

Simone Sacco, M.D.

San Francisco, California, USA.

Current Position

Postdoctoral Fellow Weill institute for neuroscience, department of Neurology, University of California San Francisco.

Education

Neuroradiology fellow, University of Toronto.	2020-2021
Residency in Radiology, University of Pavia, Italy	2014-2019
Research internship, University of California San Francisco, San Francisco, California	2016-2018
M.D., 110/110 cum laude, University of Pavia, Italy	2007-2013

Professional Experience

Junior specialist, department of neurology, University of California San Francisco.	2019-2020
Emergency medical services ASL Cosenza (Italy)	2013
Research internship in Neurology Prof. M. Versino. C. Mondino National Neurological institute, Pavia, Italy. Department of Brain and Behavioral sciences, University of Pavia, Pavia (Italy).	2011-2014

Other Positions and Employment

Tutoring position for Human Anatomy and Human Physiology at the University of Pavia. 2010-2013

Certification and Licensure

Maturità Classica (93/100) Diplomate, Liceo classico B.Telesio 87100, Cosenza, Italy. 2007

State Medical License, University of Pavia (Italy). 2014

Certified Radiologist (Italy) 2019

Professional Memberships and Activities

Radiological society of North America. 2014-present

CPSO 2020-2022

Personal skill and other education

Scientific Writing course,
UCSF Department of Surgery
Teacher: Derish Pamela 2018
(Pamela.Derish@ucsf.edu)

Publications. (*Corresponding author, ^Shared first authorship)

- 1) Versino M, Colagiorgio P, **Sacco S**, Colnaghi S, Ramat S. Artifact avoidance for head impulse testing. Clin Neurophysiol. 2014 May;125(5):1071-3. doi: 10.1016/j.clinph.2013.09.024. Epub 2013 Oct 13. PMID: 24128790.
- 2) Versino M, Colagiorgio P, **Sacco S**, Colnaghi S, Quagliari S, Manfrin M, Benazzo M, Moglia A, Ramat S. Reading while moving: the functional assessment of VOR. J Vestib Res. 2014;24(5-6):459-64. doi: 10.3233/VES-140531. PMID: 25564089.

- 3) Versino M, Colnaghi S, Ranzani M, Alloni R, Bolis C, **Sacco S**, Moglia A, Callieco R. Ocular vestibular evoked myogenic potentials in response to air-conducted 500 Hz short tones: Effect of stimulation procedure (monaural or binaural), age and gender. *J Vestib Res.* 2015;25(3-4):143-9. doi: 10.3233/VES-150554. PMID: 26756129.
- 4) Neurophysiology of migraine (Book Chapter) Versino, M, **Sacco S**, Colnaghi S. 2014 *Vestibular Migraine and Related Syndromes*
- 5) Pichiecchio A, **Sacco S***, De Filippi P, Caverzasi E, Ravaglia S, Bastianello S, Danesino C. Late-onset Pompe disease: a genetic-radiological correlation on cerebral vascular anomalies. *J Neurol.* 2017 Oct;264(10):2110-2118. doi: 10.1007/s00415-017-8601-1. Epub 2017 Aug 30. PMID: 28856460.
- 6) Staffaroni AM, Elahi FM, McDermott D, Marton K, Karageorgiou E, **Sacco S**, Paoletti M, Caverzasi E, Hess CP, Rosen HJ, Geschwind MD. Neuroimaging in Dementia. *Semin Neurol.* 2017 Oct;37(5):510-537. doi: 10.1055/s-0037-1608808. Epub 2017 Dec 5. PMID: 29207412; PMCID: PMC5823524.
- 7) University of California, San Francisco MS-EPIC Team, Cree BAC, Hollenbach JA, Bove R, Kirkish G, **Sacco S**, Caverzasi E, Bischof A, Gundel T, Zhu AH, Papinutto N, Stern WA, Bevan C, Romeo A, Goodin DS, Gelfand JM, Graves J, Green AJ, Wilson MR, Zamvil SS, Zhao C, Gomez R, Ragan NR, Rush GQ, Barba P, Santaniello A, Baranzini SE, Oksenberg JR, Henry RG, Hauser SL. Silent progression in disease activity-free relapsing multiple sclerosis. *Ann Neurol.* 2019 May;85(5):653-666. doi: 10.1002/ana.25463. Epub 2019 Mar 30. PMID: 30851128; PMCID: PMC6518998.
- 8) **Sacco S**, Ballati F, Gaetani C, Lomoro P, Farina LM, Bacila A, Imparato S, Paganelli C, Buizza G, Iannalfi A, Baroni G, Valvo F, Bastianello S, Preda L. Multi-parametric qualitative and quantitative MRI assessment as predictor of histological grading in previously treated meningiomas. *Neuroradiology.* 2020 Nov;62(11):1441-1449. doi: 10.1007/s00234-020-02476-y. Epub 2020 Jun 24. PMID: 32583368.
- 9) Bove R, Rowles W, Zhao C, Anderson A, Friedman S, Langdon D, Alexander A, **Sacco S**, Henry R, Gazzaley A, Feinstein A, Anguera JA. A novel in-home digital treatment to improve processing speed in people with multiple sclerosis: A pilot study. *Mult Scler.* 2021 Apr;27(5):778-789. doi: 10.1177/1352458520930371. Epub 2020 Jun 25. PMID: 32584155.
- 10) **Sacco S***, Paoletti M, Staffaroni AM, Kang H, Rojas J, Marx G, Goh SY, Luisa Mandelli M, Allen IE, Kramer JH, Bastianello S, Henry RG, Rosen HJ, Caverzasi E, Geschwind MD. Multimodal MRI staging for tracking progression and clinical-imaging correlation in sporadic Creutzfeldt-Jakob disease. *Neuroimage Clin.* 2021;30:102523. doi: 10.1016/j.nicl.2020.102523. Epub 2020 Dec 11. PMID: 33636540; PMCID: PMC7906895.
- 11) **Sacco S***, Caverzasi E, Papinutto N, Cordano C, Bischof A, Gundel T, Cheng S, Asteggiano C, Kirkish G, Mallott J, Stern WA, Bastianello S, Bove RM, Gelfand JM, Goodin DS, Green AJ, Waubant E, Wilson MR, Zamvil SS, Cree BA, Hauser SL, Henry RG; University of California, San Francisco MS-EPIC Team. Neurite Orientation Dispersion and Density Imaging for Assessing Acute Inflammation and Lesion Evolution in MS. *AJNR Am J Neuroradiol.* 2020 Dec;41(12):2219-2226. doi: 10.3174/ajnr.A6862. Epub 2020 Nov 5. PMID: 33154077; PMCID: PMC7963254.
- 12) **Sacco S**, Callegari I, Canavero I, Coloberti E, Farina LM, Ravaglia S, Simoncelli A, Pichiecchio A, Micieli G. Fulminant inflammatory demyelination presenting as stroke-in-evolution in an elderly subject. *Brain Behav.* 2021 Aug;11(8):e01967. doi: 10.1002/brb3.1967. Epub 2020 Dec 8. PMID: 33615744; PMCID: PMC8413797.
- 13) Franconeri A, **Sacco S^**, Raciti MV, Maggi A, Muzic SI, Imparato S, Farina L, Bacila A, Paganelli C, Buizza G, Fontana G, Baroni G, Riva G, Iannalfi A, Orlandi E, Preda L. Intravoxel incoherent motion as a tool to detect early microstructural changes in meningiomas treated with proton therapy. *Neuroradiology.* 2021 Jul;63(7):1053-1060. doi: 10.1007/s00234-020-02630-6. Epub 2021 Jan 3. PMID: 33392736.

- 14) Buizza G, Paganelli C, Ballati F, **Sacco S**, Preda L, Iannalfo A, Alexander DC, Baroni G, Palombo M. Improving the characterization of meningioma microstructure in proton therapy from conventional apparent diffusion coefficient measurements using Monte Carlo simulations of diffusion MRI. *Med Phys*. 2021 Mar;48(3):1250-1261. doi: 10.1002/mp.14689. Epub 2021 Feb 5. PMID: 33369744.
- 15) Jordan KM, Lauricella M, Licata AE, **Sacco S**, Asteggiano C, Wang C, Sudarsan SP, Watson C, Scheffler AW, Battistella G, Miller ZA, Gorno-Tempini ML, Caverzasi E, Mandelli ML. Cortically constrained shape recognition: Automated white matter tract segmentation validated in the pediatric brain. *J Neuroimaging*. 2021 Jul;31(4):758-772. doi: 10.1111/jon.12854. Epub 2021 Apr 20. PMID: 33878229.
- 16) Hsu WY, Rowles W, Anguera JA, Zhao C, Anderson A, Alexander A, **Sacco S**, Henry R, Gazzaley A, Bove R. Application of an Adaptive, Digital, Game-Based Approach for Cognitive Assessment in Multiple Sclerosis: Observational Study. *J Med Internet Res*. 2021 Jan 20;23(1):e24356. doi: 10.2196/24356. Erratum in: *J Med Internet Res*. 2021 Jan 27;23(1):e27440. PMID: 33470940; PMCID: PMC7840186.
- 17) Schilling KG, Rheault F, Petit L, Hansen CB, Nath V, Yeh FC, Girard G, Barakovic M, Rafael-Patino J, Yu T, Fisci-Gomez E, Pizzolato M, Ocampo-Pineda M, Schiavi S, Canales-Rodríguez EJ, Daducci A, Granziera C, Innocenti G, Thiran JP, Mancini L, Wastling S, Cocozza S, Petracca M, Pontillo G, Mancini M, Vos SB, Vakharia VN, Duncan JS, Melero H, Manzanedo L, Sanz-Morales E, Peña-Melián Á, Calamante F, Attyé A, Cabeen RP, Korobova L, Toga AW, Vijayakumari AA, Parker D, Verma R, Radwan A, Sunaert S, Emsell L, De Luca A, Leemans A, Bajada CJ, Haroon H, Azadbakht H, Chamberland M, Genc S, Tax CMW, Yeh PH, Srikanthana R, Mcknight CD, Yang JY, Chen J, Kelly CE, Yeh CH, Cochereau J, Maller JJ, Welton T, Almairac F, Seunarine KK, Clark CA, Zhang F, Makris N, Golby A, Rathi Y, O'Donnell LJ, Xia Y, Aydogan DB, Shi Y, Fernandes FG, Raemaekers M, Warrington S, Michielse S, Ramírez-Manzanares A, Concha L, Aranda R, Meraz MR, Lerma-Usabiaga G, Roitman L, Fekonja LS, Calarco N, Joseph M, Nakua H, Voineskos AN, Karan P, Grenier G, Legarreta JH, Adluru N, Nair VA, Prabhakaran V, Alexander AL, Kamagata K, Saito Y, Uchida W, Andica C, Abe M, Bayrak RG, Wheeler-Kingshott CAMG, D'Angelo E, Palesi F, Savini G, Rolandi N, Guevara P, Hounou J, López-López N, Mangin JF, Poupon C, Román C, Vázquez A, Maffei C, Arantes M, Andrade JP, Silva SM, Calhoun VD, Caverzasi E, **Sacco S**, Lauricella M, Pestilli F, Bullock D, Zhan Y, Brignoni-Perez E, Lebel C, Reynolds JE, Nestrasil I, Labounek R, Lenglet C, Paulson A, Aulicka S, Heilbronner SR, Heuer K, Chandio BQ, Guaje J, Tang W, Garyfallidis E, Raja R, Anderson AW, Landman BA, Descoteaux M. Tractography dissection variability: What happens when 42 groups dissect 14 white matter bundles on the same dataset? *Neuroimage*. 2021 Nov;243:118502. doi: 10.1016/j.neuroimage.2021.118502. Epub 2021 Aug 22. PMID: 34433094.
- 18) Donaldson LC, Eshtiaghi A, **Sacco S**, Micieli JA, Margolin EA. Junctional Scotoma and Patterns of Visual Field Defects Produced by Lesions Involving the Optic Chiasm. *J Neuroophthalmol*. 2021 Aug 17. doi: 10.1097/WNO.0000000000001394. Epub ahead of print. PMID: 34417771.
- 19) Gaviraghi M., Savini G, Castellazzi G, Palesi F, Rolandi N, **Sacco S**, Pichiecchio A, Mariani V, Tartara E, Tassi L, Vitali P, D'Angelo E, Gandini Wheeler-Kingshott CAM. (2021) Automatic Segmentation of Dentate Nuclei for Microstructure Assessment: Example of Application to Temporal Lobe Epilepsy Patients. In: Gyori N., Hutter J., Nath V., Palombo M., Pizzolato M., Zhang F. (eds) *Computational Diffusion MRI. Mathematics and Visualization*. Springer, Cham. https://doi.org/10.1007/978-3-030-73018-5_21.
- 20) **Sacco S** *, Lomoro P, Ballati F, Boccuzzi D, Imperato S, Ruju F, et al. Multimodality imaging of parotid gland oncocytoma: a pictorial review. *J Radiol Rev* 2021;8:292-301. DOI: 10.23736/S2723-9284.21.00149-2

- 21) Bischof A, Papinutto N, Keshavan A, Rajesh A, Kirkish G, Zhang X, Mallott JM, Asteggiano C, **Sacco S**, Gundel TJ, Zhao C, Stern WA, Caverzasi E, Zhou Y, Gomez R, Ragan NR, Santaniello A, Zhu AH, Juwono J, Bevan CJ, Bove RM, Crabtree E, Gelfand JM, Goodin DS, Graves JS, Green AJ, Oksenberg JR, Waubant E, Wilson MR, Zamvil SS; University of California, San Francisco MS-EPIC Team, Cree BA, Hauser SL, Henry RG. Spinal cord atrophy predicts progressive disease in relapsing multiple sclerosis. *Ann Neurol*. 2021 Dec 8. doi: 10.1002/ana.26281. Epub ahead of print. PMID: 34878197.
- 22) Bischof A, Papinutto N, Keshavan A, Rajesh A, Kirkish G, Zhang X, Mallott JM, Asteggiano C, **Sacco S**, Gundel TJ, Zhao C, Stern WA, Caverzasi E, Zhou Y, Gomez R, Ragan NR, Santaniello A, Zhu AH, Juwono J, Bevan CJ, Bove RM, Crabtree-Hartman E, Gelfand JM, Goodin DS, Graves JS, Green AJ, Oksenberg JR, Waubant E, Wilson MR, Zamvil SS; University of California, San Francisco MS-EPIC Team, Cree BA, Hauser SL, Henry RG. Reply to "Spinal Cord Atrophy Is a Preclinical Marker of Progressive MS". *Ann Neurol*. 2022 May;91(5):735-736. doi: 10.1002/ana.26340. Epub 2022 Mar 26. PMID: 35233827.
- 23) Differences in age-related retinal and cortical atrophy rates in multiple sclerosis (S26.002) Christian Cordano, Bardia Nourbakhsh, Hao Yiu, Nico Papinutto, Eduardo Caverzasi, Ahmed Abdelhak, Frederike Cosima Oertel, Alexandra Beaudry-Richard, Adam Santaniello, **Simone Sacco**, Daniel Bennett, Apraham Gomez, Christina Sigurdson, Stephen Hauser, Bruce Cree, Roberta Magliozzi, Roland Henry, Ari Green *Neurology* May 2022, 98 (18 Supplement) 1819;
- 24) Broce IJ, Caverzasi E, Sacco S, Nillo RM, Paoletti M, Desikan RS, Geschwind M, Sugrue LP. PRNP expression predicts imaging findings in sporadic Creutzfeldt-Jakob disease. *Ann Clin Transl Neurol*. 2023 Apr;10(4):536-552. doi: 10.1002/acn3.51739. Epub 2023 Feb 6. PMID: 36744645; PMCID: PMC10109249.
- 25) Sacco S, Virupakshaiah A, Papinutto N, Schoeps VA, Akula A, Zhao H, Arona J, Stern WA, Chong J, Hart J, Zamvil SS, Sati P, Henry RG, Waubant E. Susceptibility-based imaging aids accurate distinction of pediatric-onset MS from myelin oligodendrocyte glycoprotein antibody-associated disease. *Mult Scler*. 2023 Dec;29(14):1736-1747. doi: 10.1177/13524585231204414. Epub 2023 Oct 28. PMID: 37897254; PMCID: PMC10687802.

