , Medical Image Computing and Computer Assisted Interventions (MICCAI 2010)	Beijing, China
16-18/09/2009	Scientific Committee Member , International Conference on Computational Bioengineering (ICCB09)	Bertinoro, Italy
12-15/04/2007	International Liaison Chair , Intl Symposium on Biomedical Imaging: From Nano to Macro (ISBI 2007)	Boston, USA
27-28/06/2008	Program Committee Member , IEEE Workshop on Mathematical Methods in Biomedical Image Analysis (MMBIA 2008)	Anchorage, USA
7-8/07/2008	Program Committee Member , Intl Symposium on Computational Models for Biomedical Simulation (ISBMS 2008)	London, UK
29/10-2/11/2007	Program Committee Member , Medical Image Computing and Computer Assisted Interventions (MICCAI 2007)	Brisbane, Australia
14-15/10/2007	Program Committee Member , IEEE Workshop on Mathematical Methods in Biomedical Image Analysis (MMBIA 2007)	Rio de Janeiro, Brasil
1-6/10/2006	Workshop Organiser , "From Statistical At-lases to Personalized Models: Understanding Complex Diseases in Populations and Individuals", Satellite Workshop Medical Image Computing and Computer Assisted Interventions (MICCAI 2006)	Copenhagen, Denmark
6-9/04/2006	Special Session Co-chair , "Towards vertical integration of biomedical data", Intl Symposium on Biomedical Imaging: From Nano to Macro (ISBI 2006)	Arlington, USA
6-9/04/2006	Publications Chair , Intl Symposium on Biomedical Imaging: From Nano to Macro (ISBI 2006)	Arlington, USA
2-4/06/2005	General Chair , Third Intl Conference on Functional Imaging and Modeling of the Heart (FIMH05)	Barcelona, Spain
14-16/09/2005	Scientific Committee Member , International Conference on Computational Bioengineering (ICCB05)	Lisbon, Portugal
26-29/09/2004	Program Committee Member , Medical Image Computing and Computer Assisted Interventions (MICCAI 2004)	St Malo, France
15-15/09/2004	Scientific Committee Member , Fourth Intl Symposium on Image and Signal Processing and Analysis	Zagreb, Croatia
18-20/09/2003	Co-chair , Special Session: Cardio-Vascular Image Analysis and Modeling, as part of Third Intl Symposium on Image and Signal Processing and Analysis	Rome, Italy
5-6/06/2003	Scientific Committee Member , Second International Conference on Functional Imaging and Modelling of the Heart	Lyon, France
8-9/07/2002	Co-chair , First Preparatory Meeting, Beating Heart Excellence Network (BHEN)	Zaragoza, Spain

Funding

ONGOING GRANTS

InSilc: In-silico trials for drug-eluting bioabsorbable vascular stents (BVS): design, development and evaluation (H2020-SC1-PM-16-2017-777119)

TECHNICAL COORDINATOR, PI AT THE UNIVERSITY OF SHEFFIELD

- Consortium Leader: Dimitris Fotiadis, Foundation for Research and Technology Hellas, Greece
- Partners: University of Sheffield (UK), Erasmus University Medical Centre (NL), Politecnico de Milano (IT), CNRS (IT), Mediolanum Cardio Research SR (IT), FEOPS NV (NL), National University of Ireland (IE), BioIRC doo (RS), Panepistimio Ioanninon (EL), Concord Inc (US), Boston Scientific Ltd (IE)
- Total Funding: €5.8m
- Share of Funding: €658k

[Research & Innovation Action,](#)

[European Commission](#)

[Nov 2017 - Oct 2020](#)

BackUP: Personalised Prognostic Models to Improve Well-being and Return to Work After Neck and Low Back Pain (H2020-SC1-PM-17-2017-777090)

TECHNICAL COORDINATOR, PI AT THE UNIVERSITY OF SHEFFIELD

[Research & Innovation Action,](#)

[European Commission](#)

[Jan 2018 - Dec 2020](#)

- Consortium Leader: Helios de Rosario, Instituto de Biomechanica de Valencia, Spain
- Partners: University of Sheffield (UK), GMV Soluciones Globales Internet SAU (ES), Universita degli Studi di Parma (IT), Empirica Gessellschaft MbH (DE), Norges Teknisk Naturvitenskapelige Universitet (NO), Universita degli Studi di Padova (IT), Roessingh Research and Development BV (NL), Genos Doo (HR), Karolinska Institutet (SE), Centralny Instytut Ochrony Pracy (PL), University of Keele (UK), MAZ Mutua de Seguros (ES)
- Total Funding: €5.1m
- Share of Funding: €736k

BQ-MINDED: Breakthroughs in Quantitative Magnetic resonance Imaging for improved Detection of brain Diseases (H2020-MSCA-ITN-2017-764513)

*Marie Curie-Slowdowska Program,
European Commission
Jan 2018 - Dec 2021*

CO-INVESTIGATOR, PI AT THE UNIVERSITY OF SHEFFIELD

- Consortium Leader: Jan Sijbers, Antwerp University, Belgium
- Partners:
- Total Funding: €3.7m
- Share of Funding: €550k

VERDICT: Development and Evaluation of a Functional Prototype for the Automated Identification of Osteoporotic Vertebral Fractures (ARUK-21498)

*Proof of Concept, Arthritis Research
UK, UK
Apr 2017 - Mar 2019*

PRINCIPAL INVESTIGATOR

- PI: Alejandro F Frangi
- Collaborators: Mellanby Centre for Bone Research, University of Sheffield
- Total Funding: €99k

MedIAN: EPSRC-NIHR HTC Partnership Award 'Plus': Medical Image Analysis Network (EP/N026993/1)

*Engineering and Physical Sciences
Research Council (EPSRC), UK
Jun 2016 - Jun 2019*

CO-INVESTIGATOR, PI AT THE UNIVERSITY OF SHEFFIELD

- PI: Alison Noble, University of Oxford
- Other Partners: University of Sheffield, Imperial College London, King's College London, University College London
- Funding £507,583
- Share of Funding: €55k

STORMING Simultaneous de-noising and non-rigid registration for medical imaging (IE141258)

*International Exchanges Scheme,
The Royal Society, UK
Apr 2015 - Oct 2018*

PRINCIPAL INVESTIGATOR

- UK-China Exchange Program
- Funding £12k

OCEAN: One-stop-shop microstructure-sensitive perfusion/diffusion MRI: Application to vascular cognitive impairment (EP/M006328/1)

*Engineering and Physical Sciences
Research Council (EPSRC), UK
Apr 2015 - Apr 2018*

PRINCIPAL INVESTIGATOR

- Other Partners: University of Manchester, University of Cardiff
- Funding £1.3m

COMPLETED GRANTS

Only listed here grants and contracts since 2006.

VPH-DARE@IT: VPH Dementia Research Enabled by IT (FP7-ICT-2011-9-601055)

*Integrated Project, European
Commission
Apr 2013 - Sep 2017*

PRINCIPAL INVESTIGATOR

- Partners: The Chancellor, Masters and Scholars of the University of Oxford (UK), Teknologian Tutkimuskeskus VTT (FI), ESI Group S.A. (FR), Advanced Simulation and Design GmbH (DE), Empirica Gesellschaft Fuer Kommunikations- Und Technologie Forschung MbH (DE), Universitetet I Oslo (NO), Erasmus Universitair Medisch Centrum Rotterdam (NL), Klinik Hirslanden AG (CH), Philips Medical Systems Nederland BV (NL), Eidgenossische Technische Hochschule Zurich (CH), Kings College London (UK), Philips Technologie GmbH (DE), Sheffield Teaching Hospitals NHS Foundation Trust (UK), University College London (UK), Itä-Suomen Yliopisto (FI), Universiteit Maastricht (NL), Tomorrow Options Microelectronics S.A. (P), Imperial College of Science, Technology and Medicine (UK), EIBIR Gemeinnuetzige GmbH zur Foerderung der Erforschung der Biomedizinischen Bildgebung (A).
- Total Funding: €13.3m
- Share of Funding: €3.5m

MindNet EPSRC-NIHR HTC Partnership Award: Partnership with the MindTech HTC (EP/M000346/1)

*Engineering and Physical Sciences
Research Council (EPSRC), UK
Apr 2014 - May 2017*

COLLABORATOR

- PI: Chris Taylor, University of Manchester
- Other Partners: University of Nottingham, University of Sheffield, University of Lancaster and University of York
- Funding £151k

MedIAN EPSRC-NIHR HTC Partnership Award: Medical Image Analysis Network (EP/M000133/1)

*Engineering and Physical Sciences
Research Council (EPSRC), UK
Jun 2014 - Jun 2017*

CO-INVESTIGATOR, PI AT THE UNIVERSITY OF SHEFFIELD

- PI: Alison Noble, University of Oxford
- Other Partners: University of Sheffield, Imperial College London, King's College London, University College London
- Funding £151k

MD-Paedigree: Model-Driven European Paediatric Digital Repository (FP7-ICT-2011-9-600932)

Integrated Project, European Commission

CO-INVESTIGATOR

Mar 2013 - Feb 2017

- Partners: Ospedale Pediatrico Bambino Gesù (IT), University College London (UK), Istituto Giannina Gaslini (IT), Johns Hopkins University (USA), Katholieke Universiteit Leuven (BE), Vereniging Voor Christelijk Hoger Onderwijs Wetenschappelijk Onderzoek en Patientenzorg (NL), Universitair Medisch Centrum Utrecht (NL), Siemens AG (DE), BGI Europe Institute Denmark (DK), Fraunhofer-Gesellschaft zur Foerderung der Angewandten Forschung E.V. (DE), Institut National de Recherche en Informatique et en Automatique (FR), Motek Medical B.V. (NL), Siemens Corporation (USA), Technische Universiteit Delft (NL), Università degli Studi di Roma La Sapienza (IT), the University of Sheffield (UK), Maat France (FR), Haute Ecole Spécialisée de Suisse Occidentale (CH), Universitatea Transilvania din Brasov (RO), National and Kapodistrian University of Athens (GR), Empirica Gesellschaft fuer Kommunikations- und Technologieforschung MbH (DE), Lynkeus (IT)
- Total Funding: €11.9m
- Share of Funding: €940k

BALMORAL: Variational Basis Learning for Statistical Motion Atlases: Application to Quantitative Dynamic Cardiac Imaging (FP7-PEOPLE-2013-IIF-625745)

Marie Curie-Slowdoska International Incoming Fellowships (IIF), European Commission

PRINCIPAL INVESTIGATOR, HOST, MENTOR

Jul 2014 - Jun 2016

- Fellow: Dr Ali Gooya – Currently Lecturer at the University of Sheffield
- Total Funding: €309k

VPH-Share: Virtual Physiological Human - Structured Human Physiological Research Environment (FP7-ICT-2010-6-269978)

Integrated Project, European Commission

CO-INVESTIGATOR, PRINCIPAL INVESTIGATOR AT UNIVERSITAT POMPEU FABRA

Mar 2011 - Feb 2015

- PI: Rod Hose, University of Sheffield
- Partners: University of Sheffield (UK) Akademia Gorniczko-Hutnicza (PL), Sheffield Teaching Hospitals NHS Foundation Trust (UK), ATOS ORIGIN (ES), The Chancellor, Masters and Scholars of the University of Oxford (UK), Universitat Pompeu Fabra (UK), Empirica Gesellschaft fuer Kommunikations und Technologieforschung (DE), SCS (IT), NHS Information Centre (UK), Institut National De Recherche en Informatique et en Automatique (FR), Istituto Ortopedico Rizzoli (IT), The Open University (UK), Philips Electronics Nederland (NL), Technische Universiteit Eindhoven (NL), University of Auckland (NZ), Universiteit van Amsterdam (NL), University College London (UK), Universitaet Wien (AU), Agencia D'Avaluacio de Tecnologia i Recerca Mediques (ES), IBM Israel – Science and Technology Ltd (IL) and Fundació Clínica per a la Recerca Biomèdica (ES)
- Total Funding: €10.7m
- Share of Funding: €1.1m

MySpine: Functional prognosis simulation of patient-specific spinal treatment for clinical use (FP7-ICT-2009-6-269909)

STREP Project, European Commission

CO-INVESTIGATOR, PRINCIPAL INVESTIGATOR AT UNIVERSITAT POMPEU FABRA

Mar 2011 - Feb 2014

- PI: Damien Lacroix, Institute for Bioengineering of Catalonia
- Partners: Institute for Bioengineering of Catalonia (ES), Eindhoven University of Technology (NL), Vienna University of Technology (AU), University of Technology of Compiègne (FR), Universitat Pompeu Fabra (ES), CETIR Grup Mèdic (ES) and the National Center for Spinal Disorders (Buda Health Center) (HU)
- Total Funding: €3.9m
- Share of Funding: €512k

eHealth Innovation: Scaling up eHealth facilitated personalised health services: Developing a European roadmap for sustained eHealth Innovation (CIP-ICT-PSP-2009-4)

Thematic Network, European Commission

CO-INVESTIGATOR, PRINCIPAL INVESTIGATOR AT UNIVERSITAT POMPEU FABRA

Apr 2011 - Oct 2013

- PI: Dipak Kalra, University College London
- Partners: University College London Consultants (UK), empirica Gesellschaft fuer Kommunikations- und Technologieforschung (DE), Aarhus University (DK), European Institute for Health Records (BE), Continua Health Alliance (BE), University of Manchester (UK), National Institute of Public Health, Rep. of Slovenia (SI), French Ministry of Health (FR), Dutch Association for primary & integrated healthcare (NK), County Council of Uppsala (SE) Royal College of Physicians (UK), European Connected Health Campus (UK), University of Sheffield (UK), AOK Rheinland/Hamburg (DE), Government of Catalonia HTA Agency (ES), The Danish eHealth Portal (DK), Czech National eHealth Forum (CZ), European Health Telematics Association (BE), Europ. Coord. Committee of the Radiological, Electromedical and Healthcare IT Industry (BE), Universitat Pompeu Fabra (ES), Health Consumer Powerhouse (BE), University Hospitals of Geneva (CH), and F. Hoffmann-La Roche (CH)
- Total Funding: €497k
- Share of Funding: €20k

VERTEX: VERtebral Extensive diagnosis based on X-ray images (RD10-1-0034)

Nuclis cooperatius, ACCIO, Spain

PRINCIPAL INVESTIGATOR

Jan 2011 - May 2013

- Partners: CETIR Centre Mèdic S.A (ES), UDIAT - Centre Diagnòstic (ES), Innopro Global Services (ES), Universitat Pompeu Fabra (ES)
- Total Funding: €139k

CardioSuite: Evaluación de la función cardíaca y aplicación a la planificación de terapias cardiovasculares (2010-VALOR-00130)

VALOR, Talència, Spain

PRINCIPAL INVESTIGATOR

Jan 2011 - Dec 2012

- Partners: Universitat Pompeu Fabra (ES), Grupo Hospitalario Quirón (ES)
- Total Funding: €76.1k

EndoTreat: Herramienta para el planeamiento de tratamiento endovascular de aneurismas intracraneales con coils (2010-VALOR-00064)

VALOR, Talència, Spain

PRINCIPAL INVESTIGATOR

Jan 2011 - Dec 2012

- Partners: Universitat Pompeu Fabra (ES), Grupo Hospitalario Quirón (ES)
- Total Funding: €74.1k

cvREMOD: Gestión de remodelado cardiovascular mediante interacción de tecnologías de monitorización ubicua y conceptos del humano fisiológico virtual (CEN-20091044)

Programa CENIT, Centro para el Desarrollo Tecnológico e Industrial (CDTI), Spain

SCIENTIFIC COORDINATOR

Sep 2009 - Dec 2012

- Partners: Consortium of 10 companies and 10 academic institutions
- Total Funding: €24.0m
- Share of Funding: €2.6m

RICORDO: Researching Interoperability using Core Reference Datasets and Ontologies for the Virtual Physiological Human (ICT-2009-248502)

STREP, European Commission

CO-INVESTIGATOR, PRINCIPAL INVESTIGATOR AT UNIVERSITAT POMPEU FABRA

Feb 2009 - Jan 2013

- PI: Bernard de Bono, European Bioinformatics Institute
- Partners: EBI-European Molecular Biology Laboratory (EU), The University of Auckland (NZ), Universitat Pompeu Fabra (ES), University of Washington, Medcar Research Coucil, Danish Technical University (DK), The University of Cambridge (UK) and Herriot-Watt University (UK)
- Total Funding: €1m
- Share of Funding: €155k

MSV: Multiscale Spatiotemporal Visualisation: development of an open-source software library for the interactive visualisation of multiscale biomedical data (ICT-2009-248032)

STREP, European Commission

CO-INVESTIGATOR, PRINCIPAL INVESTIGATOR AT UNIVERSITAT POMPEU FABRA

Feb 2009 - Jan 2013

- PI: Assandro Chiarini, B3C Srl
- Partners: B3C Srl. (IT), University of Bedfordshire (UK), Universitat Pompeu Fabra (ES), The University of Auckland (NZ), Kitware Inc (USA)
- Total Funding: €1m
- Share of Funding: €200k

STIMATH: Análisis de imágenes de alto rendimiento mediante modelos estadísticos de forma, apariencia y deformación (TIN2009-14536-C02-01)

Plan Nacional de I+D+i, Ministerio de Innovación y Ciencia de España, Spain

PRINCIPAL INVESTIGATOR

Jan 2010 - Dec 2012

- Partners: B3C Srl. (IT), University of Bedfordshire (UK), Universitat Pompeu Fabra (ES), The University of Auckland (NZ), Kitware Inc (USA)
- Total Funding: €288k

euHeart: Personalised & Integrated Cardiac Care: Patient-specific Cardiovascular Modelling and Simulation for In Silico Disease Understanding & Management and for Medical Device Evaluation & Optimization (IST-2007-224495)

Integrated Project, European Commission

CO-INVESTIGATOR, PRINCIPAL INVESTIGATOR AT UNIVERSITAT POMPEU FABRA

Jun 2008 - Jun 2012

- PI: Juergen Weese, Philips Research Hamburg
- Partners: 17 European organizations led by Philips Research
- Total Funding: €13.9m
- Share of Funding: €1.64k

VPH-NOE: Virtual Physiological Human (IST-2007-223920)

Network of Excellence, European Commission

CO-INVESTIGATOR, PRINCIPAL INVESTIGATOR AT UNIVERSITAT POMPEU FABRA

Jun 2008 - Jun 2012

- PI: Peter Coveney, University College London
- Partners: 12 European organizations led by University College London
- Total Funding: €8m
- Share of Funding: €900k

Computational Analysis of Cerebral Aneurysm Evolution (R01 NS059063-01)

National Institute of Neurological Disorders and Stroke (NINDS), USA

EXTERNAL CONSULTANT

Jun 2007 - Jun 2011

- PI: Juan R Cebra, George Mason University, USA

CIBER-BBN: National Center for Networked Biomedical Research in Bioengineering, Biomaterials and Nanomedicine (CB06/01/0061)

Instituto de Salud Carlos III, Spain

CO-INVESTIGATOR, DIRECTOR OF THE UNIVERSITAT POMPEU FABRA NODE

Jan 2006 - Dec 2012

- Network of of the best 36 groups in bioengineering, biomaterials and nanomedicine
- Funding: core funding of €110k per annum during the period

CDTEAM: Consortium for the Development of Advanced Medical Imaging Technologies

*Programa CENIT, Centro para el
Desarrollo Tecnológico e Industrial
(CDTI), Spain*

Jan 2006 - Dec 2009

SCIENTIFIC COORDINATOR

- Partners: Consortium of 10 companies and 10 academic institutions
- Total Funding: €15.8m
- Share of Funding: €1.8m

@neurIST: Integrated Biomedical Informatics for the Management of Cerebral Aneurysms (IST-2004-027703)

*Integrated Project, European
Commission*

Jun 2008 - Jun 2012

PRINCIPAL INVESTIGATOR

- PI: Juergen Weese, Philips Research Hamburg
- Partners: 27 European organizations and 4 non-European participants
- Total Funding: €12.6m
- Share of Funding: €1.9k

AHAWALL: Study of the Interaction of Wall Shear Stress and Cerebral Aneurysm Wall Compliance

American Heart Association, USA

Aug 2006 - Jul 2008

EXTERNAL CONSULTANT

- PI: Juan R Cebal, George Mason University, USA

INDUSTRY-SPONSORED RESEARCH & TECHNOLOGY TRANSFER

Affine registration of 3D medical images based on mutual information normalized for radio-therapeutic applications

*Técnicas Radiofísicas Ltd.,
Zaragoza, Spain*

Apr 2002 - Oct 2002

PRINCIPAL CONTRACTOR

- Funding: € 24k

Cooperation agreement on grid computing applications in healthcare

*GridSystems SA, Palma de Mallorca,
Spain*

Apr 2003 - Mar 2011

PRINCIPAL CONTRACTOR

- Funding: 128 free licenses

Cooperation agreement in R+D on techniques for 3D facial biometry

VisionRT Ltd., London, UK

Apr 2003 - Mar 2005

PRINCIPAL CONTRACTOR

- Funding: € 45k

Excellence Research Lab in Advanced Computing and Visualization

*Silicon Graphics SAU, Barcelona,
Spain*

Apr 2006 - Mar 2011

PRINCIPAL CONTRACTOR

- Funding: Agreement declaring the Computational Imaging Lab an official Excellence Lab by SGI

Excellence Research Lab in Advanced Medical Image Computing

Philips Ibérica SAU, Madrid, Spain

Apr 2006 - Mar 2012

PRINCIPAL CONTRACTOR

- Funding: Agreement declaring the Computational Imaging Lab an official Excellence Lab by Philips Ibérica.

TEAM: TEchnologies in Aneurysm Management

*Philips Medical Systems BV, The
Netherlands*

Feb 2007 - Feb 2011

PRINCIPAL CONTRACTOR

- Funding: € 500k

SERESHA: SEgmentation, dynamic REconstruction and SHape analysis of cerebral aneurysms

*Philips Medical Systems BV, The
Netherlands*

Nov 2006 - Feb 2011

PRINCIPAL CONTRACTOR

- Funding: € 50k

In silico modeling and simulation of a novel flow diverter

Penumbra Inc. California, USA

Feb 2009 - May 2009

PRINCIPAL CONTRACTOR

- Funding: € 10k

Scientific Output

JOURNAL PAPERS

- J212. Coelho S, Pozo JM, Jespersen SN, Jones DK, Frangi AF, [Double Diffusion Encoding for unbiased Parameter Estimation of Biophysical Models in Diffusion MRI](#). Magn Res Med. In press.
- J211. Pozo JM, Costantini M, Coelho S, Mozumder M, Highley JR, Ince PG, Frangi AF, [Is the Watson distribution a good model for axonal orientation in white matter?](#) Under review.
- J210. Venneri A, Mitolo M, Beltrachini L, Varma S, Della Pietra C, Jahn-Carta C, Frangi AF, De Marco M, [Beyond Episodic Memory: Semantic Processing as Independent predictor of Hippocampal/Perirhinal Volume in Aging and Mild Cognitive Impairment due to Alzheimer's Disease](#). Neuropsychol. In press.
- J209. Zhang L, Gooya A, Pereanez M, Dong B, Piechnik SK, Neubauer S, Petersen SE, Frangi AF, [Automatic Assessment of Full Left Ventricular Coverage in Cardiac Cine Magnetic Resonance Imaging with Fisher-Discriminative 3D CNN](#). IEEE Trans Biomedical Eng. In press.
- J208. Fathi-Kazerooni A, Nabil M, Zeinali-Zadeh M, Firouznia K, Azmoudeh-Ardalan F, Frangi AF, Davatzikos C, Saligheh-Rad H, [Characterization of Active and Infiltrative Tumorous Subregions from Normal Tissue in Brain Gliomas Using Multi-Parametric MRI](#). J Mag Res Imaging. 48:938–950.
- J207. Fehri H, Gooya A, Lu Y, Meijering EHW, Johnston S, Frangi AF, [Bayesian Polytrees with Learned Deep Features for Multi-Class Cell Segmentation](#). IEEE Trans Image Process. 2019. In press.
- J206. Waller R, Baxter L, Fillingham DJ, Coelho S, Pozo JM, Mozumder M, Frangi AF, Ince PG, Simpson JE, Highley JR, [Iba-1-/CD68+ microglia are a prominent feature of age-associated deep subcortical white matter lesions](#). PLOS One. 2019;14:e0210888.
- J205. Aime S, Alberich A, Almen A, Arthurs O, Barthel H, Clément O, Crean M, de Souza N, Demuth F, Dewey M, Dousset V, Frangi A, Garos C, Golay X, Gordebeke P, Günther M, Hahn H, Hierath M, Hoeschen C, Hunink M, Kauczor H, Krestin G, Krischak K, Langs G, Liu Y, Marti-Bonmati L, Matos C, Mayerhofer-Sebera U, McNulty J, Muylle K, Neeman M, Niessen J, Nikolaou K, Pereira P, Persson A, Pifferi A, Riklund K, Rockall A, Rosendahl K, Sardanelli F, Sourbron S, Speck O, Valentini V, Zolda P, The European Institute for Biomedical Imaging Research (EIBIR), [Strategic research agenda for biomedical imaging](#). Insights into Imaging 2019;10. In press.
- J204. Ravikumar N, Gooya A, Beltrachini L, Frangi AF, Taylor ZA, [Generalised coherent point drift for group-wise multi-dimensional analysis of diffusion brain MRI data](#). Med Image Anal. 2019:47–63.
- J203. Song S, Du C, Liu X, Huang Y, Song H, Jiang Y, Ai D, Frangi AF, Wang Y, Yang J, [Deep Motion Tracking from Multiview Angiographic Image Sequences for Synchronization of Cardiac Phases](#). Phys Med Biol. 2019;64:025018.
- J202. Lassila T, Di Marco LY, Mitolo M, Iaia V, Levedianos G, Venneri A, Frangi AF, [Screening for Cognitive Impairment by Model Assisted Cerebral Blood Flow Estimation](#). IEEE Trans Biomedical Eng. 2018;65:1654–1661.
- J201. Nemat H, Fehri H, Ahmadinejad N, Frangi AF, Gooya A, [Classification of Breast Lesions in Ultrasonography Using Sparse Logistic Regression and Morphology-based Texture Features](#). Med Phys. 2018;45:4112–4124.
- J200. Maier-Hein L, Eisenmann M, Reinke A, Onogur S, Stankovic M, Scholz P, Arbel T, Bogunovic H, Bradley A, Feldmann C, Frangi AF, Full P, van Ginneken B, Hanbury A, Honauer K, Kozubek M, Landman B, März K, Maier O, Maier-Hein K, Menze B, Müller H, Neher P, Niessen WJ, Rajpoot N, Sharp G, Sirinukunwattana K, Speidel S, Stock C, Stoyanov D, Aziz Taha A, van der Sommen F, Wang CW, Weber MA, Zheng G, Jannin P, Kopp-Schneider A, [Why rankings of biomedical image analysis competitions should be interpreted with care?](#) Nat Commun. 2018;9:5217.
- J199. Coelho S, Pozo JM, Costantini M, Mozumder M, Highley JR, Ince PG, Frangi AF, [Local volume fraction distributions of axons, astrocytes, and myelin in deep subcortical white matter](#). Neuroimage 2018;179:275–287.
- J198. Mozumder M, Beltrachini L, Collier Q, Pozo JM, Frangi AF, [Simultaneous magnetic resonance diffusion and pseudo-diffusion tensor imaging](#). Magn Res Med. 2018;79:2367–2378.
- J197. Gooya A, Lekadir K, Castro-Mateos I, Pozo JM, Frangi AF, [Mixture of probabilistic principal component analyzers for shapes from point sets](#). IEEE Trans Pattern Anal Mach Intell. 2018;40:891–904.
- J196. Ngoepe MN, Frangi AF, Byrne JV, Ventikos Y, [Thrombosis in cerebral aneurysms and the computational modelling thereof: A review](#). Front Physiol- Computational Physiology and Medicine. 2018;9:e00306.
- J195. Huang Y, Shao L, Frangi AF, [Cross-Modality Image Synthesis via Weakly-Coupled and Geometry Co-Regularized Joint Dictionary Learning](#). IEEE Trans Med Imaging. 2018;37:815–827.
- J194. Chen X, Pengfei J, Yiping W, Henghui Z, Liao W, Taylor ZA, Frangi AF, [A Surface-based Approach to Determine Key Spatial Parameters of the Acetabulum in a Standardized Pelvic Coordinate](#). Med Eng Phys. 2018;52:22–30.
- J193. Suinesiaputra A, Ablin P, Alba X, Alessandrini M, Allen J, Bai W, Cimen S, Claes P, Cowan BR, D'hooge J, Duchateau N, Ehrhardt J, Frangi AF, Gooya A, Grau V, Lekadir K, Lu A, Mukhopadhyay A, Oksuz I, Parajali N, Pennec X, Pereanez M, Pinto C, Piras P, Rohe MM, Rueckert D, Saring D, Sermesant M, Siddiqi K, Tabassian M, Teresi L, Tsaftaris SA, Wilms M, Young AA, Zhang X, Medrano-Gracia P, [Statistical shape modeling of the left ventricle: myocardial infarct classification challenge](#). IEEE J Biomed Health Inform. 2018;22:503–515.
- J192. Guo L, Vardakis JC, Lassila T, Mitolo M, Ravikumar N, Chou D, Lange M, Sarrami-Foroushani A, Tully BJ, Taylor ZA, Varma S, Venneri A, Frangi AF, Ventikos Y, [Subject-specific multiporoelastic model for exploring the risk factors associated with the early stages of Alzheimer's Disease](#). Interface Focus. 2018;8:e20170019.
- J191. Alba X, Lekadir K, Young AA, Pereañez M, Medrano-Gracia P, Frangi AF, [Automatic Initialization and Quality Control of Large-Scale Cardiac MRI Segmentations](#). Med Image Anal. 2018:129–145.
- J190. Vukicevic A, Çimen S, Jagic N, Jovicic G, Frangi AF, Filipovic N, [Reconstruction and structured meshing of coronary arteries from X-ray angiography](#). Sci Reports. 2018;8:17111ff.
- J189. Kasztelnik M, Coto E, Bubak M, Malawski M, Nowakowski P, Arenas J, Saglimbeni A, Testi D, Frangi AF, [Support for Taverna workflows in the VPH-Share cloud platform](#). Comput Methods Programs Biomed 2017;146:37–46.
- J188. Hua R, Pozo JM, Taylor ZA, Frangi AF, [Multiresolution eXtended Free-Form Deformations \(XFFD\) for non-rigid registration with discontinuous transforms](#). Med Image Anal 2017;36:113–122.
- J187. Parker A, Yang L, Farzi M, Pozo JM, Frangi AF, Wilkinson MJ, [Quantifying Pelvic Periprosthetic Bone Remodeling Using Dual-Energy X-Ray Absorptiometry Region-Free Analysis](#). J Clin Densitom. 2017;20:480–485.
- J186. Geers AJ, Morales HG, Larrabide I, Butakoff C, Bijlenga P, Frangi AF, [Wall shear stress at the initiation site of cerebral aneurysms](#). Biomech Model Mechanobiol 2017;16.
- J185. De Marco M, Vallelunga A, Meneghello F, Varma S, Frangi AF, Venneri A, [ApoE ε4 Allele Related Alterations in Hippocampal Connectivity in Early Alzheimer's Disease Support Memory Performance](#). Curr Alzheimer Res 2017;14:766–77.

- J184. Ravikumar N, Gooya A, Çimen S, Frangi AF, Taylor ZA, [Group-wise similarity registration of point sets using Student's t-mixture model for statistical shape models](#). *Med Image Anal*. 2017;156–176.
- J183. Manap RA, Shao L, Frangi AF, [PATCH-IQ: A patch based learning framework for blind image quality assessment](#). *Inform Sciences*. 2017;420:329–344.
- J182. Farzi M, Morris RM, Penny J, Yang L, Pozo JM, Overgaard S, Frangi AF, Wilkinson JM, [Quantitating the effect of prosthesis design on femoral remodeling using high-resolution region-free densitometric analysis \(DXA-RFA\)](#). *J Orthop Res*. 2017;35:2203–2210.
- J181. De Marco M, Beltrachini L, Biancardi A, Frangi AF, Venneri A, [Machine learning support to individual diagnosis of mild cognitive impairment using multimodal MRI and cognitive assessments](#). *Alzheimer Dis Assoc Disord*. 2017;31:278–286.
- J180. Fu H, Xu Y, Lin S, Zhang X, Wong DWK, Liu J, Frangi AF, Baskaran M, Aung T, [Segmentation and Quantification for Angle-Closure Glaucoma Assessment in Anterior Segment OCT](#). *IEEE Trans Med Imaging*. 2017;36:1930–1938.
- J179. Pozo JM, J GA, Villa-Uriol MC, Frangi AF, [Interlacing Complexity Index for open flow systems based on mutual information](#). *J Fluid Mech*. 2017;825:704–742.
- J178. Hoogendoorn C, Sebastian R, Rodriguez JF, Lekadir K, Frangi AF, [An atlas- and data-driven approach to initializing reaction-diffusion systems in computer cardiac electrophysiology](#). *Int J Numer Method Biomed Eng*. 2017;33:e2846.
- J177. McGrath DM, Ravikumar N, Beltrachini L, Wilkinson ID, Frangi AF, Taylor ZA, [Evaluation of wave delivery methodology for brain MRE: insights from computational simulations](#). *Magn Reson Med* 2017;78:341–356.
- J176. Shaukat F, Raja G, Gooya A, Frangi AF, [Fully automatic and accurate detection of lung nodules in CT images using a hybrid feature set](#). *Med Phys* 2017;44:3615–3629.
- J175. Sarrami-Foroushani A, Lassila T, Frangi AF, [Virtual endovascular treatment of intracranial aneurysms: models and uncertainty](#). *Wiley Interdiscip Rev Syst Biol Med* 2017;9:e1385.
- J174. Elhami M, Alemi N, Frangi AF, Gooya A, [Tracking and Diameter Estimation of Retinal Vessels Using Gaussian Process and Radon Transform](#). *J Med Imaging*. 2017;4:e034006.
- J173. Lange M, Palamara S, Lassila T, Vergara C, Quarteroni A, Frangi AF, [Improved hybrid/GPU algorithm for solving cardiac electrophysiology problems on Purkinje networks](#). *Int J Numer Method Biomed Eng*. 2017;33:e2835.
- J172. Evju Ø, Pozo JM, Frangi AF, Mardal KA, [Robustness of common hemodynamic indicators with respect to numerical resolution in 38 middle cerebral artery aneurysms](#). *PLoS One* 2017;12:e0177566.
- J171. Parto Dezfouli MA, Parto Dezfouli M, Ahmadian A, Frangi AF, Esmaili Rad M, Saligheh Rad H, [Quantification of 1 H-MRS signals based on sparse metabolite profiles in the time-frequency domain](#). *NMR Biomed*. 2017;30:e3675.
- J170. Vergara C, Lange M, Palamara S, Lassila T, Frangi AF, Quarteroni A, [A coupled 3D-1D numerical monodomain solver for cardiac electrical activation in the myocardium with detailed Purkinje network](#). *J Comput Phys* 2016;308:218–238.
- J169. McGrath DM, Ravikumar N, Wilkinson ID, Frangi AF, Taylor ZA, [Magnetic resonance elastography of the brain: an in silico study to determine the influence of cranial anatomy](#). *Magn Reson Med* 2016;76:645–62.
- J168. Yao J, Burns JE, Forsberg D, Seitel A, Rasoulian A, Abolmaesumi P, Hammernik K, Urschler M, Ibragimov B, Korez R, Vrtovec T, Castro-Mateos I, Pozo JM, Frangi AF, Summers RM, Li S, [A multi-center milestone study of clinical vertebral CT segmentation](#). *Comput Med Imaging Graph* 2016;49:16–28.
- J167. Sarrami-Foroushani A, Lassila T, Gooya A, Geers AJ, Frangi AF, [Uncertainty quantification of wall shear stress in intracranial aneurysms using a data-driven statistical model of systemic blood flow variability](#). *J Biomech* 2016;49:3815–3823.
- J166. Lekadir K, Noble C, Hazrati-Marangalou J, Hoogendoorn C, Rietbergen B, Taylor ZA, Frangi AF, [Patient-specific biomechanical modeling of bone strength using statistically-derived fabric tensors](#). *Ann Biomed Eng* 2016;44:234–246.
- J165. Lekadir K, Hoogendoorn C, Armitage P, Whitby E, King D, Dimitri P, Frangi AF, [Estimation of trabecular bone parameters in children from multisequence MRI using texture-based regression](#). *Med Phys* 2016;43:3071.
- J164. Alba X, Pereanez M, Hoogendoorn C, Swift AJ, Wild JM, Frangi AF, Lekadir K, [An algorithm for the segmentation of highly abnormal hearts using a generic statistical shape model](#). *IEEE Trans Med Imaging* 2016;35:845–859.
- J163. Porras AR, Alessandrini M, Mirea O, D'hooge J, Frangi AF, Piella G, [Integration of multi-plane tissue Doppler and b-mode echocardiographic images for left ventricular motion estimation](#). *IEEE Trans Med Imaging* 2016;35:89–97.
- J162. Frangi AF, Taylor ZA, Gooya A, [Precision imaging: more descriptive, predictive and integrative imaging](#). *Med Image Anal* 2016;33:27–32.
- J161. Avegliano GP, Costabel JP, Asch F, Sciancalepore A, Kuschnir P, Huguet M, Tobon-Gomez C, Frangi AF, Ronderos R, [Utility of real time 3D echocardiography for the assessment of left ventricular mass in patients with hypertrophic cardiomyopathy: comparison with cardiac magnetic resonance](#). *Echocardiogr – J Card* 2016;33:431–436.
- J160. Karim R, Bhagirath P, Claus P, James Housden R, Chen Z, Karimaghloo Z, Sohn HM, Lara Rodríguez L, Vera S, Albà X, Henemuth A, Peitgen HO, Arbel T, González Ballester MA, Frangi AF, Götte M, Razavi R, Schaeffter T, Rhode K, [Evaluation of state-of-the-art segmentation algorithms for left ventricle infarct from late gadolinium enhancement MR images](#). *Med Image Anal* 2016;30:95–107.
- J159. Peng P, Lekadir K, Gooya A, Shao L, Petersen SE, Frangi AF, [A review of heart chamber segmentation for structural and functional analysis using cardiac magnetic resonance imaging](#). *MAGMA* 2016;29:155–195.
- J158. Lekadir K, Lange M, Zimmer VA, Hoogendoorn C, Frangi AF, [Statistically-driven 3D fiber reconstruction and denoising from multi-slice cardiac DTI using a Markov random field model](#). *Med Image Anal* 2016;27:105–116.
- J157. Castro-Mateos I, Hua R, Pozo JM, Lazary A, Frangi AF, [Intervertebral disc classification by its degree of degeneration from T2-weighted magnetic resonance images](#). *Eur Spine J* 2016;25:2721–2727.
- J156. Manap R, Shao L, Frangi AF, [Non-parametric quality assessment of natural images](#). *IEEE Multimedia* 2016;23:22–30.
- J155. Lange M, Di Marco LY, Lekadir K, Lassila T, Frangi AF, [Protective role of false tendon in subjects with left bundle branch block: a virtual population study](#). *PLoS One* 2016;11:e0146477.
- J154. Butakoff C, Balocco S, Sukno FM, Hoogendoorn C, Tobon-Gomez C, Avegliano G, Frangi AF, [Left-ventricular epi- and endocardium extraction from 3D ultrasound images using an automatically constructed 3D ASM](#). *Comput Methods Biomech Biomed Eng Imaging Vis* 2016;4:265–280.
- J153. Çimen S, Gooya A, Grass M, Frangi AF, [Reconstruction of coronary arteries from x-ray angiography: a review](#). *Med Image Anal* 2016;32:46–68.
- J152. Morris RM, Yang L, Martín-Fernández MA, Pozo JM, Frangi AF, Wilkinson JM, [High-spatial-resolution bone densitometry with dual-energy x-ray absorptiometric region-free analysis](#). *Radiology* 2015;274:532–9.

- J151. Beltrachini L, Taylor ZA, Frangi AF, [A parametric finite element solution of the generalised Bloch-Torrey equation for arbitrary domains](#). *J Magn Reson* 2015;259:126–34.
- J150. Dimitri P, Jacques RM, Paggioli M, King D, Walsh J, Taylor ZA, Frangi AF, Bishop N, Eastell R, [Leptin may play a role in bone microstructural alterations in obese children](#). *J Clin Endocrinol Metab* 2015;100:594–602.
- J149. Di Marco LY, Venneri A, Farkas E, Evans PC, Marzo A, Frangi AF, [Vascular dysfunction in the pathogenesis of Alzheimer’s disease—a review of endothelium-mediated mechanisms and ensuing vicious circles](#). *Neurobiol Dis* 2015;82:593–606.
- J148. Lekadir K, Hazrati-Marangalou J, Hoogendoorn C, Taylor ZA, van Rietbergen B, Frangi AF, [Statistical estimation of femur micro-architecture using optimal shape and density predictors](#). *J Biomech* 2015;48:598–603.
- J147. Di Marco LY, Farkas E, Martin C, Venneri A, Frangi AF, [Is vasomotion in cerebral arteries impaired in Alzheimer’s disease?](#) *J Alzheimers Dis* 2015;46:35–53.
- J146. Cito S, Geers AJ, Arroyo MP, Palero VR, Pallares J, Vernet A, Blasco J, San Roman L, Fu W, Qiao A, Janiga G, Miura Y, Ohta M, Mendina M, Usera G, Frangi AF, [Accuracy and Reproducibility of Patient-Specific Hemodynamic Models of Stented Intracranial Aneurysms: Report on the Virtual Intracranial Stenting Challenge 2011](#). *Ann Biomed Eng* 2015;43:154–167.
- J145. Sarrami-Foroushani A, Villa-Uriol MC, Nasr Esfahany M, Coley SC, Di Marco LY, Frangi AF, Marzo A, [Modeling of the acute effects of primary hypertension and hypotension on the hemodynamics of intracranial aneurysms](#). *Ann Biomed Eng* 2015;43:207–21.
- J144. Zimmer VA, Lekadir K, Hoogendoorn C, Frangi AF, Piella G, [A framework for optimal kernel-based manifold embedding of medical image data](#). *Comput Med Imaging Graph* 2015;41:93–107.
- J143. Castro-Mateos I, Pozo JM, Pereanez M, Lekadir K, Lazary A, Frangi AF, [Statistical interspace models \(sims\): application to robust 3D spine segmentation](#). *IEEE Trans Med Imaging* 2015;34:1663–75.
- J142. Lekadir K, Hoogendoorn C, Hazrati-Marangalou J, Taylor ZA, Noble C, van Rietbergen B, Frangi AF, [A predictive model of vertebral trabecular anisotropy from ex vivo micro-ct](#). *IEEE Trans Med Imaging* 2015;34:1747–59.
- J141. Pereañez M, Lekadir K, Castro-Mateos I, Pozo JM, Lazary Á, Frangi AF, [Accurate segmentation of vertebral bodies and processes using statistical shape decomposition and conditional models](#). *IEEE Trans Med Imaging* 2015;34:1627–39.
- J140. Wilkinson JM, Morris RM, Martin-Fernandez MA, Pozo JM, Frangi AF, Maheson M, Yang L, [Use of high resolution dual-energy x-ray absorptiometry-region free analysis \(DXA-RFA\) to detect local periprosthetic bone remodeling events](#). *J Orthop Res* 2015;33:712–6.
- J139. Beltrachini L, De Marco M, Taylor ZA, Lotjonen J, Frangi AF, Venneri A, [Integration of cognitive tests and resting state fMRI for the individual identification of mild cognitive impairment](#). *Curr Alzheimer Res* 2015;12:592–603.
- J138. Sarrami-Foroushani A, Nasr Esfahany M, Nasiraei Moghaddam A, Saligheh Rad H, Firouznia K, Shakiba M, Ghanaati H, Wilkinson ID, Frangi AF, [Velocity measurement in carotid artery: quantitative comparison of time-resolved 3D phase-contrast MRI and image-based computational fluid dynamics](#). *Iran J Radiol* 2015;12.
- J137. Gooya A, Davatzikos C, Frangi AF, [A Bayesian approach to sparse model selection in statistical shape models](#). *SIAM J Imag Sci* 2015;8:858–887.
- J136. Malandrino A, Pozo JM, Castro-Mateos I, Frangi AF, Rijsbergen MM, Ito K, Wilke HJ, Dao TT, Ho Ba Tho MC, Noailly J, [On the relative relevance of subject-specific geometries and degeneration-specific mechanical properties for the study of cell death in human intervertebral disk models](#). *Front Bioeng Biotechnol* 2015;3:5.
- J135. Alba X, Figueras, Lekadir K, Tobon-Gomez C, Hoogendoorn C, Frangi AF, [Automatic cardiac lv segmentation in MRI using modified graph cuts with smoothness and interslice constraints](#). *Magn Reson Med* 2014;72:1775–1784.
- J134. Lekadir K, Pashaei A, Hoogendoorn C, Pereanez M, Alba X, Frangi AF, [Effect of statistically derived fiber models on the estimation of cardiac electrical activation](#). *IEEE Trans Biomed Eng* 2014;61:2740–2748.
- J133. Geers AJ, Larrabide I, Morales HG, Frangi AF, [Approximating hemodynamics of cerebral aneurysms with steady flow simulations](#). *J Biomech* 2014;47:178–185.
- J132. Di Marco LY, Marzo A, Munoz-Ruiz M, Ikram MA, Kivipelto M, Ruefenacht DA, Venneri A, Soininen H, Wanke I, Ventikos Y, Frangi AF, [Modifiable lifestyle factors in dementia: a systematic review of longitudinal observational cohort studies](#). *J Alzheimers Dis* 2014;42:119–135.
- J131. Porras AR, Alessandrini M, De Craene M, Duchateau N, Sitges M, Bijmens BH, Delingette H, Sermesant M, D’Hooge J, Frangi AF, Piella G, [Improved myocardial motion estimation combining tissue Doppler and b-mode echocardiographic images](#). *IEEE Trans Med Imaging* 2014;33:2098–2106.
- J130. Lekadir K, Hoogendoorn C, Pereanez M, Alba X, Pashaei A, Frangi AF, [Statistical personalization of ventricular fiber orientation using shape predictors](#). *IEEE Trans Med Imaging* 2014;33:882–890.
- J129. Pereanez M, Lekadir K, Butakoff C, Hoogendoorn C, Frangi AF, [A framework for the merging of pre-existing and correspondenceless 3D statistical shape models](#). *Med Image Anal* 2014;18:1044–1058.
- J128. Moosavi MH, Fatouraee N, Katoozian H, Pashaei A, Camara O, Frangi AF, [Numerical simulation of blood flow in the left ventricle and aortic sinus using magnetic resonance imaging and computational fluid dynamics](#). *Comput Methods Biomech Biomed Engin* 2014;17:740–749.
- J127. Pavani SK, Delgado-Gomez D, Frangi AF, [Fast training procedure for Viola-Jones type object detectors using Laplacian clutter models](#). *Pattern Anal Appl* 2014;17:441–449.
- J126. Pavani SK, Delgado-Gomez D, Frangi AF, [Gaussian weak classifiers based on co-occurring Haar-like features for face detection](#). *Pattern Anal Appl* 2014;17:431–439.
- J125. Avegliano G, Costabel JP, Huguet M, Thierer J, Trivi M, Catalina TG, Petit M, Bijmens B, Frangi AF, Ronderos R, [Influence of dynamic obstruction and hypertrophy location on diastolic function in hypertrophic cardiomyopathy](#). *J Cardiovasc Med* 2014;15:207–213.
- J124. Castro-Mateos I, Pozo JM, Cootes TF, Wilkinson JM, Eastell R, Frangi AF, [Statistical shape and appearance models in osteoporosis](#). *Curr Osteoporos Rep* 2014;12:163–173.
- J123. Porras AR, Piella G, Berrueto A, Fernández-Armenta J, Frangi AF, [Pre to Intraoperative Data Fusion Framework for Multimodal Characterization of Myocardial Scar Tissue](#). *IEEE J Transl Eng Health Med*. 2014;4:1900211.
- J122. Perez F, Huguet J, Aguilar R, Lara L, Larrabide I, Villa-Uriol MC, Lopez J, Macho JM, Rigo A, Rossello J, Vera S, Vivas E, Fernandez J, Arbona A, Frangi AF, Herrero Jover J, Gonzalez Ballester MA, [RadStation3G: a platform for cardiovascular image analysis integrating pacs, 3D+t visualization and grid computing](#). *Comput Methods Programs Biomed* 2013;110:399–410.

- J121. Porras AR, Piella G, Berrueto A, Hoogendoorn C, Andreu D, Fernandez-Armenta J, Sitges M, Frangi AF, [Interventional endocardial motion estimation from electroanatomical mapping data: application to scar characterization](#). *IEEE Trans Biomed Eng* 2013;60:1217–1224.
- J120. Tobon-Gomez C, Duchateau N, Sebastian R, Marchesseau S, Camara O, Donal E, De Craene M, Pashaei A, Relan J, Steghofer M, Lamata P, Delingette H, Duckett S, Garreau M, Hernandez A, Rhode KS, Sermesant M, Ayache N, Leclercq C, Razavi R, Smith NP, Frangi AF, [Understanding the mechanisms amenable to CRT response: from pre-operative multimodal image data to patient-specific computational models](#). *Med Biol Eng Comput* 2013;51:1235–1250.
- J119. Weese J, Groth A, Nickisch H, Barschdorf H, Weber FM, Velut J, Castro M, Toumoulin C, Coatrieux JL, De Craene M, Piella G, Tobon-Gomez C, Frangi AF, Barber DC, Valverde I, Shi Y, Staicu C, Brown A, Beerbaum P, Hose DR, [Generating anatomical models of the heart and the aorta from medical images for personalized physiological simulations](#). *Med Biol Eng Comput* 2013;51:1209–1219.
- J118. Cardenes R, Larrabide I, San Roman L, Frangi AF, [Performance assessment of isolation methods for geometrical cerebral aneurysm analysis](#). *Med Biol Eng Comput* 2013;51:343–352.
- J117. Morales HG, Larrabide I, Geers AJ, Aguilar ML, Frangi AF, [Newtonian and non-newtonian blood flow in coiled cerebral aneurysms](#). *J Biomech* 2013;46:2158–2164.
- J116. Bijlenga P, Ebeling C, Jaegersberg M, Summers P, Rogers A, Waterworth A, Iavindrasana J, Macho J, Pereira VM, Bukovics P, Vivas E, Sturkenboom MCJM, Wright J, Friedrich CM, Frangi AF, Byrne J, Schaller K, Rufenacht DA, [Risk of rupture of small anterior communicating artery aneurysms is similar to posterior circulation aneurysms](#). *Stroke* 2013;44:3018–3026.
- J115. Cardenes R, Diez JL, Duchateau N, Pashaei A, Frangi AF, [Model generation of coronary artery bifurcations from CTA and single plane angiography](#). *Med Phys* 2013;40:e013701.
- J114. Larrabide I, Aguilar ML, Morales HG, Geers AJ, Kulcsar Z, Ruefenacht D, Frangi AF, [Intra-aneurysmal pressure and flow changes induced by flow diverters: relation to aneurysm size and shape](#). *Am J Neuroradiol* 2013;34:816–822.
- J113. Bogunovic H, Pozo JM, Cardenes R, San Roman L, Frangi AF, [Anatomical labeling of the Circle of Willis using maximum a posteriori probability estimation](#). *IEEE Trans Med Imaging* 2013;32:1587–1599.
- J112. Frangi AF, Hose DR, Hunter PJ, Ayache N, Brooks D, [Special issue on medical imaging and image computing in computational physiology](#). *IEEE Trans Med Imaging* 2013;32:1–7.
- J111. Hoogendoorn C, Duchateau N, Sanchez-Quintana D, Whitmarsh T, Sukno FM, De Craene M, Lekadir K, Frangi AF, [A high-resolution atlas and statistical model of the human heart from multislice ct](#). *IEEE Trans Med Imaging* 2013;32:28–44.
- J110. Morales HG, Larrabide I, Geers AJ, San Roman L, Blasco J, Macho JM, Frangi AF, [A virtual coiling technique for image-based aneurysm models by dynamic path planning](#). *IEEE Trans Med Imaging* 2013;32:119–129.
- J109. Sebastian R, Zimmerman V, Romero D, Sanchez-Quintana D, Frangi AF, [Characterization and modeling of the peripheral cardiac conduction system](#). *IEEE Trans Med Imaging* 2013;32:45–55.
- J108. Marchesseau S, Delingette H, Sermesant M, Cabrera-Lozoya R, Tobon-Gomez C, Moireau P, Figueras, Lekadir K, Hernandez A, Garreau M, Donal E, Leclercq C, Duckett SG, Rhode K, Rinaldi CA, Frangi AF, Razavi R, Chapelle D, Ayache N, [Personalization of a cardiac electromechanical model using reduced order unscented Kalman filtering from regional volumes](#). *Med Image Anal* 2013;17:816–829.
- J107. Tobon-Gomez C, De Craene M, McLeod K, Tautz L, Shi W, Hennemuth A, Prakosa A, Wang H, Carr-White G, Kapetanakis S, Lutz A, Rasche V, Schaeffter T, Butakoff C, Friman O, Mansi T, Sermesant M, Zhuang X, Ourselin S, Peitgen HO, Pennec X, Razavi R, Rueckert D, Frangi AF, Rhode KS, [Benchmarking framework for myocardial tracking and deformation algorithms: an open access database](#). *Med Image Anal* 2013;17:632–648.
- J106. Whitmarsh T, Humbert L, Del Rio Barquero LM, Di Gregorio S, Frangi AF, [3D reconstruction of the lumbar vertebrae from anteroposterior and lateral dual-energy x-ray absorptiometry](#). *Med Image Anal* 2013;17:475–487.
- J105. Piella G, De Craene M, Butakoff C, Grau V, Yao C, Nedjati-Gilani S, Penney GP, Frangi AF, [Multiview diffeomorphic registration: application to motion and strain estimation from 3D echocardiography](#). *Med Image Anal* 2013;17:348–364.
- J104. Marti Fuster B, Esteban O, Planes X, Aguiar P, Crespo C, Falcon C, Wollny G, Rubi Sureda S, Setoain X, Frangi AF, Ledesma MJ, Santos A, Pavia J, Ros D, [FocusDet, a new toolbox for SISCOM analysis. evaluation of the registration accuracy using Monte Carlo simulation](#). *Neuroinformatics* 2013;11:77–89.
- J103. Fernandez-Armenta J, Berrueto A, Andreu D, Camara O, Silva E, Serra L, Barbarito V, Carotenutto L, Evertz R, Ortiz-Perez JT, De Caralt MT, Perea RJ, Sitges M, Mont L, Frangi AF, Brugada J, [Three-dimensional architecture of scar and conducting channels based on high resolution ce-cmr: insights for ventricular tachycardia ablation](#). *Circ Arrhythm Electrophysiol* 2013;6:528–537.
- J102. Morales HG, Larrabide I, Geers AJ, Dai D, Kallmes DF, Frangi AF, [Analysis and quantification of endovascular coil distribution inside saccular aneurysms using histological images](#). *J Neurointerv Surg* 2013;5:III33–III37.
- J101. Hunter P, Chapman T, Coveney PV, Bono B, Diaz V, Fenner J, Frangi AF, Harris P, Hose R, Kohl P, Lawford P, McCormack K, Mendes M, Omholt S, Quarteroni A, Shublaq N, Skar J, Stroetmann K, Tegner J, Thomas SR, Tollis I, Tsamardinos I, Beek JHGM, Viceconti M, [A vision and strategy for the virtual physiological human: 2012 update](#). *Interface Focus* 2013;3.
- J100. Larrabide I, Villa-Uriol MC, Cardenes R, Barbarito V, Carotenutto L, Geers AJ, Morales HG, Pozo JM, Mazzeo MD, Bogunovic H, Omedas P, Riccobene C, Macho JM, Frangi AF, [Angiolab—a software tool for morphological analysis and endovascular treatment planning of intracranial aneurysms](#). *Comput Methods Programs Biomed* 2012;108:806–819.
- J99. Tobon-Gomez C, Sukno FM, Butakoff C, Huguet M, Frangi AF, [Automatic training and reliability estimation for 3D ASM applied to cardiac MRI segmentation](#). *Phys Med Biol* 2012;57:4155–4174.
- J98. Whitmarsh T, Fritscher KD, Humbert L, del Rio Barquero LM, Roth T, Kammerlander C, Blauth M, Schubert R, Frangi AF, [Hip fracture discrimination from dual-energy x-ray absorptiometry by statistical model registration](#). *Bone* 2012;51:896–901.
- J97. Cerrolaza JJ, Villanueva A, Sukno FM, Butakoff C, Frangi AF, Cabeza R, [Full multiresolution active shape models](#). *J Math Imaging Vision* 2012;44:463–479.
- J96. Humbert L, Whitmarsh T, De Craene M, del Rio Barquero LM, Frangi AF, [Technical note: comparison between single and multiview simulated DXA configurations for reconstructing the 3D shape and bone mineral density distribution of the proximal femur](#). *Med Phys* 2012;39:5272–5276.
- J95. Duchateau N, Doltra A, Silva E, De Craene Y, Piella G, Angeles Castel M, Mont L, Brugada J, Frangi AF, Sitges M, [Atlas-based quantification of myocardial motion abnormalities: added-value for understanding the effect of cardiac resynchronization therapy](#). *Ultrasound Med Biol* 2012;38:2186–2197.

- J94. Humbert L, Whitmarsh LM, Frangi AF, [Computing structural parameters from dual-energy x-ray absorptiometry using a 3D reconstruction method](#). *Osteoporos Int* 2012;23:S349–S350.
- J93. Duchateau N, De Craene M, Piella G, Frangi AF, [Constrained manifold learning for the characterization of pathological deviations from normality](#). *Med Image Anal* 2012;16:1532–1549.
- J92. Bogunovic H, Pozo JM, Cardenes R, Cruz Villa-Uriol M, Blanc R, Piotin M, Frangi AF, [Automated landmarking and geometric characterization of the carotid siphon](#). *Med Image Anal* 2012;16:889–903.
- J91. Larrabide I, Kim M, Augsburger L, Cruz Villa-Uriol M, Ruefenacht D, Frangi AF, [Fast virtual deployment of self-expandable stents: method and in vitro evaluation for intracranial aneurysmal stenting](#). *Med Image Anal* 2012;16:721–730.
- J90. De Craene M, Piella G, Camara O, Duchateau N, Silva E, Doltra A, D’Hooge J, Brugada J, Sitges M, Frangi AF, [Temporal diffeomorphic free-form deformation: application to motion and strain estimation from 3D echocardiography](#). *Med Image Anal* 2012;16:427–450.
- J89. Oubel E, De Craene M, Hero AO, Pourmorteza A, Huguet M, Avegliano G, Bijmens BH, Frangi AF, [Cardiac motion estimation by joint alignment of tagged MRI sequences](#). *Med Image Anal* 2012;16:339–350.
- J88. Bernardini A, Larrabide I, Petrini L, Pennati G, Fiore E, Kim M, Frangi AF, [Deployment of self-expandable stents in aneurysmatic cerebral vessels: comparison of different computational approaches for interventional planning](#). *Comput Methods Biomech Biomed Engin* 2012;15:303–311.
- J87. Duckett SG, Camara O, Ginks MR, Bostock J, Chinchapatnam P, Sermesant M, Pashaei A, Lambiase PD, Gill JS, Carr-White GS, Frangi AF, Razavi R, Bijmens BH, Rinaldi CA, [Relationship between endocardial activation sequences defined by high-density mapping to early septal contraction \(septal flash\) in patients with left bundle branch block undergoing cardiac resynchronization therapy](#). *Europace* 2012;14:99–106.
- J86. Pavani SK, Sukno FM, Delgado-Gomez D, Butakoff C, Planes X, Frangi AF, [An experimental evaluation of three classifiers for use in self-updating face recognition systems](#). *IEEE Trans Inf Forensics Security* 2012;7:932–943.
- J85. Bradley C, Bowery A, Britten R, Budelmann V, Camara O, Christie R, Cookson A, Frangi AF, Gamage TB, Heidlauf T, Krittan S, Ladd D, Little C, Mithraratne K, Nash M, Nickerson D, Nielsen P, Nordbo O, Omholt S, Pashaei A, Paterson D, Rajagopal V, Reeve A, Roehrl O, Safaei S, Sebastian R, Steghoefer M, Wu T, Yu T, Zhang H, Hunter PJ, [OpenCMISS: a multi-physics & multi-scale computational infrastructure for the vph/physiome project](#). *Prog Biophys Mol Biol* 2011;107:32–47.
- J84. Camara O, Sermesant M, Lamata P, Wang L, Pop M, Relan J, De Craene M, Delingette H, Liu H, Niederer S, Pashaei A, Plank G, Romero D, Sebastian R, Wong KCL, Zhang H, Ayache N, Frangi AF, Shi P, Smith NP, Wright GA, [Inter-model consistency and complementarity: learning from ex-vivo imaging and electrophysiological data towards an integrated understanding of cardiac physiology](#). *Prog Biophys Mol Biol* 2011;107:122–133.
- J83. Avegliano GP, Huguet M, Costabel JP, Kuschnir P, Thierer J, Alves de Lima A, Sanchez G, Petit M, Frangi AF, Ronderos R, [Utilidad de la resonancia magnética cardíaca en la valoración de los pacientes con dolor torácico, troponinas elevadas y ausencia de obstrucción arterial coronaria](#). *Rev Argent Cardiol* 2011;79:226–230.
- J82. Tobon-Gomez C, Sukno FM, Bijmens BH, Huguet M, Frangi AF, [Realistic simulation of cardiac magnetic resonance studies modeling anatomical variability, trabeculae, and papillary muscles](#). *Magn Reson Med* 2011;65:280–288.
- J81. Coatrieux JL, Frangi AF, Peng GCY, D’Argenio DZ, Marmarelis VZ, Michailova A, [Special issue on Multiscale modeling and analysis in computational biology and medicine - Part 2](#). *IEEE Trans Biomed Eng* 2011;58:3434–3439.
- J80. Sebastian R, Zimmerman V, Romero D, Frangi AF, [Construction of a computational anatomical model of the peripheral cardiac conduction system](#). *IEEE Trans Biomed Eng* 2011;58:3479–3482.
- J79. Frangi AF, Coatrieux JL, Peng GCY, D’Argenio DZ, Marmarelis VZ, Michailova A, [Special issue on Multiscale modeling and analysis in computational biology and medicine - Part 1](#). *IEEE Trans Biomed Eng* 2011;58:2936–2942.
- J78. Pashaei A, Romero D, Sebastian R, Camara O, Frangi AF, [Fast multiscale modeling of cardiac electrophysiology including Purkinje system](#). *IEEE Trans Biomed Eng* 2011;58:2956–2960.
- J77. Costalat V, Sanchez M, Ambard D, Thines L, Lonjon N, Nicoud F, Brunel H, Lejeune JP, Dufour H, Bouillot P, Lhaldky JP, Kouri K, Segnarbieux F, Maurage CA, Lobotesis K, Villa-Uriol MC, Zhang C, Frangi AF, Mercier G, Bonafe A, Sarry L, Jourdan F, [Biomechanical wall properties of human intracranial aneurysms resected following surgical clipping \(irras project\)](#). *J Biomech* 2011;44:2685–2691.
- J76. Marzo A, Singh P, Larrabide I, Radaelli A, Coley S, Gwilliam M, Wilkinson ID, Lawford P, Reymond P, Patel U, Frangi AF, Hose DR, [Computational hemodynamics in cerebral aneurysms: the effects of modeled versus measured boundary conditions](#). *Ann Biomed Eng* 2011;39:884–896.
- J75. Larrabide I, Cruz Villa-Uriol M, Cardenes R, Pozo JM, Macho J, San Roman L, Blasco J, Vivas E, Marzo A, Hose DR, Frangi AF, [Three-dimensional morphological analysis of intracranial aneurysms: a fully automated method for aneurysm sac isolation and quantification](#). *Med Phys* 2011;38:2439–2449.
- J74. Zhang C, Villa-Uriol MC, De Craene M, Pozo JM, Macho JM, Frangi AF, [Dynamic estimation of three-dimensional cerebrovascular deformation from rotational angiography](#). *Med Phys* 2011;38:1294–1306.
- J73. Bogunovic H, Pozo JM, Villa-Uriol MC, Majoie CBLM, van den Berg R, van Andel HA, Macho JM, Blasco J, San Roman L, Frangi AF, [Automated segmentation of cerebral vasculature with aneurysms in 3DRA and tof-mra using geodesic active regions: an evaluation study](#). *Med Phys* 2011;38:210–222.
- J72. Avegliano G, Huguet M, Costabel JP, Ronderos R, Bijmens B, Kuschnir P, Thierer J, Tobon-Gomez C, Oller Martinez G, Frangi AF, [Morphologic pattern of late gadolinium enhancement in takotsubo cardiomyopathy detected by early cardiovascular magnetic resonance](#). *Clin Cardiol* 2011;34:178–182.
- J71. Suinesiaputra A, Frangi AF, Kaandorp TAM, Lamb HJ, Bax JJ, Reiber JHC, Lelieveldt BPF, [Automated regional wall motion abnormality detection by combining rest and stress cardiac MRI: correlation with contrast-enhanced MRI](#). *J Magn Reson Imaging* 2011;34:270–278.
- J70. Pozo JM, Villa-Uriol MC, Frangi AF, [Efficient 3D geometric and Zernike moments computation from unstructured surface meshes](#). *IEEE Trans Pattern Anal Mach Intell* 2011;33:471–484.
- J69. Morales HG, Kim M, Vivas EE, Villa-Uriol MC, Larrabide I, Sola T, Guimaraens L, Frangi AF, [How do coil configuration and packing density influence intra-aneurysmal hemodynamics? Am J Neuroradiol](#) 2011;32:1935–1941.

- J68. Geers AJ, Larrabide I, Radaelli AG, Bogunovic H, Kim M, Andel HAFG, Majoie CB, VanBavel E, Frangi AF, [Patient-specific computational hemodynamics of intracranial aneurysms from 3D rotational angiography and CT angiography: an in vivo reproducibility study](#). *Am J Neuroradiol* 2011;32:581–586.
- J67. Whitmarsh T, Humbert L, De Craene M, del Rio Barquero LM, Frangi AF, [Reconstructing the 3D shape and bone mineral density distribution of the proximal femur from dual-energy x-ray absorptiometry](#). *IEEE Trans Med Imaging* 2011;30:2101–2114.
- J66. Cardenes R, Pozo JM, Bogunovic H, Larrabide I, Frangi AF, [Automatic aneurysm neck detection using surface Voronoi diagrams](#). *IEEE Trans Med Imaging* 2011;30:1863–76.
- J65. Duchateau N, De Craene M, Piella G, Silva E, Doltra A, Sitges M, Bijmens BH, Frangi AF, [A spatiotemporal statistical atlas of motion for the quantification of abnormal myocardial tissue velocities](#). *Med Image Anal* 2011;15:316–328.
- J64. Bernardini A, Larrabide I, Morales HG, Pennati G, Petrini L, Cito S, Frangi AF, [Influence of different computational approaches for stent deployment on cerebral aneurysm haemodynamics](#). *Interface Focus* 2011;1:338–348.
- J63. Smith N, Vecchi A, McCormick M, Nordsletten D, Camara O, Frangi AF, Delingette H, Sermesant M, Relan J, Ayache N, Krueger MW, Schulze WHW, Hose R, Valverde I, Beerbaum P, Staicu C, Siebes M, Spaan J, Hunter P, Weese J, Lehmann H, Chapelle D, Rezavi R, [euHeart: personalized and integrated cardiac care using patient-specific cardiovascular modelling](#). *Interface Focus* 2011;1:349–364.
- J62. Villa-Urriol MC, Berti G, Hose DR, Marzo A, Chiarini A, Penrose J, Pozo J, Schmidt JG, Singh P, Lycett R, Larrabide I, Frangi AF, [@neur1ST complex information processing toolchain for the integrated management of cerebral aneurysms](#). *Interface Focus* 2011;1:308–319.
- J61. Gianni D, McKeever S, Yu T, Britten R, Delingette H, Frangi AF, Hunter P, Smith N, [Sharing and reusing cardiovascular anatomical models over the web: a step towards the implementation of the virtual physiological human project](#). *Philos Trans A Math Phys Eng Sci* 2010;368:3039–3056.
- J60. Villa-Urriol MC, Larrabide I, Pozo JM, Kim M, Camara O, De Craene M, Zhang C, Geers AJ, Morales H, Bogunovic H, Cardenes R, Frangi AF, [Toward integrated management of cerebral aneurysms](#). *Philos Trans A Math Phys Eng Sci* 2010;368:2961–2982.
- J59. Hunter P, Coveney PV, Bono B, Diaz V, Fenner J, Frangi AF, Harris P, Hose R, Kohl P, Lawford P, McCormack K, Mendes M, Omholt S, Quarteroni A, Skar J, Tegner J, Thomas SR, Tollis I, Tsamardinos I, Beek JHGM, Viceconti M, [A vision and strategy for the virtual physiological human in 2010 and beyond](#). *Philos Trans A Math Phys Eng Sci* 2010;368:2595–2614.
- J58. Butakoff C, Frangi AF, [Multi-view face segmentation using fusion of statistical shape and appearance models](#). *Comput Vis Image Underst* 2010;114:311–321.
- J57. Singh PK, Marzo A, Howard B, Rufenacht DA, Bijlenga P, Frangi AF, Lawford PV, Coley SC, Hose DR, Patel UJ, [Effects of smoking and hypertension on wall shear stress and oscillatory shear index at the site of intracranial aneurysm formation](#). *Clin Neurol Neurosurg* 2010;112:306–313.
- J56. Yilmaz S, Bijlenga P, Rashid M, Collot-Teixeira S, Brocheton J, Proust C, Rotival M, Risselada R, Summers P, Blasco J, Singh J, Waterworth A, Ebeling C, Friedrich C, Frangi AF, Macho JJ, Byrne J, Sturkenboom MCJM, Schaller K, Cambien F, Gunel M, McGregor JL, [Gene expression signature in peripheral blood cells detects intracranial aneurysm](#). *Neurosurgery* 2010;67:540.
- J55. Piella G, De Craene M, Bijmens BH, Tobon-Gomez C, Hugué M, Avegliano G, Frangi AF, [Characterizing myocardial deformation in patients with left ventricular hypertrophy of different etiologies using the strain distribution obtained by magnetic resonance imaging](#). *Rev Esp Cardiol* 2010;63:1281–1291.
- J54. Balocco S, Basset O, Courbebaisse G, Boni E, Frangi AF, Tortoli P, Cachard C, [Estimation of the viscoelastic properties of vessel walls using a computational model and Doppler ultrasound](#). *Phys Med Biol* 2010;55:3557–3575.
- J53. Sukno FM, Guerrero JJ, Frangi AF, [Projective active shape models for pose-variant image analysis of quasi-planar objects: application to facial analysis](#). *Pattern Recognit* 2010;43:835–849.
- J52. Pavani SK, Delgado D, Frangi AF, [Haar-like features with optimally weighted rectangles for rapid object detection](#). *Pattern Recognit* 2010;43:160–172.
- J51. Yasuno K, Bilguvar K, Bijlenga P, Low SK, Krisecek B, Auburger G, Simon M, Krex D, Arlier Z, Nayak N, Ruigrok YM, Niemela M, Tajima A, Fraunberg M, Doczi T, Wirjatijasa F, Hata A, Blasco J, Oszvald A, Kasuya H, Zilani G, Schoch B, Singh P, Stueer C, Risselada R, Beck J, Sola T, Ricciardi F, Aromaa A, Illig T, Schreiber S, Duijn CM, Berg LH, Perret C, Proust C, Roder C, Ozturk AK, Gaal E, Berg D, Geisen C, Friedrich CM, Summers P, Frangi AF, State MW, Wichmann HE, Breteler MMB, Wijmenga C, Mane S, Peltonen L, Elio V, Sturkenboom MCJM, Lawford P, Byrne J, Macho J, Sandalcioglu EI, Meyer B, Raabe A, Steinmetz H, Rufenacht D, Jaaskelainen JE, Hernesniemi J, Rinkel GJE, Zembutsu H, Inoue I, Palotie A, Cambien F, Nakamura Y, Lifton RP, Guenel M, [Genome-wide association study of intracranial aneurysm identifies three new risk loci](#). *Nat Genet* 2010;42:420–U69.
- J50. Romero D, Sebastian R, Bijmens BH, Zimmerman V, Boyle PM, Vigmond EJ, Frangi AF, [Effects of the Purkinje system and cardiac geometry on biventricular pacing: a model study](#). *Ann Biomed Eng* 2010;38:1388–1398.
- J49. Balocco S, Camara O, Vivas E, Sola T, Guimaraens L, Andel HA, Majoie CB, Pozo JM, Bijmens BH, Frangi AF, [Feasibility of estimating regional mechanical properties of cerebral aneurysms in vivo](#). *Med Phys* 2010;37:1689–1706.
- J48. Ortega-Garcia J, Fierrez J, Alonso-Fernandez F, Galbally J, Freire MR, Gonzalez-Rodriguez J, Garcia-Mateo C, Alba-Castro JL, Gonzalez-Agulla E, Otero-Muras E, Garcia-Salicetti S, Allano L, Ly-Van B, Dorizzi B, Kittler J, Bourlai T, Poh N, Deravi F, Ng MWR, Fairhurst M, Hennebert J, Humm A, Tistarelli M, Brodo L, Richiardi J, Drygajlo A, Ganster H, Sukno FM, Pavani SK, Frangi AF, Akarun L, Savran A, [The multiscenario multienvironment biosecure multimodal database \(BMDB\)](#). *IEEE Trans Pattern Anal Mach Intell* 2010;32:1097–1111.
- J47. Duchateau N, De Craene M, Piella G, Silva E, Doltra A, Sitges M, Bijmens BH, Frangi AF, [Quantification of septal motion abnormalities in CRT candidates using a statistical atlas based-approach](#). *Eur Heart J* 2010;31:875–876.
- J46. Oubel E, Cebra JR, De Craene M, Blanc R, Blasco J, Macho J, Putman CM, Frangi AF, [Wall motion estimation in intracranial aneurysms](#). *Physiol Meas* 2010;31:1119–1135.
- J45. Benkner S, Arbona A, Berti G, Chiarini A, Dunlop R, Engelbrecht G, Frangi AF, Friedrich CM, Hanser S, Hasselmeyer P, Hose RD, Iavindrasana J, Koehler M, Lo Iacono L, Lonsdale G, Meyer R, Moore B, Rajasekaran H, Summers PE, Woehrer A, Wood S, [@neur1ST: infrastructure for advanced disease management through integration of heterogeneous data, computing, and complex processing services](#). *IEEE Trans Inf Technol Biomed* 2010;14:1365–1377.
- J44. Singh PK, Marzo A, Staicu C, William MG, Wilkinson I, Lawford PV, Rufenacht DA, Bijlenga P, Frangi AF, Hose R, Patel UJ, Coley SC, [The effects of aortic coarctation on cerebral hemodynamics and its importance in the etiopathogenesis of intracranial aneurysms](#). *J Vasc Interv Neurol* 2010;3:17–30.

- J43. Singh PK, Marzo A, Coley SC, Berti G, Bijlenga P, Lawford PV, Villa-Uriol MC, Rufenacht DA, McCormack KM, Frangi AF, Patel UJ, Hose DR, [The role of computational fluid dynamics in the management of unruptured intracranial aneurysms: a clinicians' view](#). *Comput Intell Neurosci* 2009;760364.
- J42. Young AA, Frangi AF, [Computational cardiac atlases: from patient to population and back](#). *Exp Physiol* 2009;94:578–596.
- J41. Hoogendoorn C, Sukno FM, Ordas S, Frangi AF, [Bilinear models for spatio-temporal point distribution analysis](#). *Int J Comput Vision* 2009;85:237–252.
- J40. Meinhardt E, Zacur E, Frangi AF, Caselles V, [3D edge detection by selection of level surface patches](#). *J Math Imaging Vision* 2009;34:1–16.
- J39. Camara O, Oeltze S, De Craene M, Sebastian R, Silva E, Tamborero D, Mont L, Sitges M, Bijnens BH, Frangi AF, [Detecting abnormal septal motion by combining spatial and electrical information from endocardial mapping data in CRT candidates](#). *Eur Heart J* 2009;30:1015.
- J38. Sebastian R, Bijnens BH, Frangi AF, [The role of the myocardial fiber orientation in homogenizing transmural electrical activation](#). *Eur Heart J* 2009;30:72.
- J37. Delgado-Gomez D, Fagertun J, Ersboll B, Sukno FM, Frangi AF, [Similarity-based fisherfaces](#). *Pattern Recognit Lett* 2009;30:1110–1116.
- J36. Zhang C, Villa-Uriol MC, De Craene M, Pozo JM, Frangi AF, [Morphodynamic analysis of cerebral aneurysm pulsation from time-resolved rotational angiography](#). *IEEE Trans Med Imaging* 2009;28:1105–1116.
- J35. Suinesiaputra A, Frangi AF, Kaandorp TAM, Lamb HJ, Bax JJ, Reiber JHC, Lelieveldt BPF, [Automated detection of regional wall motion abnormalities based on a statistical model applied to multislice short-axis cardiac MR images](#). *IEEE Trans Med Imaging* 2009;28:595–607.
- J34. Castro M, Putman C, Radaelli A, Frangi AF, Cebral JR, [Hemodynamics and rupture of terminal cerebral aneurysms](#). *Acad Radiol* 2009;16:1201–1207.
- J33. Huguet M, Tobon-Gomez C, Bijnens BH, Frangi AF, Petit M, [Cardiac injuries in blunt chest trauma](#). *J Cardiovasc Magn Reson* 2009;11.
- J32. Laclaustra M, Frangi AF, Frangi AG, Casasnovas JA, Cia P, [Association of endothelial function and vascular data with ldl-c and HDL-c in a homogeneous population of middle-aged, healthy military men: evidence for a critical role of optimal lipid levels](#). *Int J Cardiol* 2008;125:376–382.
- J31. Radaelli AG, Augsburg L, Cebral JR, Ohta M, Ruefenacht DA, Balossino R, Benndorf G, Hose DR, Marzo A, Metcalfe R, Mortier P, Mut F, Reymond P, Socci L, Verhegghe B, Frangi AF, [Reproducibility of haemodynamical simulations in a subject-specific stented aneurysm model - a report on the virtual intracranial stenting challenge 2007](#). *J Biomech* 2008;41:2069–2081.
- J30. Tobon-Gomez C, Butakoff C, Aguade S, Sukno F, Moragas G, Frangi AF, [Automatic construction of 3D-ASM intensity models by simulating image acquisition: application to myocardial gated SPECT studies](#). *IEEE Trans Med Imaging* 2008;27:1655–1667.
- J29. Sukno FM, Frangi AF, [Reliability estimation for statistical shape models](#). *IEEE Trans Image Process* 2008;17:2442–2455.
- J28. Olafsdottir H, Darvann TA, Hermann NV, Oubel E, Ersboll BK, Frangi AF, Larsen P, Perlyn CA, Morriss-Kay GM, Kreiborg S, [Computational mouse atlases and their application to automatic assessment of craniofacial dysmorphology caused by the Crouzon mutation fgfr2\(c342y\)](#). *J Anat* 2007;211:37–52.
- J27. Sukno FM, Ordas S, Butakoff C, Cruz S, Frangi AF, [Active shape models with invariant optimal features: application to facial analysis](#). *IEEE Trans Pattern Anal Mach Intell* 2007;29:1105–1117.
- J26. Laclaustra M, Frangi AF, Garcia D, Boisrobert L, Frangi AG, Pascual I, [Detailed exploration of the endothelium: parameterization of flow-mediated dilation through principal component analysis](#). *Physiol Meas* 2007;28:301–320.
- J25. Millan RD, Dempere-Marco L, Pozo JM, Cebral JR, Frangi AF, [Morphological characterization of intracranial aneurysms using 3D moment invariants](#). *IEEE Trans Med Imaging* 2007;26:1270–1282.
- J24. Barber DC, Oubel E, Frangi AF, Hose DR, [Efficient computational fluid dynamics mesh generation by image registration](#). *Med Image Anal* 2007;11:648–662.
- J23. Hernandez M, Frangi AF, [Non-parametric geodesic active regions: method and evaluation for cerebral aneurysms segmentation in 3DRA and CTA](#). *Med Image Anal* 2007;11:224–241.
- J22. Butakoff C, Frangi AF, [A framework for weighted fusion of multiple statistical models of shape and appearance](#). *IEEE Trans Pattern Anal Mach Intell* 2006;28:1847–1857.
- J21. Frangi AF, Radeva PI, Santos A, [Special Issue on International Conference on Functional Imaging and Modelling of the Heart \(FIMH\)](#). *Med Image Anal* 2006;10:612–614.
- J20. Assen HC, Danilouchkine MG, Frangi AF, Ordas S, Westenberg JJM, Reiber JHC, Lelieveldt BR, [SPASM: a 3D-ASM for segmentation of sparse and arbitrarily oriented cardiac MRI data](#). *Med Image Anal* 2006;10:286–303.
- J19. Yang J, Frangi AF, Yang JY, Zhang D, Jin Z, [Kpca plus LDA: a complete kernel fisher discriminant framework for feature extraction and recognition](#). *IEEE Trans Pattern Anal Mach Intell* 2005;27:230–244.
- J18. Cebral JR, Castro MA, Appanaboyina S, Putman CM, Millan D, Frangi AF, [Efficient pipeline for image-based patient-specific analysis of cerebral aneurysm hemodynamics: technique and sensitivity](#). *IEEE Trans Med Imaging* 2005;24:457–467.
- J17. Frangi AF, Amini AA, Bullitt E, [Vascular imaging](#). *IEEE Trans Med Imaging* 2005;24:433–435.
- J16. Yang J, Frangi AF, Yang JY, [A new kernel fisher discriminant algorithm with application to face recognition](#). *Neurocomputing* 2004;56:415–421.
- J15. Yang J, Jin Z, Yang JY, Zhang D, Frangi AF, [Essence of kernel fisher discriminant: KPCA plus LDA](#). *Pattern Recognit* 2004;37:2097–2100.
- J14. Yang J, Zhang D, Frangi AF, Yang JY, [Two-dimensional PCA: a new approach to appearance-based face representation and recognition](#). *IEEE Trans Pattern Anal Mach Intell* 2004;26:131–137.
- J13. Frangi AF, Laclaustra M, Lamata P, [A registration-based approach to quantify flow-mediated dilation \(FMD\) of the brachial artery in ultrasound image sequences](#). *IEEE Trans Med Imaging* 2003;22:1458–1469.
- J12. Rueckert D, Frangi AF, Schnabel JA, [Automatic construction of 3-D statistical deformation models of the brain using nonrigid registration](#). *IEEE Trans Med Imaging* 2003;22:1014–1025.
- J11. Yang H, Yang JY, Frangi AF, [Combined fisherfaces framework](#). *Image Vision Comput* 2003;21:1037–1044.
- J10. Yang R, Yang JY, Frangi AF, Zhang D, [Uncorrelated projection discriminant analysis and its application to face image feature extraction](#). *Int J Pattern Recognit Artif Intell* 2003;17:1325–1347.

- J9. Wink O, Frangi AF, Verdonck B, Viergever MA, Niessen WJ, [3D MRA coronary axis determination using a minimum cost path approach](#). *Magn Reson Med* 2002;47:1169–1175.
- J8. Frangi AF, Rueckert D, Duncan JS, [Three-dimensional cardiovascular image analysis](#). *IEEE Trans Med Imaging* 2002;21:1005–1010.
- J7. Frangi AF, Rueckert D, Schnabel JA, Niessen WJ, [Automatic construction of multiple-object three-dimensional statistical shape models: application to cardiac modeling](#). *IEEE Trans Med Imaging* 2002;21:1151–1166.
- J6. Ginneken B, Frangi AF, Staal JJ, Romeny BMT, Viergever MA, [Active shape model segmentation with optimal features](#). *IEEE Trans Med Imaging* 2002;21:924–933.
- J5. Frangi AF, Riu PJ, Rosell J, Viergever MA, [Propagation of measurement noise through backprojection reconstruction in electrical impedance tomography](#). *IEEE Trans Med Imaging* 2002;21:566–578.
- J4. Frangi AF, Niessen WJ, Nederkoorn PJ, Bakker J, Mali W, Viergever MA, [Quantitative analysis of vascular morphology from 3D MR angiograms: in vitro and in vivo results](#). *Magn Reson Med* 2001;45:311–322.
- J3. Frangi AF, Niessen WJ, Viergever MA, [Three-dimensional modeling for functional analysis of cardiac images: a review](#). *IEEE Trans Med Imaging* 2001;20:2–25.
- J2. Frangi AF, Egmont-Petersen M, Niessen WJ, Reiber JHC, Viergever MA, [Bone tumor segmentation from MR perfusion images with neural networks using multi-scale pharmacokinetic features](#). *Image Vision Comput* 2001;19:679–690.
- J1. Frangi AF, Niessen WJ, Hooijveen RM, Walsum T, Viergever MA, [Model-based quantitation of 3-D magnetic resonance angiographic images](#). *IEEE Trans Med Imaging* 1999;18:946–956.

BOOKS & PROCEEDINGS

- E15. Frangi AF, Schnabel JA, Davatzikos C, López-Alberola C, Fichtinger G, eds. [Medical Image Computing and Computer-Assisted Intervention \(MICCAI\). Proceedings of the International Conference MICCAI 2018 – Part IV: Computer Assisted Intervention: Image Guided Interventions and Surgery; Surgical Planning, Simulation and Work Flow Analysis; Visualization and Augmented Reality. Image Segmentation Methods: General Image Segmentation Methods, Measures and Applications; Multi-Organ Segmentation; Abdominal Segmentation Methods; Cardiac Segmentation Methods; Chest, Lung and Spine Segmentation; Other Segmentation Applications](#). Vol. 11073. *Lecture Notes in Computer Science*. Berlin: Springer-Verlag, 2018.
- E14. Frangi AF, Schnabel JA, Davatzikos C, López-Alberola C, Fichtinger G, eds. [Medical Image Computing and Computer-Assisted Intervention \(MICCAI\). Proceedings of the International Conference MICCAI 2018 – Part III: Diffusion Tensor Imaging and Functional MRI: Diffusion Tensor Imaging; Diffusion Weighted Imaging; Functional MRI; Human Connectome. Neuroimaging and Brain Segmentation Methods: Neuroimaging; Brain Segmentation Methods](#). Vol. 11072. *Lecture Notes in Computer Science*. Berlin: Springer-Verlag, 2018.
- E13. Frangi AF, Schnabel JA, Davatzikos C, López-Alberola C, Fichtinger G, eds. [Medical Image Computing and Computer-Assisted Intervention \(MICCAI\). Proceedings of the International Conference MICCAI 2018 – Part II: Optical and Histology Applications: Optical Imaging Applications; Histology Applications; Microscopy Applications; Optical Coherence Tomography and Other Optical Imaging Applications. Cardiac, Chest and Abdominal Applications: Cardiac Imaging Applications: Colorectal, Kidney and Liver Imaging Applications; Lung Imaging Applications; Breast Imaging Applications; Other Abdominal Applications](#). Vol. 11071. *Lecture Notes in Computer Science*. Berlin: Springer-Verlag, 2018.
- E12. Frangi AF, Schnabel JA, Davatzikos C, López-Alberola C, Fichtinger G, eds. [Medical Image Computing and Computer-Assisted Intervention \(MICCAI\). Proceedings of the International Conference MICCAI 2018 – Part I: Image Quality and Artefacts; Image Reconstruction Methods; Machine Learning in Medical Imaging; Statistical Analysis for Medical Imaging; Image Registration Methods](#). Vol. 11070. *Lecture Notes in Computer Science*. Berlin: Springer-Verlag, 2018.
- E11. Glocker B, Yao J, Vrtovec T, Frangi AF, Zheng G, eds. [Computational Methods and Clinical Applications in Musculoskeletal Imaging. Proceedings of the International Workshop and Challenge on Computational Musculoskeletal Imaging \(MSKI2017\)](#). Vol. 10734. *Lecture Notes in Computer Science*. Berlin: Springer-Verlag, 2018.
- E10. Tsaftaris SA, Gooya A, Frangi AF, Prince JL, eds. [Simulation and Synthesis in medical Imaging. Proceedings of the International Workshop SASHIMI 2017](#). Vol. 10557. *Lecture Notes in Computer Science*. Berlin: Springer-Verlag, 2017.
- E9. Yao J, Vrtovec T, Glocker B, Zheng G, Frangi AF, Shuo L, eds. [Computational Methods and Clinical Applications for Spine Imaging. Proceedings of the International Workshop and Challenge on Computational Spine Imaging \(CSI2016\)](#). Vol. 10182. *Lecture Notes in Computer Science*. Berlin: Springer-Verlag, 2017.
- E8. Tsaftaris SA, Gooya A, Frangi AF, Prince JL, eds. [Simulation and Synthesis in medical Imaging. Proceedings of the International Workshop SASHIMI 2016](#). Vol. 9968. *Lecture Notes in Computer Science*. Berlin: Springer-Verlag, 2016.
- E7. Vrtovec T, Yao J, Glocker B, Klinder T, Frangi AF, Zheng G, Li S, eds. [Computational Methods and Clinical Applications for Spine Imaging. Proceedings of the International Workshop and Challenge Computational Spine Imaging \(CSI2015\)](#). Vol. 9402. *Lecture Notes in Computer Science*. Berlin: Springer-Verlag, 2016.
- E6. Navab N, Hornegger J, Wells WM, Frangi AF, eds. [Medical Image Computing and Computer-Assisted Intervention \(MICCAI\). Proceedings of the International Conference MICCAI 2015 – Part III: Quantitative Image Analysis I: Segmentation and Measurement; Quantitative Image Analysis IV: Microscopy, Fluorescence and Histological Imagery; Quantitative Image Analysis III: Motion, Deformation, Development and Degeneration; Quantitative Image Analysis II: Classification, Detection, Features, and Morphology](#). Vol. 9351. *Lecture Notes in Computer Science*. Berlin: Springer-Verlag, 2015.
- E5. Navab N, Hornegger J, Wells WM, Frangi AF, eds. [Medical Image Computing and Computer-Assisted Intervention \(MICCAI\). Proceedings of the International Conference MICCAI 2015 – Part II: Quantitative Image Analysis II: Classification, Detection, Features, and Morphology, Advanced MRI: Diffusion, fMRI, DCE; Quantitative Image Analysis III: Motion, Deformation, Development and Degeneration; Quantitative Image Analysis IV: Microscopy, Fluorescence and Histological Imagery](#). Vol. 9350. *Lecture Notes in Computer Science*. Berlin: Springer-Verlag, 2015.
- E4. Navab N, Hornegger J, Wells WM, Frangi AF, eds. [Medical Image Computing and Computer-Assisted Intervention \(MICCAI\). Proceedings of the International Conference MICCAI 2015 – Part I: Advanced MRI: Diffusion, fMRI, DCE; Computer Assisted and Image-guided Interventions; Computer Aided Diagnosis: Machine Learning](#). Vol. 9349. *Lecture Notes in Computer Science*. Berlin: Springer-Verlag, 2015.

- E3. Frangi AF, Delingette H, eds. [From Statistical Atlases to Personalized Models: Understanding Complex Diseases in Populations and Individuals. Proceedings of the International Workshop](#). Technical Report. IT University of Copenhagen, 2006.
- E2. Frangi AF, Radeva P, Santos A, Hernandez M, eds. [Functional Imaging and Modelling of the Heart \(FIMH\). Proceedings of the International Conference](#). Vol. 3504. Lecture Notes in Computer Science. Berlin: Springer-Verlag, 2005.
- E1. Frangi AF. [Three-dimensional Mode-based Analysis of Vascular and Cardiac Images](#). Wageningen, The Netherlands: Ponsen & Looijen, 2001.

BOOK CHAPTERS

- B11. Duchateau N, Piella G, Frangi AF, De Craene M, [Learning pathological deviations from a normal pattern of myocardial motion: Added value for CRT studies?](#) In: [Machine Learning and Medical Imaging](#). Ed. by Wu, G, Shen, D, and Sabuncu, M. Elsevier, 2016:365–82.
- B10. Radaelli AG, Bogunović H, Villa-Uriol MC, Cebal JR, Frangi AF, [Image-based haemodynamics simulation in intracranial aneurysms](#). In: [Handbook of Biomedical Imaging: Methodologies and Clinical Research](#). Ed. by Paragios, N, Duncan, J, and Ayache, N. Boston, MA: Springer US, 2015:199–217.
- B9. Hunter PJ, Bradley C, Britten R, Brooks D, Carotenuto L, Christie R, Frangi AF, Garny A, Ladd D, Little C, Nickerson D, Nielsen P, Miller A, Planes X, Steghoffer M, Young AA, Yu T, [The VPH-Physiome Project: standards, tools and databases for multi-scale physiological modelling](#). In: [Modelling Physiological Flows](#). Ed. by Ambrosi, D, Quarteroni, A, and Rozza, G. Springer, 2012:205–250.
- B8. Dunlop R, Arbona A, Rajasekaran H, Lo Iacono L, Fingberg J, Summers P, Benkner S, Engelbrecht G, Chiarini A, Friedrich CM, Moore B, Bijlenga P, Iavindrasana J, Hose RD, Frangi AF, The @neurIST Consortium, [@neurIST - chronic disease management through integration of heterogeneous data and computer-interpretable guideline services](#). In: [Global Healthgrid: E-science Meets Biomedical Informatics](#). Ed. by Solomonides, T, Silverstein, JC, Saltz, J, Legre, Y, Kratz, M, Foster, I, Breton, V, and Beck, JR. Vol. 138. Studies in Health Technology and Informatics. 2008:173–177.
- B7. Iavindrasana J, Lo Iacono L, Mueller H, Periz I, Summers P, Wright J, Friedrich CM, Dach H, Gattermayer T, Engelbrecht G, Benkner S, Hofmann-Apitius M, Dunlop R, Arbona A, Rajasekaran H, Fingberg J, Chiarini A, Moore B, Bijlenga P, Hose RD, Frangi AF, [The @neurIST project](#). In: [Global Healthgrid: E-science Meets Biomedical Informatics](#). Ed. by Solomonides, T, Silverstein, JC, Saltz, J, Legre, Y, Kratz, M, Foster, I, Breton, V, and Beck, JR. Vol. 138. Studies in Health Technology and Informatics. 2008:161–164.
- B6. Tobon-Gomez C, Ordas S, Frangi AF, Aguade S, Castell J, [Statistical deformable models for cardiac segmentation and functional analysis in gated-SPECT studies](#). In: [Deformable Models: Biomedical and Clinical Applications](#). Ed. by Suri, J and Farag, A. Springer, 2007:163–193.
- B5. Arbona A, Benkner S, Fingberg J, Frangi AF, Hofmann M, Hose DR, Lonsdale G, Ruefenacht D, Viceconti M, [Outlook for grid service technologies within the @neurIST ehealth environment](#). In: [Challenges and Opportunities of Healthgrids](#). Ed. by Hernandez, V and Blanquer, I. Vol. 120. Studies in Health Technology and Informatics. 2006:401–404.
- B4. Hernandez M, Frangi AF, Sapiro G, [Quantification of brain aneurysm dimensions from CTA for surgical planning of coiling interventions](#). In: [Handbook of Biomedical Image Analysis, Vol III: Registration Models](#). Ed. by Suri, JA, Wilson, DL, and Laxminarayan, S. Kluwer Academic Publisher, 2005:185–217.
- B3. Ordas S, Assen HC, Puente J, Lelieveldt BPF, Frangi AF, [Parametric optimization of a model-based segmentation algorithm for cardiac MR image analysis: a grid-computing approach](#). In: [From Grid to Healthgrid](#). Ed. by Solomonides, T and McClatchey, R. Vol. 112. Studies in Health Technology and Informatics. 2005:146–156.
- B2. Frangi AF, Niessen WJ, Viergever MA, Lelieveldt BPF, [A survey of three-dimensional modeling techniques for quantitative functional analysis of cardiac images](#). In: [Advanced Image Processing in Magnetic Resonance Imaging](#). Ed. by Landini, L and Santarelli, MF. Vol. 26. CRC Pres, 2005:267–341.
- B1. Frangi AF, Laclaustra M, Yang J, [Computerized analysis and vasodilation parameterization in flow-mediated dilation tests from ultrasonic image sequences](#). In: [Handbook of Biomedical Image Analysis, Vol II: Segmentation Models Pt B](#). Ed. by Suri, JS, Wilson, DL, and Laxminarayan, S. Vol. 2. Kluwer Academic Publisher, 2005:229–266.

CONFERENCE PAPERS

- C154. Pinto C, Çimen S, Gooya A, Lekadir K, Frangi AF, [Joint clustering and component analysis of spatio-temporal shape patterns in myocardial infarction](#). In: [Statistical Atlases and Computational Models of the Heart](#). Ed. by Camara, O, Mansi, T, Pop, M, Rhode, K, Sermesant, M, and Young, A. Cham: Springer International Publishing, 2016:171–179.
- C153. Castro-Mateos I, Pozo JM, Lazary A, Frangi AF, [Automatic construction of patient-specific finite-element mesh of the spine from ivds and vertebra segmentations](#). In: [SPIE Medical Imaging: Biomedical Applications in Molecular, Structural, and Functional Imaging](#). Ed. by Gimi, B and Krol, A. Vol. 9788. Proceedings of SPIE. 2016.
- C152. Çimen S, Gooya A, Frangi AF, [Reconstruction of coronary artery centrelines from x-ray rotational angiography using a probabilistic mixture model](#). In: [SPIE Medical Imaging: Image Processing](#). Vol. 9784. 2016:97843A–7.
- C151. Dong B, Shao L, Da Costa M, Bandmann O, Frangi AF, [Deep learning for automatic cell detection in wide-field microscopy zebrafish images](#). In: [IEEE International Symposium on Biomedical Imaging \(ISBI\)](#). 2015:772–776.
- C150. Gooya A, Lekadir K, Alba X, Swift AJ, Wild JM, Frangi AF, [Joint clustering and component analysis of correspondenceless point sets: application to cardiac statistical modeling](#). In: [Information Processing in Medical Imaging \(IPMI\)](#). Ed. by Ourselin, S, Alexander, CD, Westin, CF, and Cardoso, JM. Cham: Springer International Publishing, 2015:98–109.
- C149. Manap RA, Frangi AF, Shao L, [A non-parametric framework for no-reference image quality assessment](#). In: [IEEE Global Conference on Signal and Information Processing \(GlobalSIP\)](#). 2015:562–566.
- C148. Navab N, Hornegger J, Wells WM, Frangi AF, [Medical Image Computing and Computer-Assisted Intervention \(MICCAI\) proceedings](#). In: [Medical Image Computing and Computer-Assisted Intervention \(MICCAI\) proceedings](#). Springer International Publishing, 2015.
- C147. Ravikumar N, Castro-Mateos I, Pozo JM, Frangi AF, Taylor ZA, [3D active shape models of human brain structures: application to patient-specific mesh generation](#). In: [SPIE Medical Imaging: Computer-aided Diagnosis](#). Ed. by Hadjiiski, LM and Tourassi, GD. Vol. 9414. 2015.

- C146. Hua R, Pozo JM, Taylor ZA, Frangi AF, [Discontinuous non-rigid registration using extended free-form deformations](#). In: [SPIE Medical Imaging: Image Processing](#). Ed. by Ourselin, S and Styner, MA. Vol. 9413. 2015.
- C145. Lange M, Palamara S, Lassila T, Vergara C, Quarteroni A, Frangi AF, [Efficient numerical schemes for computing cardiac electrical activation over realistic Purkinje networks: method and verification](#). In: [Functional Imaging and Modeling of the Heart \(FIMH\)](#). Ed. by VanAssen, H, Bovendeerd, P, and Delhaas, T. Vol. 9126. Lecture Notes in Computer Science. 2015:430–438.
- C144. Alba X, Lekadir K, Hoogendoorn C, Pereanez M, Swift AJ, Wild JM, Frangi AF, [Reusability of statistical shape models for the segmentation of severely abnormal hearts](#). In: [Statistical Atlases and Computational Models of the Heart](#). Ed. by Camara, O, Mansi, T, Pop, M, Rhode, K, Sermesant, M, and Young, A. Vol. 8896. Lecture Notes in Computer Science. 2015:257–264.
- C143. Gooya A, Lekadir K, Alba X, Swift AJ, Wild JM, Frangi AF, [Joint clustering and component analysis of correspondenceless point sets: application to cardiac statistical modeling](#). [Inf Process Med Imaging](#) 2015;24:98–109.
- C142. Schmidt-Richberg A, Guerrero R, Ledig C, Molina-Abril H, Frangi AF, Rueckert D, Initiative AD, [Multi-stage biomarker models for progression estimation in alzheimer's disease](#). In: vol. 24. 2015:387–98.
- C141. Castro-Mateos I, Pozo JM, Lazary A, Frangi AF, [2D segmentation of intervertebral discs and its degree of degeneration from T2-weighted magnetic resonance images](#). In: [SPIE Medical Imaging: Computer-aided Diagnosis](#). Vol. 9035. 2014.
- C140. Cimen S, Hoogendoorn C, Morris PD, Gunn J, Frangi AF, [Reconstruction of coronary trees from 3DRA using a 3D+t statistical cardiac prior](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Vol. 17. Pt 2. 2014:619–26.
- C139. Molina-Abril H, Frangi AF, [Topo-geometric filtration scheme for geometric active contours and level sets: application to cerebrovascular segmentation](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Vol. 17. Pt 1. 2014:755–62.
- C138. Pashaei A, Piella G, Planes X, Duchateau N, Maria de Caralt T, Sitges M, Frangi AF, [Image based cardiac acceleration map using statistical shape and 3D+t myocardial tracking models; in-vitro study on heart phantom](#). In: [SPIE Medical Imaging: Image-guided Procedures, Robotic Interventions, and Modeling](#). Vol. 8671. 2013.
- C137. Zimmer VAM, Fonolla R, Lekadir K, Piella G, Hoogendoorn C, Frangi AF, [Patient-specific manifold embedding of multispectral images using kernel combinations](#). In: [Machine Learning in Medical Imaging](#). Ed. by Wu, G, Zhang, D, Shen, D, Yan, P, Suzuki, K, and Wang, F. Vol. 8184. Lecture Notes in Computer Science. 2013:82–89.
- C136. Porras AR, De Craene M, Duchateau N, Sitges M, Bijnens BH, Frangi AF, Piella G, [Myocardial motion estimation combining tissue doppler and b-mode echocardiographic images](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Vol. 16. Pt 2. 2013:484–91.
- C135. Pereanez M, Lekadir K, Butakoff C, Hoogendoorn C, Frangi AF, [Fusing correspondenceless 3D point distribution models](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Vol. 16. Pt 1. 2013:251–8.
- C134. Aguilar ML, Morales HG, Larrabide I, Macho JM, San Roman L, Frangi AF, [Effect of coil surface area on the hemodynamics of a patient-specific intracranial aneurysm: a computational study](#). In: [IEEE International Symposium on Biomedical Imaging \(ISBI\)](#). 2012:1180–1183.
- C133. Alba X, Figueras, Lekadir K, Frangi AF, [Conical deformable model for myocardial segmentation in late-enhanced MRI](#). In: [IEEE International Symposium on Biomedical Imaging \(ISBI\)](#). 2012:270–273.
- C132. Camara O, Sermesant M, Lamata P, Wang L, Pop M, Relan J, De Craene M, Delingette H, Liu H, Niederer S, Pashaei A, Plank G, Romero D, Sebastian R, Wong KCL, Zhang H, Ayache N, Frangi AF, Shi P, Smith NP, Wright GA, [Integration of different cardiac electrophysiological models into a single simulation pipeline](#). In: [IEEE International Symposium on Biomedical Imaging \(ISBI\)](#). 2012:1429.
- C131. Cardenes R, Novikov A, Gunn J, Hose R, Frangi AF, [3D reconstruction of coronary arteries from rotational x-ray angiography](#). In: [IEEE International Symposium on Biomedical Imaging \(ISBI\)](#). 2012:618–621.
- C130. Castro I, Humbert L, Whitmarsh T, Lazary A, Del Rio Barquero LM, Frangi AF, [3D reconstruction of intervertebral discs from t1-weighted magnetic resonance images](#). In: [IEEE International Symposium on Biomedical Imaging \(ISBI\)](#). 2012:1695–1698.
- C129. Cordero-Grande L, Merino-Caviedes S, Alba X, Figueras, Frangi AF, Alberola-Lopez C, [3D fusion of cine and late-enhanced cardiac magnetic resonance images](#). In: [IEEE International Symposium on Biomedical Imaging \(ISBI\)](#). 2012:286–289.
- C128. De Craene M, Duchateau N, Tobon-Gomez C, Ghafaryasl B, Piella G, Rhode KS, Frangi AF, [SPM to the heart: mapping of 4D continuous velocities for motion abnormality quantification](#). In: [IEEE International Symposium on Biomedical Imaging \(ISBI\)](#). 2012:454–457.
- C127. Humbert L, Whitmarsh T, Fritscher K, Rio Barquero LM, Eckstein F, Link T, Schubert R, Frangi AF, [Femoral strength prediction using a 3D reconstruction method from dual-energy x-ray absorptiometry](#). In: [IEEE International Symposium on Biomedical Imaging \(ISBI\)](#). 2012:1451–1454.
- C126. Lekadir K, Hoogendoorn C, Duchateau N, Frangi AF, [Construction of a statistical atlas of the whole heart from a large 4D ct database](#). In: [IEEE Computers in Cardiology Conference \(CinC\)](#). 2012:541–544.
- C125. Morales HG, Larrabide I, Aguilar ML, Geers AJ, Macho JM, San Roman L, Frangi AF, [Comparison of two techniques of endovascular coil modeling in cerebral aneurysms using CFD](#). In: [IEEE International Symposium on Biomedical Imaging \(ISBI\)](#). 2012:1216–1219.
- C124. Porras AR, Piella G, Hoogendoorn C, Andreu D, Berrueto A, Frangi AF, [Endocardial motion estimation from electro-anatomical data](#). In: [IEEE International Symposium on Biomedical Imaging \(ISBI\)](#). 2012:282–285.
- C123. Wang VY, Hoogendoorn C, Engelbrecht G, Frangi AF, Young AA, Hunter PJ, Nash MP, [Unsupervised segmentation and personalised fe modelling of in vivo human myocardial mechanics based on an MRI atlas](#). In: [IEEE International Symposium on Biomedical Imaging \(ISBI\)](#). 2012:1360–1363.
- C122. Bisbal J, Engelbrecht G, Frangi AF, [Quantitative assessment of estimation approaches for mining over incomplete data in complex biomedical spaces: a case study on cerebral aneurysms](#). In: [International Conference on Practical Applications of Computational Biology and Bioinformatics](#). Ed. by Rocha, MP, Luscombe, N, FdezRiverola, F, and Rodriguez, JMC. Vol. 154. Advances in Intelligent and Soft Computing. 2012:63–71.
- C121. Lekadir K, Frangi AF, Yang GZ, [Inter-point procrustes: identifying regional and large differences in 3D anatomical shapes](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Vol. 15. Pt 3. 2012:99–106.
- C120. Sun Q, Groth A, Larrabide I, Cito S, Aguila M, Frangi AF, Pereira VM, Ouared R, Brina O, Aach T, [In-vitro verification of CFD simulations for predicting flow in a stented aneurysm model](#). In: [IEEE International Symposium on Biomedical Imaging \(ISBI\)](#). 2011:545–548.

- C119. Whitmarsh T, Fritscher KD, Humbert L, Del-Rio-Barquero LM, Schubert R, Frangi AF, [Hip fracture discrimination using 3D reconstructions from dual-energy x-ray absorptiometry](#). In: [IEEE International Symposium on Biomedical Imaging \(ISBI\)](#). 2011:1189–1192.
- C118. Cardenes R, Luis Diez J, Larrabide I, Bogunovic H, Frangi AF, [3D modeling of coronary artery bifurcations from CTA and conventional coronary angiography](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Ed. by Fichtinger, G, Martel, A, and Peters, T. Vol. 6893. Lecture Notes in Computer Science. 2011:395–402.
- C117. Bogunovic H, Pozo JM, Cardenes R, Frangi AF, [Anatomical labeling of the anterior circulation of the Circle of Willis using maximum a posteriori classification](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Ed. by Fichtinger, G, Martel, A, and Peters, T. Vol. 6893. Lecture Notes in Computer Science Pt 3. 2011:330–7.
- C116. Duchateau N, De Craene M, Piella G, Frangi AF, [Characterizing pathological deviations from normality using constrained manifold-learning](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Ed. by Fichtinger, G, Martel, A, and Peters, T. Vol. 6893. Lecture Notes in Computer Science Pt 3. 2011:256–63.
- C115. Morales HG, Larrabide I, Kim M, Villa-Uriol MC, Macho JM, Blasco J, San Roman L, Frangi AF, [Virtual coiling of intracranial aneurysms based on dynamic path planning](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Ed. by Fichtinger, G, Martel, A, and Peters, T. Vol. 6893. Lecture Notes in Computer Science Pt 1. 2011:355–62.
- C114. Lekadir K, Ghafaryasl B, Munoz-Moreno E, Butakoff C, Hoogendoorn C, Frangi AF, [Predictive modeling of cardiac fiber orientation using the Knutsson mapping](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Ed. by Fichtinger, G, Martel, A, and Peters, T. Vol. 6892. Lecture Notes in Computer Science. 2011:50–57.
- C113. Whitmarsh T, Fritscher KD, Humbert L, Del Rio Barquero LM, Roth T, Kammerlander C, Blauth M, Schubert R, Frangi AF, [A statistical model of shape and bone mineral density distribution of the proximal femur for fracture risk assessment](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Ed. by Fichtinger, G, Martel, A, and Peters, T. Vol. 6892. Lecture Notes in Computer Science. 2011:393–400.
- C112. Butakoff C, Sukno F, Doltra A, Silva E, Sitges M, Frangi AF, [Order statistic based cardiac boundary detection in 3D+t echocardiograms](#). In: [Functional Imaging and Modeling of the Heart \(FIMH\)](#). Vol. 6666. 2011:359–366.
- C111. Hoogendoorn C, Pashaei A, Sebastian R, Sukno FM, Camara O, Frangi AF, [Sensitivity analysis of mesh warping and subsampling strategies for generating large scale electrophysiological simulation data](#). In: [Functional Imaging and Modeling of the Heart \(FIMH\)](#). Vol. 6666. 2011:418–426.
- C110. Pashaei A, Hoogendoorn C, Sebastian R, Romero D, Camara O, Frangi AF, [Effect of scar development on fast electrophysiological models of the human heart: in-silico study on atlas-based virtual populations](#). In: [Functional Imaging and Modeling of the Heart \(FIMH\)](#). Vol. 6666. 2011:427–436.
- C109. Piella G, De Craene M, Yao C, Penney GP, Frangi AF, [Multiview diffeomorphic registration for motion and strain estimation from 3D ultrasound sequences](#). In: [Functional Imaging and Modeling of the Heart \(FIMH\)](#). Vol. 6666. 2011:375–383.
- C108. Porras AR, Piella G, Camara O, Silva E, Andreu D, Berruezo A, Frangi AF, [Cardiac deformation from electro-anatomical mapping data: application to scar characterization](#). In: [Functional Imaging and Modeling of the Heart \(FIMH\)](#). Vol. 6666. 2011:47–54.
- C107. Romero D, Sachse FB, Sebastian R, Frangi AF, [Towards high resolution computational models of the cardiac conduction system: a pipeline for characterization of Purkinje-ventricular-junctions](#). In: [Functional Imaging and Modeling of the Heart \(FIMH\)](#). Vol. 6666. 2011:28–35.
- C106. Suinesiaputra A, Frangi AF, Kaandorp TAM, Lamb HJ, Bax JJ, Reiber JHC, Lelieveldt BPF, [Slice-based combination of rest and dobutamine-stress cardiac MRI using a statistical motion model to identify myocardial infarction: validation against contrast-enhanced MRI](#). In: [Functional Imaging and Modeling of the Heart \(FIMH\)](#). Vol. 6666. 2011:267–274.
- C105. Duckett SG, Camara O, Ginks M, Bostock J, Chinchapatnam P, Sermesant M, Pashaei A, Gill JS, Carr-White G, Frangi AF, Razavi RS, Bijnens BH, Rinaldi CA, [Electromechanical interaction in patients undergoing cardiac resynchronisation therapy: comparison of intracardiac activation maps and early septal contraction in left bundle branch block](#). In: vol. 97. 2011:A52.
- C104. Cardenes R, Bogunovic H, Frangi AF, [Fast 3D centerline computation for tubular structures by front collapsing and fast marching](#). In: [IEEE International Conference on Image Processing \(ICIP\)](#). 2010:4109–4112.
- C103. Figueras, Hoogendoorn C, Sukno FM, Frangi AF, [Bilinear point distribution models for heart motion analysis](#). In: [IEEE International Symposium on Biomedical Imaging \(ISBI\)](#). 2010:476–479.
- C102. Humbert L, Whitmarsh T, De Craene M, Rio Barquero LM, Fritscher K, Schubert R, Eckstein F, Link T, Frangi AF, [3D reconstruction of both shape and bone mineral density distribution of the femur from dxa images](#). In: [IEEE International Symposium on Biomedical Imaging \(ISBI\)](#). 2010:456–459.
- C101. Munoz-Moreno E, Frangi AF, [Spatial normalization of cardiac diffusion tensor imaging for modeling the muscular structure of the myocardium](#). In: [IEEE International Conference on Image Processing \(ICIP\)](#). 2010:4413–4416.
- C100. Hoogendoorn C, Whitmarsh T, Duchateau N, Sukno FM, De Craene M, Frangi AF, [A groupwise mutual information metric for cost efficient selection of a suitable reference in cardiac computational atlas construction](#). In: [SPIE Medical Imaging: Image Processing](#). Vol. 7623. 2010.
- C99. Sukno FM, Butakoff C, Bijnens BH, Frangi AF, [Sparse active shape models: influence of the interpolation kernel on segmentation accuracy and speed](#). In: [SPIE Medical Imaging: Image Processing](#). Vol. 7623. 2010.
- C98. Whitmarsh T, Humbert L, De Craene M, Del Rio Barquero LM, Fritscher K, Schubert R, Eckstein F, Link T, Frangi AF, [3D bone mineral density distribution and shape reconstruction of the proximal femur from a single simulated dxa image: an in vitro study](#). In: [SPIE Medical Imaging: Image Processing](#). Vol. 7623. 2010.
- C97. Zhang C, Villa-Uriol MC, Frangi AF, [Evaluation of an efficient GPU implementation of digitally reconstructed radiographs in 3D/2D image registration](#). In: [SPIE Medical Imaging: Image Processing](#). Vol. 7623. 2010.
- C96. Camara O, Pashaei A, Sebastian R, Frangi AF, [Personalization of fast conduction Purkinje system in eikonal-based electrophysiological models with optical mapping data](#). In: [Statistical Atlases and Computational Models of the Heart](#). Ed. by Camara, O, Pop, M, Rhode, K, Sermesant, M, Smith, N, and Young, A. Vol. 6364. Lecture Notes in Computer Science. 2010:281–290.
- C95. De Craene M, Sukno FM, Tobon-Gomez C, Butakoff C, Figueras, Hoogendoorn C, Piella G, Duchateau N, Munoz-Moreno E, Sebastian R, Camara O, Frangi AF, [Atlas construction and image analysis using statistical cardiac models](#). In: [Statistical Atlases and Computational Models of the Heart](#). Ed. by Camara, O, Pop, M, Rhode, K, Sermesant, M, Smith, N, and Young, A. Vol. 6364. Lecture Notes in Computer Science. 2010:1–13.

- C94. Duchateau N, De Craene M, Piella G, Hoogendoorn C, Silva E, Doltra A, Mont L, Angeles Castel M, Brugada J, Sitges M, Frangi AF, [Atlas-based quantification of myocardial motion abnormalities: added-value for the understanding of CRT outcome?](#) In: [Statistical Atlases and Computational Models of the Heart](#). Ed. by Camara, O, Pop, M, Rhode, K, Sermesant, M, Smith, N, and Young, A. Vol. 6364. Lecture Notes in Computer Science. 2010:65–74.
- C93. Hoogendoorn C, Pashaei A, Sebastian R, Sukno FM, Camara O, Frangi AF, [Influence of geometric variations on lv activation times: a study on an atlas-based virtual population](#). In: [Statistical Atlases and Computational Models of the Heart](#). Ed. by Camara, O, Pop, M, Rhode, K, Sermesant, M, Smith, N, and Young, A. Vol. 6364. Lecture Notes in Computer Science. 2010:242–251.
- C92. Vegas-Sanchez-Ferrero G, Aja-Fernandez S, Martin-Fernandez M, Frangi AF, Palencia C, [Probabilistic-driven oriented speckle reducing anisotropic diffusion with application to cardiac ultrasonic images](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Ed. by Jiang, T, Navab, N, Pluim, JPW, and Viergever, MA. Vol. 6361. Lecture Notes in Computer Science. 2010:518–525.
- C91. Bogunovic H, Pozo JM, Cardenes R, Frangi AF, [Automatic identification of internal carotid artery from 3DRA images](#). In: [IEEE Engineering in Medicine and Biology Society Conference \(EMBC\)](#). Vol. 2010. 2010:5343–6.
- C90. Geers AJ, Larrabide I, Morales HG, Frangi AF, [Comparison of steady-state and transient blood flow simulations of intracranial aneurysms](#). In: [IEEE Engineering in Medicine and Biology Society Conference \(EMBC\)](#). Vol. 2010. 2010:2622–5.
- C89. Larrabide I, Cruz Villa-Uriol M, Cardenes R, Pozo JM, Hose RD, Frangi AF, [Automated intracranial aneurysm isolation and quantification](#). In: [IEEE Engineering in Medicine and Biology Society Conference \(EMBC\)](#). Vol. 2010. 2010:2841–2844.
- C88. Munoz-Moreno E, Cardenes R, Frangi AF, [Analysis of the helix and transverse angles of the muscle fibers in the myocardium based on diffusion tensor imaging](#). In: [IEEE Engineering in Medicine and Biology Society Conference \(EMBC\)](#). Vol. 2010. 2010:5720–3.
- C87. Romero D, Zimmerman V, Sebastian R, Frangi AF, [Flexible modeling for anatomically-based cardiac conduction system construction](#). In: [IEEE Engineering in Medicine and Biology Society Conference \(EMBC\)](#). Vol. 2010. 2010:779–82.
- C86. Tobon-Gomez C, Butakoff C, Yushkevich P, Hugué M, Frangi AF, [3D mesh based wall thickness measurement: identification of left ventricular hypertrophy phenotypes](#). In: [IEEE Engineering in Medicine and Biology Society Conference \(EMBC\)](#). Vol. 2010. 2010:2642–5.
- C85. Tobon-Gomez C, Sukno FM, Butakoff C, Hugué M, Frangi AF, [Simulation of late gadolinium enhancement cardiac magnetic resonance studies](#). In: [IEEE Engineering in Medicine and Biology Society Conference \(EMBC\)](#). Vol. 2010. 2010:1469–72.
- C84. Valencia C, Villa-Uriol MC, Pozo JM, Frangi AF, [Morphological descriptors as rupture indicators in middle cerebral artery aneurysms](#). In: [IEEE Engineering in Medicine and Biology Society Conference \(EMBC\)](#). Vol. 2010. 2010:6046–9.
- C83. Villa-Uriol MC, Larrabide I, Geers AJ, Pozo J, Bogunovic H, Mazzeo M, Omedas P, Barbarito V, Carotenuto L, Riccobene C, Planes X, Martelli Y, Frangi AF, [Angiolab: integrated technology for patient-specific management of intracranial aneurysms](#). In: [IEEE Engineering in Medicine and Biology Society Conference \(EMBC\)](#). Vol. 2010. 2010:6801–4.
- C82. Pashaei A, Romero D, Sebastian R, Camara O, Frangi AF, [Comparison of phenomenological and biophysical cardiac models coupled with heterogenous structures for prediction of electrical activation sequence](#). In: [IEEE Computers in Cardiology Conference \(CinC\)](#). Vol. 37. 2010:871–874.
- C81. Morales HG, Kim M, Villa-Uriol MC, Diaz EV, Frangi AF, [Influence of coil packing rate and configuration on intracranial aneurysm hemodynamics](#). In: vol. 25. 2010:2291–2294.
- C80. Sebastian R, Zimmerman V, Sukno F, Bijmens BB, Frangi AF, [Cardiac modelling for pathophysiology research and clinical applications. the need for an automated pipeline](#). In: [World Congress on Medical Physics and Biomedical Engineering, Vol 25, Pt 4: Image Processing, Biosignal Processing, Modelling and Simulation, Biomechanics](#). Vol. 25. 2010:2207–2210.
- C79. De Craene M, Piella G, Duchateau N, Silva E, Doltra A, Gao H, D’Hooge J, Camara O, Brugada J, Sitges M, Frangi AF, [Temporal diffeomorphic free-form deformation for strain quantification in 3D-us images](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Vol. 13. Pt 2. 2010:1–8.
- C78. Sun H, Frangi AF, Wang H, Sukno FM, Tobon-Gomez C, Yushkevich PA, [Automatic cardiac MRI segmentation using a biventricular deformable medial model](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Vol. 13. Pt 1. 2010:468–75.
- C77. Geers AJ, Larrabide I, Radaelli AG, Bogunovic H, Andel HAFG, Majoie CB, Frangi AF, [Reproducibility of image-based computational hemodynamics in intracranial aneurysms: comparison of CTA and 3DRA](#). In: [IEEE International Symposium on Biomedical Imaging \(ISBI\)](#). 2009:610–613.
- C76. Kim M, Larrabide I, Villa-Uriol MC, Frangi AF, [Hemodynamic alterations of a patient-specific intracranial aneurysm induced by virtual deployment of stents in various axial orientation](#). In: [IEEE International Symposium on Biomedical Imaging \(ISBI\)](#). 2009:1215–1218.
- C75. Pashaei A, Sebastian R, Zimmerman V, Bijmens BH, Frangi AF, [A mesh-less approach for fast estimation of electrical activation time in the ventricular wall](#). In: [IEEE Computers in Cardiology Conference \(CinC\)](#). Ed. by Murray, A. Computers in Cardiology Series. 2009:209–212.
- C74. Sun H, Tobon-Gomez C, Das SR, Hugué M, Yushkevich PA, Frangi AF, [Ventricular wall thickness analysis in acute myocardial infarction and hypertrophic cardiomyopathy](#). In: [IEEE International Symposium on Biomedical Imaging \(ISBI\)](#). 2009:670–673.
- C73. Watton PN, Frangi AF, Ventikos Y, [An integrative approach to cerebrovascular disease healthcare: it for cerebral aneurysms](#). In: [IEEE International Symposium on Biomedical Imaging \(ISBI\)](#). 2009:378–381.
- C72. Zimmerman V, Sebastian R, Bijmens BH, Frangi AF, [Modeling the Purkinje conduction system with a non deterministic rule based iterative method](#). In: [IEEE Computers in Cardiology Conference \(CinC\)](#). Ed. by Murray, A. Computers in Cardiology Series. 2009:461–464.
- C71. Pavani SK, Delgado-Gomez D, Frangi AF, [A rapidly trainable and global illumination invariant object detection system](#). In: [Progress in Pattern Recognition, Image Analysis, Computer Vision, and Applications, Proceedings](#). Ed. by Bayro-Corrochano, E and Eklundh, JO. Vol. 5856. Lecture Notes in Computer Science. 2009:877–884.
- C70. Sukno FM, Pavani SK, Butakoff C, Frangi AF, [Automatic assessment of eye blinking patterns through statistical shape models](#). In: [Computer Vision Systems, Proceedings](#). Ed. by Fritz, M, Schiele, B, and Piater, JH. Vol. 5815. Lecture Notes in Computer Science. 2009:33–42.

- C69. Duchateau N, De Craene M, Silva E, Sitges M, Bijmens BH, Frangi AF, [Septal flash assessment on CRT candidates based on statistical atlases of motion](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Ed. by Yang, GZ, Hawkes, D, Rueckert, D, Nobel, A, and Taylor, C. Vol. 5761. Lecture Notes in Computer Science Pt 2. 2009:759–66.
- C68. Pavani SK, Delgado Gomez D, Frangi AF, [Gaussian weak classifiers based on Haar-like features with four rectAngles for real-time face detection](#). In: [Computer Analysis of Images and Patterns, Proceedings](#). Ed. by Jiang, X and Petkov, N. Vol. 5702. Lecture Notes in Computer Science. 2009:91–98.
- C67. Pavani SK, Sukno FM, Butakoff C, Planes X, Frangi AF, [A confidence-based update rule for self-updating human face recognition systems](#). In: [Advances in Biometrics](#). Ed. by Tistarelli, M and Nixon, MS. Vol. 5558. Lecture Notes in Computer Science. 2009:151–160.
- C66. Camara O, Oeltze S, De Craene M, Sebastian R, Silva E, Tamborero D, Mont L, Sitges M, Bijmens BH, Frangi AF, [Cardiac motion estimation from intracardiac electrical mapping data: identifying a septal flash in heart failure](#). In: [Functional Imaging and Modeling of the Heart \(FIMH\)](#). Ed. by Ayache, N, Delingette, H, and Sermesant, M. Vol. 5528. Lecture Notes in Computer Science. 2009:21–29.
- C65. Camara O, Oubel E, Piella G, Balocco S, De Craene M, Frangi AF, [Multi-sequence registration of cine, tagged and delay-enhancement MRI with shift correction and steerable pyramid-based detagging](#). In: [Functional Imaging and Modeling of the Heart \(FIMH\)](#). Ed. by Ayache, N, Delingette, H, and Sermesant, M. Vol. 5528. Lecture Notes in Computer Science. 2009:330–338.
- C64. De Craene M, Camara O, Bijmens BH, Frangi AF, [Large diffeomorphic FFD registration for motion and strain quantification from 3D-us sequences](#). In: [Functional Imaging and Modeling of the Heart \(FIMH\)](#). Ed. by Ayache, N, Delingette, H, and Sermesant, M. Vol. 5528. Lecture Notes in Computer Science. 2009:437–446.
- C63. Larrabide I, Omedas P, Martelli Y, Planes X, Nieber M, Moya JA, Butakoff C, Sebastian R, Camara O, De Craene M, Bijmens BH, Frangi AF, [Gimias: an open source framework for efficient development of research tools and clinical prototypes](#). In: [Functional Imaging and Modeling of the Heart \(FIMH\)](#). Ed. by Ayache, N, Delingette, H, and Sermesant, M. Vol. 5528. Lecture Notes in Computer Science. 2009:417–426.
- C62. Romero D, Sebastian R, Bijmens BH, Zimmerman V, Boyle PM, Vigmond EJ, Frangi AF, [The Purkinje system and cardiac geometry: assessing their influence on the paced heart](#). In: [Functional Imaging and Modeling of the Heart \(FIMH\)](#). Ed. by Ayache, N, Delingette, H, and Sermesant, M. Vol. 5528. Lecture Notes in Computer Science. 2009:68–77.
- C61. Zhang C, De Craene M, Villa-Uriol MC, Pozo JM, Bijmens BH, Frangi AF, [Estimating continuous 4D wall motion of cerebral aneurysms from 3D rotational angiography](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Vol. 12. Pt 1. 2009:140–7.
- C60. Rajasekaran H, Lo Iacono L, Hasselmeyer P, Fingberg J, Summers P, Benkner S, Engelbrecht G, Arbona A, Chiarini A, Friedrich CM, Hofmann-Apitius M, Kumpf K, Moore B, Bijlenga P, Iavindrasana J, Mueller H, Hose RD, Dunlop R, Frangi AF, [@neurIST - towards a system architecture for advanced disease management through integration of heterogeneous data, computing, and complex processing services](#). In: [IEEE International Symposium on Computer-based Medical Systems](#). Ed. by Puuronen, S, Pechenizkiy, M, Tsymbal, A, and Lee, DJ. 2008:361–366.
- C59. Sun H, Avants BB, Frangi AF, Ordas S, Gee JC, Yushkevich PA, [Branching medial models for cardiac shape representation](#). In: [IEEE International Symposium on Biomedical Imaging \(ISBI\)](#). 2008:1485–1488.
- C58. Romero DA, Sebastian R, Plank G, Vigmond EJ, Frangi AF, [Modeling the influence of the wv delay for CRT on the electrical activation patterns in absence of conduction through the av node - art. no. 69182g](#). In: [SPIE Medical Imaging: Visualization, Image-guided Procedures, and Modeling](#). Ed. by Miga, MI and Cleary, KR. Vol. 6918. Proceedings of the Society of Photo-Optical Instrumentation Engineers (SPIE). 2008:G9182.
- C57. Castro M, Putman C, Radaelli A, Frangi AF, Cebral J, [Image-based investigation of hemodynamics and rupture of cerebral aneurysms of a single morphological type: terminal aneurysms - art. no. 69160k](#). In: [SPIE Medical Imaging: Physiology, Function, and Structure from Medical Images](#). Ed. by Hu, XP and Clough, AV. Vol. 6916. Proceedings of the Society of Photo-Optical Instrumentation Engineers (SPIE). 2008:K9160.
- C56. Sebastian R, Ordas S, Plank G, Roriguez B, Vigmond EJ, Frangi AF, [Assessing influence of conductivity in heart modelling with the aim of studying cardiovascular diseases - art. no. 691627](#). In: [SPIE Medical Imaging: Physiology, Function, and Structure from Medical Images](#). Ed. by Hu, XP and Clough, AV. Vol. 6916. Proceedings of the Society of Photo-Optical Instrumentation Engineers (SPIE). 2008:91627.
- C55. De Craene M, Pozo JM, Villa MC, Vivas E, Sola T, Guimaraens L, Blasco J, Macho J, Frangi AF, [Coil compaction and aneurysm growth: image-based quantification using non-rigid registration](#). In: [SPIE Medical Imaging: Computer-aided Diagnosis](#). Ed. by Giger, ML and Karssemeijer, N. Vol. 6915. Proceedings of SPIE. 2008.
- C54. Bogunovic H, Radaelli AG, De Craene M, Delgado D, Frangi AF, [Image intensity standardization in 3D rotational angiography and its application to vascular segmentation - art. no. 691419](#). In: [SPIE Medical Imaging: Image Processing](#). Ed. by Reinhardt, JM and Pluim, JPW. Vol. 6914. Proceedings of the Society of Photo-Optical Instrumentation Engineers (SPIE). 2008:91419.
- C53. Larrabide I, Radaelli A, Frangi AF, [Fast virtual stenting with deformable meshes: application to intracranial aneurysms](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Ed. by Metaxas, D, Axel, L, Fichtinger, G, and Szekely, G. Vol. 5242. Lecture Notes in Computer Science. 2008:790–797.
- C52. Balocco S, Camara O, Frangi AF, [Towards regional elastography of intracranial aneurysms](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Vol. 5241. Pt 2. 2008:131–8.
- C51. Sun H, Avants BB, Frangi AF, Sukno F, Geel JC, Yushkevich PA, [Cardiac medial modeling and time-course heart wall thickness analysis](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Vol. 11. Pt 2. 2008:766–73.
- C50. Hansen MS, Olafsdottir H, Darvann TA, Hermann NV, Oubell E, Larsen R, Ersboll BK, Frangi AF, Larsen P, Perlyn CA, Morriss-Kays GM, Kreiborg S, [Estimation of independent non-linear deformation modes for analysis of craniofacial malformations in crouzon mice](#). In: [IEEE International Symposium on Biomedical Imaging \(ISBI\)](#). 2007:1296–1299.
- C49. Hoogendoorn C, Sukno FM, Ordas S, Frangi AF, [Bilinear models for spatio-temporal point distribution analysis: application to extrapolation of whole heart cardiac dynamics](#). In: [IEEE International Conference on Computer Vision \(ICCV\)](#). 2007:2378–2385.
- C48. Ordas S, Oubel E, Sebastian R, Frangi AF, [Computational anatomy atlas of the heart](#). In: [International Symposium on Image and Signal Processing and Analysis \(ISISPA\)](#). 2007:338–342.
- C47. Oubel E, De Craene M, Gazzola M, Alfred, Frangi AF, [Multiview registration of cardiac tagging MRI images](#). In: [IEEE International Symposium on Biomedical Imaging \(ISBI\)](#). 2007:388–391.

- C46. Sukno FM, Frangi AF, [Exploring reliability for automatic identity verification with statistical shape models](#). In: [IEEE Workshop on Automatic Identification Advanced Technologies](#). 2007:80–86.
- C45. Butakoff C, Balocco S, Ordas S, Frangi AF, [Simulated 3D ultrasound lv cardiac images for active shape model training - art. no. 65123u](#). In: [SPIE Medical Imaging: Image Processing](#). Ed. by Pluim, JPW and Reinhardt, JM. Vol. 6512. Proceedings of the Society of Photo-Optical Instrumentation Engineers (SPIE). 2007:U5123.
- C44. Olafsdottir H, Darvann TA, Ersboll BK, Hermann NV, Oubel E, Larsen R, Frangi AF, Larsen P, Perlyn CA, Morriss-Kay GM, Kreiborg S, [Craniofacial statistical deformation models of wild-type mice and Crouzon mice](#). In: [SPIE Medical Imaging: Image Processing](#). Ed. by Pluim, JPW and Reinhardt, JM. Vol. 6512. Proceedings of the Society of Photo-Optical Instrumentation Engineers (SPIE). 2007:C5121.
- C43. Cebal JR, Radaelli A, Frangi AF, Putman CM, [Hemodynamics before and after bleb formation in cerebral aneurysms - art. no. 65112c](#). In: [SPIE Medical Imaging: Physiology, Function, and Structure from Medical Images](#). Ed. by Manduca, A and Hu, XP. Vol. 6511. Proceedings of the Society of Photo-Optical Instrumentation Engineers (SPIE). 2007:C5112.
- C42. Cebal JR, Radaelli A, Frangi AF, Putman CM, [Qualitative comparison of intra-aneurysmal flow structures determined from conventional and virtual angiograms - art. no. 65111e](#). In: [SPIE Medical Imaging: Physiology, Function, and Structure from Medical Images](#). Ed. by Manduca, A and Hu, XP. Vol. 6511. Proceedings of the Society of Photo-Optical Instrumentation Engineers (SPIE). 2007:E5111.
- C41. Ordas S, Oubel E, Leta R, Carreras F, Frangi AF, [A statistical shape model of the heart and its application to model-based segmentation](#). In: [SPIE Medical Imaging: Physiology, Function, and Structure from Medical Images](#). Ed. by Manduca, A and Hu, XP. Vol. 6511. Proceedings of SPIE. 2007.
- C40. Oubel E, De Craene M, Putman CM, Cebal JR, Frangi AF, [Analysis of intracranial aneurysm wall motion and its effects on hemodynamic patterns - art. no. 65112a](#). In: [SPIE Medical Imaging: Physiology, Function, and Structure from Medical Images](#). Ed. by Manduca, A and Hu, XP. Vol. 6511. Proceedings of the Society of Photo-Optical Instrumentation Engineers (SPIE). 2007:A5112.
- C39. Radaelli AG, Martinez TS, Diaz EV, Mellado X, Castro MA, Putman CM, Guimaraens L, Cebal JR, Frangi AF, [Combined clinical and computational information in complex cerebral aneurysms: application to mirror cerebral aneurysms](#). In: [SPIE Medical Imaging: Physiology, Function, and Structure from Medical Images](#). Ed. by Manduca, A and Hu, XP. Vol. 6511. Proceedings of SPIE. 2007.
- C38. Tobon-Gomez C, Butakoff C, Ordas S, Aguade S, Frangi AF, [Comparative study of diverse model building strategies for 3D-ASM segmentation of dynamic gated SPECT data](#). In: [SPIE Medical Imaging: Physiology, Function, and Structure from Medical Images](#). Ed. by Manduca, A and Hu, XP. Vol. 6511. Proceedings of the Society of Photo-Optical Instrumentation Engineers (SPIE). 2007:G5112.
- C37. Olafsdottir H, Lanche S, Darvann TA, Hermann NV, Larsen R, Ersboll BK, Oubel E, Frangi AF, Larsen P, Perlyn CA, Morriss-Kay GM, Kreiborg S, [A point-wise quantification of asymmetry using deformation fields: application to the study of the crouzon mouse model](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Ed. by Ayache, N, Ourdelin, S, and Maeder, A. Vol. 6361. Lecture Notes in Computer Science Pt 2. 2007:452–9.
- C36. Olafsdottir H, Hansen MS, Sjostrand K, Darvann TA, Hermann NV, Oubel E, Ersboll BK, Larsen R, Frangi AF, Larsen P, Perlyn CA, Morriss-Kay GM, Kreiborg S, [Sparse statistical deformation model for the analysis of craniofacial malformations in the crouzon mouse](#). In: [Image Analysis, Proceedings](#). Ed. by Ersboll, BK and Pedersen, KS. Vol. 4522. Lecture Notes in Computer Science. 2007:112–121.
- C35. Oubel E, Frangi AF, Hero AO, [Complex wavelets for registration of tagged MRI sequences](#). In: [IEEE International Symposium on Biomedical Imaging \(ISBI\)](#). 2006:622–625.
- C34. Ravikumar N, Gooya A, Frangi AF, Taylor ZA, [Robust group-wise rigid registration of point sets using t-mixture model](#). In: [SPIE Medical Imaging: Image Processing](#). Vol. 9784. 2006:97840S–14.
- C33. Oubel E, Hero AO, Frangi AF, [Cardiac motion estimation by using high-dimensional features and k-means clustering method](#). In: [SPIE Medical Imaging: Image Processing](#). Ed. by Reinhardt, JM and Pluim, JPW. Vol. 6144. Proceedings of SPIE. 2006.
- C32. Dempere-Marco L, Oubel E, Castro M, Putman C, Frangi AF, Cebal J, [CFD analysis incorporating the influence of wall motion: application to intracranial aneurysms](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Ed. by Larsen, R, Nielsen, M, and Sporning, J. Vol. 4191. Lecture Notes in Computer Science. 2006:438–445.
- C31. Gonzalez-Jimenez D, Sukno F, Alba-Castro JL, Frangi AF, [Automatic pose correction for local feature-based face authentication](#). In: [Articulated Motion and Deformable Objects \(AMDO\)](#). Ed. by Perales, FJ and Fisher, RB. Vol. 4069. Lecture Notes in Computer Science. 2006:356–365.
- C30. Ordas S, Frangi AF, [Automatic quantitative analysis of myocardial wall motion and thickening from long- and short-axis cine MRI studies](#). In: [IEEE Engineering in Medicine and Biology Society Conference \(EMBC\)](#). 2005:7028–7031.
- C29. Perez JFG, Frangi AF, Solano EL, Lukas K, [Lip reading for robust speech recognition on embedded devices](#). In: [IEEE International Conference on Acoustics, Speech, and Signal Processing \(ICASSP\)](#). 2005:473–476.
- C28. Sukno FM, Guerrero JJ, Frangi AF, [Homographic active shape models for view-independent facial analysis](#). In: [SPIE Biometric Technology for Human Identification](#). Ed. by Jain, AK and Ratha, NK. Vol. 5779. 2005:152–163.
- C27. Boisrobert L, Laclaustra M, Bossa M, Frangi AG, Frangi AF, [Combined statistical analysis of vasodilation and flow curves in brachial ultrasonography: technique and its connection to cardiovascular risk factors](#). In: [SPIE Medical Imaging: Ultrasonic Imaging and Signal Processing](#). Ed. by Walker, WF and Emelianov, SY. Vol. 5750. Proceedings of the Society of Photo-Optical Instrumentation Engineers (SPIE). 2005:244–253.
- C26. Hernandez M, Frangi AF, [Brain aneurysm segmentation in CTA and 3DRA using geodesic active regions based on second order prototype features and non parametric density estimation](#). In: [SPIE Medical Imaging: Image Processing](#). Ed. by Fitzpatrick, JM and Reinhardt, JM. Vol. 5747. Proceedings of the Society of Photo-Optical Instrumentation Engineers (SPIE). 2005:514–525.
- C25. Millan RD, Hernandez M, Gallardo D, Cebal JR, Putman C, Dempere-Marco L, Frangi AF, [Characterization of cerebral aneurysms using 3D moment invariants](#). In: [SPIE Medical Imaging: Image Processing](#). Ed. by Fitzpatrick, JM and Reinhardt, JM. Vol. 5747. Proceedings of the Society of Photo-Optical Instrumentation Engineers (SPIE). 2005:743–754.
- C24. Oubel E, Neemuchwala H, Hero A, Boisrobert L, Laclaustra M, Frangi AF, [Assessment of artery dilation by using image registration based on spatial features](#). In: [SPIE Medical Imaging: Image Processing](#). Ed. by Fitzpatrick, JM and Reinhardt, JM. Vol. 5747. Proceedings of SPIE. 2005:1283–1291.

- C23. Oubel E, Tobon-Gomez C, Hero AO, **Frangi AF**, [Myocardial motion estimation in tagged MR sequences by using alpha mi-based non rigid registration](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Ed. by Duncan, JS and Gerig, G. Vol. 3750. Lecture Notes in Computer Science. 2005:271–278.
- C22. Assen HC, Danilouchkine MG, **Frangi AF**, Ordas S, Westenberg JJM, Reiber JHC, Lelieveldt BPF, [SPASM: segmentation of sparse and arbitrarily oriented cardiac MRI data using a 3D-ASM](#). In: [Functional Imaging and Modeling of the Heart \(FIMH\)](#). Ed. by Frangi, A, Radeva, PI, Santos, A, and Hernandez, M. Vol. 3504. Lecture Notes in Computer Science. 2005:33–43.
- C21. Ordas S, Assen HC, Boisrobert L, Laucelli M, Puente J, Lelieveldt BPF, **Frangi AF**, [Statistical modeling and segmentation in cardiac MRI using a grid computing approach](#). In: [Advances in Grid Computing - EGC](#). Ed. by Sloot, PMA, Hoekstra, AG, Priol, T, Reinefeld, A, and Bubak, M. Vol. 3470. Lecture Notes in Computer Science. 2005:6–15.
- C20. Laclaustra M, Kaski JC, **Frangi AF**, [Flow-mediated dilation: just a marker of local shear stress?](#) In: vol. 45. 3. 2005:E11.
- C19. Suinesiaputra A, **Frangi AF**, Lamb HJ, Reiber JHC, Lelieveldt BPF, [Automatic prediction of myocardial contractility improvement in stress MRI using shape morphometrics with independent component analysis](#). In: [Information Processing in Medical Imaging \(IPMI\)](#). Vol. 19. 2005:321–32.
- C18. Suinesiaputra A, Uzumcu M, **Frangi AF**, Kaandorp TAM, Reiber JHC, Lelieveldt BPF, [Detecting regional abnormal cardiac contraction in short-axis MR images using independent component analysis](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Ed. by Barillot, C, Haynor, DR, and Hellier, P. Vol. 3216. Lecture Notes in Computer Science. 2004:737–744.
- C17. Hernandez M, **Frangi AF**, [Geodesic active regions using non-parametric statistical regional description and their application to aneurysm segmentation from cta](#). In: [Medical Imaging and Augmented Reality](#). Ed. by Yang, GZ and Jiang, T. Vol. 3150. Lecture Notes in Computer Science. 2004:94–102.
- C16. Suinesiaputra A, **Frangi AF**, Uzumcu M, Reiber JHC, Lelieveldt BPF, [Extraction of myocardial contractility patterns from short-axes MR images using independent component analysis](#). In: [Computer Vision and Mathematical Methods in Medical and Biomedical Image Analysis](#). Ed. by Sonka, M, Kakadiaris, IA, and Kybic, J. Vol. 3117. Lecture Notes in Computer Science. 2004:75–86.
- C15. Lamata P, Laclaustra M, **Frangi AF**, [Characterization of endothelial function in the brachial artery via affine registration of ultrasonographic image sequences](#). In: [SPIE Medical Imaging: Ultrasonic Imaging and Signal Processing](#). Ed. by Walker, WF and Insana, MF. Vol. 5035. Proceedings of the Society of Photo-Optical Instrumentation Engineers (SPIE). 2003:127–134.
- C14. Hernandez M, Barrena R, Hernandez G, Sapiro G, **Frangi AF**, [Pre-clinical evaluation of implicit deformable models for three-dimensional segmentation of brain aneurysms in cta](#). In: [SPIE Medical Imaging: Image Processing](#). Ed. by Sonka, M and Fitzpatrick, JM. Vol. 5032. Proceedings of the Society of Photo-Optical Instrumentation Engineers (SPIE). 2003:1264–1274.
- C13. Uzumcu M, **Frangi AF**, Reiber JHC, Lelieveldt BPF, [Independent component analysis in statistical shape models](#). In: [SPIE Medical Imaging: Image Processing](#). Ed. by Sonka, M and Fitzpatrick, JM. Vol. 5032. Proceedings of the Society of Photo-Optical Instrumentation Engineers (SPIE). 2003:375–383.
- C12. Hernandez M, **Frangi AF**, Sapiro G, [Three-dimensional segmentation of brain aneurysms in CTA using non-parametric region-based information and implicit deformable models: method and evaluation](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Ed. by Ellis, RE and Peters, TM. Vol. 2879. Lecture Notes in Computer Science. 2003:594–602.
- C11. Uzumcu M, **Frangi AF**, Sonka M, Reiber JHC, Lelieveldt BPF, [ICA vs. PCA active appearance models: application to cardiac MR segmentation](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Ed. by Ellis, RE and Peters, TM. Vol. 2878. Lecture Notes in Computer Science. 2003:451–458.
- C10. **Frangi AF**, Rueckert D, Schnabel JA, Niessen WJ, [Automatic construction of biventricular statistical shape models](#). In: [Functional Imaging and Modeling of the Heart \(FIMH\)](#). Ed. by Magnin, IE, Clarysse, P, Katila, T, Montagnat, J, and Nenonen, J. Vol. 2674. Lecture Notes in Computer Science. 2003:18–29.
- C9. Ordas S, Boisrobert L, Huguët M, **Frangi AF**, [Active shape models with invariant optimal features \(IOF-ASM\) application to cardiac MRI segmentation](#). In: [IEEE Computers in Cardiology Conference \(CinC\)](#). Ed. by Murray, A. Vol. 30. 2003:633–636.
- C8. Ginneken B, **Frangi AF**, Staal JJ, Romeny BMT, Viergever MA, [A non-linear gray-level appearance model improves active shape model segmentation](#). In: [IEEE Workshop on Mathematical Methods in Biomedical Image Analysis \(MMBIA\)](#). 2001:205–212.
- C7. Egmont-Petersen M, **Frangi AF**, Niessen WJ, Hogendoorn PCW, Bloem JL, Viergever MA, Reiber JHC, [Segmentation of bone tumor in MR perfusion images using neural networks and multiscale pharmacokinetic features](#). In: [IEEE International Conference on Pattern Recognition \(ICPR\)](#). Ed. by Sanfeliu, A, Villanueva, JJ, Vanrell, M, Alquezar, R, Crowley, J, and Shirai, Y. International Conference on Pattern Recognition. 2000:80–83.
- C6. **Frangi AF**, Niessen WJ, Nederkoorn PJ, Elgersma OEH, Viergever MA, [Three-dimensional model-based stenosis quantification of the carotid arteries from contrast-enhanced MR angiography](#). In: [IEEE Workshop on Mathematical Methods in Biomedical Image Analysis \(MMBIA\)](#). 2000:110–118.
- C5. Baert SAM, Niessen WJ, Meijering EHW, **Frangi AF**, Viergever MA, [Guide wire tracking during endovascular interventions](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Ed. by Delp, S, DiGioia, AM, and Jaramaz, B. Vol. 1935. Lecture Notes in Computer Science. 2000:727–734.
- C4. Baert SAM, Niessen WJ, Meijering EHW, **Frangi AF**, Viergever MA, [Guide wire tracking in interventional radiology](#). In: [CARS: Computer Assisted Radiology and Surgery](#). Ed. by Lemke, HU, Vannier, MW, Inamura, K, Farman, AG, and Doi, K. Vol. 1214. International Congress Series. 2000:537–542.
- C3. **Frangi AF**, Niessen WJ, Hoogeveen RM, Walsum T, Viergever MA, [Quantitation of vessel morphology from 3D mra](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Ed. by Taylor, C and Colchester, A. Vol. 1679. Lecture Notes in Computer Science. 1999:358–367.
- C2. **Frangi AF**, Niessen WJ, Vincken KL, Viergever MA, [Multiscale vessel enhancement filtering](#). In: [Medical Image Computing and Computer-assisted Intervention \(MICCAI\)](#). Ed. by Wells, WM, Colchester, A, and Delp, S. Vol. 1496. Lecture Notes in Computer Science. 1998:130–137.
- C1. **Frangi AF**, Rosell J, [A theoretical analysis of noise in electrical impedance tomographic images](#). In: [IEEE Engineering in Medicine and Biology Society Conference \(EMBC\)](#). Vol. 19. 1997:433–436.

PATENTS

- P11. Cimen S, Frangi AF, [Method and Apparatus for Modelling Non-rigid Networks](#). Patent Application WO 2016/030692 A1 (World Intellectual Property Organization). 2016.
- P10. Barbarito V, Carotenuto L, Serra Del Molino L, Frangi AF, Brugada J, Berruezo A, [Computer Implemented Methods for Identifying Channels in a 3D Volume and Computer Program Product Implementing the Methods](#). Patent Application US 2015/0356742 A1 (United States). 2015.
- P9. Barbarito V, Carotenuto L, Serra Del Molino L, Frangi AF, Brugada J, Berruezo A, [Computer Implemented Methods for Identifying Channels in a 3D Volume and Computer Program Product Implementing the Methods](#). Patent Application EP 2943933 A1 (European Patent Office). 2015.
- P8. Barbarito V, Carotenuto L, Serra Del Molino L, Frangi AF, Brugada J, Berruezo A, [Computer Implemented Methods for Identifying Channels in a 3D Volume and Computer Program Product Implementing the Methods](#). Patent Application WO 2014/111787 A4 (World Intellectual Property Organization). 2014.
- P7. Barbarito V, Carotenuto L, Serra Del Molino L, Frangi AF, Brugada J, Berruezo A, [Computer Implemented Methods for Identifying Channels in a 3D Volume and Computer Program Product Implementing the Methods](#). Patent Application WO 2014/111787 A1 (World Intellectual Property Organization). 2014.
- P6. Humbert L, Whitmarsh T, Del Rio Barquero L, De Craene M, Frangi AF, [Metodo para Obtener una Reconstruccion Tridimensional a Partir de una o mas Vistas Proyectivas, y uso de la misma](#). Granted Patent ES 2382774 B1 (Spain). 2013.
- P5. Humbert L, Whitmarsh T, Del Rio Barquero L, De Craene M, Frangi AF, [Method for Obtaining a Three-dimensional Reconstruction from One or More Projective Views and Use Thereof](#). Patent Application EP 2534641 A2 (European Patent Office). 2012.
- P4. Humbert L, Whitmarsh T, Del Rio Barquero L, De Craene M, Frangi AF, [Method for Obtaining a Three-dimensional Reconstruction from One or More Projective Views and Use Thereof](#). Patent Application WO 2011/098895 A8 (World Intellectual Property Organization). 2012.
- P3. Humbert L, Whitmarsh T, Del Rio Barquero L, De Craene M, Frangi AF, [Metodo para Obtener una Reconstruccion Tridimensional a Partir de una o mas Vistas Proyectivas, y uso de la misma](#). Patent Application ES 2382774 A1 (Spain). 2012.
- P2. Humbert L, Whitmarsh T, Del Rio Barquero L, De Craene M, Frangi AF, [Method for Obtaining a Three-dimensional Reconstruction from One or More Projective Views and Use Thereof](#). Search report WO 2011/098895 A3 (World Intellectual Property Organization). 2011.
- P1. Humbert L, Whitmarsh T, Del Rio Barquero L, De Craene M, Frangi AF, [Method for Obtaining a Three-dimensional Reconstruction from One or More Projective Views and Use Thereof](#). Patent Application WO 2011/098895 A2 (World Intellectual Property Organization). 2011.

OUTREACH & DISSEMINATION

- O12. Frangi AF. [Café Scientific, Chesterfield](#). Video. 2016. URL: <http://tinyurl.com/zdmrot6>.
- O11. Frangi AF. [Can Computer Heal Spines? Do you know?](#) Video. 2015. URL: <http://tinyurl.com/jjjozs4r>.
- O10. Frangi AF. [MySpine Project Overview](#). Video. 2015. URL: <http://tinyurl.com/jd8e8nm>.
- O9. Frangi AF. [Sheffield Festival of Science & Engineering, Interview](#). Video. 2015. URL: <http://tinyurl.com/he3w45x>.
- O8. Frangi AF. [VPH-DARE@IT Clinical Research Platforms Overview](#). Video. 2015. URL: <http://tinyurl.com/jd2s2hq>.
- O7. Frangi AF. [VPH-DARE@IT Platforms Overview](#). Video. 2015. URL: <http://tinyurl.com/jcxhphh>.
- O6. Frangi AF. [CISTIB YouTube Channel](#). Video. 2011. URL: <https://www.youtube.com/user/CISTIB>.
- O5. Frangi AF. [DISCIPULUS Project – Digital Patient: Interview](#). Video. 2011. URL: <http://tinyurl.com/jrnx9tx>.
- O4. Frangi AF. [The @neurIST Project: Outreach Video](#). Video. 2010. URL: <http://tinyurl.com/hl5vzvq>.
- O3. Frangi AF. [The @neurIST Project: Biomedical data integration supporting in silico understanding of cerebral aneurysms and individualized disease management and interventional planning](#). The Parliament Magazines Research Review 2008;7:52–53.
- O2. Frangi AF, Hose RD, Ruefenacht DA, [The @neurIST Project: Towards understanding of cerebral aneurysms](#). SPIE Newsroom. 2007. URL: <http://tinyurl.com/ycexcalq>.
- O1. Frangi AF, Ruiz A, Hofmann M, [Understanding cerebral aneurysms: The @neurIST project](#). ERCIM News. 2007. URL: <http://tinyurl.com/y7sfqyoq>. Special Theme on the Digital Patient.

PhD Supervision

- T24. Farzi M. [Bone Ageing and Osteoporosis: Automated DXA Image Analysis for Population Imaging](#). PhD Thesis. Supervisors (ordered): Wilkinson JM, Frangi AF, University of Sheffield: Sheffield, UK. Viva held Nov. 2018.
- T23. Sarrami-Foroushani A. [In silico clinical trials for assessment of intracranial flow diverters](#). PhD Thesis. Supervisors (ordered): Frangi AF, Lassila T, University of Sheffield: Sheffield, UK. Viva held Nov. 2018.
- T22. Manap R. [New learning frameworks for blind image quality assessment model](#). PhD Thesis. Supervisors (ordered): Frangi AF, Shao L, University of Sheffield: Sheffield, UK. Viva held Feb. 2018.
- T21. Pereanez M. [Enlargement, Subdivision and Individualization of Statistical Shape Models: Application to 3D Medical Image Segmentation](#). PhD Thesis. Supervisors (ordered): Frangi AF, Lekadir K, Universitat Pompeu Fabra: Barcelona, Spain. Viva held Sept. 2017.
- T20. Dong B. [High-throughput Image Analysis of Zebrafish Model of Parkinson's Disease](#). PhD Thesis. Supervisor: Frangi AF. University of Sheffield: Sheffield, UK. Viva held July 2017.
- T19. Ravikumar N. [A Probabilistic Framework for Statistical Shape Models and Atlas Construction: Application to Neuroimaging](#). PhD Thesis. Supervisors (ordered): Taylor ZA, Frangi AF, University of Sheffield. Viva held May 2017.
- T18. Alba X. [Automated Cardiac MR Image Analysis for Population Imaging](#). PhD Thesis. Supervisors (ordered): Frangi AF, Lekadir K, Universitat Pompeu Fabra: Barcelona, Spain. Viva held Apr. 2017.
- T17. Cimen S. [Reconstruction of Coronary Arteries from X-ray Rotational Angiography](#). PhD Thesis. Supervisors (ordered): Frangi AF, Gooya A, University of Sheffield: Sheffield, UK. Viva held Apr. 2017.
- T16. Hua R. [Non-rigid Medical Image Registration with Extended Free Form Deformations: Modelling General Tissue Transitions](#). PhD Thesis. Supervisors (ordered): Frangi AF, Pozo JM, University of Sheffield: Sheffield, UK. Viva held Mar. 2017.

- T15. Lange M. [Exploration of the Human Purkinje Network in Virtual Populations](#). PhD Thesis. University of Sheffield: Sheffield, UK. Frangi, A F and Lassila, T Feb. 2017.
- T14. Castro-Mateos I. [Statistical Anatomical Modelling for Efficient and Personalised Spine Biomechanical Models](#). PhD Thesis. Supervisors (ordered): **Frangi AF**, Pozo JM, University of Sheffield: Sheffield, UK. Viva held June 2015.
- T13. Porras-Perez AR. [Multi-cue Image Integration for Cardiac Tissue Characterization](#). Cum Laude. PhD Thesis. Supervisors (ordered): Piella G, **Frangi AF**, Universitat Pompeu Fabra: Barcelona, Spain. Viva held June 2015.
- T12. Geers AH. [Hemodynamic Modeling of Cerebral Aneurysms](#). Cum Laude. PhD Thesis. Supervisors (ordered): **Frangi AF**, Larrabide I, Universitat Pompeu Fabra: Barcelona, Spain. Viva held Jan. 2015.
- T11. Hoogendoorn C. [A Statistical Dynamic Cardiac Atlas for the Virtual Physiological Human: Construction and Application](#). Cum Laude. PhD Thesis. Supervisor: **Frangi AF**. Universitat Pompeu Fabra: Barcelona, Spain. Viva held Feb. 2014.
- T10. Bogunovic H. [Geometric Modeling and Characterization of the Circle of Willis](#). Cum Laude. PhD Thesis. Supervisors (ordered): **Frangi AF**, Pozo JM, Universitat Pompeu Fabra: Barcelona, Spain. Viva held Sept. 2012.
- T9. Morales H. [Endovascular Coiling and Its Influence on Intra-aneurysmal Hemodynamics by Image-based](#). Cum Laude. PhD Thesis. Supervisors (ordered): **Frangi AF**, Larrabide I, Universitat Pompeu Fabra: Barcelona, Spain. Viva held Sept. 2012.
- T8. Whitmarsh T. [3D Reconstruction of the Proximal Femur and Lumbar Vertebrae from Dual-energy X-ray Absorptiometry for Osteoporotic Fracture Risk Assessment](#). Cum Laude. PhD Thesis. Supervisors (ordered): **Frangi AF**, Humbert L, Universitat Pompeu Fabra: Barcelona, Spain. Viva held Sept. 2012.
- T7. Duchateau N. [Statistical Atlases of Motion and Deformation for the Characterization of Crt Responders](#). Cum Laude. PhD Thesis. Supervisors (ordered): **Frangi AF**, De Craene M, Universitat Pompeu Fabra: Barcelona, Spain. Viva held May 2012.
- T6. Zhang C. [Recovery of Cerebrovascular Morphodynamics from Time-resolved Rotational Angiography](#). Cum Laude. PhD Thesis. Supervisors (ordered): **Frangi AF**, Villa-Uriol MC, Universitat Pompeu Fabra: Barcelona, Spain. Viva held July 2011.
- T5. Tobon-Gomez C. [Three-dimensional Statistical Shape Models for Cardiac Image Analysis](#). Cum Laude. PhD Thesis. Supervisor: **Frangi AF**. Universitat Pompeu Fabra: Barcelona, Spain. Viva held June 2011.
- T4. Pavani SK. [Face Detection and Adaptive Face Recognition Systems](#). Cum Laude. PhD Thesis. Supervisors (ordered): **Frangi AF**, Delgado D, Universitat Pompeu Fabra: Barcelona, Spain. Viva held July 2010.
- T3. Butakoff C. [Efficient Techniques for Statistical Shape Model Building and Fusion](#). Cum Laude. PhD Thesis. Supervisor: **Frangi AF**. Universidad de Zaragoza: Zaragoza, Spain. Viva held Nov. 2009.
- T2. Oubel E. [Registration-based Motion and Deformation Analysis of Cardiovascular Image Sequences](#). Cum Laude. PhD Thesis. Supervisor: **Frangi AF**. Universidad de Zaragoza: Zaragoza, Spain. Viva held Dec. 2008.
- T1. Sukno FM. [Invariance and Reliability for Statistical Shape Models](#). Cum Laude. PhD Thesis. Supervisor: **Frangi AF**. Universidad de Zaragoza: Zaragoza, Spain. Viva held May 2008.

The full manuscript of all these theses can be downloaded from www.cistib.org/afrangi/alumni.

Scientific Evaluation Committees

2002	Examiner , Docent position Dr. Jyrki Lötjönen, Department of Engineering and Physics, Helsinki University of Technology	<i>Helsinki, FI</i>
2003	Evaluator , Torres y Quevedo Technologists Fellowship Program, Spanish Ministry of Science and Technology	<i>Spain</i>
2001-03	Evaluator , National R+D Program. Spanish National Evaluation and Prospection Agency (ANEP)	<i>Spain</i>
2003	Examiner , Nederland Wetenschap Organisatie, Holland, Research Program on Computational Life Sciences	<i>The Netherlands</i>
2003	Examiner , Junior Grants, Grant Agency, Academy of Sciences of the Czech Republic	<i>Czech Republic</i>
2006-10	International College Member , Review College, Engineering and Physical Sciences Research Council (EPSRC)	<i>United Kingdom</i>
2007	Expert Panellist , Expert Consensus Panel, Tecnología Electrónica y Comunicaciones (TEC), Ministerio de Educación y Ciencia, Plan Nacional	<i>Spanish</i>
2007	Expert Panellist , Expert Consensus Panel, Tecnología Electrónica y Comunicaciones (TEC), Ministerio de Educación y Ciencia, Plan Nacional	<i>Spanish</i>
2008	Expert Reviewer, evaluated a proposal of 20M€ , Strategic Awards Programme, Joint call of Wellcome Trust and EPSRC,	<i>United Kingdom</i>
2010	Expert Reviewer, evaluated a fellowship application , MRC Career Development Award Fellowship, Medical Research Council (MRC)	<i>United Kingdom</i>
2010	Expert Reviewer , Expert Consensus Panel, Tecnologías de la Sociedad de la Información (TSI), Ministerio de Educación y Ciencia, Plan Nacional	<i>Spain</i>
2010–	Expert Reviewer , French National Research Agency ANR	<i>France</i>
2013–	Expert Reviewer , Review College Member, Engineering and Physical Sciences Research Council (EPSRC)	<i>United Kingdom</i>
2014	Expert Reviewer , Czech Science Foundation	<i>Czech Republic</i>
2013–	Expert Reviewer , Research Grants and Fellowships, British Heart Foundation	<i>United Kingdom</i>
2014–	Expert Reviewer , New Zealand Ministry of Business, Innovation & Employment (MBIE)	<i>New Zealand</i>
2014–	Expert Reviewer , Research Program, Alzheimer's Society	<i>United Kingdom</i>
2014	Expert Evaluator and Panellist , Special Research Program (SFB) F32 Mathematical Optimization and Applications in Biomedical Sciences, Austrian Science Foundation	<i>Austria</i>
2015	Expert Evaluator , STW programme Samenwerkingsprogramma, Technology Foundation STW	<i>The Netherlands</i>

2016	Expert Evaluator and Panel Member, various programs worth each €5m , ICTPLUSS Program, Research Council of Norway (RCN)	Norway
2016	Expert Evaluator, various programs worth each €10m , Programme of the Investment for the Future (Hospital And Academic Research in Health Area), French National Research Agency ANR	France
2016	External Panel Member, each cluster worth around 1M€/year for 5 years , Cluster of Excellence Evaluation, University of Bordeaux	France
2016	External Project Reviewer, 2 projects , Project 5-100 (5stop100.com), Ministry of Education and Science of the Russian Federation	Russia
2016	Expert Evaluator, 2 projects , R&D Infrastructure Funding, Austrian Research Promotion Agency (FFG)	Austria
2017	Chair of the Fellows Committee, oversee 26 nominations , Society Technical Committee, IEEE Engineering in Medicine & Biology Society	USA
2017	Leading Expert Evaluator and Panel Member, each project worth €2M/each , Lead Projects, Strategic Program, Graz University of Technology (TU Graz)	Austria

PhD Evaluation Committees

Jun 2003	Ernesto Serrano: Vocal del Tribunal de Tesis , Estudio de la función pulmonar unilateral mediante tomografía de impedancia eléctrica. Supervisor: Joan Pere Riu, Doctorado en Ingeniería Biomédica, Universidad Politécnica de Cataluña	Barcelona, Spain
Jun 2003	Javier Pascau: Informador del Proyecto de Tesis , Integración de imágenes biomédicas: técnicas basadas en la teoría de la información. Supervisors: Manuel Desco Menéndez y Andrés Santos y Lleó, Doctorado en Ingeniería Electrónica, Universidad Politécnica de Madrid	Madrid, Spain
Sep 2003	María Jesús Ledesma-Carbayo: Vocal del Tribunal de Tesis , Detección del movimiento cardíaco mediante técnicas de registro elástico. Supervisors: Manuel Desco Menéndez y Andrés Santos y Lleó, Doctorado en Ingeniería Electrónica, Universidad Politécnica de Madrid	Madrid, Spain
Sep 2003	Joan Domingo Gispert: Suplente Segundo del Tribunal de Tesis , Segmentación estadística de resonancia magnética. Supervisor: Manuel Desco Méndez, Doctorado en Ingeniería Electrónica, Universidad Politécnica de Madrid	Madrid, Spain
Jan 2004	Joan Verdera: Suplente Primero del Tribunal de Tesis , Some interpolation problems in image processing. Supervisor: Vicent Caselles. Doctorado en Tecnología, Universidad Pompeu Fabra	Barcelona, Spain
Nov 2004	Oriol Pujol: Vocal del Tribunal de Tesis , A Semi-Supervised Statistical Framework and Generative Snakes for IVUS Analysis. Supervisor: Petia Radeva, Doctorado en Visión por Computador, Universidad Autónoma de Barcelona	Barcelona, Spain
Dec 2005	Valerie Moreau-Villegier: Rapporteur and Member of PhD Defence Committee , Méthodes variationnelles et séquentielles pour l'étude de la contraction cardiaque. Supervisor: Nicholas Ayache, Herve Delingette, Doctorado Ecole doctorale STIC, Université de Nice-Sophia Antipolis	Sophia-Antipolis, France
Mar 2006	Juha Koikkalainen: Thesis Opponent , Image Databases in Medical Applications. Supervisor: J. Lötjönen, Technical University of Helsinki	Helsinki, Finland
Oct 2005	Hans C. van Assen: Titular del Tribunal de Tesis , 3D Active Shape Modeling for Cardiac MR and CT Image Segmentation. Supervisor: J.H.C. Reiber, B.H.P. Lelieveldt, Leiden University	Leiden, The Netherlands
Nov 2006	Stephane Allaire: Rapporteur and Member of PhD Defence Committee , Ajustement robuste de quadriques et coniques de types contraintes appliqué à la morphométrie tridimensionnelle de structures osseuses. Supervisor: C. Roux, Ecole Nationale Supérieure des Télécommunications de Bretagne	Brest, France
Dec 2006	Lars A, Conrad-Hansen: PhD Evaluation Committee Member , Towards an Automated Quantification Tool for the Assessment of Atherosclerotic Plaque in Lumbar X-rays. Supervisor: M. Nielsen, M. de Bruijne, IT University of Copenhagen	Copenhagen, Denmark
May 2007	Arnau Oliver: Vocal del Tribunal de Tesis , Automatic Mass Segmentation in Mammographic Images. Supervisor: Jordi Freixenet, Doctorado en Ingeniería Informática, Universidad de Girona	Girona, Spain
Sep 2007	Mehmet Üzumcü: PhD Evaluation Committee Member , Constrained segmentation of cardiac MR image sequences. Supervisor: J.H.C. Reiber, B.H.P. Lelieveldt, Leiden University	Leiden, The Netherlands
Apr 2008	Dong-Seon Cheng: PhD Committee Member , Image and Video Segmentation through Semi-supervised Clustering. Supervisor: V. Murino, Università degli Studi di Verona	Verona, Italy
Mar 2010	Hui Sun: PhD Committee Member , Medial model and application in biomedical image analysis. Supervisor: Paul Yushkevich, University of Pennsylvania	Philadelphia, USA
Apr 2010	Harvey Ho: PhD Examiner Committee , Computational Modeling of Cerebral Aneurysms. Supervisor: Peter J Hunter, University of Auckland	Auckland, New Zealand
Mar 2011	Tim H. Heibel: PhD Examiner Committee , Medical Tool Tracking in Fluoroscopic Interventions: new insights in detection and tracking of tubular tools. Supervisor: Nassir Navab, Technical University of Munich	Munich, Germany
Mar 2011	Enric Meinhardt: Vocal de Tribunal de Tesis , Morphological and Statistical Techniques for the Analysis of 3D Images. Supervisor: Vicent Caselles, Universitat Pompeu Fabra	Barcelona, Spain

Oct 2011	An Elen: PhD Committee Member , Model-based analysis of cardiac medical images. Supervisors: Paul Suetens, Frederik Maes, Catholic University of Leuven	Leuven, Belgium
Dec 2012	Marina Piccinelli: PhD Committee Member , Characterization of cerebral aneurysm morphology-development of methods and techniques in an open-source framework. Supervisors: Frans van der Vosse, Luca Antiga, Technical University Eindhoven	Eindhoven, The Netherlands
Jan 2013	Nicolas Honnorat: PhD Committee Member , Curvilinear Structures Segmentation and Tracking in Interventional Imaging. Supervisor: Nikos Paragios, Ecole Centrale Paris	Paris, France
Jan 2013	Azadeh Firouzian: PhD Committee Member , Automated Analysis of Intracranial Aneurysm Morphology and Dynamics from CTA Data. Supervisors: Wiro Niessen, Rashindra Maniessing, Erasmus University Rotterdam	Rotterdam, The Netherlands
Oct 2013	Malebogo N Ngoepe: PhD External Examiner , Computational modelling of thrombotic processes and complex haemodynamics in cerebral aneurysms. Supervisor: Yiannis Ventikos, University of Oxford	Oxford, UK
Apr 2014	Lene Lillemark: PhD External Examiner , Shapes related to longitudinal studies of disease. Supervisor: Prof Mads Nielssen, University of Copenhagen	Copenhagen, Denmark
Oct 2014	Xianliang Wu: PhD External Examiner , Fast Catheter segmentation and tracking based on X-ray fluoroscopic and echocardiographic modalities for catheter-based cardiac minimally invasive interventions. Supervisor: Daniel Rueckert, Imperial College of Science, Technology and Medicine	London, UK
Jul 2015	Thomas Peach: PhD External Examiner , The effect of design on endovascular embolisation device performance. Supervisor: Yiannis Ventikos, University of Oxford	Oxford, UK
May 2016	Hugo Winfield: PhD External Examiner , Automatic segmentation of the lumbar spine from medical images. Supervisor: Judy R Meakin, University of Exeter	Exeter, UK
Jun 2016	David Ladd: PhD External Examiner , An open-source vascular modelling framework: from imaging to multiscale CFD. Supervisor: Chris Bradley, University of Auckland	Auckland, New Zealand
Nov 2016	Jessie Thomson: PhD External Examiner , Algorithms for Automatic Analysis of Radiographs of the Knee with Application in Diagnosis and Monitoring of Osteoarthritis. Supervisor: Tim Cootes, University of Manchester	Manchester, UK
Nov 2016	Zhongliu Xie: PhD External Examiner , Segmentation and anomaly detection in phenotyping experiments involving mouse embryo images. Supervisors: Duncan Gillies / Daniel Rueckert, Imperial College London	London, UK
May 2017	Kristína Lidayová. Opponent , Fast Methods for Vascular Segmentation Based on Approximate Skeleton Detection. Supervisors: Hans Frimmel, Ewert Bengtsson, Örjan Smedby, Uppsala University	Uppsala, Sweden
Jul 2017	Christopher P Bridge. PhD External Examiner , Computer Aided Analysis of Foetal Cardiac Ultrasound Videos. Supervisors: Alison Noble, Oxford University	Oxford, UK
Jul 2017	Nuno Almeida: PhD Committee Member , Automated echocardiographic assessment of the left atrium. Supervisors: Jan D'Hooge, Eigil Samset, Catholic University of Leuven	Leuven, Belgium
Oct 2017	Seyed-Alborz Amir-khalili: PhD Examiner , Automated Dynamic Scene Analysis and Augmentation of Medical Data with Application to Image-Guided Radiological and Surgical Interventions. Supervisors: Rafeef Abugharbieh, University of British Columbia	Vancouver, Canada
Dec 2017	Ozan Oktay: PhD Examiner , Segmentation, synthesis and super-resolution in cardiac MRI. Supervisor: Daniel Rueckert, Imperial College London	London, UK
May 2018	Dejan Knez: PhD Examiner , Computer Assisted Design and Analysis of Pedicle Screw Placement based on Medical Images of the Spine. Supervisor: Tomaž Vrtovec, University of Ljubljana	Ljubljana, Slovenia
Oct 2018	Quinten Collier: PhD Examiner , Robust estimation of diffusion tensor and diffusion kurtosis imaging parameters. Supervisors: Jan Sijbers and Jelle Veraart, University of Antwerp	Antwerp, Belgium

Invited Keynotes & Courses

INVITED KEYNOTES

Sep 2004	Invited lecturer , Summer School on Medical Image Computing 2004, Imperial College London	London, United Kingdom
Mar 2005	Invited speaker , 2nd International Intracranial Stent Meeting	Buenos Aires, Argentina
Apr 2005	Invited course , Departamento de Ciencias Computacionales, Instituto Tecnológico de Monterrey	Monterrey, México
Oct 2005	Invited tutorial , Medical Image Computing and Computer Assisted Interventions (MICCAI)	Palm Springs, USA
Feb 2006	Invited talk , SPIE Medical Imaging 2006)	San Diego, USA
Jun 2006	Invited lecture , 7th IEEE EMBS International Summer School on Biomedical Imaging	Ile de Berder, France
Apr 2007	Invited keynote lecture , Image Analysis and in Vivo Pharmacology	Roskilde, Denmark
Apr 2007	Invited speaker , 4th International Intra-cranial Stent Meeting)	Kyoto, Japan
Apr 2007	Invited speaker , 4th International Intra-cranial Stent Meeting)	Kyoto, Japan
Mar 2008	Keynote Lecture , Multiscale Modelling Workshop)	Auckland, New Zealand

Jul 2009	Invited Speaker , The Cardiac Physiome: Multi-scale and Multi-physics Mathematical Modelling Applied to the Heart, Isaac Newton Institute for Mathematical Sciences	Cambridge, UK
Jun 2011	Invited Course , BIOMAT-2011: Perspectives in Mathematics and Life Sciences	Granada, Spain
Jan 2013	Invited Speaker , 1st UK National Conference on Patient-Specific Modelling & Translational Research (2013)	Cardiff, UK
Jul 2013	Invited Speaker , The Rank Prize Funds, Symposium on Medical Imaging Meets Computer Vision	Grasmere, UK
Sep 2013	Keynote Lecture , International Conference on Computational Bioengineering (ICCB 2013)	Leuven, Belgium
Jul 2015	Invited Speaker , Tissue and Cell Engineering Society (TCES 2015) Meeting	Southampton, United Kingdom
Jul 2015	Keynote Speaker , Medical Image Analysis and Understanding (MIUA 2015) Conference	Lincoln, United Kingdom
Feb 2016	Keynote Speaker , 2nd International Symposium on Multidisciplinary Computational Anatomy	Nagoya, Japan
Apr 2016	Keynote Speaker , 7th Symposium on Bioengineering	Porto, Portugal
Jul 2016	Keynote Speaker , International Conference on Image Analysis and Recognition (ICIAR)	Povoa de Varzim, Portugal
Jun 2017	Invited Course , BIOMAT-2017: Mathematical Models in Biomedical Imaging	Granada, Spain
Jul 2017	Keynote Speaker , 40th IEEE International Conference on Telecommunications and Signal Processing (TSP)	Barcelona, Spain
Oct 2017	Keynote Speaker , 13th International Symposium on Medical Information Processing and Analysis (SIPAIM)	San Andres Island, Colombia
Nov 2017	Plenary Talk , 4th International Workshop on Medical Imaging	Suzhou, China
Mar 2018	Keynote Speaker , Bildverarbeitung für die Medizin	Erlangen, Germany
Apr 2018	Plenary Talk , Mathematical and Numerical Modeling of the Cardiovascular System, Istituto Nazionale di Alta Matematica	Rome, Italy
May 2018	Invited Talk , 1st International Symposium on Intelligent Precision Medicine 2018, Cixi Institute of Biomedical Engineering, Chinese Academy of Sciences	Ningbo, China
Jun 2018	Invited Course , VISUM Summer School 2018, VISion Understanding and Machine intelligence	Porto, Portugal

Referees

Over the years, I have collaborated extensively with a number of top academic faculties around the world either in joint research papers, joint or international research funding, interdisciplinary collaborative project, or simply in the organisation or the governance of scientific societies and conferences. The following is a list of people who can provide in-depth references to my work or collegial endeavours, and of particularly high standing and representing a good spread of disciplines and activities.

Prof Daniel Alexander ISMRM Fellow

PROFESSOR OF IMAGING SCIENCE, CENTRE FOR MEDICAL IMAGE COMPUTING DIRECTOR

[✉ d.alexander@cs.ucl.ac.uk](mailto:d.alexander@cs.ucl.ac.uk)

[🏠 www.cs.ucl.ac.uk/people/D.Alexander](http://www.cs.ucl.ac.uk/people/D.Alexander)

UNIVERSITY COLLEGE LONDON

London, UK

Prof Nicholas Ayache MICCAI Fellow

RESEARCH DIRECTOR

[✉ nicholas.ayache@inria.fr](mailto:nicholas.ayache@inria.fr)

[🏠 www-sop.inria.fr/members/Nicholas.Ayache](http://www-sop.inria.fr/members/Nicholas.Ayache)

INRIA ASCLEPIOS

Sophia-Antipolis, France

Prof Sir Mike Brady FRS FREng

EMERITUS PROFESSOR OF ONCOLOGICAL IMAGING

[✉ mike.brady@oncology.ox.ac.uk](mailto:mike.brady@oncology.ox.ac.uk)

[🏠 en.wikipedia.org/wiki/J._Michael_Brady](http://en.wikipedia.org/wiki/J._Michael_Brady)

UNIVERSITY OF OXFORD

Oxford, UK

Prof Christos Davatzikos IEEE Fellow

PROFESSOR OF RADIOLOGY AND ELECTRICAL AND SYSTEMS ENGINEERING

[✉ christos@rad.upenn.edu](mailto:christos@rad.upenn.edu)

[🏠 www.rad.upenn.edu/sbia/christos/](http://www.rad.upenn.edu/sbia/christos/)

UNIVERSITY OF PENNSYLVANIA

Philadelphia, USA

Prof James Duncan IEEE Fellow MICCAI Fellow

EBENEZER K. HUNT PROFESSOR OF BIOMEDICAL ENGINEERING, PROFESSOR OF DIAGNOSTIC RADIOLOGY

YALE UNIVERSITY

New Haven, USA

✉ james.duncan@yale.edu

🏠 seas.yale.edu/faculty-research/faculty-directory/james-duncan

Prof Richard Eastell MD FRCP FRCPI FRCPEdin FRCPath FMedSci

PROFESSOR AND HEAD OF THE ACADEMIC UNIT OF BONE METABOLISM, DIRECTOR OF THE MELLANBY CENTRE

FOR BONE RESEARCH

✉ r.eastell@sheffield.ac.uk

🏠 www.sheffield.ac.uk/oncology-metabolism/staff/eastell

THE UNIVERSITY OF SHEFFIELD

Sheffield, UK

Prof Polina Golland MICCAI Fellow

PROFESSOR OF COMPUTER SCIENCE, EECS DEPARTMENT

✉ polina@csail.mit.edu

🏠 people.csail.mit.edu/polina/

MASSACHUSETTS INSTITUTE OF

TECHNOLOGY

Cambridge, MA, USA

Prof David Hawkes MICCAI Fellow

FOUNDING DIRECTOR OF THE CENTRE FOR MEDICAL IMAGE COMPUTING

✉ d.hawkes@ucl.ac.uk

🏠 cmic.cs.ucl.ac.uk/staff/dave_hawkes/

UNIVERSITY COLLEGE LONDON

London, UK

Prof Jay Humphrey Fellow ASME Fellow AIMBE

JOHN C. MALONE PROFESSOR OF BIOMEDICAL ENGINEERING AND CHAIR

✉ jay.humphrey@yale.edu

🏠 seas.yale.edu/faculty-research/faculty-directory/jay-humphrey

YALE UNIVERSITY

New Haven, USA

Prof Peter Hunter FRS Fellow AIMBE

DIRECTOR, DISTINGUISHED PROFESSOR OF ENGINEERING SCIENCE, AUCKLAND BIOENGINEERING INSTITUTE

✉ p.hunter@auckland.ac.nz

🏠 www.abi.auckland.ac.nz/uoa/peter-hunter

UNIVERSITY OF AUCKLAND

Auckland, New Zealand

Prof Ron Kikinis MICCAI Fellow

ROBERT GREENES DISTINGUISHED DIRECTOR OF BIOMEDICAL INFORMATICS

✉ kikinis@bwh.harvard.edu

🏠 www.spl.harvard.edu/pages/People/kikinis

BRIGHAM AND WOMEN'S HOSPITAL,

HARVARD MEDICAL SCHOOL

Boston, USA

Prof Eugene McCloskey FRCPI

PROFESSOR IN ADULT BONE DISEASE

✉ e.v.mccloskey@sheffield.ac.uk

🏠 www.sheffield.ac.uk/oncology-metabolism/staff/mccloskey

THE UNIVERSITY OF SHEFFIELD

Sheffield, UK

Prof Jean-Michel Morel

PROFESSOR OF APPLIED MATHEMATICS

✉ morel@cmla.ens-cachan.fr

🏠 cmla.ens-paris-saclay.fr/version-anglaise/people/

ECOLE NORMALE SUPÉRIEURE DE

CACHAN

Cachan, France

Prof Nassir Navab MICCAI Fellow

PROFESSOR OF COMPUTER AIDED MEDICAL PROCEDURES AND AUGMENTED REALITY

✉ navab@cs.tum.edu

🏠 www.cs.jhu.edu/faculty/nassir-navab/

JOHNS HOPKINS UNIVERSITY, USA;

TECHNICAL UNIVERSITY MUNICH, DE

Baltimore, USA & Munich, Germany

Prof Stefan Neubauer FMedSci FRCP

CLINICAL DIRECTOR, UNIVERSITY OF OXFORD CENTRE CLINICAL MAGNETIC RESONANCE RESEARCH (OCMR)

UNIVERSITY OF OXFORD

Oxford, UK

✉ stefan.neubauer@cardiov.ox.ac.uk
🏠 www.rdm.ox.ac.uk/principal-investigators/researcher/stefan-neubauer

Prof Alison Noble FRS FEng OBE MICCAI Fellow

TECHNIKOS PROFESSOR OF BIOMEDICAL ENGINEERING AND ASSOCIATE HEAD OF MPLS DIVISION

✉ alison.noble@eng.ox.ac.uk
🏠 www.ibme.ox.ac.uk/research/biomedica/people/professor-alison-noble

UNIVERSITY OF OXFORD
Oxford, UK

Prof Steffen Petersen

PROFESSOR OF CARDIOVASCULAR MEDICINE

✉ s.e.petersen@qmul.ac.uk
🏠 www.qmul.ac.uk/whri/people/research-staff/items/petersensteffen-.html

QUEEN MARY UNIVERSITY OF
LONDON
London, UK

Prof Jerry Prince IEEE Fellow MICCAI Fellow

WILLIAM B. KOUWENHOVEN PROFESSOR OF ELECTRICAL AND COMPUTER ENGINEERING, WHITING SCHOOL OF ENGINEERING

✉ prince@jhu.edu
🏠 www.iacel.ece.jhu.edu/Prince

JOHNS HOPKINS UNIVERSITY
Baltimore, USA

Prof Daniel Rueckert FEng IEEE Fellow

PROFESSOR OF VISUAL INFORMATION PROCESSING, DEPARTMENT OF COMPUTING

✉ d.rueckert@imperial.ac.uk
🏠 www.doc.ic.ac.uk/~dr/

IMPERIAL COLLEGE
London, UK

Prof Gabor Szekely MICCAI Fellow

PROFESSOR OF MEDICAL IMAGE ANALYSIS AND VISUALIZATION, INFORMATION TECHNOLOGY & ELECTRICAL ENGINEERING

✉ szekely@vision.ee.ethz.ch
🏠 www.vision.ee.ethz.ch/~szekely/

ETH ZURICH
Zurich, Switzerland

Prof Chris Taylor FEng OBE MICCAI Fellow

PROFESSOR OF MEDICAL BIOPHYSICS, PROFESSOR OF COMPUTER SCIENCE

✉ chris.taylor@manchester.ac.uk
🏠 www.research.manchester.ac.uk/portal/chris.taylor.html

UNIVERSITY OF MANCHESTER
Manchester, UK

Prof Yiannis Ventikos

KENNEDY PROFESSOR, HEAD OF DEPARTMENT, DEPARTMENT OF MECHANICAL ENGINEERING

✉ y.ventikos@ucl.ac.uk
🏠 www.ucl.ac.uk/mecheng/people/academic-staff/yiannis-ventikos

UNIVERSITY COLLEGE LONDON
London, UK

Prof Max Viergever IEEE Fellow MICCAI Fellow

PROFESSOR OF IMAGING SCIENCES, UNIVERSITY MEDICAL CENTER UTRECHT

✉ max@isi.uu.nl
🏠 www.isi.uu.nl/People/?max

UTRECHT UNIVERSITY
Utrecht, The Netherlands

See 20+ public recommendations available at [in/alejandrosfrangi](https://www.linkedin.com/in/alejandrosfrangi) from students, mentees and collaborators.