

Laure Fournier – Curriculum Vitae

Education

- PhD in Physics, Paris Sud University, (2005)
- Masters in Bio-Imaging, Paris Est Créteil Val-de-Marne University (1999)
- Ecole Normale Supérieure, Paris, Biochemistry (1991-1995)
- Board Certification in Radiology, Caen Medical School (2001)
- Medical Doctorate (MD), Caen Medical School (2000)
- Medical Graduate Training, Paris Descartes Medical School, Paris, (1990-1995)

Employment

- Full Professor, Head of Genito-urinary Imaging, Radiology department, Hôpital Européen Georges Pompidou, Paris Descartes University (2016-)
- Associate Professor, Radiology department, Hôpital Européen Georges Pompidou, Paris Descartes University (2010-2016)
- Research Fellow, UCSF, San Francisco, CA, USA (2001-2003)

Publications

• 93 papers in international journals (95 invited courses and conferences (27 national and 17 international on big data, radiomics and AI), 136 conference proceedings and educational publications, 3052 citations; h-index: 29 (source: Google Scholar)

Teaching and student supervision

- 7 PhD students, 15 MSc students, 14 MD students
- Teaching: over 100 educational courses, 2 classes for Med students, 5 classes for Masters students, 6 classes for residents, 5 classes for continuous medical education
- Responsible for the organisation of courses in Artificial Intelligence in Radiology for radiology residents (2h for level I, 8h for level II).
- Organiser of « Introduction to research in imaging » for radiology residents
- Currently organising a “Artificial Intelligence applied to Medical Imaging” track in the Biomedical Engineering Masters Program (Université Paris Descartes - ParisTech) for MD students to open in September 2019.
- « European-Asian Postgraduate Curriculum on Biomedical Imaging Research (EAPCoBIR) » (2008-2010)
- Organizer of French workshop on « Tumour Response Evaluation on Imaging » (2018-), co-organizer for European (EORTC-ESOI) workshop on « Tumour Response Evaluation on Imaging » (2016-)

Professional activities

- Chair in the PRAIRIE AI Institute
- Member of European Imaging Biomarker Alliance (EIBALL), of the European Society of Radiology
- Leader of the working Group on the national grid for imaging overcosts in industrial clinical trials in the FORCE imaging (France Organisation pour la Recherche CliniquE en Imagerie) network
- Member of the CERF (Collège des Enseignants de Radiologie de France)
- Member of the Research group for the CERF & SFR (Société Française de Radiologie)
- Member of the Scientific Committee of the DRIM France IA database
- Research officer in the bureau of the SIFEM (Société d'Imagerie de la FEMme)
- Member of the Institutional Review Board of the Assistance Publique – Hôpitaux de Paris

Grants

- FUI (Fonds Unique Interministériel), RIHDO: Radiomic and Integration of Heterogenous Data in Oncology, 375 k€
- Industrial grant from Invectys, Patterns of patient response and progression to immunotherapies in advanced cancer: 28 k€
- Grant from the Fondation pour la Recherche Médicale, Programme Analyse Bio-informatique pour la recherche en Biologie 2013: DBI20131228564 RADIOMICS: La radiomique du cancer du rein métastatique pour la prédiction de la réponse au traitement. 253 k€ (2014-2017)
- Industrial grant from Novartis, Patterns of patient response and progression to targeted therapies in metastatic renal cell cancer: 23 k€

Five most significant publications in the past five years

1. Fournier L, Costaridou L, Bidaut L, Michoux N, Lecouvet FE, de Geus-Oei LF, Boellaard R, Oprea-Lager DE, Obuchowski NA, Caroli A, Kunz WG, Oei EH, O'Connor JPB, Mayerhoefer ME, Franca M, Alberich-Bayarri A, Deroose CM, Loewe C, Manniesing R, Caramella C, Lopci E, Lassau N, Persson A, Achten R, Rosendahl K, Clement O, Kotter E, Golay X, Smits M, Dewey M, Sullivan DC, van der Lugt A, deSouza NM, European Society Of Radiology. Incorporating radiomics into clinical trials: expert consensus endorsed by the European Society of Radiology on considerations for data-driven compared to biologically driven quantitative biomarkers. *Eur Radiol*. 2021 Jan 25. doi: 10.1007/s00330-020-07598-8. Epub ahead of print. PMID: 33492473
2. Roblot V, Giret Y, Bou Antoun M, Morillot C, Chassin X, Zerbib J, Fournier L. *Artificial Intelligence to diagnose a meniscus tear on MRI: winner of the JFR Data Challenge 2018*. *Diagn Interv Imaging*. 2019;100(4):243-249.
3. Lecler A, Duron L, Balvay D, Savatovsky J, Berges O, Zmuda M, Farah E, Galatoire O, Bouchouicha A, Fournier LS. *Combining Multiple Magnetic Resonance Imaging Sequences Provides Independent Reproducible Radiomics Features*. *Sci Rep* 2019 Feb 14;9(1):2068.
4. Duron L, Balvay D, Van de Perre S, Bouchouicha A, Savatovsky J, Sadik JC, Thomassin-Naggara I, Fournier LS, Lecler A. *Influence of gray-level discretization on inter- and intraobserver reproducibility of MRI radiomics texture features*. *PLoS One*. 2019 Mar 7;14(3):e0213459.
5. The French Radiology Society Artificial Intelligence Working Group. *Artificial Intelligence in 2018 and Medical Imaging: White Paper by the French Radiology Community*. SFR-IA Group; CERF; French Radiology Community. Artificial intelligence and medical imaging 2018: French Radiology Community white paper. *Diagn Interv Imaging*. 2018 Nov;99(11):727-742.

Five most significant presentations in the past five years

1. *AI for medical imaging: what is missing to make it work?* IEEE ISBI 2021 International Symposium on Biomedical Imaging, April 13-16, 2021, online.
2. *From radiomics to radiogenomics*. ESOR Foundation course on Artificial Intelligence in Radiology, January 30-31, 2020, Rome, Italy.
3. *Machine Learning in MRI: Radiomics for Lesion Characterisation*. ESMRMB Annual Meeting, October 3-5, 2019, Rotterdam, Netherlands.
4. *Radiomics: how does it work?* European Society of Thoracic Imaging -Fleischner Society Meeting 2019, May 9-11, 2019, Paris, France.
5. *Radiomics and oncology: an overview - access to big data and open data for research: a French perspective*. Canadian Association of Radiology Meeting: Artificial Intelligence in Radiology, April 26-29, 2018? Montreal, Canada.