

Dr Ferdia Aidan Gallagher

Curriculum Vitae

Personal Details

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Qualifications

BA University of Cambridge, June 1996.
Firsts in both Part IA and Part IB Medical Sciences Tripos.
First in Part II Natural Sciences Tripos: Physiology (Neurobiology).

BM BCh University of Oxford, July 1999.

MA University of Cambridge, March 2000.

MRCP (UK) Royal College of Physicians, March 2002.

FRCR Royal College of Radiologists, October 2005.

PhD Dept of Biochemistry, University of Cambridge, February 2010.
“Molecular imaging of tumours using dynamic nuclear polarization and magnetic resonance imaging”
Supervisors: Prof Kevin Brindle & Prof David Lomas

Appointments: Past and Present

Oct. 2002 - Dec. 2005	Specialist Registrar, Radiology: Addenbrooke's hospital
Jan. 2006 - Dec. 2008	CRUK/RCR Clinical Research Training Fellow
Dec. 2008 - Dec. 2009	Clinical Lecturer: Dept of Radiology, University of Cambridge
Jan. 2010 -	Cancer Research UK (CRUK) Clinician Scientist: Department of Radiology, University of Cambridge Honorary Consultant: Addenbrooke's Hospital, Cambridge Fellow, Gonville & Caius College, Cambridge: Comyns Berkeley Research Fellow (2009-2013) College Lecturer in Anatomy (2013-) Director, Radiology Academic Research Training Programme (2014-)
Jan 2014 -	University Lecturer: Dept. of Radiology, Univ. of Cambridge.
October 2017 -	Reader in Molecular Imaging: Department of Radiology, University of Cambridge.

Current group members:

Postdoctoral researchers:	Andrew Gill (CRUK funded) Frank Riemer (CRUK/EPSRC funded) Ramona Woitek (Schrödinger Fellowship funded)
PhD students:	James Grist (MRC funded) Doreen Lau (Cambridge Cancer Centre funded) Laura Leichermann (CRUK funded) Stephan Ursprung (Cambridge International Scholarship)
Clinical PhD students:	Surrin Deen (Gates Scholarship funded) Fulvio Zaccagna (CRUK/EPSRC funded)
Affiliated members	
Project Manager:	Marie-Christine Laurent (Wellcome Trust funded)
Research co-ordinator:	Matthew Locke (CRUK funded)
Staff scientist:	Mary McLean (CRUK Cambridge Institute funded)
Postdoctoral researcher:	Josh Kaggie (EPSRC/GSK funded with Dr Martin Graves)
Research nurse:	Jackie Mason (Wellcome Trust funded)
Clinical PhD student:	David Noble (Cambridge Cancer Centre with Prof Neil Burnet)

Selected Prizes, Awards and Scholarships

International

- 2016: International Society of Magnetic Resonance in Medicine (ISMRM) outstanding teacher award, Singapore.
- 2014: Top five cited papers in the journal Magnetic Resonance in Medicine in 2011 “Tumor imaging using hyperpolarized ^{13}C magnetic resonance spectroscopy”.
- 2012: International Society of Magnetic Resonance in Medicine (ISMRM) outstanding teacher award, Melbourne.
- 2009: American Association for Cancer Research (AACR), Future Leaders Award.
- 2007: Radiological Society of North America (RSNA) Young Investigator in Molecular Imaging Travel Award.

National

- 2014: Cancer Research UK Clinician Scientist Fellowship renewal.
- 2010: Cancer Research UK Clinician Scientist Fellowship.
- 2010: Pontecorvo Prize (jointly) for the best CRUK funded PhD.
- 2009: Medical Research Society/Academy of Medical Sciences/Royal College of Physicians Young Investigator Prize: 1st place. Pushpa Chopra Bursary.
- 2009: Gonville & Caius College (G&CC), Research Fellowship Competition. Comyns Berkeley Research Fellow.
- 2005: Cancer Research UK (CRUK)/Royal College of Radiologists (RCR) Clinical Research Training Fellowship (PhD).

Research prizes won by students I have supervised

- 2017: Ahmed Maiter, European Congress of Radiology best medical student presentation (euroradiology).
- 2016: Ahmed Maiter, Glasgow Neurological Conference Poster Prize.
- 2016: Ahmed Maiter, Sahara Essay prize, Gonville and Caius college.
- 2016: Fulvio Zaccagna, Future researcher award by the Royal Academy of Engineering to attend the Young Researchers' Futures Meeting (YRFM) 2016.
- 2016: Fulvio Zaccagna, Translational research prize, Cambridge Cancer Centre Symposium.
- 2016: Ahmed Maiter, Royal College of Radiologists Clinical Oncology undergraduate prize for a research project.
- 2016: Ahmed Maiter, first place at the Cambridge Neuroscience Conference 2016.
- 2015: Charlie Daniels, third place at the British Chapter postgraduate meeting of ISMRM.

Publications

1. Analysis of ^{13}C and ^{14}C labeling in pyruvate and lactate in tumor and blood of lymphoma-bearing mice injected with ^{13}C -labeled pyruvate.
Serrao EM, Kettunen MI, Rodrigues TB, Lewis DY, **Gallagher FA**, Hu, DE, Brindle KM.
NMR in Biomed. 2018 *In press*.
2. Translating in vivo metabolomic analysis of succinate dehydrogenase deficient tumours into clinical utility.
Casey RT, McLean MA, Basetti M, Challis BG, ten Hoopen R, Roberts T, Clark GR, Pittfield D, Simpson HL, Bulusu VR, Allinson K, Happerfield L, Park S-M, Marker A, Giger O, Maher ER*, **Gallagher FA***.
JCO Precis Oncol. 2018 *In press*.
3. Hyperpolarized carbon-13 Magnetic Resonance Spectroscopic Imaging: a clinical tool for studying tumour metabolism.
Zaccagna F, Grist JT, Deen SS, Woitek R, Lechermann LM, McLean MA, Basu B, **Gallagher FA**.
Br J Radiol. 2018 Jan 2; doi: 10.1259/bjr.20170688
4. Extracellular lactate: a novel measure of T cell proliferation.
Grist JT, Jarvis LB, Georgieva Z, Thompson S, Kaur H, Burling H, Clarke A, Jackson S, Wills M, **Gallagher FA**, Jones JL.
J Immunol. 2017 Dec 29. doi: 10.4049/jimmunol.1700886.
5. Evaluation of Magnetization Transfer and Diffusion Kurtosis imaging for prostate cancer detection in a re-biopsy population.
Barrett T, McLean M, Priest AN, Lawrence EM, Patterson A, Koo BC, Patterson I, Warren A, Doble A, Gnanapragasam VJ, Kastner C, **Gallagher FA**.
Eur Radiol. 2017 Dec 8; doi: 10.1007/s00330-017-5169-1.
6. Hyperpolarized [1,4- $^{13}\text{C}_2$]Fumarate Enables Magnetic Resonance-Based Imaging of Myocardial Necrosis.
Miller JJ, Lau AZ, Nielsen PM, McMullen-Klein G, Lewis AJ, Jespersen NR, Ball V, **Gallagher FA**, Carr CA, Laustsen C, Bøtker HE, Tyler DJ & Schroeder MA.
JACC: Cardiovascular Imaging 2017 Dec 8. doi: 10.1016/j.jcmg.2017.09.020.
7. A method for mapping and quantifying whole organ diffusion-weighted image distortion in MR imaging of the prostate.
Gill AB, Czarniecki M, **Gallagher FA**, Barrett T.
Scientific Reports 2017 Oct 5;7(1):12727.
8. Unsupervised segmentation of 5D hyperpolarized carbon-13 MRI data using a fuzzy Markov random field model
Daniels CJ, **Gallagher FA**.
IEEE Transactions on Medical Imaging. 2017 *In press*.
9. The longitudinal effect of ejaculation on seminal vesicle fluid volume and whole prostate ADC as measured on prostate MRI.
Barrett T, Tanner J, Slough R, Gill A, Wason J, **Gallagher FA**.
Eur Radiol. 2017 *In press*.
10. Clinical significance of prostate ^{18}F -labelled fluorodeoxyglucose uptake on PET/CT: A five-year review.
Chetan MR, Barrett T, Gallagher FA
World J Radiol. 2017 *In press*
11. Robotic assisted laparoscopic radical prostatectomy following transrectal compared to transperineal prostate biopsy: surgical, oncological and functional outcomes.
Wadhwa K, Patrino G, Patterson A, Barrett T, Dalia C, Koo BC, **Gallagher FA**, Serrao E, Warren A, Gnanapragasam V, Shah N, Doble A, Kastner C.
Minerva Urol Nefrol. 2017 Feb;69(1):85-92.

12. Comparison of positive and negative predictive values of initial and subspecialist second opinion reads of multiparametric magnetic resonance imaging of the prostate.
Hansen NL, Koo B, **Gallagher F**, Warren A, Doble A, Gnanapragasam V, Bratt O, Kastner K, and Barrett T.
Eur Radiol. 2016. *In press*.
13. The Prostate Health Index adds predictive value to multi-parametric MRI in detecting significant prostate cancers in a repeat biopsy population.
Gnanapragasam VJ, Burling K, George A, Stearn S, Warren A, Barrett T, Koo B, **Gallagher FA**, Doble A, Kastner C, Parker RA.
Sci Rep. 2016 Oct 17;6:35364. Commentery in European Urology.
14. Imaging biomarker roadmap for cancer studies.
O'Connor JP, Aboagye EO, Adams JE, Aerts HJ, Barrington SF, Beer AJ, Boellaard R, Bohndiek SE, Brady M, Brown G, Buckley DL, Chenevert TL, Clarke LP, Collette S, Cook GJ, deSouza NM, Dickson JC, Dive C, Evelhoch JL, Faivre-Finn C, **Gallagher FA**, Gilbert FJ, Gillies RJ, Goh V, Griffiths JR, Groves AM, Halligan S, Harris AL, Hawkes DJ, Hoekstra OS, Huang EP, Hutton BF, Jackson EF, Jayson GC, Jones A, Koh DM, Lacombe D, Lambin P, Lassau N, Leach MO, Lee TY, Leen EL, Lewis JS, Liu Y, Lythgoe MF, Manoharan P, Maxwell RJ, Miles KA, Morgan B, Morris S, Ng T, Padhani AR, Parker GJ, Partridge M, Pathak AP, Peet AC, Punwani S, Reynolds AR, Robinson SP, Shankar LK, Sharma RA, Soloviev D, Stroobants S, Sullivan DC, Taylor SA, Tofts PS, Tozer GM, van Herk M, Walker-Samuel S, Wason J, Williams KJ, Workman P, Yankeelov TE, Brindle KM, McShane LM, Jackson A, Waterton JC.
Nat Rev Clin Oncol. 2016 Oct 11. doi: 10.1038/nrclinonc.2016.162.
15. Robotic assisted laparoscopic radical prostatectomy following transrectal compared to transperineal prostate biopsy: surgical, oncological and functional outcomes.
Wadhwa K, Patruno G, Patterson A, Barrett T, Dalia C, Koo BC, **Gallagher FA**, Serrao E, Warren A, Gnanapragasam V, Shah N, Doble A, Kastner C.
Minerva Urol Nefrol. 2016 Sep 29. Epub ahead of print.
16. Effects of fasting on serial measurements of hyperpolarized [1-¹³C]pyruvate metabolism in tumors.
Serrao EM, Rodrigues TB, **Gallagher FA**, Kettunen MI, Kennedy BW, Vowler SL, Burling KA, Brindle KM.
NMR Biomed. 2016 Aug;29(8):1048-55.
17. Evaluating Prostate Cancer Using Fractional Tissue Composition of Radical Prostatectomy Specimens and Pre-Operative Diffusional Kurtosis Magnetic Resonance Imaging.
Lawrence EM, Warren AY, Priest AN, Barrett T, Goldman DA, Gill AB, Gnanapragasam VJ*, Sala E*, **Gallagher FA***.
PLoS One. 2016 Jul 28;11(7):e0159652. doi: 10.1371/journal.pone.0159652.
18. A comparison of quantitative methods for clinical imaging with hyperpolarized ¹³C-pyruvate.
Daniels CJ, McLean MA, Schulte RF, Robb FJ, Gill AB, McGlashan N, Graves MJ, Schwaiger M, Lomas DJ, Brindle KM, **Gallagher FA**.
NMR in Biomed. 2016 Apr;29(4):387-399.
19. Targeted transperineal biopsy of the prostate has limited additional benefit over background cores for larger MRI-identified tumors.
Barrett T, Patterson AJ, Koo BC, Wadhwa K, Warren AY, Doble A, Gnanapragasam VJ, Kastner C, **Gallagher FA**.
World J Urol. 2016 Apr;34(4):501-8.
20. MRI with hyperpolarized [1-¹³C]pyruvate detects advanced pancreatic preneoplasia prior to invasive disease in a mouse model.
Serrao EM, Kettunen MI, Rodrigues TB, Dzien P, Wright AJ, Gopinathan A, **Gallagher FA**, Lewis DY, Frese KK, Almeida J, Howat WJ, Tuveson DA, Brindle KM.

- Gut.** 2016 Mar;65(3):465-75.
21. Defining the Learning Curve for multi-parametric MRI of the prostate using MRI-TRUS fusion guided transperineal prostate biopsies as a validation tool.
Gaziev G, Wadhwa K, Barrett T, Koo BC, **Gallagher FA**, Serrao E, Frey J, Seidenader J, Carmona L, Warren A, Gnanapragasam V, Doble A, Kastner C.
BJU Int. 2016 Jan;117(1):80-6.
 22. The ADC ratio of tumor to normal prostate as a method for quantifying diffusion weighted imaging of the prostate.
Barrett T, Priest AN, Lawrence EM, Goldman DA, Warren AY, Gnanapragasam VJ, Sala E, **Gallagher FA**.
Am J Roent. 2015 Dec;205(6):W585-93.
 23. Investigating the ability of multiparametric MRI to exclude significant prostate cancer prior to transperineal biopsy
Serrao EM, Barrett T, Wadhwa K, Frey J, Koo BC, Warren A, Doble A, Kastner C*, **Gallagher FA***.
Can Urol Ass J. 2015 Nov-Dec;9(11-12):E853-8.
 24. Carbonic anhydrase activity monitored *in vivo* by hyperpolarized ¹³C-magnetic resonance spectroscopy demonstrates its importance for pH regulation in tumors.
Gallagher FA, Sladen H, Kettunen MI, Serrao EM, Rodrigues TB, Wright A, Gill A, McGuire S, Booth TC, Boren J, McIntyre A, Miller JL, Lee S-H, Honess D, Day SE, Hu D, Howat WJ, Harris AL, Brindle KM.
Cancer Res. 2015 Oct 1;75(19):4109-18.
 25. Prospective study evaluating the relative sensitivity of ¹⁸F-NaF PET/CT for detecting skeletal metastases from renal cell carcinoma in comparison to multidetector CT and ^{99m}Tc-MDP bone scintigraphy, using an adaptive trial design.
Gerety EL, Lawrence EM, Wason J, Yan H, Hilborne S, Buscombe J, Cheow HK, A. S. Shaw AS, Bird N, Fife K, Heard S, Lomas DJ, Matakidou A, Soloviev D, Eisen T*, **Gallagher FA***.
Ann of Oncol. 2015 Oct;26(10):2113-8.
Comment in Nature Reviews Clinical Oncology 11 August 2015;
doi:10.1038/nrclinonc.2015.138
 26. Identifying active vascular microcalcification by ¹⁸F-sodium fluoride positron emission tomography
Irkle A, Vesey AT, Lewis DY, Skepper JN, Bird JL, Dweck MR, Joshi FR, **Gallagher FA**, Warburton EA, Bennett MR, Brindle KM, Newby DE, Rudd JH, Davenport AP.
Nat Commun. 2015 Jul 7;6:7495.
 27. Preoperative 3-T diffusion-weighted MRI for the qualitative and quantitative assessment of extracapsular extension in patients with intermediate- or high-risk prostate cancer.
Lawrence EM, **Gallagher FA**, Barrett T, Warren A, Priest AN, Joubert I, Stearn S, Sala E, Gnanapragasam VJ.
Am J Roent. 2014 Sep;203(3):W280-6.
 28. Prostate cancer: Performance characteristics of combined T2W and DW-MRI scoring in the setting of template transperineal rebiopsy using MR-TRUS fusion.
Lawrence EM, Tang SYW, Barrett T, Koo B, Goldman DA, Warren AY, Axell R, Doble A, **Gallagher FA**, Gnanapragasam VJ, Kastner C, Sala E.
Eur Radiol. 2014 Jul;24(7):1497-505.
 29. Hyperpolarized [1,4-¹³C₂]fumarate allows early, non-invasive diagnosis of acute tubular necrosis.
Clatworthy MR, Kettunen MI, Hu DE, Mathews RJ, Witney TH, **Gallagher FA**, Jarvis L, Smith KG, Brindle KM.
Proc Natl Acad Sci U S A. 2012 Aug 14;109(33):13374-9.

30. Disruption of mouse Cenpj, a regulator of centriole biogenesis, phenocopies Seckel Syndrome.
McIntyre RE, Chavali PL, Ismail O, Carragher DM, Sanchez-Andrade G, Forment JV, Fu B, Del Castillo Velasco Herrea M, Edwards A, Yang F, Sanger Mouse Genetics Project, Ramirez-Solis R, Estabel J, **Gallagher FA**, Logan DW, Arends MJ, Tsang SH, Mahajan VB, Scudamore C, White JK, Jackson SP, Gergely F, Adams DJ.
Plos Genetics. 2012;8(11):e1003022
31. Comparing the accuracy of initial head CT reporting by radiologists, radiology trainees, neuroradiographers and emergency doctors.
Gallagher FA, Tay KY, Vowler SL, Szutowicz H, Cross JJ, McAuley DJ, Antoun NM.
Br J Radiol. 2011 Nov;84(11):1040-1045.
32. Measuring pH with hyperpolarized ^{13}C .
Gallagher FA, Kettunen MI, Brindle KM.
NMR in Biomed. 2011 Oct;24(8):1006-15. Invited Review. Corresponding author.
33. Hyperpolarized ^{13}C MRI and PET: *in vivo* tumor biochemistry.
Gallagher FA, Bohndiek SE, Kettunen MI, Lewis DY, Soloviev D, Brindle KM.
J Nuc Med. 2011; 52(9):1333-1336. Invited Review.
34. Hyperpolarized $[1-^{13}\text{C}]$ -ascorbic and dehydroascorbic acid: vitamin C as a DNP substrate for *in vivo* imaging of redox state.
Bohndiek SE, Kettunen MI, Hu DE, Kennedy BW, Boren J, **Gallagher FA**, Brindle KM.
J Am Chem Soc. 2011 Aug 3;133(30):11795-801.
35. Tumor imaging using hyperpolarized ^{13}C magnetic resonance spectroscopy.
Brindle KM, Bohndiek SE, **Gallagher FA**, Kettunen MI.
Magn Reson Med. 2011 Aug;66(2):505-19. Invited Review.
36. Detection of tumor glutamate metabolism *in vivo* using ^{13}C magnetic resonance spectroscopy and hyperpolarized $[1-^{13}\text{C}]$ glutamate.
Gallagher FA, Kettunen MI, Day SE, Hu DE, Karlsson M, Gisselsson A, Lerche MH, Brindle KM.
Magn Reson Med. 2011 Jul;66(1):18-23.
37. Functional and molecular imaging with MRI: potential applications in pediatric radiology.
Arthurs OJ, **Gallagher FA**.
Ped Radiol. 2011 Feb;41:185-198. Invited Review.
38. Disruption of mouse Slx4 – a regulator of structure-specific nucleases phenocopies Fanconi anaemia.
Crossan GP, van der Weyden L, Rosado IV, Langevin F, Gaillard PH, McIntyre RE, Sanger Mouse Genetics Project, **Gallagher F**, Kettunen MI, Lewis DY, Brindle K, Arends MJ, Adams DJ, Patel KJ.
Nat Genet. 2011 Feb;43(2):147-52.
39. Detecting tumor response to a vascular disrupting agent using ^{13}C magnetic resonance spectroscopy and hyperpolarized $[1-^{13}\text{C}]$ pyruvate and $[1,4-^{13}\text{C}_2]$ fumarate.
Bohndiek SE, Kettunen MI, Hu DE, Witney TH, Kennedy B, **Gallagher FA**, Brindle KM.
Mol Cancer Ther. 2010 Dec;9(12):3278-88.
40. Detecting treatment response in a model of human breast adenocarcinoma using hyperpolarized $[1-^{13}\text{C}]$ pyruvate and $[1,4-^{13}\text{C}_2]$ fumarate.
Witney TH, Kettunen MI, Hu DE, **Gallagher FA**, Bohndiek SE, Napolitano R, Brindle KM.
Br J Cancer. 2010 Oct;103(9):1400-6.
41. An introduction to functional and molecular imaging with MRI.
Gallagher FA.
Clin Radiol. 2010 Jul;65(7):557-566. Invited Review.

42. Magnetization transfer measurements of exchange between hyperpolarized [1-¹³C]pyruvate and [1-¹³C]lactate in a murine lymphoma.
Kettunen MI, Hu DE, Witney T, McLaughlin R, **Gallagher FA**, Bohndiek SE, Brindle KM.
Magn Reson Med. 2010 Apr;63(4):872-880.
43. Measuring intracellular pH in the heart using hyperpolarized carbon dioxide and bicarbonate: a ¹³C and ³¹P MRS study.
Schroeder MA, Swietach P, Atherton HJ, **Gallagher FA**, Lee P, Clarke K, Radda GK, Tyler DJ.
Cardiovasc Res. 2010 Apr 1;86(1):82-91.
44. Magnetic Resonance Elastography (MRE): Spleen stiffness measurements in healthy volunteers. Preliminary experience.
Mannelli L, Godfrey E, Joubert I, Patterson AJ, Graves MJ, **Gallagher FA**, Lomas DJ.
Am J Roent. 2010 Aug;195(2):387-92.
45. Production of hyperpolarized [1,4-¹³C₂]malate from [1,4-¹³C₂]fumarate is a marker of cell necrosis and treatment response in tumors.
Gallagher FA, Kettunen MI, Hu DE, Jensen PR, in 't Zandt R, Karlsson M, Gisselsson A, Nelson SK, Witney TH, Bohndiek SE, Hansson G, Pietersen T, Lerche MH, Brindle KM.
Proc Natl Acad Sci U S A. 2009 Nov 24;106(47):19801-19806.
46. Biomedical applications of hyperpolarized ¹³C magnetic resonance imaging.
Gallagher FA, Kettunen MI, Brindle KM.
Prog in NMR Spec. 2009 Nov;55(4):285-295.
47. A comparison between radiolabeled fluorodeoxyglucose uptake and hyperpolarized ¹³C-labeled pyruvate utilization as methods for detecting tumor response to treatment.
Witney TH, Kettunen MI, Day SE, Hu DE, Neves AA, **Gallagher FA**, Fulton SM, Brindle KM.
Neoplasia. 2009 Jun;11(6):574-82.
48. ¹³C MR spectroscopy measurements of glutaminase activity in human hepatocellular carcinoma cells using hyperpolarized ¹³C-labeled glutamine.
Gallagher FA, Kettunen MI, Day SE, Lerche M, Brindle KM.
Magn Reson Med. 2008 Aug;60(2):253-7.
49. Magnetic resonance imaging of pH in vivo using hyperpolarized ¹³C-labelled bicarbonate.
Gallagher FA*, Kettunen MI*, Day SE, Hu DE, Ardenkjaer-Larsen JH, Zandt R, Jensen PR, Karlsson M, Golman K, Lerche MH, Brindle KM.
Nature. 2008 Jun 12;453(7197):940-3. Cover article.
50. Postmortem fetal organ volumetry using magnetic resonance imaging and comparison to organ weights at conventional autopsy.
Breeze AC, **Gallagher FA**, Lomas DJ, Smith GC, Lees CC; Cambridge Post-Mortem MRI Study Group.
Ultrasound Obstet Gynecol. 2008 Feb;31(2):187-93.
51. Detecting tumor response to treatment using hyperpolarized ¹³C magnetic resonance imaging and spectroscopy.
Day SE, Kettunen MI, **Gallagher FA**, Hu DE, Lerche M, Wolber J, Golman K, Ardenkjaer-Larsen JH, Brindle KM.
Nat Med. 2007 Nov;13(11):1382-7. Erratum in: *Nat Med.* 2007 Dec;13(12):1521.
52. CT pulmonary angiography versus ventilation-perfusion scintigraphy in pregnancy: implications from a UK survey of doctors' knowledge of radiation exposure.
Groves AM, Yates SJ, Win T, Kayani I, **Gallagher FA**, Syed R, Bomanji J, Ell PJ.
Radiology. 2006 Sep;240(3):765-7.
53. A randomised controlled trial comparing two methods of teaching medical students trauma and orthopaedics: traditional lectures versus the "donut round".

- Bulstrode C, **Gallagher FA**, Pilling EL, Furniss D, Proctor RD.
Surgeon. 2003 Apr;1(2):76-80.
54. Osmotic 'detubulation' in frog muscle arises from a reversible vacuolation process.
Gallagher FA, Huang CL.
J Muscle Res Cell Motil. 1997 Jun;18(3):305-21.

Other publications

1. An unusual presentation of a post-operative urinoma.
Gallagher FA, Cahir J, Markose G, Appleton DS (2006).
Eurorad (online), 2006; 11 Jul:4950.
2. Ankylosing Spondylitis: an unusual cause for complete heart block.
Gallagher FA, Gopalan D, Sala E.
Eur Radiol. 2005-2006; 15:2214; 16:244-246.
3. The alternative A to Z of medical eponyms *or* Lesser known facts about famous people in medicine.
Gallagher F.
A series of articles in the **Student BMJ**. 1999-2000; 7:461; 8:93; 8:227; 8:276.

Book editing and book chapters

1. Grainger and Allison's Diagnostic Radiology: A textbook of medical imaging; 6th edition.
Editors: Adam A, Dixon AK, Gillard JH & Schaefer-Prokop C.
Chapter: Molecular and Personalised Medicine in Cancer
Authors: **Gallagher FA**, Thakor A, Serrao E, Goh V.
Elsevier, 2014.
2. Oxford Handbook of Emergencies in Clinical Radiology.
Editors: Graham RNJ & **Gallagher FA**.
Oxford University Press, 2009. Co-authored 9 chapters.

Invited Lectures

Plenary, Eponymous and Keynote lectures

- Keynote lecture, NIH Hyperpolarized MRI Technology Resource Center Workshop. UCSF 2017.
Clinical imaging of hyperpolarized pyruvate in oncology and neurology.
- Keynote lecture, Personalised Medicine congress, Tübingen, Germany. May 2016.
New imaging techniques for personalised medicine: hyperpolarized MRI.
- FW Spiers Lecture, University of Leeds, January 2015.
Hyperpolarized carbon-13 MRI.
- European Society of Molecular and Functional Imaging in Radiology Inaugural Workshop, Plenary Lecture, Berlin, July 2014.
Imaging on many levels: the potential scale of molecular imaging
- Keynote lecture, Scottish Imaging Network Annual Scientific Meeting 2013.
- International Radiology Day Plenary Lecture 2012, London, November 2012.
- David Lintott lecture, Annual Radiology Meeting, Leeds, October 2012.
- Blue Skies Lecture, Royal College of Radiologists Annual Scientific Meeting 2010, London.
Molecular imaging: the future of radiology?

International invited lectures and conferences

- Looking for the Biomarker meeting, July 2017, Pisa, Italy.
Molecular Imaging of cancer in Cambridge.
- German Congress of Radiology, May 2017, Leipzig, Germany.
Clinical potential of hyperpolarized MRI.
- European Congress of Radiology, New Horizons Session, March 2017, Vienna.
Hyperpolarized MRI in oncology.
- Cancer Core Europe meeting, January 2017, Heidelberg, Germany.
Structural and functional imaging of tumours and response to treatment
- Cancer Core Europe meeting, January 2017, Heidelberg, Germany.
Imaging taskforce.
- Cancer Core Europe Imaging taskforce meeting, July 2016, Paris.
Imaging tumour heterogeneity using texture analysis.
- LIFE-DNP meeting June 2016, Aarhus Denmark.
Initial experience of clinical hyperpolarization in Cambridge.
- International Society of Magnetic Resonance in Medicine, May 2016, Singapore.
Educational course.
Hyperpolarization – clinical potential and relevance.
Received the highest quality scores of any talk in the Hyperpolarisation & MR Applications category and awarded the 2016 Outstanding Teacher Award.
- Joint European Society of Molecular Imaging and European Society of Molecular and Functional Imaging in Radiology Workshop, Utrecht, March 2016.
Metabolism and Tumor Heterogeneity.
- Cancer Core Europe Meeting, Amsterdam, February 2016.
Translational Molecular Imaging in Oncology.
- Goettingen SPIRIT summer school. Multimodal molecular imaging: from high resolution in vitro towards in vivo imaging. Max Planck Institute for Experimental Medicine, Goettingen, Germany, November 2015.
Translational MRI.
- European Society of Breast Imaging Annual Scientific Meeting, London, 2015.
Hyperpolarized MRI in breast cancer.
- International Society of Magnetic Resonance in Medicine, June 2015, Toronto.
GE 13C Research Circle meeting
Beyond pyruvate - the challenges of translating other probes into humans.
- Medical University of Vienna, Comprehensive Cancer Centre, November 2014, Vienna, Austria.
The potential role of hyperpolarised carbon-13 imaging in oncology.
- Medical University of Vienna, Wiener Radiologisches Symposium, November 2014, Vienna, Austria.
Hyperpolarized MRI.
- MR-hyperpolarization workshop 2014, Aarhus, Denmark.
Clinical hyperpolarized carbon-13: a routine clinical tool for the future?
- World Molecular Imaging Congress, September 2014, Seoul, Korea.
Strengths and weaknesses of imaging modalities and probes: MRI.
Panel discussion on hyperpolarized MRI.
- European Society for Molecular Imaging, European Molecular Imaging Meeting, June 2014, Antwerp.
Hyperpolarized MRI in the clinic: when and why?
- European Congress of Radiology, March 2014, Vienna.
Potential of MRI for Molecular Imaging in Oncology
- Aarhus University, October 2013, Denmark.

- *Imaging of tumour metabolism using hyperpolarised carbon-13.*
- ISMRM MR of Cancer Study Group Workshop, February 2013, Valencia.
Multimodality of the Tumour Microenvironment.
- European Congress of Radiology, March 2013, Vienna.
Potential of MRI for Molecular Imaging in Oncology.
- World Molecular Imaging Congress 2012, Dublin.
Hyperpolarized MRI in oncology.
- Memorial Sloan-Kettering Cancer Center, Academic Lecturing Program, Autumn 2012, New York.
Imaging metabolism in oncology with hyperpolarized carbon MRI.
- Radiological Society of North America, November 2012, Chicago.
Principles and Practices of Translational Molecular Imaging: Molecular Oncology Meets Molecular Imaging; what can Radiologists Expect.
Hyperpolarized MR Imaging in Oncology
- International Society of Magnetic Resonance in Medicine, May 2012, Melbourne.
Hyperpolarized ¹³C Imaging of Cancer.
Received the highest quality scores of any talk in the Cross Cutting & Emerging Technologies category and awarded the 2012 Outstanding Teacher Award.
- European Congress of Radiology, March 2012, Vienna.
Targets for Tumour Characterisation and Treatment Response.
- Eighth International Workshop on Pharmacodynamics of Anticancer Agents, October 2010, Hakone, Japan.
Molecular Imaging of Treatment Response using MRI.
- CRUK Cambridge Research Institute Annual International Symposium 2010.
Unanswered questions in tumour monitoring.
Hyperpolarized ¹³C MRI as a tool for imaging cancer.
- Second International Workshop on Hyperpolarized Carbon-13 and its Applications in Metabolic Imaging, July 2009, Philadelphia.
pH Mapping with hyperpolarized ¹³C-bicarbonate.
- American Association for Cancer Research Future Leaders New Directions Symposium, April 2009, Denver.
Molecular imaging of carbon metabolism in tumors using MRI.

National conferences and talks

- CRUK National Training Event, June 2017, St Thomas' Hospital, London.
Contrast agents – metabolic.
- UK Radiological Congress, June 2017, Manchester.
Hyperpolarised MRI in cardiac imaging.
- UK Radiological Congress, June 2017, Manchester.
Hyperpolarised MRI. Technology and informatics.
- UCLH PET MRI course, May 2017, London.
The potential of hyperpolarised MRI with PET/MRI
- National Cancer Research Institute Conference, Liverpool 2016.
Policy session: “Accelerating adoption of research findings into NHS clinical practice”
- CRUK Clinical Researchers Meeting, London September 2016.
Raising your profile as a clinical academic researcher.
- Glioma Bootcamp, Cambridge September 2016.
Exploring the application of new imaging techniques in neuro-oncology.
- RCR/NIHR trainee workshop, London July 2016.
How to build your CV to be competitive for a further Academic position.

- CRUK All Fellows Meeting, York July 2016.
Improving the imaging of Cancer.
- Christie Grand Rounds, Manchester, June 2016.
Molecular Imaging in Oncology.
- CRUK Cancer Imaging Conference, London 2015.
The future of cancer imaging.
- UK Diffusion MRI meeting, Manchester 2015.
Clinical applications of diffusion in oncology.
- 2nd RCR Functional and Molecular Imaging Study Day 2014, London.
Emerging MRI techniques.
- Imaging seminars, Queen's Medical Centre, February 2014, Nottingham.
Imaging with hyperpolarised carbon-13.
- RCR/Wellcome Trust Radiology Research Day, October 2013, London.
New molecular and functional imaging techniques.
- UCLH PET MRI course, November 2012, London.
PET-MRI Molecular Imaging research opportunities in cancer.
- Institute of Physics in Engineering and Medicine (IPEM) MR special interest group meeting July 2011, Leeds.
Response monitoring with MRI: current and emerging techniques.
- RCR Functional and Molecular Imaging Meeting, May 2011, London.
Hyperpolarized MRI.
- Cambridge Breast Cancer Conference, March 2011, Cambridge.
New horizons in molecular imaging.
- Institute of Cancer Research, February 2011, London.
Imaging of carbon metabolism using dynamic nuclear polarization and magnetic resonance imaging.
- RCR Radionuclide and Functional Imaging Study Day, January 2011, London.
Functional and molecular imaging with MRI.
- CRUK Clinical Fellows meeting, November 2010, London.
Molecular imaging of cancer.
- CRUK London Research Institute PhD induction program and Pontecorvo Prize ceremony, September 2010, London.
Molecular imaging of tumours using using dynamic nuclear polarization and magnetic resonance imaging.
- Symposium Mammographicum Conference. July 2010, Liverpool.
An introduction to functional and molecular imaging.
- Research Careers in Radiology. Wellcome Trust and the RCR. April 2010. London.
Life after a PhD.
- Merck Investigators Meeting, February 2010, London.
PET-CT in pancreas cancer.
- London School of Radiology Annual Conference Day 2009, London.
Research options for radiology trainees.
- UK Radiological Congress, June 2009, Manchester.
MRI biomarkers of early treatment response in cancer.
- RCR Clinical Radiology Research Day- Research Career Pathways, November 2008, London.
Personal experiences of a research fellowship.
- CRUK Clinical Fellows meeting, November 2008, London.
Molecular imaging using Dynamic Nuclear Polarisation.
- RCR Clinical Radiology Annual Meeting, September 2008, London.
Molecular imaging using Dynamic Nuclear Polarisation.

Grants

Research Grants

Major external grants as principal investigator

- 2016-2017: **MS Society Innovative Grant: £39,900.**
Imaging cerebral metabolism in acute multiple sclerosis with hyperpolarized carbon-13 MRI. 1/11/2016 for 24 months (2015-35).
- 2016-2017: **The Evelyn Trust: £72,485.**
Novel imaging of brain metabolism following stroke. 1/1/16 for 24 months (15/37).
- 2015-2017: **Prostate Cancer UK Pilot Award £49,930.**
Investigating the metabolism of hyperpolarized carbon-13 labelled pyruvate in prostate cancer using Magnetic Resonance Spectroscopic Imaging. 1/10/15 for 24 months (PA14-012).
- 2014-2018: **CRUK Clinician Scientist Fellowship: £1,283,245.**
Development of hyperpolarized carbon-13 as a novel imaging tool in oncology. 1/1/14 for 60 months (C19212/A16628).
- 2013-2017: **GSK studentship: £70,500.** Additional co-funding from the NIHR through the University of Cambridge Biomedical Research Centre: **£40,000.**
- 2010-2013: **CRUK Clinician Scientist Fellowship: £897,054.**
Metabolic imaging of tumours and their response to chemotherapy. 1/1/10 for 48 months (C19212/A911376).
- 2006-2008: **CRUK Clinical Research Training Fellowship: £200,485.**
Development of novel MRI methods to detect tumour cell proliferation in vivo. 1/1/06 for 36 months C19212/A6078.

Other major external grants

- 2017-2026 **NIHR Health Technology Assessment Programme. £2,652,673.**
A randomised discontinuation trial to evaluate optimal duration of anti - PD1 monoclonal antibody treatment in patients with metastatic melanoma. 1/1/17 for 120 months. PI: Sarah Danson, University of Sheffield.
- 2017-2022: **CRUK Major Cancer Centre and Experimental Cancer Medicines Centre Awards. £41,000,000** of which £1,588,690 is allocated to the imaging programme which I co-lead with an additional £7,635,000 for imaging within the Integrative Cancer Medicine budget.
1/4/17 for 60 months. PI: Richard Gilbertson.
- 2016-2017: **European Institute of Innovation and Technology (EIT) health grant for Innovation for Personalised Cancer Medicine. €1,500,000 (£197,290 for imaging in Cambridge).**
Innovation for IT, Immunotherapy and Imaging for Personalized Medicine. 1/1/16 for 48 months. Cambridge PI: Carlos Caldas. Partners: Institut Gustave Roussy, German Cancer Research Center, Karolinska Institutet, Netherlands Cancer Institute, Val d'Hebron Institute of Oncology, Abbvie, Roche, AstraZeneca.
- 2015-2017: **The Evelyn Trust: £55,809.**
Imaging sodium within normal prostate and cancer tissue using Magnetic

- Resonance Imaging (MRI)*. 1/7/15 for 18 months. PI: Tristan Barrett.
I am leading the development of the sodium MRI within the grant.
- 2013-2018: **Wellcome Trust Strategic Award: £4,284,278.**
Real time clinical imaging of tumour metabolism using hyperpolarized ¹³C magnetic resonance spectroscopy.
An additional **£1,163,522** is being provided by CRUK/Cambridge Cancer Centre. 7/1/13 for 60 months. PI: Kevin Brindle (095962).
I am leading the clinical translation of hyperpolarized carbon into patients. I line manage the people employed under the grant and am chief investigator or principal investigator on the associated clinical trials.
- 2013-2018: **CRUK/EPSRC Cancer Imaging Centre: £3,400,000** to Cambridge (total £8,835,943). Jointly with the University of Manchester. PIs: Alan Jackson, Kevin Brindle, Fiona Gilbert (C197/A16465).
I am leading the Cambridge arm of one of the work packages (work package 3, tissue microstructure). I lead the clinical training arm
- 2010-2015: **Leukemia & Lymphoma project grant \$465,009/£312,675.**
New imaging methods for detecting treatment response in lymphoma.
PI: Kevin Brindle.

Other research grants

- 2015-2016: **Royal College of Radiologists; Kodak Radiology Research Bursary; co-applicant; £5,000.**
The effect of patient preparation on the quality of prostate and bladder MRI.
- 2014: **Research Capability Fund** support for the hyperpolarized carbon-13 pharmacy development; applicant: **£22,000.**
- 2014: **NIHR Cambridge Biomedical Research Centre; University of Cambridge; principal investigator: £15,000.**
Imaging of multiple sclerosis with hyperpolarized carbon-13.
- 2014: **NIHR Cambridge Biomedical Research Centre; University of Cambridge; co-investigator: £18,500.**
Imaging of prostate cancer with ¹¹C-acetate PET-CT.
- 2014: **Marmaduke Sheild Fund, University of Cambridge, applicant £10,000.**
Sodium MRI head coil.
- 2013: **School of Clinical Medicine, University of Cambridge, equipment grant; lead applicant: £50,000.**
Pharmacy equipment for translating hyperpolarized carbon-13 to human imaging.
- 2013: **NIHR Cambridge Biomedical Research Centre; University of Cambridge; lead applicant: £10,000.**
Grant for the human hyperpolarized carbon-13 imaging project.
- 2013-2014: **NIHR Cambridge Biomedical Research Centre; University of Cambridge; principal investigator: £10,000.**
Preliminary assessment of advanced Magnetic Resonance and Transrectal Ultrasound fusion targeted re-biopsy.
- 2011-2013: **NIHR Cambridge Biomedical Research Centre; University of Cambridge; principal investigator: £25,000.**
A pilot study investigating the sensitivity of ¹⁸F-labelled sodium fluoride PET-CT for detecting renal cell carcinoma metastases in comparison to bone scintigraphy and multidetector CT.
- 2009-2011: **School of Clinical Medicine, University of Cambridge, Equipment grant: £51,850.**

- 2009: *Development of hyperpolarized carbon on a clinical MRI system.*
Department of Oncology and School of Clinical Medicine, University of Cambridge; co-investigator: **£60,000**.
- 1996: *Setting up costs for a hyperpolarizer in the CRUK Research Institute.*
Wellcome Trust Vacation Scholarship; summer studentship: **£1000**.

Research grants as a supervisor

- 2017-2020: **Cambridge International Scholarship** to Stephan Ursprung.
 2017: **Vredenberg Summer Studentship**, Johns Hopkins University to Callie Deng.
- 2017-2020: **W D Armstrong studentship** jointly with the Dept of Chemical Engineering and Biotechnology. 1/10/17 for 42 months **£53,936**.
- 2017-2019: **Erwin Schrödinger Fellowship** to Ramona Woitek (supervisor)
The development of novel imaging biomarkers of tumour metabolism in breast cancer
 1/4/17 for 24 months.
- 2016-2020: **EPSRC** Early Career Fellowship to Eleftheria Panagiotaki (Co-applicant).
Non-invasive MRI biomarkers for Oncology.
- 2016: **MRC** DTP Flexible Supplement to James Grist: **£4410** (supervisor).
 2016-2019: **Cambridge Cancer Centre** studentship to Doreen Lau: **£171,300** (supervisor).
- 2015-2017: **Royal Society** International Exchange Grant to Josh Kaggie (co-supervisor): **£12,000**. 1/10/15 for 48 months.
Implementation of sodium techniques for brain cancer detection.
- 2016-2018: **Cambridge Cancer Centre** Clinical PhD studentship awarded to David Noble, co-supervisor.
- 2014-2018: **Gates Foundation** studentship to Surrin Deen who was awarded a scholarship (supervisor).
- 2014-2018: **MRC/Sackler** studentship to James Grist: **£78,900**.

Committee Membership

International

- 2017-19: Workshop & Study Group Review Committee ISMRM.
 2017-18: Chair of the MR of the Cancer Study Group of the International Society of Magnetic Resonance in Medicine.
 2016-18: European Society of Radiology Research Committee Board, Member at large.
 2016-18: European Society of Radiology Education Committee member.
 2016-17: Vice-president of the European Society of Molecular and Functional Imaging in Radiology Executive Board.
 2016-17: Vice-chair of the MR of Cancer Study Group of the International Society of Magnetic Resonance in Medicine.
 2015- Co-lead of the Imaging Task Force for Cancer Core Europe.
 2015-16: Secretary of the MR of Cancer Study Group of the International Society of Magnetic Resonance in Medicine.
 2014- Executive committee member of the European Society of Molecular and Functional Imaging in Radiology (Member at large).
 2014-15: Secretary Elect of the MR of Cancer Study Group of the International Society of Magnetic Resonance in Medicine.

- 2012-14: Board member of the European Society of Molecular and Functional Imaging in Radiology (Molecular Imaging Committee) and founding member of the society.
- 2009-12: Member of the European Society of Radiology (ESR) Subcommittee for Molecular Imaging.

National

- 2017- Academy of Medical Research Councils Genomics Champion Group, RCR Clinical Radiology Representative.
- 2016- Member of the CRUK New Investigator Committee.
- 2015- Member of the CRUK Clinical Research Committee.
- 2015- NCRI imaging advisory expert panel member.
- 2012: Member of the RCR molecular imaging working group.
Produced the RCR mission statement on molecular imaging
http://www.rcr.ac.uk/docs/newsroom/pdf/Molecular_Imaging_RCR_position_statement.pdf
- 2009-2010 Member of the RCR Molecular Imaging Working Party;
Have provided advice on incorporating Functional and Molecular Imaging into the FRCR curriculum to both the RCR Curriculum Development Group and the RCR Physics Working Group.

Editorial Board and Reviewing

- 2016- Editorial Board Member for Scientific Reports (Nature publishing group).
- 2015-2016 Re-appointed to the Scientific Editorial Board for European Radiology (Molecular-experimental section).
- 2013-2015 Scientific Editorial Board for European Radiology (Molecular-experimental section).

I have reviewed for the following journals, conferences and funding bodies:

- | | |
|--------------------------------------------------|---------------------------------------------------------------|
| American Journal of Physiology: renal physiology | Nature Communications |
| British Journal of Cancer | Neoplasia |
| British Journal of Radiology | NMR in Biomedicine |
| Cancer Research UK | Oxford University Press |
| Chemistry Communications | PLoSone |
| Clinical Radiology | Proceedings of the National Academy of Sciences (PNAS) |
| European Congress of Radiology | Prostate Cancer UK |
| European Molecular Imaging Meeting | Royal College of Radiologists (RCR) Annual Scientific meeting |
| European Radiology | Scientific reports |
| Insights into Imaging | Scottish Clinical Academic Training Programme |
| Journal of Magnetic Resonance | RCR Pump Priming Awards |
| Journal of Nuclear Medicine | Wellcome Trust |
| Journal of Urology | World Molecular Imaging Congress |
| Magnetic Resonance in Medicine | |
| Molecular Imaging and Biology | |
| Nature Biomedical Engineering | |

Conferences: Committees, Organization and Session Chairing

International

- 2017: Plenary session moderator, World Molecular Imaging Congress, Philadelphia.
- 2017: Moderator, Clinical & Translational Molecular/Metabolic Imaging, ISMRM 2017, Hawaii.
- 2017: Moderator, Cancer Treatment Response, ISMRM 2017, Hawaii.
- 2017: Chairperson of the Molecular Imaging Scientific Subcommittee of the European Congress of Radiology.
- 2017: Program Committee, World Molecular Imaging Congress. Category chair, Oncology First-in-Human & Clinical Studies.
- 2017: Moderator, Imaging nervous system and musculoskeletal tumours, ECR Vienna.
- 2016: Moderator, Preclinical oncology – MRI, WMIC 2016, New York.
- 2016: Joint organiser of the ISMRM MR of cancer study group meeting at the annual meeting in Singapore.
- 2016: Plenary session chair, Hyperpolarization techniques, ISMRM 2016, Singapore.
- 2016: Co-organiser of the joint ESMI/ESMOFIR workshop on Tumour Heterogeneity and Radiomics in Utrecht.
- 2016: Category chair in oncology at the European Molecular Imaging Meeting, Utrecht, Amsterdam.
- 2016: EMIM Tumour metabolism session chair
- 2016: EMIM Young Investigator Award Committee
- 2016: EMIM Chair of the best of ECR session
- 2016: Cancer Core Europe Conference organising committee, Amsterdam.
- 2015: Poster committee, World Molecular Imaging Conference, Hawaii.
- 2015: Joint organiser of the ISMRM MR of cancer study group meeting at the annual meeting in Toronto.
- 2015: Moderator for the Abdomen and Pelvis session at ISMRM.
- 2015: Member of the European Congress of Radiology 2015 Molecular Imaging and Contrast Media scientific subcommittee.
- 2015: Category chair in oncology at the European Molecular Imaging Meeting, Tübingen, Germany.
- 2015: Session chair, Clinical Molecular Imaging, ECR 2015, Vienna.
- 2014: Poster judge, World Molecular Imaging Conference, Seoul, Korea.
- 2014: Organising committee and session chair, First European workshop on clinical functional imaging, ESMOFIR, Berlin.
- 2014: Chair of for Metabolic Disease category at WMIC 2014.
- 2014: Member of the European Congress of Radiology 2014 Molecular Imaging and Contrast Media scientific subcommittee.
- 2013: Organiser, Global SPINlab sites meeting, Cambridge.
- 2013: Co-chair for Metabolic Disease category at WMIC 2013.
- 2013: Member of the European Congress of Radiology Molecular Imaging and Contrast Media scientific subcommittee including abstract reviewing for ECR 2013.

- 2013: Moderator for the Perfusion CT and MRI: ready for clinical practice session at ECR.
- 2012: Co-chair of Studies of Metabolism using Hyperpolarized C13 at ISMRM.
- 2010: Co-chair of the Hyperpolarized C13 MRI session at ISMRM.

National

- 2017: National Training Workshop on contrast agents for CRUK/EPSRC trainees, St Thomas's Hospital, London.
- 2016: Organising committee for the national training event for CRUK/EPSRC trainees. *From bench to bedside: validating and qualifying imaging biomarkers*, abstract lead, Cambridge, June 2016.
- 2015-: Organising committee for the training of the Cambridge-Manchester Cancer Imaging Centre including twice yearly training alternating between sites.
- 2014: Joint Organiser of the 2nd RCR Functional and Molecular Imaging Conference.
- 2012: Organising committee for the British Chapter of ISMRM.
- 2012: Session chair for Novel Contrast at the British Chapter of ISMRM, Cambridge.
- 2012: Organising and shaping the International Day of Radiology.
- 2011: Joint Organiser of the 1st RCR Functional and Molecular Imaging Conference.
- 2011: Co-chair of the Cancer MRI session of the British Chapter of ISMRM, Cambridge.
- 2010: Organising and Chairing the Molecular Imaging session for the RCR Annual Scientific Meeting, London.
- 2010: Co-chair at a session at the Research Careers in Radiology meeting, Wellcome Trust and RCR, London.

Teaching, Examining and Supervision

PhD students

- Current PhD students as principal supervisor:
 - Stephan Ursprung (Cambridge International Scholarship) 2017
 - Laura Lechermann (GSK-CRUK studentship) 2017
 - Doreen Lau (Cambridge Cancer Centre) 2016
 - Fulvio Zaccagna (CRUK/EPSRC studentship) 2015
 - James Grist (MRC-Sackler studentship) 2014
 - Surrin Deen (Gates studentship) 2014
- Current PhD students as secondary supervisor:
 - David Noble (with Prof Neil Burnet and Dr Raj Jena) 2016
- Former PhD students:
 - Charlotte Daniels (GSK/BRC NIHR studentship) 2013-2017
 - Agnese Irtle (Primary supervisor, Dr Anthony Davenport) 2013-2016
 - Eddie Lawrence (Primary supervisors, Dr Evis Sala & Prof Fiona Gilbert) 2010-13
- MD supervision:

Tristan Barrett (Primary supervisor: Prof Fiona Gilbert) 2011-2017

- Research prizes won by students I have supervised:
 - 2017: Ruth Casey, Best Oral Presentation, Irish Endocrine Society, Dublin.
 - 2017: James Grist, Best Presentation Prize, British Chapter of ISMSM, Liverpool.
 - 2017: Ahmed Maiter, European Congress of Radiology best medical student presentation (neuroradiology).
 - 2016: Ahmed Maiter, Sahara Essay prize, Gonville and Caius college.
 - 2016: Fulvio Zaccagna, Future researcher award by the Royal Academy of Engineering to attend the Young Researchers' Futures Meeting (YRFM) 2016.
 - 2016: Fulvio Zaccagna, Translational research prize, Cambridge Cancer Centre Symposium.
 - 2016: Ahmed Maiter, Royal College of Radiologists Clinical Oncology undergraduate prize for a research project.
 - 2016: Ahmed Maiter, first place at the Cambridge Neuroscience Conference 2016.
 - 2015: Charlie Daniels, third place at the British Chapter postgraduate meeting of ISMRM.

Medical student and radiology supervision/teaching

- Currently involved in teaching and lecturing radiology to both medical students as part of their curriculum, and registrars in radiology.
- I lecture on the oncology registrars teaching programme.
- Supervision of special study component (SSC) students:
 - Cormac O'Neill 2016
 - Ahmed Maiter 2016 who won a prize for his work (see above)
 - Madhu Chetan 2015
- Supervision of summer students:
 - Ahmed Maiter 2015
 - Callie Deng 2017
- 2015: Examining Final MB, University of Cambridge
- 2015: ESOR tutor in molecular imaging
- 2014: Director of the Radiology Academic Research Training Programme
- 2014: Course organizer for research skills workshop in radiology
- 2013: Gonville and Caius College and College Lecturer in Anatomy
- 2011: Director of the Academic Clinical Fellows (ACF) Programme in Radiology
- 2011: Tutor for the European School of Radiology: Marius Mayerhoefer
- Since 2002: Interviewer for prospective medical students, Gonville and Caius College
- Since 2002: Supervisor for Functional Architecture of the Human Body/Anatomy

Lecture Courses

2017: Lectures in Cancer Biology (CRUK CI)

2017: Medical Physics (Cavendish)

Teaching prizes

- 2016: Outstanding Teacher Award from the International Society of Magnetic

Resonance in Medicine. For the highest scored lecture in the Hyperpolarisation & MR Applications course as voted by the audience.

- 2012: Outstanding Teacher Award from the International Society of Magnetic Resonance in Medicine. For the highest scored lecture in the Cross Cutting & Emerging Technologies course as voted by the audience.

Examining

- PhD examinations:
 - Christoffer Laustsen, Aarhus University, Denmark 2013
 - Sidhartha Nagala, University of Cambridge, 2013
 - Maarten Grootendorst, King's College London 2016
- MD examinations:
 - Hugh Harvey, Institute of Cancer Research, University of London 2017
- Masters degree examinations:
 - Gavin Low, University of Cambridge, 2014
 - Agnese Irkle, University of Cambridge, 2013
- First year PhD examinations at the University of Cambridge since 2010:
 - Oshi Abeyakoon (Radiology)
 - Nick Evans (Neuroscience)
 - Michal Tomaszewski (Physics)
 - Linda Johnson (CRUK CI)
 - Agnese Irkle (Clinical Pharmacology)
 - Tess Catherwood (Radiology)
 - Reem Bedair (Radiology)
 - Andrew Gill (Radiology)
 - Nicola Ainsworth (CRUK CI)
 - Shen-Han Lee (CRUK CI)