

Personal information

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Publications 320, Total cites 6261, h-index 42 (Clarivate Web of Science)

(Google Scholar <https://scholar.google.ch/citations?hl=fr&user=bG1p0ccAAAAJ>); ORCID <http://orcid.org/0000-0003-1429-1374>; Clarivate <https://www.webofscience.com/wos/author/rec-ord/1435442>; Loop <https://loop.frontiersin.org/people/65339/impact>; PubMed (most complete, but not exhaustive) <https://www.ncbi.nlm.nih.gov/pubmed/?term=Prior+J+NOT+Prior+JC+AND+Lausanne+OR+Prior%2C+John+O>

Education

Institution, location	Degree	Date	Field
University of Texas Southwestern Medical Center at Dallas, USA	PhD	1993	Biomedical Engineering
Eidgenössische Technische Hochschule Zürich	MSc	1989	Electrical Engineering
University of Lausanne	Federal Diploma	1999	Medicine
Swiss Federation of Physicians (FMH/ISFM)	Specialization diploma	2005	Nuclear Medicine
European Board of Nuclear Medicine, EBNM	Fellow of EBNM	2008	Nuclear Medicine

Employment history

Institution, location	Title	Date	Field
University of Texas Southwestern Medical Center at Dallas, USA	Research Assistant	1989–93	Biomedical Engineering
École Polytechnique Fédérale de Lausanne	Postdoctoral Fellow	1994–95	Biomedical Engineering
Lausanne University Hospital	Postdoctoral Fellow	1996–99	Nuclear Medicine
Lausanne University Hospital, Switzerland	Resident	2000–01	NM, Int. Med., Radiol.
University of California at Los Angeles, USA	Visiting Fellow	2002–03	Nuclear Medicine
University of California at Los Angeles, USA	Visiting Associate Professor	2003–04	Nuclear Medicine
Lausanne University Hospital, UNIL	Fellow, MER	2004–05	Nuclear Medicine
Lausanne University Hospital, UNIL	Junior Staff, PD	2005–07	Nuclear Medicine
Lausanne University Hospital, UNIL	Senior Staff	2007–10	Nuclear Medicine
Lausanne University Hospital, UNIL	Full Professor	2010–	Nuclear Medicine
Faculty of Biology and Medicine, UNIL, Doctoral School	Vice-Director	2015–	Medicine, Biology, Nursing Sciences

Institutional responsibilities

Head of Nuclear Medicine and Molecular Imaging, Lausanne University Hospital (CHUV);
Vice-Director, Doctoral School, Faculty of Biology and Medicine, UNIL (MD, MD-PhD, PhD in Nursing Sciences)

Approved research projects (>27.5 MCHF in total)

1. H2020 Research and Innovation Framework Programme INFRAIA-1 RIA. The European medical isotope programme: Production of high-purity isotopes by mass separation (PRISMAP), **€ 4,995,257.50**. Co-initiator, PI.
2. Swiss National Science Foundation – Grant CRSII5_189969 Sinergia, **CHF 2,798,447** for the project PETITION—PET for InTensive Care units and Innovative protON therapy. co-PI.
3. Loterie Romande (Western Switzerland Lottery) – Grant of **CHF 400,000** (2019) for a μ PET to be installed in the new Agora Translational Building of the Swiss Cancer Center Lausanne.
4. CTI (Bern). Grant 32983.1 IP-LS (2018) for a **CHF729,413**. (2018-2021) New tools for radio-guided surgery of head and neck cancer Co-PI. Project not started as the grant contract could not be finalized.
5. Swiss National Science Foundation – Grant 176241 of **CHF308,907** (2018–2020) Chest imaging under high frequency percussive ventilation. Co-PI.
6. Swiss National Science Foundation – Grant IZK0Z2_175430, **CHF10,000**, Design and development of a meta-structured detector head with ultimate energy and time resolution for sub-100ps TOF-PET. PI.
7. CTI (Bern). grant (2017) for a **CHF164,307** Development of novel imaging reagents for early detection and surgical replacement of prosthetic joint infections. Co-PI.
8. Swiss Card-Onco Grants 2015: Alfred & Annemarie von Sick Grant (Zurich), **CHF920,000**, Molecular imaging and therapy targeting TEM1 in soft tissue sarcoma: A first-in-human study. PI.
9. H2020, Marie Skłodowska-Curie Actions (2014-2018) on Innovative Training Network (2014, N°642889), MEDICIS-PROMED, **€2,829,270** MEDICIS-produced radioisotope beams for medicine. Co-initiator, PI.
10. Eurostars-2 Eureka Grant N°8974 TURBO-PET (2014-2017), **€ 2,235,106**, high-resolution, high-sensitivity dedicated breast PET scanner. Co-PI.
11. Swiss National Science Foundation (Bern), Grant 316030_150837 (2014). **CHF977,240**, Preclinical imaging MicroPET/SPECT/CT. PI.

12. CTI (Bern). Grant (2012-13), **CHF812,867**, Image-guided soft tissue interventions in liver surgery and interventional radiology. Co-PI.
13. Oncosuisse Research Grant (2011-2013), **CHF320,692**, Development and Optimization of Folate-Based Targeted Radionuclide Therapy of Folate Receptor-Positive Cancer Diseases. Co-PI.
14. FP7 Grant (2010-2013), **€5,516,001**, EndoTOFPET-US—Novel multimodal endoscopic probes for simultaneous PET/ultrasound imaging for image-guided interventions. Grant Initiator and PI.
15. Swiss Heart Foundation (Bern). Grant (2009-10), **CHF141,000** Plaque inflammation and progression using two different positron emission tomography (PET) tracers and multimodality PET-MRI imaging. Co-PI.
16. CTI (Bern). Grant (2009–2012), **CHF1,808,344**, Compact probes for radiotracer-guided and fluorescence-guided surgery, biopsy and diagnostics based on SiPM and advanced time-stamping electronics. PI.
17. Emma Muschamp Foundation (SAV, Lausanne). Grant (2008–2011) **CHF50,000** Myocardial blood flow imaging with cardiac positron emission tomography (PET). PI.
18. Leenaards Foundation Prize (Lausanne). Grant (2008–10), **CHF500'000**, Noninvasive tumor angiogenesis imaging based on $\alpha\beta3$ & $\alpha5\beta1$ integrin-targeted molecular probes with PET. PI.
19. SAKK (Bern). Grant (2007) SAKK 56/07, **CHF115'000**, PET/CT Core Laboratory in a multicenter phase II trial Dascatinib 1st-line in GIST. PI.
20. Leenaards Foundation Award (Lausanne). Fellowship, **CHF130'000** (2007–09) for Academic Career Planning in Clinical Medicine in Lausanne allowing to allocate 50% of time to research.
21. Foundation Lionel Perrier Research (Montreux). Prize 2007-2009, **CHF100'000**, Multimodal diagnostic assessment of cerebral gliomas with FET and FCH PET/CT and magnetic resonance spectroscopy. PI.
22. Cardiovascular and Metabolic Diseases Center (Lausanne). Grant 2006–2007, **CHF63,000**. Noninvasive Measurement of Endothelial Dysfunction with PET. PI.
23. Cardiovascular and Metabolic Diseases Center (Lausanne). Grant 2006–2007, **CHF20,000**. Facilitation of atrial fibrillation by sympathetic hyperinnervation. Co-PI.
24. Bracco Diagnostics Inc. (Princeton, NJ, USA). EMRC Research Grant 2016, **US\$90,000**, Quantitative myocardial blood flow measurement with generator-based Rubidium-82 cardiac PET. PI.
25. Swiss National Science Foundation (Bern). Grant 320000-109986/1 (2005–7), **CHF151,300**, Quantitative myocardial blood flow measurement with generator-based Rubidium-82 cardiac PET: Genotype and phenotype effects of paraoxonase 1 on coronary vasomotion. PI.
26. Michel Tossizza Foundation (Lausanne). Grant (2005) **CHF65,000**, Quantitative myocardial blood flow measurement with generator-based Rubidium-82 cardiac PET. PI.
27. Société Académique Vaudoise (SAV, Lausanne). Grant (2006) **CHF10,000**, Quantitative myocardial blood flow measurement with generator-based Rubidium-82 cardiac positron emission tomography. PI.

Supervision of junior researchers at graduate and postgraduate level

10 MD Thesis, 5 PhD Thesis, >30 MSc. Thesis in Medicine, 2 MSc. Sa Thesis HESAV HESSO

Memberships in panels, boards, etc., and individual scientific reviewing activities

Editorial board: European Journal of Nuclear Medicine and Molecular Imaging (Associate Editor); **Journal of Nuclear Medicine** (International Associate Editor); **American Journal of Nuclear Medicine and Molecular Imaging** (Associate Editorial Board); **Médecine nucléaire** (Elsevier).

World Federation of Nuclear Medicine and Biology: Liaison Officer with the World Health Organization (2019–). International Strategic Committee for Medical Application at CERN/ Medical Application Advisory Committee (2014–18). **Swiss Society of Nuclear Medicine: President (2018–)**, Vice-President (2014–18), Board Member (2005–); IEEE Senior Member (2006–); **Fellow of the European Board of Nuclear Medicine** (2008–). **President of the Section and Board of Nuclear Medicine of the European Union of Medical Specialists (UEMS/EBNM)** (2024–); **Chairman of the UEMS Accreditation Committee of Nuclear Medicine and Training Department** (2016–24); **Society of Nuclear Medicine** Board of Directors, PET Center of Excellence (2011–14).

Prizes, awards, fellowships

Swiss CTI Medtech Award Finalist (2016), Prize of the Swiss Organization of GIST patients (2010), Leenaards Prize (2008). Lionel Perrier Prize (2007), Swiss Diabetes Foundation, Scientific Prize (2005). Foundation for Social and Preventive Medicine, Lausanne (2005). 5th International Conference on Preventive Cardiology–4th International Heart Health Conference: Young Investigator Award, Osaka, (2001). Swiss Academy of Medical Sciences, Basel, PhD-MD Grant (1995); Société Académique Vaudoise/Fern Moffat Foundation, Lausanne, PhD-MD grant (1994); Alfred R. & Janet H. Potvin Award for Outstanding Ph.D. Student, Dallas (1992); Master of Science with honors (ranked 3rd/56 students), ETH Zurich (1989). PhD research led to patented imaging technology/joint-venture (Epikon, Dallas, 1993), (periodontal probe, Vivadent, Liechtenstein, 1988) and industrial success story (Codeman-Hakim implantable programmable hydrocephalic valves, Johnson & Johnson Co., Switzerland, 1985).

Lausanne (Switzerland), June 30, 2024



RESEARCH OUTPUT LIST (LIMITED TO THE LAST 5 YEARS)

PEER-REVIEWED PUBLICATIONS

1. Champendal M, Ribeiro RST, Müller H, Prior JO, Sá Dos Reis C. Nuclear medicine technologists practice impacted by AI denoising applications in PET/CT images. *Radiography (Lond)*. 2024 Jun 24;30(4):1232-1239. doi: 10.1016/j.radi.2024.06.010. Online ahead of print. PMID: 38917681
2. Firsova M, Treglia G, Sempoux C, Dromain C, Prior JO, Schaefer N, Boughdad S. Increased [68Ga]Ga-SST uptake in the uncinate pancreatic process in new digital PET/CT machine and potential association with clinical and histologic factors in NET patients. *EJNMMI Rep*. 2024 Jun 24;8(1):18. doi: 10.1186/s41824-024-00203-x. PMID: 38910232 Free PMC article.
3. Cloître M, Benkhald S, Boughdad S, Schaefer N, Prior JO, Zeverino M, Berthold D, Tawadros T, Meuwly JY, Martel P, Rohner C, Heym L, Duclos F, Vallet V, Valerio M, Bourhis J, Herrera F. Spatial Distribution of Recurrence and Long-Term Toxicity Following Dose Escalation to the Dominant Intra-Prostatic Nodule for Intermediate-High-Risk Prostate Cancer: Insights from a Phase III Study. *Cancers (Basel)*. 2024 May 31;16(11):2097. doi: 10.3390/cancers16112097. PMID: 38893216 Free PMC article.
4. Dietz M, Kamani CH, Bousige C, Dunet V, Delage J, Rubimbura V, Nicod Lalonde M, Treglia G, Schaefer N, Nammass W, Saraste A, Knuuti J, Mewton N, Prior JO. Natural History of Myocardial $\alpha\beta 3$ Integrin Expression After Acute Myocardial Infarction: Correlation with Changes in Myocardial Blood Flow. *J Nucl Med*. 2024 May 9;jnumed.124.267514. doi: 10.2967/jnumed.124.267514. Online ahead of print. PMID: 38724280
5. Bors S, Ablor D, Dietz M, Andrearczyk V, Fageot J, Nicod-Lalonde M, Schaefer N, DeKemp R, Kamani CH, Prior JO, Depeursinge A. Comparing various AI approaches to traditional quantitative assessment of the myocardial perfusion in [82Rb] PET for MACE prediction. *Sci Rep*. 2024 Apr 26;14(1):9644. doi: 10.1038/s41598-024-60095-6. PMID: 38671059 Free PMC article.
6. Pascual TNB, Paez D, Iagaru A, Gnanasegaran G, Lee ST, Sathekge M, Buatti JM, Giammarile F, Al-Ibraheem A, Pardo MA, Baum RP, De Bari B, Ben-Haim S, Blay JY, Brink A, Estrada-Lobato E, Fanti S, Golubic AT, Hatazawa J, Israel O, Kiess A, Knoll P, Louw L, Mariani G, Mirzaei S, Orellana P, Prior JO, Urbain JL, Vichare S, Vinjamuri S, Virgolini I, Scott AM. Guiding principles on the education and practice of theranostics. *Eur J Nucl Med Mol Imaging*. 2024 Jul;51(8):2320-2331. doi: 10.1007/s00259-024-06657-2. Epub 2024 Mar 8. PMID: 38453729 Free PMC article.
7. Girardet R, Knebel JF, Dromain C, Vietti Violi N, Tsoumakidou G, Villard N, Denys A, Halkic N, Demartines N, Kobayashi K, Digkila A, Schaefer N, Prior JO, Boughdad S, Duran R. Anatomical Quantitative Volumetric Evaluation of Liver Segments in Hepatocellular Carcinoma Patients Treated with Selective Internal Radiation Therapy: Key Parameters Influencing Untreated Liver Hypertrophy. *Cancers (Basel)*. 2024 Jan 30;16(3):586. doi: 10.3390/cancers16030586. PMID: 38339337 Free PMC article.
8. Barras D, Ghisoni E, Chiffelle J, Orcurto A, Dagher J, Fahr N, Benedetti F, Crespo I, Grimm AJ, Morotti M, Zimmermann S, Duran R, Imbimbo M, de Olza MO, Navarro B, Homicsko K, Bobisse S, Labes D, Tsourti Z, Andriakopoulou C, Herrera F, Pétremand R, Dummer R, Berthod G, Kraemer AI, Huber F, Thevenet J, Bassani-Sternberg M, Schaefer N, Prior JO, Matter M, Aedo V, Dromain C, Corria-Osorio J, Tissot S, Kandalaf LE, Gottardo R, Pittet M, Sempoux C, Michielin O, Dafni U, Trueb L, Harari A, Laniti DD, Coukos G. Response to tumor-infiltrating lymphocyte adoptive therapy is associated with preexisting CD8+ T-myeloid cell networks in melanoma. *Sci Immunol*. 2024 Feb 2;9(92):eadg7995. doi: 10.1126/sciimmunol.adg7995. Epub 2024 Feb 2. PMID: 38306416
9. Vicino A, Hottinger AF, Latifyan S, Boughdad S, Becce F, Prior JO, Kuntzer T, Brouland JP, Dunet V, Obeid M, Théaudin M. Immune checkpoint inhibitor-related myositis and myocarditis: diagnostic pitfalls and imaging contribution in a real-world, institutional case series. *J Neurol*. 2024 Apr;271(4):1947-1958. doi: 10.1007/s00415-023-12134-x. Epub 2023 Dec 23. PMID: 38141128 Free PMC article. Review.
10. Lacagne AS, May L, Lalonde MN, Prior JO, Broome M. Primary Chronic Sclerosing Osteomyelitis: A New Diagnostic Tool. *Diagnostics (Basel)*. 2023 Nov 29;13(23):3571. doi: 10.3390/diagnostics13233571. PMID: 38066812 Free PMC article.
11. Lenherr A, Boughdad S, Prior JO, Lalonde MN, Filippidis P. Infective aortitis and subacute myocarditis due to *Campylobacter fetus*. *Int J Infect Dis*. 2024 Jan;138:113-114. doi: 10.1016/j.ijid.2023.11.033. Epub 2023 Nov 26. PMID: 38016501 Free article.

12. Champendal M, Müller H, **Prior JO**, Dos Reis CS. A scoping review of interpretability and explainability concerning artificial intelligence methods in medical imaging. *Eur J Radiol.* 2023 Dec;169:111159. doi: 10.1016/j.ejrad.2023.111159. Epub 2023 Oct 21. PMID: 37976760 Review.
13. Andrearczyk V, Oreiller V, Boughdad S, Le Rest CC, Tankyevych O, Elhalawani H, Jreige M, **Prior JO**, Vallières M, Visvikis D, Hatt M, Depeursinge A. Automatic Head and Neck Tumor segmentation and outcome prediction relying on FDG-PET/CT images: Findings from the second edition of the HECKTOR challenge. *Med Image Anal.* 2023 Dec;90:102972. doi: 10.1016/j.media.2023.102972. Epub 2023 Sep 18. PMID: 37742374
14. Smet H, Martin D, Uldry E, Duran R, Girardet R, Schaefer N, **Prior JO**, Denys A, Halkic N, Demartines N, Melloul E. Tc-99m mebrofenin hepatobiliary scintigraphy to assess future liver remnant function before major liver surgery. *J Surg Oncol.* 2023 Dec;128(8):1312-1319. doi: 10.1002/jso.27426. Epub 2023 Aug 28. PMID: 37638473
15. Lenherr A, Boughdad S, **Prior JO**, Lalonde MN, Filippidis P. Infective aortitis and subacute myocarditis due to *Campylobacter fetus*. *Int J Infect Dis.* 2023 Nov 26:S1201-9712(23)00794-4. doi: 10.1016/j.ijid.2023.11.033. Online ahead of print. PMID: 38016501 No abstract available.
16. Nammass W, Paunonen C, Teuho J, Siekkinen R, Luoto P, Käkälä M, Hietanen A, Viljanen T, Dietz M, **Prior JO**, Li XG, Roivainen A, Knuuti J, Saraste A. Imaging of Myocardial $\alpha\beta3$ Integrin Expression for Evaluation of Myocardial Injury After Acute Myocardial Infarction. *J Nucl Med.* 2023 Nov 16;jnumed.123.266148. doi: 10.2967/jnumed.123.266148. Online ahead of print. PMID: 37973184
17. Mazini B, Dietz M, Maréchal B, Corredor-Jerez R, **Prior JO**, Dunet V. Interrelation between cardiac and brain small-vessel disease: a pilot quantitative PET and MRI study. *Eur J Hybrid Imaging.* 2023 Nov 6;7(1):20. doi: 10.1186/s41824-023-00180-7. PMID: 37926793 Free PMC article.
18. Annunziata S, Testart N, Auf der Springe K, Cuzzocrea M, Nicod Lalonde M, Schaefer N, **Prior JO**, Garibotto V, Treglia G. Contrast enhanced CT on PET/CT imaging in clinical routine: an international survey. *Front Med (Lausanne).* 2023 Oct 16;10:1290956. doi: 10.3389/fmed.2023.1290956. eCollection 2023. PMID: 37908847 Free PMC article.
19. Tian M, Zuo C, Cahid Civelek A, Carrio I, Watanabe Y, Kang KW, Murakami K, **Prior JO**, Zhong Y, Dou X, Yu C, Jin C, Zhou R, Liu F, Li X, Lu J, Zhang H, Wang J; Molecular Imaging-based Precision Medicine Task Group of A3 (China-Japan-Korea) Foresight Program. International consensus on clinical use of presynaptic dopaminergic positron emission tomography imaging in parkinsonism. *Eur J Nucl Med Mol Imaging.* 2023 Oct 4. doi: 10.1007/s00259-023-06403-0. Online ahead of print. PMID: 37789188
20. Casutt A, Lamothe F, Lortholary O, **Prior JO**, Tonglet A, Manuel O, Bergeron A, Beigelman-Aubry C. Atypical imaging patterns during lung invasive mould diseases: lessons for clinicians. *Eur Respir Rev.* 2023 Sep 27;32(169):230086. doi: 10.1183/16000617.0086-2023. Print 2023 Sep 30. PMID: 37758271 Free PMC article. Review.
21. Jreige M, Darçot E, Lovis A, Simons J, Nicod-Lalonde M, Schaefer N, Buella F, Long O, Beigelman-Aubry C, **Prior JO**. Lung CT stabilization with high-frequency non-invasive ventilation (HF-NIV) and breath-hold (BH) in lung nodule assessment by PET/CT. *Eur J Hybrid Imaging.* 2023 Sep 4;7(1):16. doi: 10.1186/s41824-023-00175-4. PMID: 37661217 Free PMC article.
22. Tabotta F, Gnesin S, Dunet V, Ponti A, Digkila A, Boughdad S, Schaefer N, **Prior JO**, Villard N, Tsoumakidou G, Denys A, Duran R. 99mTc-macroaggregated albumin SPECT/CT predictive dosimetry and dose-response relationship in uveal melanoma liver metastases treated with first-line selective internal radiation therapy. *Sci Rep.* 2023 Aug 12;13(1):13118. doi: 10.1038/s41598-023-39994-7. PMID: 37573346 Free PMC article.
23. Hajri R, Nicod-Lalonde M, Hottinger AF, **Prior JO**, Dunet V. Prediction of Glioma Grade and IDH Status Using 18F-FET PET/CT Dynamic and Multiparametric Texture Analysis. *Diagnostics (Basel).* 2023 Aug 5;13(15):2604. doi: 10.3390/diagnostics13152604. PMID: 37568967 Free PMC article.
24. Tian M, Zuo C, Civelek AC, Carrio I, Watanabe Y, Kang KW, Murakami K, Garibotto V, **Prior JO**, Barthel H, Guan Y, Lu J, Zhou R, Jin C, Wu S, Zhang X, Zhong Y, Zhang H; Molecular Imaging-Based Precision Medicine Task Group of A3 (China-Japan-Korea) Foresight Program. International Nuclear Medicine Consensus on the Clinical Use of Amyloid Positron Emission Tomography in Alzheimer's Disease. *Phenomics.* 2022 Aug 26;3(4):375-389. doi: 10.1007/s43657-022-00068-9. eCollection 2023 Aug. PMID: 37589025 Free PMC article.
25. Dietz M, Kamani CH, Allenbach G, Rubimbura V, Fournier S, Dunet V, Treglia G, Nicod Lalonde M, Schaefer N, Eeckhout E, Muller O, **Prior JO**. Comparison of the prognostic value of impaired stress myocardial blood flow, myocardial flow reserve, and myocardial flow capacity on low-dose Rubidium-82 SiPM PET/CT. *Nucl Cardiol.* 2023 Aug;30(4):1385-1395. doi: 10.1007/s12350-022-03155-6. Epub 2022 Dec 27. PMID: 36574175 Free PMC article.
26. Courlet P, Abler D, Guidi M, Girard P, Amato F, Vietti Violi N, Dietz M, Guignard N, Wicky A, Latifyan S, De Micheli R, Jreige M, Dromain C, Csajka C, **Prior JO**, Venkatakrishnan K, Michielin O, Cuendet MA, Terranova N. Modeling tumor size dynamics based on real-world electronic health records and image data in advanced melanoma patients receiving immunotherapy. *CPT Pharmacometrics Syst Pharmacol.* 2023 Jun 16. doi: 10.1002/psp4.12983.

27. Papadimitriou-Oliveris M, Monney P, Rotzinger DC, Kamani CH, Fahrni G, **Prior JO**, Ianculescu N, Messaoudi Y, Tozzi P, Kirsch M, Guery B. Impact of thoracoabdominal imaging on diagnosis and management in patients with suspected infective endocarditis. *Eur J Intern Med.* 2023 Jun 15;S0953-6205(23)00202-9. doi: 10.1016/j.ejim.2023.06.007.
28. Gnesin S, Chouin N, Cherel M, Dunn SM, Schaefer N, Faivre-Chauvet A, Prior JO, Delage JA. From bench to bedside: ⁶⁴Cu/¹⁷⁷Lu 1C1m-Fc anti TEM-1: mice-to-human dosimetry extrapolations for future theranostic applications. *EJNMMI Res.* 2023 Jun 14;13(1):59. doi: 10.1186/s13550-023-01010-4.
29. Andrearczyk V, Oreiller V, Abobakr M, Akhavanallaf A, Balermipas P, Boughdad S, Capriotti L, Castelli J, Le Rest CC, Decazes P, Correia R, El-Habashy D, Elhalawani H, Fuller CD, Jreige M, Khamis Y, La Greca A, Mohamed A, Naser M, **Prior JO**, Ruan S, Tanadini-Lang S, Tankyevych O, Salimi Y, Vallières M, Vera P, Visvikis D, Wahid K, Zaidi H, Hatt M, Depeursinge A. Overview of the HECKTOR Challenge at MICCAI 2022: Automatic Head and Neck Tumor Segmentation and Outcome Prediction in PET/CT. *Head Neck Tumor Chall* (2022). 2023;13626:1-30. doi: 10.1007/978-3-031-27420-6_1. Epub 2023 Mar 18.
30. Abler D, Courlet P, Dietz M, Gatta R, Girard P, Munafo A, Wicky A, Jreige M, Guidi M, Latifyan S, De Micheli R, Csajka C, **Prior JO**, Michielin O, Terranova N, Cuendet MA. Semiautomated Pipeline to Quantify Tumor Evolution From Real-World Positron Emission Tomography/Computed Tomography Imaging. *JCO Clin Cancer Inform.* 2023 May;7:e2200126. doi: 10.1200/CCI.22.00126.
31. Lecoq P, Gonzalez A J, Auffray E, Konstantinou G, Nuyts J. **Prior JO**, Turtos RM, Varela J. Fast Timing in Medical Imaging. *IEEE Transactions on Radiation and Plasma Medical Sciences*, vol. 7, no. 5, pp. 429-452, May 2023, doi: 10.1109/TRPMS.2023.3259464.
32. Gauthiez E, Uldry E, Coste AT, **Prior J**, Cavassini M, Munting A. [2023 update on alveolar echinococcosis]. *Rev Med Suisse.* 2023 Apr 12;19(822):708-712. doi: 10.53738/REVMED.2023.19.822.708.
33. Abler D, Schaer R, Oreiller V, Verma H, Reichenbach J, Aidonopoulos O, Evéquoz F, Jreige M, **Prior JO**, Depeursinge A. QuantImage v2: a comprehensive and integrated physician-centered cloud platform for radiomics and machine learning research. *Eur Radiol Exp.* 2023 Mar 22;7(1):16. doi: 10.1186/s41747-023-00326-z.
34. Lalonde MN, Correia RD, Syktiotis GP, Schaefer N, Matter M, **Prior JO**. Parathyroid Imaging. *Semin Nucl Med.* 2023 Mar 13;S0001-2998(23)00010-7. doi: 10.1053/j.semnuclmed.2023.02.004. Review.
35. Schaefferkoetter J, Shah V, Hayden C, **Prior JO**, Zuehlsdorff S. Deep learning for improving PET/CT attenuation correction by elastic registration of anatomical data. *Eur J Nucl Med Mol Imaging.* 2023 Mar 8. doi: 10.1007/s00259-023-06181-9.
36. Jreige M, Kurian GK, Perriraz J, Potheegadoo J, Bernasconi F, Stampacchia S, Blanke O, Alessandra G, Lejay N, Chiabotti PS, Rouaud O, Nicod Lalonde M, Schaefer N, Treglia G, Allali G, **Prior JO**. The diagnostic performance of functional dopaminergic scintigraphic imaging in the diagnosis of dementia with Lewy bodies: an updated systematic review. *Eur J Nucl Med Mol Imaging.* 2023 Mar 15. doi: 10.1007/s00259-023-06154-y.
37. Cloitre M, Valerio M, Mampuya A, Rakauskas A, Berthold D, Tawadros T, Meuwly JY, Heym L, Duclos F, Vallet V, Zeverino M, Jichlinski P, **Prior J**, Roth B, Bourhis J, Herrera FG. Toxicity, quality of life, and PSA control after 50 Gy stereotactic body radiation therapy to the dominant intraprostatic nodule with the use of a rectal spacer: results of a phase I/II study. *Br J Radiol.* 2023 Apr 1;96(1145):20220803. doi: 10.1259/bjr.20220803.
38. Altarelli M, Jreige M, **Prior JO**, Nicod Lalonde M, Schneider AG. Renal scintigraphy to predict persistent renal failure after acute kidney injury: an observational study. *J Nephrol.* 2023 Feb 2. doi: 10.1007/s40620-023-01569-0.
39. Dietz M, Dunet V, Mantziari S, Pomoni A, Dias Correia R, Testart Dardel N, Boughdad S, Nicod Lalonde M, Treglia G, Schafer M, Schaefer N, **Prior JO**. Comparison of integrin $\alpha\beta 3$ expression with ⁶⁸Ga-NODAGA-RGD PET/CT and glucose metabolism with ¹⁸F-FDG PET/CT in esophageal or gastroesophageal junction cancers. *Eur J Hybrid Imaging.* 2023 Feb 1;7(1):3. doi: 10.1186/s41824-023-00162-9.
40. Gautron Moura B, Gerard CL, Testart N, Caikovski M, Wicky A, Aedo-Lopez V, Berthod G, Homicsko K, **Prior JO**, Dromain C, Kandalaf LE, Cuendet MA, Michielin O. Estimated Costs of the Ipilimumab-Nivolumab Therapy and Related Adverse Events in Metastatic Melanoma. *Cancers (Basel).* 2022 Dec 21;15(1):31. doi: 10.3390/cancers15010031.
41. Dietz M, Kamani CH, Allenbach G, Rubimbura V, Fournier S, Dunet V, Treglia G, Nicod Lalonde M, Schaefer N, Eeckhout E, Muller O, **Prior JO**. Comparison of the prognostic value of impaired stress myocardial blood flow, myocardial flow reserve, and myocardial flow capacity on low-dose Rubidium-82 SiPM PET/CT. *J Nucl Cardiol.* 2022 Dec 27. doi: 10.1007/s12350-022-03155-6.
42. Boughdad S, Da Mota M, Mendes De Carvalho M, Firsova M, **Prior JO**, Schaefer N. Lymphopenia during ¹⁷⁷Lu-DOTATATE therapy leading to recurrence of tuberculosis: a case report. *Eur J Hybrid Imaging.* 2022 Dec 13;6(1):36. doi: 10.1186/s41824-022-00157-y.
43. Jreige M, Hall N, Becce F, Aubry-Rozier B, Gonzalez Rodriguez E, Schaefer N, **Prior JO**, Nicod Lalonde M. A novel approach for fibrous dysplasia assessment using combined planar and quantitative SPECT/CT analysis of Tc-99m-diphosphonate bone scan in correlation with biological bone turnover markers of disease activity. *Front Med (Lausanne).* 2022 Nov 25;9:1050854. doi: 10.3389/fmed.2022.1050854. eCollection 2022.

44. Dedeciusova M, **Prior JO**, Schiappacasse L, Patin D, Levivier M, Tuleasca C. The role of single fraction Gamma Knife radiosurgery for intraventricular central neurocytomas and the utility of F-18 fluoroethyltyrosine: two case reports. *J Med Case Rep*. 2022 Nov 28;16(1):441. doi: 10.1186/s13256-022-03665-4.
45. Gnesin S, Mikell JK, Conti M, **Prior JO**, Carlier T, Lima TVM, Dewaraja YK. A Multicenter Study on Observed Discrepancies Between Vendor-Stated and PET-Measured ⁹⁰Y Activities for Both Glass and Resin Microsphere Devices. *J Nucl Med*. 2023 May;64(5):825-828. doi: 10.2967/jnumed.122.264458. Epub 2022 Nov 23.
46. Kathe C, Skinnider MA, Hutson TH, Regazzi N, Gautier M, Demesmaeker R, Komi S, Ceto S, James ND, Cho N, Baud L, Galan K, Matson KJE, Rowald A, Kim K, Wang R, Minassian K, **Prior JO**, Asboth L, Barraud Q, Lacour SP, Levine AJ, Wagner F, Bloch J, Squair JW, Courtine G. The neurons that restore walking after paralysis. *Nature*. 2022 Nov;611(7936):540-547. doi: 10.1038/s41586-022-05385-7.
47. Faist D, Jreige M, Oreiller V, Nicod Lalonde M, Schaefer N, Depeursinge A, **Prior JO**. Reproducibility of lung cancer radiomics features extracted from data-driven respiratory gating and free-breathing flow imaging in [¹⁸F]-FDG PET/CT. *Eur J Hybrid Imaging*. 2022 Oct 30;6(1):33. doi: 10.1186/s41824-022-00153-2.
48. Digkila A, Boughdad S, Homicsko K, Dromain C, Trimech M, Dolcan A, Peters S, **Prior J**, Schaefer N. First communication on the efficacy of combined ¹⁷⁷Lutetium-PSMA with immunotherapy outside prostate cancer. *J Immunother Cancer*. 2022 Oct;10(10):e005383. doi: 10.1136/jitc-2022-005383.
49. Stora T, **Prior JO**, Decristoforo C. Editorial: MEDICIS-promed: Advances in radioactive ion beams for nuclear medicine. *Front Med (Lausanne)*. 2022 Oct 3;9:1013619. doi: 10.3389/fmed.2022.1013619. eCollection 2022.
50. Keshavjee B, Lambelet V, Coppola H, Viertl D, **Prior JO**, Kappeler L, Armengaud JB, Chouraqui JP, Chehade H, Vanderrielle PE, Allouche M, Balsiger A, Sarre A, Peyter AC, Simeoni U, Zyzdorczyk C. Stress-Induced Premature Senescence Related to Oxidative Stress in the Developmental Programming of Nonalcoholic Fatty Liver Disease in a Rat Model of Intrauterine Growth Restriction. *Antioxidants (Basel)*. 2022 Aug 29;11(9):1695. doi: 10.3390/antiox11091695.
51. Graziani M, Dutkiewicz L, Calvaresi D, Amorim JP, Yordanova K, Vered M, Nair R, Abreu PH, Blanke T, Pulignano V, **Prior JO**, Lauwaert L, Reijers W, Depeursinge A, Andriarczyk V, Müller H. A global taxonomy of interpretable AI: unifying the terminology for the technical and social sciences. *Artif Intell Rev*. 2023;56(4):3473-3504. doi: 10.1007/s10462-022-10256-8.
52. Dietz M, Kamani CH, Dunet V, Fournier S, Rubimbura V, Testart Dardel N, Schaefer A, Jreige M, Boughdad S, Nicod Lalonde M, Schaefer N, Mewton N, **Prior JO**, Treglia G. Overview of the RGD-Based PET Agents Use in Patients With Cardiovascular Diseases: A Systematic Review. *Front Med (Lausanne)*. 2022;9:887508. doi: 10.3389/fmed.2022.887508.
53. Darçot E, Jreige M, Rotzinger DC, Gidoïn Tuyet Van S, Casutt A, Delacoste J, Simons J, Long O, Buela F, Ledoux JB, **Prior JO**, Lovis A, Beigelman-Aubry C. Comparison Between Magnetic Resonance Imaging and Computed Tomography in the Detection and Volumetric Assessment of Lung Nodules: A Prospective Study. *Front Med (Lausanne)*. 2022;9:858731. doi: 10.3389/fmed.2022.858731.
54. Postupalenko V, Marx L, Viertl D, Gsponer N, Gasilova N, Denoel T, Schaefer N, **Prior JO**, Hagens G, Lévy F, Garrouste P, Segura JM, Nyanguile O. Template directed synthesis of antibody Fc conjugates with concomitant ligand release. *Chem Sci*. 2022;13(14):3965-3976. doi: 10.1039/d1sc06182h.
55. Cicone F, Viertl D, Denoël T, Stabin MG, **Prior JO**, Gnesin S. Comparison of absorbed dose extrapolation methods for mouse-to-human translation of radiolabelled macromolecules. *EJNMMI Res*. 2022;12(1):21. doi: 10.1186/s13550-022-00893-z.
56. Fontaine P, Andriarczyk V, Oreiller V, Abler D, Castelli J, Acosta O, De Crevoisier R, Vallières M, Jreige M, **Prior JO**, Depeursinge A. Cleaning radiotherapy contours for radiomics studies, is it worth it? A head and neck cancer study. *Clin Transl Radiat Oncol*. 2022 Feb 1;33:153-158. doi: 10.1016/j.ctro.2022.01.003.
57. Nesterov SV, Deshayes E, Juarez-Orozco LE, deKemp RA, Sciagrà R, Malaspina S, Settimo L, Han C, Ryzhkova DV, Kostina IS, Gwet KL, **Prior JO**, Knuuti JM. Myocardial perfusion quantification with Rb-82 PET: good interobserver agreement of Carimas software on global, regional, and segmental levels. *Ann Nucl Med*. 2022 Feb 22. doi: 10.1007/s12149-022-01729-5.
58. Oreiller V, Andriarczyk V, Jreige M, Boughdad S, Elhalawani H, Castelli J, Vallières M, Zhu S, Xie J, Peng Y, Iantsen A, Hatt M, Yuan Y, Ma J, Yang X, Rao C, Pai S, Ghimire K, Feng X, Naser MA, Fuller CD, Yousefirizi F, Rahmim A, Chen H, Wang L, **Prior JO**, Depeursinge A. Head and neck tumor segmentation in PET/CT: The HECKTOR challenge. *Med Image Anal*. 2021 Dec 25;77:102336. doi: 10.1016/j.media.2021.102336.
59. Fontana AO, Gonzalez Melo M, Allenbach G, Georgantas C, Wang R, Braissant O, Barbey F, **Prior JO**, Ballhausen D, Viertl D. The use of ⁶⁸Ga-EDTA PET allows detecting progressive decline of renal function in rats. *Am J Nucl Med Mol Imaging*. 2021 Dec 15;11(6):519-528. PMID: 35003889; PMCID: PMC8727875.
60. Tian M, Civelek AC, Carrio I, Watanabe Y, Kang KW, Murakami K, Garibotto V, **Prior JO**, Barthel H, Zhou R, Hou H, Dou X, Jin C, Zuo C, Zhang H; Molecular Imaging-based Precision Medicine Task Group of A3 (China-Japan-Korea) Foresight Program. International consensus on the use of tau PET imaging agent ¹⁸F-flortaucipir in Alzheimer's disease. *Eur J Nucl Med Mol Imaging*. 2022 Feb;49(3):895-904. doi: 10.1007/s00259-021-05673-w. Epub 2022 Jan 3. PMID: 34978595; PMCID: PMC8803772.

61. Gilliéron P, Boillat-Blanco N, Nicod Lalonde M, Becce F, Omoumi P, **Prior JO**, Borens O, Steinmetz S. Diagnostic et prise en charge de l'ostéomyélite chronique des os longs chez l'adulte [Diagnosis and management of chronic osteomyelitis of long bones in adults]. *Rev Med Suisse*. 2021 Dec 15;17(763):2194-2200. French.
62. Delage JA, Gnesin S, **Prior JO**, Barbet J, Le Saëc P, Marionneau-Lambot S, Gouard S, Chérel M, Bourgeois M, Schaefer N, Viertl D, Fierle JK, Dunn SM, Faivre-Chauvet A. Copper-64-Labeled 1C1m-Fc, a New Tool for TEM-1 PET Imaging and Prediction of Lutetium-177-Labeled 1C1m-Fc Therapy Efficacy and Safety. *Cancers (Basel)*. 2021 Nov 25;13(23):5936. doi: 10.3390/cancers13235936. PMID: 34885044; PMCID: PMC8657097.
63. Codeluppi C, Ninane F, Jolliet L, Glemarec P, Orcurto A, Rakauskas A, Tawadros T, Bosshard P, Eicher M, Herrera F, La Rosa S, Meuwly JY, Vietti-Violi N, **Prior J**, Schaefer N, Bessaire B, Ehrensperger M, Roth B, Berthold D, Valerio M. Infirmière clinicienne de centre du cancer : l'expérience du Centre de la prostate du CHUV [Cancer center clinical nurse: The experience of the CHUV Prostate Cancer Center]. *Rev Med Suisse*. 2021 Dec 1;17(761):2082-2085. French. PMID: 34851055.
64. Alshehri S, **Prior J**, Moshebah M, Schiappacasse L, Dunet V. Negative 18F-FET PET/CT in brain metastasis recurrence: a teaching case report. *Eur J Hybrid Imaging*. 2021 Nov 22;5(1):21. doi: 10.1186/s41824-021-00115-0. PMID: 34806124; PMCID: PMC8606481.
65. Gonzalez Melo M, Fontana AO, Viertl D, Allenbach G, **Prior JO**, Rotman S, Feichtinger RG, Mayr JA, Costanzo M, Caterino M, Ruoppolo M, Braissant O, Barbey F, Ballhausen D. A knock-in rat model unravels acute and chronic renal toxicity in glutaric aciduria type I. *Mol Genet Metab*. 2021 Dec;134(4):287-300. doi: 10.1016/j.ymgme.2021.10.003. Epub 2021 Nov 10. PMID: 34799272.
66. Corby-Zauner C, Monney P, Papadimitriou-Olivgeris M, **Prior JO**, Kamani CH. 18F-FDG-PET/CT as part of the diagnostic workup of native valve endocarditis: A case report. *J Nucl Cardiol*. 2021 Nov 17. doi: 10.1007/s12350-021-02849-7. Epub ahead of print. PMID: 34791620.
67. Boughdad S, Latifyan S, Fenwick C, Bouchaab H, Suffiotti M, Moslehi JJ, Salem JE, Schaefer N, Nicod-Lalonde M, Costes J, Perreau M, Michielin O, Peters S, **Prior JO**, Obeid M. 68Ga-DOTATOC PET/CT to detect immune checkpoint inhibitor-related myocarditis. *J Immunother Cancer*. 2021 Oct;9(10):e003594.
68. Dietz M, Kamani CH, Deshayes E, Dunet V, Mitsakis P, Coukos G, Nicod Lalonde M, Schaefer N, **Prior JO**. Imaging angiogenesis in atherosclerosis in large arteries with 68Ga-NODAGA-RGD PET/CT: relationship with clinical atherosclerotic cardiovascular disease. *EJNMMI Res*. 2021 Aug 14;11(1):71.
69. Herrera FG, Ronet C, Ochoa de Olza M, Barras D, Crespo I, Andreatta M, Corria-Osorio J, Spill A, Benedetti F, Genolet R, Orcurto A, Imbimbo M, Ghisoni E, Navarro Rodrigo B, Berthold DR, Sarivalasis A, Zaman K, Duran R, Dromain C, **Prior J**, Schaefer N, Bourhis J, Dimopoulou G, Tsourti Z, Messemaker M, Smith T, Warren SE, Foukas P, Rusakiewicz S, Pittet MJ, Zimmermann S, Sempoux C, Dafni U, Harari A, Kandalaft LE, Carmona SJ, Dangaj Laniti D, Irving M, Coukos G. Low Dose Radiotherapy Reverses Tumor Immune Desertification and Resistance to Immunotherapy. *Cancer Discov*. 2021 Sep 3:candisc.0003.2021.
70. Nesterov SV, Sciagrà R, Orozco LEJ, **Prior JO**, Settimo L, Han C, Deshayes E, deKemp RA, Ryzhkova DV, Gwet KL, Knuuti JM. One-tissue compartment model for myocardial perfusion quantification with N-13 ammonia PET provides matching results: A cross-comparison between Carimas, FlowQuant, and PMOD. *J Nucl Cardiol*. 2021 Aug 18. doi: 10.1007/s12350-021-02741-4. PMID: 34409572
71. Pozzessere C, Lazor R, Jumeau R, Peters S, **Prior JO**, Beigelman-Aubry C. Imaging Features of Pulmonary Immune-related Adverse Events. *J Thorac Oncol*. 2021 Sep;16(9):1449-1460.
72. Mirzaei S, **Prior JO**, Farsad M, Lipp RW, Hustinx R. Ausbildung in Nuklearmedizin und Zukunftsperspektiven. *Nuklearmedizin*. 2021 Aug;60(4):264-265. doi: 10.1055/a-1486-5876. Epub 2021 Jul 29. PMID: 34325474.
73. Kamani CH, **Prior JO**. Assessment of myocardial viability using a [15O]-water perfusion PET: Towards a one-stop shop? *J Nucl Cardiol*. 2021 Aug;28(4):1281-1283. doi: 10.1007/s12350-019-01838-1.
74. Schnetz M, Stravodimou A, Cisarovsky C, Dunand A, **Prior JO**, Nicod Lalonde M, Baud D, Meuwly JY, Winterfeld U, Zaman K. [Breast cancer during pregnancy]. *Rev Med Suisse*. 2021 May 19;17(739):957-961.
75. Kamani C, Firsova M, Akiba R, Fournier S, Duchini M, **Prior JO**. Inflammation or Ischemia?: That Is the Question. *Circ Cardiovasc Imaging*. 2021 May;14(5):e012164. doi: 10.1161/CIRCIMAGING.120.012164.
76. Chammah SE, Allenbach G, Jumeau R, Boughdad S, **Prior JO**, Nicod Lalonde M, Schaefer N, Meyer M. Impact of prophylactic cranial irradiation and hippocampal sparing on 18F-FDG brain metabolism in small cell lung cancer patients. *Radiother Oncol*. 2021 May;158:200-206. doi: 10.1016/j.radonc.2021.02.016.
77. Vijjala S, Epiney JB, Jöhr J, Pincherle A, Meyer MM, Du Pasquier R, **Prior JO**, Diserens K. Case Report: Behavioral Unresponsiveness in Acute COVID-19 Patients: The Utility of the Motor Behavior Tool-Revised and 18F-FDG PET/CT. *Front Neurol*. 2021 Apr 30;12:644848. doi: 10.3389/fneur.2021.644848. eCollection 2021.
78. **Prior JO**, Mirzaei S, Gnesin S, Lalonde MN. Dose Optimization in Pediatric Studies: Why It Is Important and How It Can Benefit Every Nuclear Medicine Department. *J Nucl Med*. 2021 Apr;62(4):568-569. doi: 10.2967/jnumed.120.254193. Epub 2020 Oct 9. PMID: 33037088.
79. Awenat S, Piccardo A, Carvoeiras P, Signore G, Giovanella L, **Prior JO**, Treglia G. Diagnostic Role of 18F-PSMA-1007 PET/CT in Prostate Cancer Staging: A Systematic Review. *Diagnostics (Basel)*. 2021 Mar 19;11(3):552.

80. Delage JA, Faivre-Chauvet A, Barbet J, Fierle JK, Schaefer N, Coukos G, Viertl D, Dunn SM, Gnesin S, **Prior JO**. Impact of DOTA Conjugation on Pharmacokinetics and Immunoreactivity of [177Lu]Lu-1C1m-Fc, an Anti TEM-1 Fusion Protein Antibody in a TEM-1 Positive Tumor Mouse Model. *Pharmaceutics*. 2021 Jan 13;13(1):96.
81. D'Onofrio A, Gano L, Melo R, Mendes F, Oliveira MC, Denoël T, Schaefer N, Viertl D, Fierle J, Coukos G, Dunn S, **Prior JO**, Paulo A. Biological evaluation of new TEM1 targeting recombinant antibodies for radioimmunotherapy: In vitro, in vivo and in silico studies. *Eur J Pharm Biopharm*. 2021 Jan;158:233-244. doi: 10.1016/j.ejpb.2020.11.015. Epub 2020 Nov 30. PMID: 33271301.
82. Auditore L, Amato E, Boughdad S, Meyer M, Testart N, Cicone F, Beigelman-Aubry C, **Prior JO**, Schaefer N, Gnesin S. Monte Carlo 90Y PET/CT dosimetry of unexpected focal radiation-induced lung damage after hepatic radioembolisation. *Phys Med Biol*. 2020 Nov 27;65(23):235014.
83. Fernandes Vieira V, Dubruc E, Raffoul W, **Prior JO**, Meyer M. Bilateral Silicone Granulomas Mimicking Breast Cancer Recurrence on 18F-FDG PET/CT. *Clin Nucl Med*. 2021 Feb 1;46(2):140-141. doi: 10.1097/RLU.0000000000003422. PMID: 33234930.
84. Annunziata S, Delgado Bolton RC, Kamani CH, **Prior JO**, Albano D, Bertagna F, Treglia G. Role of 2-[18F]FDG as a Radiopharmaceutical for PET/CT in Patients with COVID-19: A Systematic Review. *Pharmaceutics (Basel)*. 2020 Nov 10;13(11):377. doi: 10.3390/ph13110377. PMID: 33182811.
85. **Prior JO**, Mirzaei S, Gnesin S, Nicod Lalonde M. Dose optimization in pediatric studies: Why this is important and can benefit every nuclear medicine department. *J Nucl Med*. 2020 Oct 9;jnumed.120.254193. doi: 10.2967/jnumed.120.254193. Online ahead of print. PMID: 33037088.
86. Tozzi P, Kampouri EE, Tzimas G, **Prior JO**, Monney P, Kamani C, Lamoth F. COVID-19 Pandemics: A Surprising Link to Bread Flour With Collateral Damage to a Prosthetic Heart Valve. *Circ Cardiovasc Imaging*. 2020 Oct;13(10):e011395. doi: 10.1161/CIRCIMAGING.120.011395. Epub 2020 Oct 2. PMID: 33003958.
87. Kamani CH, Allenbach G, Jreige M, Pavon AG, Meyer M, Testart N, Firsova M, Fernandes Vieira V, Boughdad S, Nicod Lalonde M, Schaefer N, Guery B, Monney P, **Prior JO**, Treglia G. Diagnostic Performance of 18F-FDG PET/CT in Native Valve Endocarditis: Systematic Review and Bivariate Meta-Analysis. *Diagnostics (Basel)*. 2020 Sep 25;10(10):754. doi: 10.3390/diagnostics10100754. PMID: 32993032.
88. Auditore L, Amato E, Boughdad S, Meyer M, Testart N, Cicone F, Beigelman-Aubry C, **Prior J**, Schaefer N, Gnesin S. Monte Carlo 90Y PET/CT dosimetry of unexpected focal radiation-induced lung damage after hepatic radioembolisation. *Phys Med Biol*. 2020 Sep 29. doi: 10.1088/1361-6560/abbc80. PMID: 32992311
89. Dunet V, Halkic N, Sempoux C, Demartines N, Montemurro M, **Prior JO**, Schmidt S. Prediction of tumour grade and survival outcome using pre-treatment PET- and MRI-derived imaging features in patients with resectable pancreatic ductal adenocarcinoma. *Eur Radiol*. 2021 Feb;31(2):992-1001. doi: 10.1007/s00330-020-07191-z. Epub 2020 Aug 26. PMID: 32851447.
90. Delage JA, Faivre-Chauvet A, Fierle JK, Gnesin S, Schaefer N, Coukos G, Dunn SM, Viertl D, **Prior JO**. 177Lu radiolabeling and preclinical theranostic study of 1C1m-Fc: an anti-TEM-1 scFv-Fc fusion protein in soft tissue sarcoma. *EJNMMI Res*. 2020 Aug 17;10(1):98. doi: 10.1186/s13550-020-00685-3. PMID: 32804276.
91. Lecoq P, Morel C, **Prior J**, Visvikis D, Gundacker S, Auffray E, Krizan P, Martinez Turtos R, Thers D, Charbon E, Varela J, de La Taille C, Rivetti A, Breton D, Pratte JF, Nuyts J, Surti S, Vandenberghe S, Marsden PK, Parodi K, Benlloch JM, Benoit M. Roadmap toward the 10 ps time-of-flight PET challenge. *Phys Med Biol*. 2020 May 20. doi: 10.1088/1361-6560/ab9500. Epub ahead of print.
92. Doms J, **Prior JO**, Peters S, Obeid M. Tocilizumab for refractory severe immune checkpoint inhibitor-associated myocarditis. *Ann Oncol*. 2020 May 16. doi: 10.1016/j.annonc.2020.05.005. Epub ahead of print.
93. Kamani CH, Jreige M, Pappon M, Fischbacher A, Borens O, Monney P, Nicod Lalonde M, Schaefer N, **Prior JO**. Added value of 18F-FDG PET/CT in a SARS-CoV-2-infected complex case with persistent fever. *Eur J Nucl Med Mol Imaging*. 2020 May 16:1–2. doi: 10.1007/s00259-020-04860-5. Epub ahead of print.
94. Schaefer N, **Prior JO**, Schottelius M. From Theranostics to Immunotheranostics: The Concept. *Nucl Med Mol Imaging*. 2020 Apr;54(2):81-85. doi: 10.1007/s13139-020-00639-6. Epub 2020 Apr 8.
95. Durante S, Dunet V, Gorostidi F, Mitsakis P, Schaefer N, Delage J, **Prior JO**. Head and neck tumors angiogenesis imaging with 68Ga-NODAGA-RGD in comparison to 18F-FDG PET/CT: A pilot study. *EJNMMI Research* 2020.
96. Gnesin S, Müller J, Burger IA, Meisel A, Siano M, Früh M, Choschzick M, Müller C, Schibli R, Ametamey SM, Kaufmann PA, Treyer V, **Prior JO**, Schaefer N. Radiation dosimetry of (18)F-AzaFol: A first in-human use of a folate receptor PET tracer. *EJNMMI Res*. 2020 Apr 8;10(1):32. doi: 10.1186/s13550-020-00624-2.
97. Pozzessere C, Bouchaab H, Jumeau R, Letovanec I, Daccord C, Bourhis J, **Prior JO**, Peters S, Lazor R, Beigelman-Aubry C. Relationship between pneumonitis induced by immune checkpoint inhibitors and the underlying parenchymal status: a retrospective study. *ERJ Open Res*. 2020 Mar 16;6(1). pii: 00165-2019. doi: 10.1183/23120541.00165-2019. eCollection 2020 Jan.
98. Mirzaei S, Hustinx R, **Prior JO**, Ozcan Z, Boubaker A, Farsad M; European Union of Medical Specialists and European Board for Nuclear Medicine. Improving Nuclear Medicine Practice with UEMS/EBNM Committees. *J Nucl Med*. 2020 Mar;61(3):18N-20N.

99. Cicone F, Denoël T, Gnesin S, Riggi N, Irving M, Jakka G, Schaefer N, Viertl D, Coukos G, **Prior JO**. Preclinical Evaluation and Dosimetry of [(111)In]CHX-DTPA-scFv78-Fc Targeting Endosialin/Tumor Endothelial Marker 1 (TEM1). *Mol Imaging Biol*. 2020 Jan 28. doi: 10.1007/s11307-020-01479-8.
100. Mantziari S, Pomoni A, **Prior JO**, Winiker M, Allemann P, Demartines N, Schäfer M. (18)F- FDG PET/CT-derived parameters predict clinical stage and prognosis of esophageal cancer. *BMC Med Imaging*. 2020 Jan 22;20(1):7. doi: 10.1186/s12880-019-0401-x.
101. Meier D, Fournier S, Barras N, Regamey J, Rosset S, Pavon AG, Kamani CH, Deliniere A, Domenichini G, Graf D, Hullin R, Pascale P, Girod G, Eeckhout É, Schwitter J, **Prior JO**, Pruvot É, Bouchardy J, Monney P, Muller O, Rutz T. [Cardiology]. *Rev Med Suisse*. 2020 Jan 15;16(676-7):16-22. French.
102. Meyer M, Allenbach G, Nicod Lalonde M, Schaefer N, **Prior JO**, Gnesin S. Increased (18)F-FDG signal recovery from small physiological structures in digital PET/CT and application to the pituitary gland. *Sci Rep*. 2020 Jan 15;10(1):368. doi: 10.1038/s41598-019-57313-x.
103. Gnesin S, Kieffer C, Zeimpekis K, Papazyan JP, Guignard R, **Prior JO**, Verdun FR, Lima TVM. Phantom-based image quality assessment of clinical (18)F-FDG protocols in digital PET/CT and comparison to conventional PMT-based PET/CT. *EJNMMI Phys*. 2020 Jan 6;7(1):1. doi: 10.1186/s40658-019-0269-4.
104. Tabotta F, Jreige M, Schaefer N, Becce F, **Prior JO**, Nicod Lalonde M. Quantitative bone SPECT/CT: high specificity for identification of prostate cancer bone metastases. *BMC Musculoskelet Disord*. 2019 Dec 26;20(1):619. doi: 10.1186/s12891-019-3001-6.
105. Denoël T, Pedrelli L, Pantaleo G, **Prior JO**. A Robust Method for Assaying the Immunoreactive Fraction in Nonequilibrium Systems. *Pharmaceuticals (Basel)*. 2019 Dec 3;12(4). pii: E177. doi: 10.3390/ph12040177.
106. Pozzessere C, Bassanelli M, Ceribelli A, Rasul S, Li S, **Prior JO**, Cicone F. Renal Cell Carcinoma: The Oncologist Asks, Can PSMA PET/CT Answer? *Curr Urol Rep*. 2019 Oct 11;20(11):68.
107. Schaefer N, **Prior J**. [Nuclear medicine diagnostics, therapy and theranostics in the context of modern oncology]. *Ther Umsch*. 2019 Sep;76(4):167-172.
108. Kamani CH, **Prior JO**. Assessment of myocardial viability using a [(15)O]-water perfusion PET: Towards a one-stop shop? *J Nucl Cardiol*. 2019 Aug 21. doi: 10.1007/s12350-019-01838-1. [Epub ahead of print]
109. Jreige M, Dunet V, Letovanec I, **Prior JO**, Meuli RA, Beigelman-Aubry C, Schaefer N. Pulmonary lymphangitic carcinomatosis: diagnostic performance of HRCT and (18)F-FDG-PET/CT in correlation to clinical pathologic outcome. *J Nucl Med*. 2019 Jun 21. doi: 10.2967/jnumed.119.229575.
110. Jreige M, Letovanec I, Chaba K, Renaud S, Rusakiewicz S, Cristina V, Peters S, Krueger T, de Leval L, Kandalaf LE, Nicod-Lalonde M, Romero P, **Prior JO**, Coukos G, Schaefer N. (18)F-FDG PET metabolic-to-morphological volume ratio predicts PD-L1 tumour expression and response to PD-1 blockade in non-small-cell lung cancer. *Eur J Nucl Med Mol Imaging*. 2019 Aug;46(9):1859-1868.
111. Meyer M, Testart N, Jreige M, Kamani C, Moshebah M, Muoio B, Nicod-Lalonde M, Schaefer N, Giovanella L, **Prior JO**, Treglia G. Diagnostic Performance of PET or PET/CT Using (18)F-FDG Labeled White Blood Cells in Infectious Diseases: A Systematic Review and a Bivariate Meta-Analysis. *Diagnostics (Basel)*. 2019;15;9(2).
112. Cicone F, Gnesin S, Denoël T, Stora T, van der Meulen NP, Müller C, Vermeulen C, Benešová M, Köster U, Johnston K, Amato E, Auditore L, Coukos G, Stabin M, Schaefer N, Viertl D, **Prior JO**. Internal radiation dosimetry of a (152)Tb-labeled antibody in tumor-bearing mice. *EJNMMI Res*. 2019 Jun 11;9(1):53.
113. Treglia G, Pereira Mestre R, Ferrari M, Bosetti DG, Pascale M, Oikonomou E, De Dosso S, Jermini F, **Prior JO**, Roggero E, Giovanella L. Radiolabelled choline versus PSMA PET/CT in prostate cancer restaging: a meta-analysis. *Am J Nucl Med Mol Imaging*. 2019 Apr 15;9(2):127-139.
114. Molinos C, Sasser T, Salmon P, Gsell W, Viertl D, Massey JC, Mińczuk K, Li J, Kundu BK, Berr S, Correcher C, Bahadur A, Attarwala AA, Stark S, Junge S, Himmelreich U, **Prior JO**, Laperre K, Van Wyk S, Heidenreich M. Low-Dose Imaging in a New Preclinical Total-Body PET/CT Scanner. *Front Med (Lausanne)*. 2019 May 3;6:88. doi: 10.3389/fmed.2019.00088. PubMed PMID: 31131277; PubMed Central PMCID: PMC6509903.
115. Treglia G, Annunziata S, Pizzuto DA, Giovanella L, **Prior JO**, Ceriani L. Detection Rate of (18)F-Labeled PSMA PET/CT in Biochemical Recurrent Prostate Cancer: A Systematic Review and a Meta-Analysis. *Cancers (Basel)*. 2019 May 23;11(5). pii: E710. doi: 10.3390/cancers11050710. Review. PubMed PMID: 31126071.
116. Savovic T, **Prior JO**, Nicod-Lalonde M, Bressoud A, Roux S, Schaefer N, Meyer M. First experience of durable cytoreduction in chronic lymphoid leukemia with (177)Lu-DOTATATE. *Med Oncol*. 2019 Mar 27;36(5):41. doi:10.1007/s12032-019-1266-0. PubMed PMID: 30919094.
117. Zukotynski KA, Niederkohr RD, Greenspan BS, **Prior JO**, Schöder H, Seltzer MA, Rohren EM, Yoo DC. An International Survey of PET/CT Clinical Reporting. *J Nucl Med*. 2019 Apr;60(4):478-479. doi: 10.2967/jnumed.118.223073. Epub 2019 Mar 15. PubMed PMID: 30877176.
118. Giroulet F, Tabotta F, Pomoni A, **Prior J**. Primary parotid Merkel cell carcinoma: a first imagery and treatment response assessment by 18F-FDG PET. *BMJ Case Rep*. 2019 Mar 9;12(3). pii: e226511. doi: 10.1136/bcr-2018-226511. PubMed PMID: 30852509.
119. Delacoste J, Dunet V, Dournes G, Lovis A, Rohner C, Elandoy C, Simons J, Long O, Piccini D, Stuber M, **Prior JO**, Nicod L, Beigelman-Aubry C. MR Volumetry of Lung Nodules: A Pilot Study. *Front Med (Lausanne)*. 2019;6:18. doi:10.3389/fmed.2019.00018. eCollection 2019. PubMed PMID: 30809522.

120.Cerny M, DUNET V, Rebecchini C, Hahnloser D, **Prior J**, Sempoux C, Schmidt S. Response of locally advanced rectal cancer (LARC) to radiochemotherapy: DW-MRI and multiparametric PET/CT in correlation with histopathology. Nuklearmedizin. 2019 Feb;58(1):28-38. doi: 10.1055/a-0809-4670. Epub 2019 Feb 15. PubMed PMID: 30769371.

ORAL CONTRIBUTIONS TO INTERNATIONAL CONFERENCES

Prof. Prior has held >80 invited contributions in international conferences or symposium over the last 5 years in the field of nuclear medicine and molecular imaging, as well as in nuclear medicine physics and instrumentation.

OUTREACH ACTIVITIES

Prof. Prior has been a co-initiator of an H2020 Marie Skłodowska-Curie Actions (2014-2018) on Innovative Training Network (MSCA-ITN 2014 #642889) MEDICIS-PROMED (<https://medicis-promed.web.cern.ch>) for a € 2,829,270 project on MEDICIS-produced radioisotope beams for medicine. Prior JO; consortium of 8 EU + 3 CH members. Within this training program for 15 PhD, several outreach activities of the network have been proposed to the general public within Europe (<https://medicis-promed.web.cern.ch/outreach>).

GENERAL CONTRIBUTION TO SCIENCE

Prof. Prior was personally appointed from 2014–2018 as member of the International Strategic Committee (ISC) for Medical Application at CERN, renamed in 2017 to CERN Medical Application Advisory Committee (CMAAC).

OTHER ARTEFACTS WITH DOCUMENTED USE

Prof. Prior was one of the three initiators of the 10-ps time-of-flight PET challenge (<http://the10ps-challenge.org>) to motivate the researcher community to go for unprecedented PET time-of-flight resolution that would benefit the field of molecular imaging by reducing delivered dose and increasing resolution. As of today, 36 scientists or associations have subscribed to this challenge.

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