

## Personal information

**John O. PRIOR, PhD MD, FEBNM, Professor and Head of Nuclear Medicine and Molecular Imaging**, Centre Hospitalier Universitaire Vaudois, Bugnon 46, CH-1011 Lausanne, Switzerland, Phone: +41 21 314 4348, [John.Prior@chuv.ch](mailto:John.Prior@chuv.ch)



**Publications 285, Total cites 7125, h-index 43 indice i10 128**

(Google Scholar <https://scholar.google.ch/citations?hl=fr&user=bG1p0ccAAAAJ>); ORCID <http://orcid.org/0000-0003-1429-1374>; WOS <https://publons.com/researcher/l-5364-2017/>; 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, **CHF2,798,447** for the project PETITION—PET for InTensive Care units and Innovative protON therapy. co-PI.
3. Loterie Romande (Western Switzerland Lottery) – Grant of **CHF400,000** (2019) for a  $\mu$ 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 IZK022\_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 Dasatinib 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

**9 MD Thesis, 3 PhD Thesis, 20 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 Officier 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–). Chairman of the UEMS/EBNM Accreditation Committee of Nuclear Medicine and Training Department (2016–); 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). 5<sup>th</sup> International Conference on Preventive Cardiology–4<sup>th</sup> 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 3<sup>rd</sup>/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 28, 2022*

## John O. PRIOR, MD, PhD

### Professor and Head of Nuclear Medicine and Molecular Imaging Department



Centre Hospitalier Universitaire Vaudois, 1011 Lausanne, Switzerland

Phone +41 21 314 4348 or +41 21 314 4347, FAX +41 21 314 4349, e-mail [John.Prior@chuv.ch](mailto:John.Prior@chuv.ch)

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#### RESEARCH OUTPUT LIST (LIMITED TO THE LAST 5 YEARS)

##### PEER-REVIEWED PUBLICATIONS

1. 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.
2. 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.
3. 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.
4. 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.
5. Fontaine P, Andreczyk 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.
6. Nesterov SV, Deshayes E, Juarez-Orozco LE, deKemp RA, Sciagra 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.
7. Oreiller V, Andreczyk 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.
8. 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.
9. 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.
10. 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.
11. 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.
12. 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.
13. 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.
14. 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.
15. 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.
  16. 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.
  17. 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.
  18. 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.
  19. 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
  20. 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.
  21. 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.
  22. 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.
  23. 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.
  24. 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.
  25. 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.
  26. 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.
  27. **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.
  28. 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.
  29. 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.
  30. 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.
  31. 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.
  32. 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.
  33. 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.
  34. **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.

35. 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.
36. 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.
37. 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
38. 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.
39. 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.
40. 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.
41. 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.
42. 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.
43. 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.
44. 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.
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## 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.

## MORE COMPREHENSIVE PUBLICATION LIST

ORCID <http://orcid.org/0000-0003-1429-1374>

ORCID



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