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Articles in Scientific Journals

2019 (21)

J.A. Pereira, P. Sepúlveda, M. Rana, **C. Montalba**, **C. Tejos**, R. Torres, R. Sitaram, S. Ruiz. [Self-Regulation of the Fusiform Face Area in Autism Spectrum: A Feasibility Study With Real-Time fMRI Neurofeedback](#). *Frontiers in Human Neuroscience*, 13, 446, 1-17, 2019. DOI:10.3389/fnhum.2019.00446

C. Milovic, B. Bilgic, B. Zhao, C. Langkammer, **C. Tejos**, J. Acosta-Cabronero. [Weak-Harmonic Regularization for Quantitative Susceptibility Mapping \(WH-QSM\)](#). *Magnetic Resonance in Medicine*, vol. 81, n. 2, 1399-1411, 2019. DOI: 10.1002/mrm.27483

Aline Xavier, Flavia Zacconi, Constanza Gainza, Daniel Cabrera, Marco Arrese, **Sergio Uribe**, **Carlos Sing-Long**, **Marcelo E. Andía**. [Intrahepatic fatty acids composition as a biomarker of NAFLD progression from steatosis to NASH by using 1H-MRS](#). *RSC Advances*. DOI:10.1039/C9RA08914D. Diciembre 19, 2019.

Arrieta, Cristóbal; Sing-Long, Carlos. [Extensions of Real Atomic Gauges for Complex Signal Recovery](#). *IEEE-Inst Electrical Electronics Engineers Inc*. DOI:10.1109/ACCESS.2019.2960826. Diciembre 19, 2019.

Burris NS, Nordsletten DA, **Sotelo JA**, Grogan-Kaylor R, Houben IB, Figueroa CA, **Uribe S**, Patel HJ. [False lumen ejection fraction predicts growth in type B aortic dissection: preliminary results](#). *Eur J Cardiothorac Surg*. doi: 10.1093/ejcts/ezz343. Diciembre 10, 2019.

Lydia Dux-Santoy, Andrea Guala, **Julio Sotelo**, **Sergio Uribe**, Gisela Teixido-Tura, Aroa Ruiz-Munoz, **Daniel E. Hurtado**, Filipa Valente, Laura Galian-Gay, Laura Gutierrez, Teresa Gonzalez-Alujas, Kevin M. Johnson, Oliver Wieben, Ignacio Ferreira, Arturo Evangelista, Jose F. Rodriguez-Palomares. [Low and Oscillatory Wall Shear Stress Is Not Related to Aortic Dilatation in Patients With Bicuspid Aortic Valve](#). *Arteriosclerosis*,



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Thrombosis, and Vascular Biology. <https://doi.org/10.1161/ATVBAHA.119.313636>.
Diciembre 5, 2019.

C. Arrieta, J. Urrutia, P. Besa, C. Montalba, N. Lafont, M. E. Andía, S. Uribe.

[Automatic quantification of fat infiltration in paraspinal muscles using T2-weighted images: An OsiriX application.](#) Biomedical Signal Processing and Control.
<https://doi.org/10.1016/j.bspc.2019.101793>. Noviembre 30, 2019.

Andrew Tran, Barbara Burkhardt, Animesh Tandon, Sarah Blumenschein, Arna van Engelen, Marina Cecelja, Song Zhang, **Sergio Uribe, Joaquín Mura**, Gerald Greil, Tarique Hussain. [Pediatric heterozygous familial hypercholesterolemia patients have locally increased aortic pulse wave velocity and wall thickness at the aortic root.](#) The International Journal of Cardiovascular Imaging. doi:10.1007/s10554-019-01626-5.
Octubre 1, 2019.

Katherine Rivera, Francisca Salas-Perez, Guadalupe Echeverria, Ines Urquiaga, Sara Dicenta, Druso Perez, Paula de la Cerda, **Leticia González, Marcelo E Andía, Sergio Uribe, Cristián Tejos**, Gonzalo Martinez, Dolores Busso, **Pablo Irrarrázaval**, Attilio Rigotti. [Red Wine Grape Pomace Attenuates Atherosclerosis and Myocardial Damage and Increases Survival in Association with Improved Plasma Antioxidant Activity in a Murine Model of Lethal Ischemic Heart Disease.](#) Nutrients. <https://doi.org/10.3390/nu11092135>.
Septiembre 6, 2019.

Liang Zhong, Eric Schrauben, Julio Garcia Flores, **Sergio Uribe**, Stuart Grieve, Mohammed Elbaz, Alex Barker, Julia Geiger, Sarah Nordmeyer, Alison Marsden, Marcus Carlsson, Ru-San Tan, Pankaj Garg, Jos Westenberg, Michael Markl, Tino Ebbers. [Intracardiac 4D Flow MRI in Congenital Heart Disease: Recommendations on Behalf of the ISMRM Flow & Motion Study Group.](#) Journal of Magnetic Resonance Imaging. <https://doi.org/10.1002/jmri.26858>. Septiembre 1, 2019.

TL Atenas, EC Diaz, JPC Quiroga, **S Uribe Arancibia**, CC Rodríguez. [Functional magnetic resonance imaging: Basic principles and application in the neurosciences.](#) Radiologia (English Edition) 60 (5), 368-377. Septiembre 1, 2019.



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BIOMEDICAL IMAGING CENTER

Pablo Irrarrázaval, Ali Dehghan Firoozabadi, **Sergio Uribe**, **Cristián Tejos**, **Carlos Sing-Long**. [Noise estimation for the velocity in MRI phase-contrast](#). Magnetic Resonance Imaging. <https://doi.org/10.1016/j.mri.2019.08.028>. Agosto 23, 2019.

Steren Chabert, Jorge Verdu, Gamaliel Huerta, **Cristian Montalba**, Pablo Cox, Rodrigo Riveros, **Sergio Uribe**, Rodrigo Salas, Alejandro Velozo. [Impact of b-Value Sampling Scheme on Brain IVIM Parameter Estimation in Healthy Subjects](#). Magnetic Resonance in Medical Sciences. <https://doi.org/10.2463/mrms.mp.2019-0061>. Agosto 6, 2019.

Rodrigo Herrera, Francisco Penaloza, **Cristobal Arrieta**, Flavia Zacconi, Victor Saavedra, Carla Saavedra, Cecilia Branes, Thomas Hack, **Sergio Uribe**. [Quantification of liver fat infiltration by magnetic resonance](#). Revista Médica de Chile. DOI:10.4067/S0034-98872019000700821. Julio 1, 2019.

Gabriel E. Varela-Mattatall, Alexandra Koch, Rudiger Stirnberg, Steren Chabert, **Sergio Uribe**, **Cristian Tejos**, Tony Stöcker, **Pablo Irrarrázaval**. [Comparison of q-Space Reconstruction Methods for Undersampled Diffusion Spectrum Imaging Data](#). Magnetic Resonance in Medical Sciences. <https://doi.org/10.2463/mrms.mp.2019-0015>. Mayo 10, 2019.

Carrillo, Hugo; Osses, Axel; **Uribe, Sergio**; Bertoglio, Cristobal. [Optimal Dual-VENC Unwrapping in Phase-Contrast MRI](#). IEEE Transactions on Medical Imaging. 10.1109/TMI.2018.2882553. Mayo 1, 2019.

Q. Yang, **C. A. Sing-Long**, E. Chen, E. J. Reed. [Data-Driven Methods for Building Reduced Kinetic Monte Carlo Models of Complex Chemistry from Molecular Dynamics Simulations](#). N. Goldman. Computational Approaches for Chemistry Under Extreme Conditions. Springer International Publishing. 10.1007/978-3-030-05600-1_9. Febrero 19, 2019.

E. Chen, Q. Yang, V. Dufour Decieux, **C. A. Sing-Long**, R. Freitas, E. J. Reed. [Transferable Kinetic Monte Carlo Models with Thousands of Reactions Learned from](#)



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BIOMEDICAL IMAGING CENTER

[Molecular Dynamics Simulations](#). The Journal of Physical Chemistry A. 2019; 123(9): 1874-1881. DOI:10.1021/acs.jpca.8b09947. Febrero 8, 2019.

V. J. Parot, **C. Sing-Long**, Y. Adam, U. L. Bohm, L. Z. Fan, S. L. Farhi, A. E. Cohen. [Compressed Hadamard microscopy for high-speed optically sectioned neuronal activity recordings](#). Journal of Physics D: Applied Physics. 2019; 52(14): 144001. DOI: 10.1088/1361-6463/aafe88. Febrero 4, 2019.

Lavin-Plaza B, Phinikaridou A, **Andía ME**, Lacerda S, Henningsson M, Makowski M, Botnar RM. [Atherosclerotic Plaque Imaging](#). Cardiovascular Magnetic Resonance Imaging. Febrero 1, 2019.

Crossley NA, Alliende LM, Ossandon T, Castaneda CP, Gonzalez-Valderrama A, Undurraga J, Castro M, Guinjoan S, Diaz-Zuluaga AM, Pineda-Zapata JA, Lopez-Jaramillo C, Reyes-Madrigal F, Leon-Ortiz P, de la Fuente-Sandoval C, Czepielewski LS, Gama CS, Zugman A, Gadelha A, Jackowski A, Bressan R. [Imaging Social and Environmental Factors as Modulators of Brain Dysfunction: Time to Focus on Developing Non-Western Societies](#). Biol Psychiatry Cogn Neurosci Neuroimaging. Enero 1, 2019.

2018 (24)

J. Acosta-Cabronero, **C. Milovic**, H. Mattern, **C. Tejos**, O. Speck, M.F. Callaghan. [A robust multi-scale approach to quantitative susceptibility mapping](#). Neuroimage, vol. 183, 7-24, 2018. DOI: 10.1016/j.neuroimage.2018.07.065. Diciembre 1, 2018.

Isabel T. Ramos, Markus Henningsson, Maryam Nezafat, Begonna Lavin, Silvia Lorrio, Pierre Gebhardt, Andrea Protti, Thomas R. Eykyn, **Marcelo E. Andía**, Ulrich Floogel, Alkystis Phinikaridou, Ajay M. Shah, Renee M. Botnar. [Simultaneous Assessment of Cardiac Inflammation and Extracellular Matrix Remodeling After Myocardial Infarction](#). Circ Cardiovasc Imaging 2018; 11(11):e007453. doi.org/10.1161/CIRCIMAGING.117.007453. Noviembre 15, 2018.



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BIOMEDICAL IMAGING CENTER

Contreras-Duarte S, Chen P, **Andía ME**, **Uribe S**, **Irarrázaval P**, Kopp S, Kern S, Marsche G, Busso D, Wadsack C, Rigotti A. [Beneficial effects of preventive vitamin C and E supplementation on serum lipids and HDL, inflammatory and antioxidant biomarkers, atherosclerosis, and lifespan in a murine model of lethal ischemic heart disease.](#) Biological Research 2018;15(1):34-44. <http://dx.doi.org/10.1186/s40659-018-0183-6>. Octubre 10, 2018.

T. Labbé, M. Zurita, C. Montalba, E. Ciampi, J.P. Cruz, R. Uribe, M. Vásquez, **S. Uribe**, **N. Crossley**, C. Carcamo. [Abnormal network connectivity related to social cognition in relapsing remitting multiple sclerosis.](#) Neuro UC. Octubre 10, 2018.

Campos F, Abrigo J, Aguirre F, Garces B, Arrese M, Karpen S, Cabrera D, **Andía ME**, Simon F, Cabello-Verrugio C. [Sarcopenia in a mice model of chronic liver disease: Role of the ubiquitin-proteasome system and oxidative stress.](#) Pflugers Arch - Eur J Physiol; 470(10):1503-1519. Octubre 1, 2018.

Contreras-Duarte S, Chen P, **Andía M**, **Uribe S**, **Irarrázaval P**, Kopp S, Kern S, Marsche G, Busso D, Wadsack C, Rigotti A. [Attenuation of atherogenic apo B-48-dependent hyperlipidemia and high density lipoprotein remodeling induced by vitamin C and E combination and their beneficial effect on lethal ischemic heart disease in mice.](#) Biol Res, vol 51, no. 34, octubre 1, 2018.

C. Milovic, B. Bilgic, B. Zhao, C. Langkammer, **C. Tejos**, J. Acosta-Cabronero. [Weak-Harmonic Regularization for Quantitative Susceptibility Mapping \(WH-QSM\).](#) Magnetic Resonance in Medicine, vol. 81, n. 2, 1399-1411, 2019. DOI: 10.1002/mrm.27483. September 28, 2018.

Mariana Zurita, **Cristian Montalba**, Tomas Labbé, Juan Pablo Cruz, Josue Dalboni da Rocha, **Cristián Tejos**, Ethel Ciampi, Claudia Cárcamo, Ranganatha Sitaram, and **Sergio Uribe**. [Characterization of relapsing-remitting multiple sclerosis patients using support vector machine classifications of functional and diffusion MRI data.](#) NeuroImage: Clinical. DOI: 10.1016/j.nicl.2018.09.002. Septiembre 4, 2018.



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DE CHILE

BIOMEDICAL IMAGING CENTER

Mena C, González-Valderrama A, Iruretagoyena B, Undurraga J, Crossley NA. [Early treatment resistance in a Latin-American cohort of patients with schizophrenia](#). Schizophr Res. doi: 10.1016/j.schres.2018.02.056. September, 2018.

Milovic C, Acosta-Cabronero J, Pinto JM, Mattern H, Andía ME, Uribe S, Tejos C. [A new discrete dipole kernel for quantitative susceptibility mapping](#). Magn Reson Imaging 2018;51:7-13. <https://doi.org/10.1016/j.mri.2018.04.004>. Septiembre 1, 2018.

Phinikaridou A, Lacerda S, Lavin B, Andía ME, Smith A, Saha P, Botnar RM. [Tropoelastin: A novel marker for plaque progression and instability](#). Circ Cardiovasc Imaging 2018; 11(8):e007303. Agosto 1, 2018.

T Labbé, E Ciampi, JP Cruz, M Zurita, S Uribe, C Carcamo Rodriguez. [Imágenes de resonancia magnética funcional en el estudio de la esclerosis múltiple](#). Revista de Neurología 67 (3), 91-98. Agosto, 2018.

Urrutia J, Besa P, Lobos D, Andía ME, Arrieta C, Uribe S. [Is a single level measurement of paraspinal muscle fat infiltration and cross-sectional area representative of the entire lumbar spine?](#) Skeletal Radiology 2018;47(7):939-945. Julio 1, 2018.

Urrutia J, Besa P, Lobos D, Campos M, Arrieta C, Andía ME, Uribe S. [Lumbar paraspinal muscle fat infiltration is independently associated with sex, age, and intervertebral disc degeneration in symptomatic patients](#). Skeletal Radiology 2018;47(7):955-961. doi:10.1007/s00256-018-2880-1. Julio 1, 2018.

Julio Sotelo, Lydia Dux-Santoy, Andrea Guala, Jose Rodriguez-Palomares, Arturo Evangelista, Carlos Sing-Long, Jesús Urbina, Joaquín Mura, Daniel E Hurtado, Sergio Uribe. [3D axial and circumferential wall shear stress from 4D flow MRI data using a finite element method and a laplacian approach](#). Magn Reson Med., 79-5. Mayo, 2018.

C. Montalba, J. Urbina, J. Sotelo, M. E. Andía, C. Tejos, P. Irrarrazaval, D. E. Hurtado, I. Valverde, S. Uribe. [Variability of 4D flow parameters when subjected to changes in MRI acquisition parameters using a realistic thoracic aortic phantom](#). Magnetic Resonance in



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DE CHILE

BIOMEDICAL IMAGING CENTER

Medicine, vol. 79, n. 4, 1882-1892, 2018. DOI: 10.1002/mrm.26834. Abril 1, 2018.

Navarro ME, Razmilic D, Araos I, Rodrigo A, **Andía ME**. [Contrast-enhanced spectral mammography: experience in 465 examinations](#). Rev Med Chile 2018;146(2):141-149. doi: 10.4067/s0034-98872018000200141. Febrero 1, 2018.

Sotelo J, Urbina J, Valverde I, **Mura J**, **Tejos C**, **Irarrázaval P**, **Andía ME**, Hurtado D, **Uribe S**. [Three-dimensional quantification of vorticity and helicity from 3D cine PC-MRI using finiteelement interpolations](#). Magn Reson Med 2018;79(1):541-553. Enero 1, 2018.

Carlos Milovic, Berkin Bilgic, Bo Zhao, Julio Acosta-Cabronero, **Cristian Tejos**. [Fast Nonlinear Susceptibility Inversion with Variational Regularization](#), Magnetic Resonance in Medicine 2018, 11-enero. doi:10.1002/mrm.27073

Francisca Salas-Pérez, Katherine Rivera, Guadalupe Echeverría, Inés Urquiaga, Sara Dicenta, Druso Pérez, **Marcelo Andía**, **Sergio Uribe**, **Cristián Tejos**, Dolores Busso, **Pablo Irarrázaval**, Attilio Rigotti “Intake of red wine grape pomace decreased atherosclerosis, attenuated myocardial damage and increased survival in a murine model of lethal coronary heart disease” Conference Paper XVIIIth International Symposium on Atherosclerosis, Toronto, Canadá, 9 – 12 Jun 2018.
<https://doi.org/10.1016/j.atherosclerosis.2018.04.045>

Ali Dehghan Firoozabadi, **Pablo Irarrázaval**, **Sergio Uribe**, **Cristian Tejos**, **Carlos Sing-Long** “Velocity Variability in MRI Phase-Contrast” Eusipco 2018 Conference Proceedings -1570433328, Rome, Italy. Sep. 3-7, 2019 Rome, Italy. Sep. 3-7, 2018

J. Mura “A reduced model to locate low contrast inclusions in poroelastic media” Applied Mathematical Modellingg 56 (2018) 469–486. <https://doi.org/10.1016/j.apm.2017.12.022>. 2018

2017 (7)

J. Sotelo, P. Bächler, J. Urbina, G. Crelier, L. Toro, M. Ferreira, I. Valverde, **M. Andía**, **C. Tejos**, **P. Irarrázaval**. “Quantification of pulmonary regurgitation in patients with repaired



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DE CHILE

BIOMEDICAL IMAGING CENTER

Tetralogy of Fallot by 2D phase-contrast MRI: Differences between the standard method of velocity averaging and a pixel-wise analysis”. *JRSM cardiovascular disease*. Vol 6, 2048004017731986., 2017. doi: 10.1177/2048004017731986.

V. Cortés, N. Quezada, **S. Uribe**, M. Arrese, F. Nervi. “Effect of cholecystectomy on hepatic fat accumulation and insulin resistance in non-obese Hispanic patients: a pilot study”. *Lipids in health and disease*. Vol 16(1), 129., 2017. DOI: 10.1186/s12944-017-0525-3.

A. Videla, L. Matamala, **S. Uribe**, **M. Andía**. “Ferrous Ion oxidation monitoring by using magnetic resonance imaging for bio-oxidation laboratory testing”. *Minerals Engineering*. Vol 106, 108–115., 2017.

C. Arrieta, **S. Uribe**, **C. Sing-Long**, **D. Hurtado**, **M. Andía**, **P. Irrarrázaval**, **C. Tejos**. “Simultaneous left and right ventricle segmentation using topology preserving level sets”. *Biomedical Signal Processing and Control*. Vol 33, 88–95., 2017.

A. Paolino, T. Hussain, A. Pavon, M. Velasco, **S. Uribe**, A. Ordoñez, I. Valverde. “NT-proBNP as marker of ventricular dilatation and pulmonary regurgitation after surgical correction of Tetralogy of Fallot: a MRI validation study”. *Pediatric cardiology*. Vol 38(2), 324–331., 2017.

J. Arab, F. Barrera, C. Gallego, J. Valderas, **S. Uribe**, **C. Tejos**, C. Serrano, Á. Huete, J. Liberona, P. Labbé. “High prevalence of undiagnosed liver cirrhosis and advanced fibrosis in type 2 diabetic patients”. *Annals of hepatology*. Vol 15(5), 721–728., 2017.

G. Cruz, D. Atkinson, M. Henningson, **R. Botnar**, **C. Prieto**. “Highly efficient nonrigid motion-corrected 3D whole-heart coronary vessel wall imaging”. *Magnetic resonance in medicine*. Vol 77(5), 1894–1908., 2017.

2016 (9)

A. Phinikaridou, **M. Andía**, B. Lavin, A. Smith, P. Saha, **R. Botnar**. “Increased Vascular Permeability Measured With an Albumin-Binding Magnetic Resonance Contrast Agent Is a



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DE CHILE

BIOMEDICAL IMAGING CENTER

Surrogate Marker of Rupture-Prone Atherosclerotic Plaque **CLINICAL PERSPECTIVE**".
Circulation: Cardiovascular Imaging. Vol 9(12), e004910., 2016.

C. Arboleda, D. Aguirre-Reyes, M. García, **C. Tejos**, L. Muñoz, J. Miquel, **P. Irrarrázaval**, **M. Andía**, **S. Uribe**. "Total liver fat quantification using three-dimensional respiratory self-navigated MRI sequence". Magnetic resonance in medicine. Vol 76(5), 1400–1409., 2016.

P. Sepúlveda, R. Sitaram, M. Rana, C. Montalba, **C. Tejos**, S. Ruiz. "How feedback, motor imagery, and reward influence brain self-regulation using real-time fMRI". Human brain mapping. Vol 37(9), 3153–3171., 2016.

J. Mura, A. Pino, **J. Sotelo**, I. Valverde, **C. Tejos**, **M. Andía**, **P. Irrarrázaval**, **S. Uribe**. "Enhancing the Velocity Data From 4D Flow MR Images by Reducing its Divergence". IEEE transactions on medical imaging. Vol 35(10), 2353–2364., 2016.

J. Urbina, **J. Sotelo**, D. Springmüller, C. Montalba, K. Letelier, **C. Tejos**, **P. Irrarrázaval**, **M. Andía**, R. Razavi, I. Valverde. "Realistic aortic phantom to study hemodynamics using MRI and cardiac catheterization in normal and aortic coarctation conditions". Journal of Magnetic Resonance Imaging. Vol 44(3), 683–697., 2016.

J. Sotelo, J. Urbina, I. Valverde, **C. Tejos**, **P. Irrarrázaval**, **M. Andía**, **S. Uribe**, D. Hurtado. "3D quantification of wall shear stress and oscillatory shear index using a finite-element method in 3D CINE PC-MRI data of the thoracic aorta". IEEE transactions on medical imaging. Vol 35(6), 1475–1487., 2016.

C. Milovic, J. Conejero, **C. Tejos**. "Multiscale gradient domain compression for astronomical high dynamic range imaging". Imaging Science Journal, Volume 64, 2016 – Issue 7. Pages 353-363. DOI: 10.1179/1743131X15Y.0000000028. 2016.

K. Letelier, J. Urbina, **M. Andía**, **C. Tejos**, **P. Irrarrázaval**, **C. Prieto**, **S. Uribe**. "Accelerating dual cardiac phase images using undersampled radial phase encoding trajectories". Magnetic resonance imaging. Vol 34(7), 1017–1025., 2016.



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BIOMEDICAL IMAGING CENTER

G. Cruz, D. Atkinson, C. Buerger, T. Schaeffter, **C. Prieto**. “Accelerated motion corrected three-dimensional abdominal MRI using total variation regularized SENSE reconstruction”. *Magnetic resonance in medicine*. Vol 75(4), 1484–1498., 2016. 29

2015 (8)

D. Aguirre-Reyes, **J. Sotelo**, J. Arab, M. Arrese, R. Tejos, **P. Irrarrázaval**, **C. Tejos**, **S. Uribe**, **M. Andía**. “Intrahepatic portal vein blood volume estimated by non-contrast magnetic resonance imaging for the assessment of portal hypertension”. *Magnetic resonance imaging*. Vol 33(8), 970–977., 2015.

J. Sotelo, J. Urbina, I. Valverde, **C. Tejos**, **P. Irrarrázaval**, D. Hurtado, **S. Uribe**. “Quantification of wall shear stress using a finite-element method in multidimensional phase-contrast MR data of the thoracic aorta”. *Journal of biomechanics*. Vol 48(10), 1817–1827., 2015.

J. Pinto, **C. Arrieta**, **M. Andía**, **S. Uribe**, J. Ramos-Grez, A. Vargas, **P. Irrarrázaval**, **C. Tejos**. “Sensitivity analysis of geometric errors in additive manufacturing medical models”. *Medical Engineering and Physics*. Vol 37(3), 328–334., 2015.

I. Valverde, G. Gómez, J. Coserria, C. Suarez-Mejias, **S. Uribe**, **J. Sotelo**, M. Velasco, J. Santos De Soto, A. Hosseinpour, T. Gómez-Cia. “3D printed models for planning endovascular stenting in transverse aortic arch hypoplasia”. *Catheterization and Cardiovascular Interventions*. Vol 85(6), 1006–1012., 2015.

I. Valverde, G. Gómez, A. Gonzalez, C. Suarez-Mejias, A. Adsuar, J. Coserria, **S. Uribe**, T. Gómez-Cia, A. Hosseinpour. “Three-dimensional patient-specific cardiac model for surgical planning in Nikaidoh procedure”. *Cardiology in the Young*. Vol 25(4), 698–704., 2015.

G. Passacquale, A. Phinikaridou, C. Warboys, M. Cooper, B. Lavin, A. Alfieri, **M. Andía**, **R. Botnar**, A. Ferro. “Aspirin-induced histone acetylation in endothelial cells



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CATÓLICA
DE CHILE

BIOMEDICAL IMAGING CENTER

enhances synthesis of the secreted isoform of netrin-1 thus inhibiting monocyte vascular infiltration”. *British journal of pharmacology*. Vol 172(14), 3548–3564., 2015.

T. Hussain, M. Henningson, B. Butzbach, D. Lossnitzer, G. Greil, **M. Andía, R. Botnar**. “Combined coronary lumen and vessel wall magnetic resonance imaging with i-T2prep: influence of nitroglycerin”. *The International Journal of Cardiovascular Imaging*. Vol 31(1), 77–82., 2015.

G. Galaz, **C. Milovic**, V. Suc, L. Busta, G. Lizana, L. Infante, S. Royo. “Deep optical images of Malin 1 reveal new features”. *The Astrophysical Journal Letters*. Vol 815(2), L29., 2015.

2014 (9)

R. Cádiz, C. Muñoz, **C. Tejos, M. Andía, S. Uribe, P. Irrarrázaval**. “Quantization error in magnetic resonance imaging”. *Concepts in Magnetic Resonance Part A*. Vol 43(3), 79–89., 2014.

E. Bultman, E. Brodsky, D. Horng, **P. Irrarrázaval**, W. Schelman, W. Block, S. Reeder. “Quantitative hepatic perfusion modeling using DCE-MRI with sequential breathholds”. *Journal of Magnetic Resonance Imaging*. Vol 39(4), 853–865., 2014.

S. Chabert, C. Galindo, **C. Tejos, S. Uribe**. “Multiple echo multi-shot diffusion sequence”. *Journal of Magnetic Resonance Imaging*. Vol 39(4), 1027–1032., 2014.

B. Bigalke, A. Phinikaridou, **M. Andía**, M. Cooper, A. Schuster, T. Wurster, D. Onthank, G. Münch, P. Blower, M. Gawaz. “PET/CT and MR imaging biomarker of lipid-rich plaques using [64Cu]-labeled scavenger receptor (CD68-Fc)”. *International journal of cardiology*. Vol 177(1), 287–291., 2014.

A. Miras, F. Seyfried, A. Phinikaridou, **M. Andía**, I. Christakis, A. Spector, **R. Botnar**, C. le Roux. “Rats fed diets with different energy contribution from fat do not differ in adiposity”. *Obesity facts*. Vol 7(5), 302–310., 2014.



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BIOMEDICAL IMAGING CENTER

M. Andía, P. Saha, J. Jenkins, B. Modarai, A. Wiethoff, A. Phinikaridou, S. Grover, A. Patel, T. Schaeffter, A. Smith. “Fibrin-targeted magnetic resonance imaging allows in vivo quantification of thrombus fibrin content and identifies thrombi amenable for thrombolysis”. *Arteriosclerosis, thrombosis, and vascular biology.*, ATVBAHA–113., 2014.

A. Phinikaridou, **M. Andía**, A. Indermuehle, D. Onthank, R. Cesati, A. Smith, S. Robinson, P. Saha, **R. Botnar**. “Vascular remodeling and plaque vulnerability in a rabbit model of atherosclerosis: comparison of delayed-enhancement MR imaging with an elastin-specific contrast agent and unenhanced black-blood MR imaging”. *Radiology*. Vol 271(2), 390–399., 2014.

A. Protti, X. Dong, **M. Andía**, B. Yu, K. Dokukina, S. Chaubey, A. Phinikaridou, G. Vizcay-Barrena, M. Taupitz, **R. Botnar**. “Assessment of inflammation with a very small iron-oxide particle in a murine model of reperfused myocardial infarction”. *Journal of Magnetic Resonance Imaging*. Vol 39(3), 598–608., 2014.

J. Delgado, P. Abad, S. Rascovsky, V. Calvo, G. Castrillon, G. Greil, **S. Uribe**. “Assessment of cardiac volumes using an isotropic whole-heart dual cardiac phase sequence in pediatric patients”. *Journal of Magnetic Resonance Imaging*. Vol 39(3), 708–716., 2014.

2013 (15)

C. Milovic, C. Oses, M. Villalón, **S. Uribe**, C. Lizama, **C. Prieto**, **M. Andía**, **P. Irrarrázaval**, **C. Tejos**. “Calcium (Ca²⁺) waves data calibration and analysis using image processing techniques”. *BMC bioinformatics*. Vol 14(1), 162., 2013.

P. Bächler, I. Valverde, N. Pinochet, S. Nordmeyer, T. Kuehne, G. Crelier, **C. Tejos**, **P. Irrarrázaval**, P. Beerbaum, **S. Uribe**. “Caval blood flow distribution in patients with Fontan circulation: quantification by using particle traces from 4D flow MR imaging”. *Radiology*. Vol 267(1), 67–75., 2013.



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CATÓLICA
DE CHILE

BIOMEDICAL IMAGING CENTER

A. Poonawalla, B. Sjöberg, J. Rehm, D. Hernando, C. Hines, **P. Irarrázaval, S. Reeder**. “Adipose tissue MRI for quantitative measurement of central obesity”. *Journal of Magnetic Resonance Imaging*. Vol 37(3), 707–716., 2013.

S. Uribe, P. Bächler, I. Valverde, G. Crelier, P. Beerbaum, **C. Tejos, P. Irarrázaval**. “Hemodynamic assessment in patients with one-and-a-half ventricle repair revealed by four-dimensional flow magnetic resonance imaging”. *Pediatric cardiology*. Vol 34(2), 447–451., 2013.

P. Bächler, N. Pinochet, **J. Sotelo**, G. Crelier, **P. Irarrázaval, C. Tejos, S. Uribe**. “Assessment of normal flow patterns in the pulmonary circulation by using 4D magnetic resonance velocity mapping”. *Magnetic resonance imaging*. Vol 31(2), 178–188., 2013.

L. Meneses, M. Fava, P. Diaz, **M. Andía, C. Tejos, P. Irarrázabal, S. Uribe**. “Embolization of incompetent pelvic veins for the treatment of recurrent varicose veins in lower limbs and pelvic congestion syndrome”. *Cardiovascular and interventional radiology*. Vol 36(1), 128–132., 2013.

M. Miquel, J. Blackall, **S. Uribe**, D. Hawkes, T. Schaeffter. “Patient-specific respiratory models using dynamic 3D MRI: preliminary volunteer results”. *Physica Medica: European Journal of Medical Physics*. Vol 29(2), 214–220., 2013.

A. Phinikaridou, **M. Andía**, S. Lacerda, S. Lorrio, M. Makowski, **R. Botnar**. “Molecular MRI of atherosclerosis”. *Molecules*. Vol 18(11), 14042–14069., 2013.

B. Bigalke, A. Phinikaridou, **M. Andía**, M. Cooper, A. Schuster, T. Schönberger, C. Griessinger, T. Wurster, D. Onthank, M. Ungerer. “Positron emission tomography/computed tomographic and magnetic resonance imaging in a murine model of progressive atherosclerosis using ⁶⁴Cu-labeled glycoprotein VI-Fc”. *Circulation: Cardiovascular Imaging*. Vol 6(6), 957–964., 2013.



PONTIFICIA
UNIVERSIDAD
CATÓLICA
DE CHILE

BIOMEDICAL IMAGING CENTER

A. Phinikaridou, **M. Andía**, G. Passacuale, A. Ferro, **R. Botnar**. “Noninvasive MRI monitoring of the effect of interventions on endothelial permeability in murine atherosclerosis using an albumin-binding contrast agent”. *Journal of the American Heart Association*. Vol 2(5), e000402., 2013.

P. Saha, **M. Andía**, B. Modarai, U. Blume, J. Humphries, A. Patel, A. Phinikaridou, C. Evans, K. Mattock, S. Grover. “Magnetic Resonance T1 Relaxation Time of Venous Thrombus Is Determined by Iron Processing and Predicts Susceptibility to LysisClinical Perspective”. *Circulation*. Vol 128(7), 729–736., 2013.

A. Phinikaridou, **M. Andía**, P. Saha, B. Modarai, A. Smith, **R. Botnar**. “In Vivo Magnetization Transfer and Diffusion-Weighted Magnetic Resonance Imaging Detects Thrombus Composition in a Mouse Model of Deep Vein ThrombosisClinical Perspective”. *Circulation: Cardiovascular Imaging*. Vol 6(3), 433–440., 2013.

M. Andía, M. Henningsson, T. Hussain, A. Phinikaridou, A. Protti, G. Greil, **R. Botnar**. “Flow-independent 3D whole-heart vessel wall imaging using an interleaved T2-preparation acquisition”. *Magnetic resonance in medicine*. Vol 69(1), 150–157., 2013.

E. Candes, **C. Sing-Long**, J. Trzasko. “Unbiased risk estimates for singular value thresholding and spectral estimators”. *IEEE transactions on signal processing*. Vol 61(19), 4643–4657., 2013.

E. Van Den Berg, E. Candès, G. Chinn, C. Levin, P. Olcott, **C. Sing-Long**. “Single-photon sampling architecture for solid-state imaging sensors”. *Proceedings of the National Academy of Sciences*. Vol 110(30), E2752–E2761., 2013.

2012 (16)

C. Serrano, F. Barrera, P. Labbé, J. Liberona, M. Arrese, P. Irrarázabal, **C. Tejos, S. Uribe**. “Quantification of visceral adipose tissue using magnetic resonance imaging compared with anthropometry, in type 2 diabetic patients”. *Revista medica de Chile*. Vol 140(12), 1535–1543., 2012.



PONTIFICIA
UNIVERSIDAD
CATÓLICA
DE CHILE

BIOMEDICAL IMAGING CENTER

J. Honorato, V. Parot, **C. Tejos, S. Uribe, P. Irrarrázaval**. “Chemical species separation with simultaneous estimation of field map and T_2^* using k -space formulation”. *Magnetic resonance in medicine*. Vol 68(2), 400–408., 2012.

V. Parot, **C. Sing-Long, C. Lizama, C. Tejos, S. Uribe, P. Irrarrázaval**. “Application of the fractional Fourier transform to image reconstruction in MRI”. *Magnetic resonance in medicine*. Vol 68(1), 17–29., 2012.

S. Uribe, L. Cadavid, T. Hussain, R. Parra, G. Urcelay, F. Heusser, M. Andía, C. Tejos, P. Irrarrázaval. “Cardiovascular magnetic resonance findings in a pediatric population with isolated left ventricular non-compaction”. *Journal of Cardiovascular Magnetic Resonance*. Vol 14(1), 9., 2012.

C. Arrieta, S. Uribe, J. Ramos-Grez, A. Vargas, P. Irrarrázaval, V. Parot, C. Tejos. “Quantitative assessments of geometric errors for rapid prototyping in medical applications”. *Rapid Prototyping Journal*. Vol 18(6), 431–442., 2012.

A. Bertelsen, **P. Irrarrázaval, R. Cádiz**. “Volume visualization using a spatially aware mobile display device”. *Computerized Medical Imaging and Graphics*. Vol 36(1), 66–71., 2012.

S. Chabert, M. Villalobos, P. Ulloa, R. Salas, **C. Tejos, S. San Martin, J. Pereda**. “Quantitative description of the morphology and ossification center in the axial skeleton of 20-week gestation formalin-fixed human fetuses using magnetic resonance images”. *Prenatal diagnosis*. Vol 32(3), 252–258., 2012.

I. Valverde, S. Nordmeyer, **S. Uribe, G. Greil, F. Berger, T. Kuehne, P. Beerbaum**. “Systemic-to-pulmonary collateral flow in patients with palliated univentricular heart physiology: measurement using cardiovascular magnetic resonance 4D velocity acquisition”. *Journal of Cardiovascular Magnetic Resonance*. Vol 14(1), 25., 2012.

P. Bächler, I. Valverde, **S. Uribe**. “Quantification of caval flow contribution to the lungs in vivo after total cavopulmonary connection with 4-dimensional flow magnetic resonance imaging”. *The Journal of thoracic and cardiovascular surgery*. Vol 143(3), 742–743., 2012.



PONTIFICIA
UNIVERSIDAD
CATÓLICA
DE CHILE

BIOMEDICAL IMAGING CENTER

T. Hussain, D. Lossnitzer, H. Bellsham-Revell, I. Valverde, P. Beerbaum, R. Razavi, A. Bell, T. Schaeffter, **R. Botnar**, **S. Uribe**. “Three-dimensional dual-phase whole-heart MR imaging: clinical implications for congenital heart disease”. *Radiology*. Vol 263(2), 547–554., 2012.

C. Prieto, **M. Andía**, C. von Bary, D. Onthank, T. Schaeffter, **R. Botnar**. “Accelerating three-dimensional molecular cardiovascular MR imaging using compressed sensing”. *Journal of Magnetic Resonance Imaging*. Vol 36(6), 1362–1371., 2012.

A. Phinikaridou, **M. Andía**, A. Protti, A. Indermuehle, A. Shah, A. Smith, A. Warley, **R. Botnar**. “Noninvasive MRI Evaluation of Endothelial Permeability in Murine Atherosclerosis Using an Albumin-Binding Contrast Agent”. *Circulation*, CIRCULATIONAHA-112., 2012.

A. Phinikaridou, **M. Andía**, A. Shah, **R. Botnar**. “Advances in molecular imaging of atherosclerosis and myocardial infarction: shedding new light on in vivo cardiovascular biology”. *American Journal of Physiology-Heart and Circulatory Physiology*. Vol 303(12), H1397–H1410., 2012.

T. Wurster, K. Stellos, T. Geisler, P. Seizer, **M. Andía**, A. Schuster, A. May, A. Melms, M. Gawaz, B. Bigalke. “Expression of stromal-cell-derived factor-1 (SDF-1): a predictor of ischaemic stroke?”. *European journal of neurology*. Vol 19(3), 395–401., 2012.

M. Andía, **R. Botnar**. “Arterial spin labeling angiography using a triple inversion recovery prepulse”. *Magnetic resonance in medicine*. Vol 67(2), 477–483., 2012.

M. Makowski, A. Wiethoff, C. Jansen, **S. Uribe**, V. Parish, A. Schuster, **R. Botnar**, A. Bell, C. Kiesewetter, R. Razavi. “Single breath-hold assessment of cardiac function using an accelerated 3D single breath-hold acquisition technique-comparison of an intravascular and extravascular contrast agent”. *Journal of Cardiovascular Magnetic Resonance*. Vol 14(1), 53., 2012.



PONTIFICIA
UNIVERSIDAD
CATÓLICA
DE CHILE

BIOMEDICAL IMAGING CENTER

2011 (7)

L. Ramirez, **C. Prieto**, **C. Sing-Long**, **S. Uribe**, P. Batchelor, **C. Tejos**, **P.**

Irarrázaval. “TRIO a technique for reconstruction using intensity order: application to undersampled MRI”. IEEE transactions on medical imaging. Vol 30(8), 1566–1576., 2011.

P. Irarrázaval, C. Lizama, V. Parot, **C. Sing-Long**, **C. Tejos**. “The fractional Fourier transform and quadratic field magnetic resonance imaging”. Computers & Mathematics with Applications. Vol 62(3), 1576–1590., 2011.

S. Uribe, T. Hussain, I. Valverde, **C. Tejos**, **P. Irarrázaval**, M. Fava, P. Beerbaum, **R. Botnar**, R. Razavi, T. Schaeffter. “Congenital heart disease in children: coronary MR angiography during systole and diastole with dual cardiac phase whole-heart imaging”. Radiology. Vol 260(1), 232–240., 2011.

L. Meneses, **S. Uribe**, **C. Tejos**, **M. Andía**, M. Fava, **P. Irarrázaval**. “Using magnetic resonance phase-contrast velocity mapping for diagnosing pelvic congestion syndrome”. Phlebology. Vol 26(4), 157–161., 2011.

S. Uribe, **C. Tejos**, R. Razavi, T. Schaeffter. “New respiratory gating technique for whole heart cine imaging: integration of a navigator slice in steady state free precession sequences”. Journal of Magnetic Resonance Imaging. Vol 34(1), 211–219., 2011.

R. Clough, T. Hussain, **S. Uribe**, G. Greil, R. Razavi, P. Taylor, T. Schaeffter, M. Waltham. “A new method for quantification of false lumen thrombosis in aortic dissection using magnetic resonance imaging and a blood pool contrast agent”. Journal of vascular surgery. Vol 54(5), 1251–1258., 2011.

M. Makowski, A. Wiethoff, **S. Uribe**, V. Parish, **R. Botnar**, A. Bell, C. Kiesewetter, P. Beerbaum, C. Jansen, R. Razavi. “Congenital heart disease: cardiovascular MR imaging by using an intravascular blood pool contrast agent”. Radiology. Vol 260(3), 680–688., 2011.

2010 (6)



PONTIFICIA
UNIVERSIDAD
CATÓLICA
DE CHILE

BIOMEDICAL IMAGING CENTER

A. Groves, G. Chiesa, G. Durighel, S. Goldring, J. Fitzpatrick, **S. Uribe**, R. Razavi, J. Hajnal, A. Edwards. “[Functional cardiac MRI in preterm and term newborns](#)”. Archives of Disease in Childhood-Fetal and Neonatal Edition., fetalneonatal189142., 2010.

E. Bertran, K. Heise, **M. Andía**, C. Ferreccio. “[Gallbladder cancer: incidence and survival in a high-risk area of Chile](#)”. International journal of cancer. Vol 127(10), 2446–2454., 2010.

J. Winter, P. Castro, L. Meneses, M. Chalhub, H. Verdejo, D. Greig, L. Gabrielli, M. Chiong, R. Concepción, R. MELLADO. “[Determinaciones de niveles de creatina y lípidos mediante espectroscopia por resonancia magnética en miocardio de pacientes con insuficiencia cardiaca no isquémica](#)”. Revista médica de Chile. Vol 138(12), 1475–1479., 2010.

C. Prieto, **S. Uribe**, R. Razavi, D. Atkinson, T. Schaeffter. “[3D undersampled golden-radial phase encoding for DCE-MRA using inherently regularized iterative SENSE](#)”. Magnetic resonance in medicine. Vol 64(2), 514–526., 2010.

F. Odille, **S. Uribe**, P. Batchelor, **C. Prieto**, T. Schaeffter, D. Atkinson. “[Model-based reconstruction for cardiac cine MRI without ECG or breath holding](#)”. Magnetic Resonance in Medicine. Vol 63(5), 1247–1257., 2010.

V. Parish, T. Hussain, P. Beerbaum, G. Greil, E. Nagel, R. Razavi, T. Schaeffter, **S. Uribe**. “[Single breath-hold assessment of ventricular volumes using 32-channel coil technology and an extracellular contrast agent](#)”. Journal of Magnetic Resonance Imaging. Vol 31(4), 838–844., 2010.

2009 (6)

C. Tejos, **P. Irarrázaval**, A. Cárdenas-Blanco. “[Simplex mesh diffusion snakes: integrating 2D and 3D deformable models and statistical shape knowledge in a variational framework](#)”. International journal of computer vision. Vol 85(1), 19–34., 2009.



PONTIFICIA
UNIVERSIDAD
CATÓLICA
DE CHILE

BIOMEDICAL IMAGING CENTER

M. Andía, J. Plett, **C. Tejos**, M. Guarini, M. Navarro, D. Razmilic, L. Meneses, M. Villalón, **P. Irrarrázaval**, “[Enhancement of Visual Perception through Dynamic Cues](#)”. Radiology, vol 250, no 2,551-557 2009. DOI: 10.1148/radiol.2502080168. 2009.

U. Blume, T. Lockie, C. Stehning, S. Sinclair, **S. Uribe**, R. Razavi, T. Schaeffter. “[Interleaved T1 and T2 relaxation time mapping for cardiac applications](#)”. Journal of Magnetic Resonance Imaging. Vol 29(2), 480–487., 2009.

S. Arancibia, P. Beerbaum, A. Rasmusson, T. Sørensen, R. Razavi, T. Schaeffter. “[4D flow of the whole heart and great vessels using real time self respiratory gating](#)”. Journal of Cardiovascular Magnetic Resonance. Vol 11(1), P3., 2009.

R. Boubertakh, **C. Prieto**, P. Batchelor, **S. Uribe**, D. Atkinson, H. Eggers, T. Sørensen, M. Hansen, R. Razavi, T. Schaeffter. “[Whole-heart imaging using undersampled radial phase encoding \(RPE\) and iterative sensitivity encoding \(SENSE\) reconstruction](#)”. Magnetic resonance in medicine. Vol 62(5), 1331–1337., 2009.

K. Heise, E. Bertran, **M. Andía**, C. Ferreccio. “[Incidence and survival of stomach cancer in a high-risk population of Chile](#)”. World journal of gastroenterology: WJG. Vol 15(15), 1854., 2009.

2008 (3)

A. Cárdenas-Blanco, **C. Tejos**, **P. Irrarrázaval**, I. Cameron. “[Noise in magnitude magnetic resonance images](#)”. Concepts in Magnetic Resonance Part A. Vol 32(6), 409–416., 2008.

M. Andía, A. Hsing, G. Andreotti, C. Ferreccio. “[Geographic variation of gallbladder cancer mortality and risk factors in Chile: a population-based ecologic study](#)”. International journal of cancer. Vol 123(6), 1411–1416., 2008.

S. Uribe, T. Tangchaoren, V. Parish, I. Wolf, R. Razavi, G. Greil, T. Schaeffter. “[Volumetric cardiac quantification by using 3D dual-phase whole-heart MR imaging](#)”. Radiology. Vol 248(2), 606–614., 2008.



PONTIFICIA
UNIVERSIDAD
CATÓLICA
DE CHILE

BIOMEDICAL IMAGING CENTER

2007 (3)

C. Prieto, P. Batchelor, D. Hill, J. Hajnal, M. Guarini, **P. Irarrázaval**. “Reconstruction of undersampled dynamic images by modeling the motion of object elements”. Magnetic resonance in medicine. Vol 57(5), 939–949., 2007.

S. Uribe, A. Guesalaga, R. Mir, M. Guarini, **P. Irarrázaval**. “A 3D trajectory for undersampling k-space in MRSI applications”. Magnetic resonance imaging. Vol 25(3), 350–358., 2007.

S. Uribe, V. Muthurangu, R. Boubertakh, T. Schaeffter, R. Razavi, D. Hill, M. Hansen. “Whole-heart cine MRI using real-time respiratory self-gating”. Magnetic Resonance in Medicine. Vol 57(3), 606–613., 2007.

2006 (1)

M. Andía, A. Gederlini, C. Ferreccio. “Gallbladder cancer: trend and risk distribution in Chile”. Revista medica de Chile. Vol 134(5), 565–574., 2006.

2005 (4)

P. Irarrázaval, R. Boubertakh, R. Razavi, D. Hill. “Dynamic three-dimensional undersampled data reconstruction employing temporal registration”. Magnetic resonance in medicine. Vol 54(5), 1207–1215., 2005.

P. Batchelor, D. Atkinson, **P. Irarrázaval**, D. Hill, J. Hajnal, D. Larkman. “Matrix description of general motion correction applied to multishot images”. Magnetic resonance in medicine. Vol 54(5), 1273–1280., 2005.

J. Spiniak, A. Guesalaga, R. Mir, M. Guarini, **P. Irarrázaval**. “Undersampling k-space using fast progressive 3D trajectories”. Magnetic resonance in medicine. Vol 54(4), 886–892., 2005.

K. McLeish, **P. Irarrázaval**. “Scan time reduction with an adaptive field of view”. Magnetic resonance imaging. Vol 23(1), 47–52., 2005.



PONTIFICIA
UNIVERSIDAD
CATÓLICA
DE CHILE

BIOMEDICAL IMAGING CENTER

2004 (5)

J. Ulloa, M. Guarini, A. Guesalaga, **P. Irarrázaval**. “Chebyshev series for designing RF pulses employing an optimal control approach”. IEEE transactions on medical imaging. Vol 23(11), 1445–1452., 2004.

R. Mir, A. Guesalaga, J. Spiniak, M. Guarini, **P. Irarrázaval**. “Fast three-dimensional k-space trajectory design using missile guidance ideas”. Magnetic resonance in medicine. Vol 52(2), 329–336., 2004.

S. Morales, A. Guesalaga, M. Fernández, M. Guarini, **P. Irarrázaval**. “Computer reconstruction of pine growth rings using MRI”. Magnetic Resonance Imaging. Vol 22(3), 403–412., 2004.

J. Andaur, A. Guesalaga, E. Agosin, M. Guarini, **P. Irarrázaval**. “Magnetic resonance imaging for nondestructive analysis of wine grapes”. Journal of agricultural and food chemistry. Vol 52(2), 165–170., 2004.

O. Brihuega-Moreno, F. Heese, **C. Tejos**, L. Hall. “Effects of, and corrections for, cross-term interactions in q-space MRI”. Magnetic resonance in medicine. Vol 51(5), 1048–1054., 2004.

2003 (2)

S. Sabat, R. Mir, M. Guarini, A. Guesalaga, **P. Irarrázaval**. “Three dimensional k-space trajectory design using genetic algorithms”. Magnetic resonance imaging. Vol 21(7), 755–764., 2003.

A. Guesalaga, P. Irarrázabal, M. Guarini, R. Álvarez. “Measurement of the glaucomatous cup using sequentially acquired stereoscopic images”. Measurement. Vol 34(3), 207–213., 2003.

2002 (4)



PONTIFICIA
UNIVERSIDAD
CATÓLICA
DE CHILE

BIOMEDICAL IMAGING CENTER

I. Contreras, A. Guesalga, M. Fernandez, M. Guarini, **P. Irarrázaval**. “MRI fast tree log scanning with helical undersampled projection acquisitions”. Magnetic resonance imaging. Vol 20(10), 781–787., 2002.

J. Lisboa, M. Guarini, **P. Irarrázaval**. “A correction algorithm for undersampled images using dynamic segmentation and entropy based focus criterion”. Magnetic resonance imaging. Vol 20(9), 659–666., 2002.

J. Akel, M. Rosenblitt, **P. Irarrázaval**. “Off-resonance correction using an estimated linear time map”. Magnetic resonance imaging. Vol 20(2), 189–198., 2002.

M. Ocaranza, G. Díaz-Araya, M. Chiong, D. Munoz, J. Riveros, R. Ebensperger, S. Sabat, **P. Irarrázaval**, J. Jalil, S. Lavandero. “Isoproterenol and angiotensin I-converting enzyme in lung, left ventricle, and plasma during myocardial hypertrophy and fibrosis”. Journal of cardiovascular pharmacology. Vol 40(2), 246–254., 2002. 37

2001 (1)

G. Lagos, J. Lehuedé, **M. Andía**. “Sulfur dioxide abatement costs and compliance with health-based standards: the case of copper smelters”. Resources Policy. Vol 27(3), 147–155., 2001.