

Clinical Surgery NEWS

Annual Research Report 2018

Professor Stephen Wigmore



2018 has been another excellent year for the Department of Surgery in terms of grants and publications. 2017 was

probably the most successful year in our history and was always going to be tough to match. The current year has shown only a slight fall in numbers of publications with 77 papers up to the beginning of December compared with 97 in 2017. In terms of quality the median impact factor of published articles remains close to 4 and there were 29 papers (33%) published in journals with an impact factor >5.

There were again some very high scoring papers in *Lancet Infectious diseases*, *Nature Reviews Disease Primers*, *Gut*, *British Journal of Cancer*, *AP&T* and *JAMA Surgery*.

Members of the department published

Welcome to the
End of Year
2018
Edition of
the Department
of
Clinical Surgery
Newsletter

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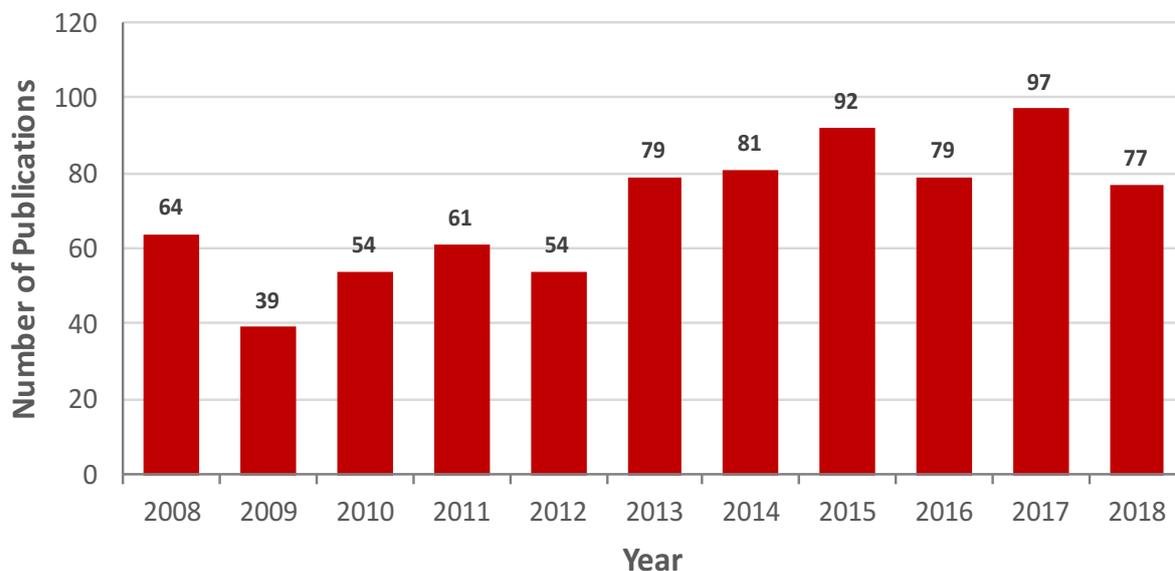
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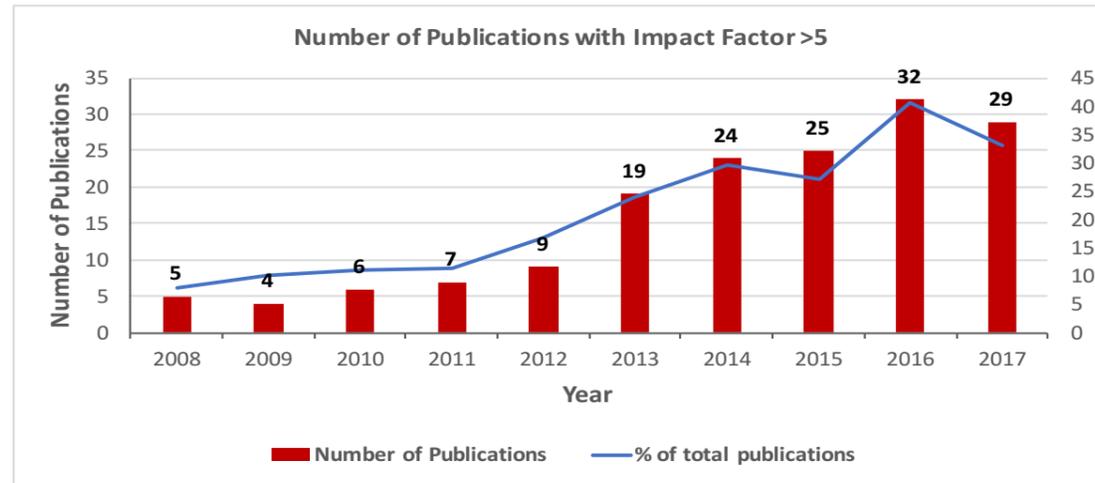
Recent
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Total Number of Publications



no less than 8 papers in BJS last year, which is very impressive. Given that the median impact factor of the 200 or so Surgical journals currently listed on Thompson ISI is only 1.8, the department is doing very well in publishing consistently in general science or medicine journals as well as high ranking surgery journals.



Excellence Framework exercise in 2021.

There was a mock exercise at the beginning of this year and all of the tenured academic faculty have excellent ratings based on their publications.

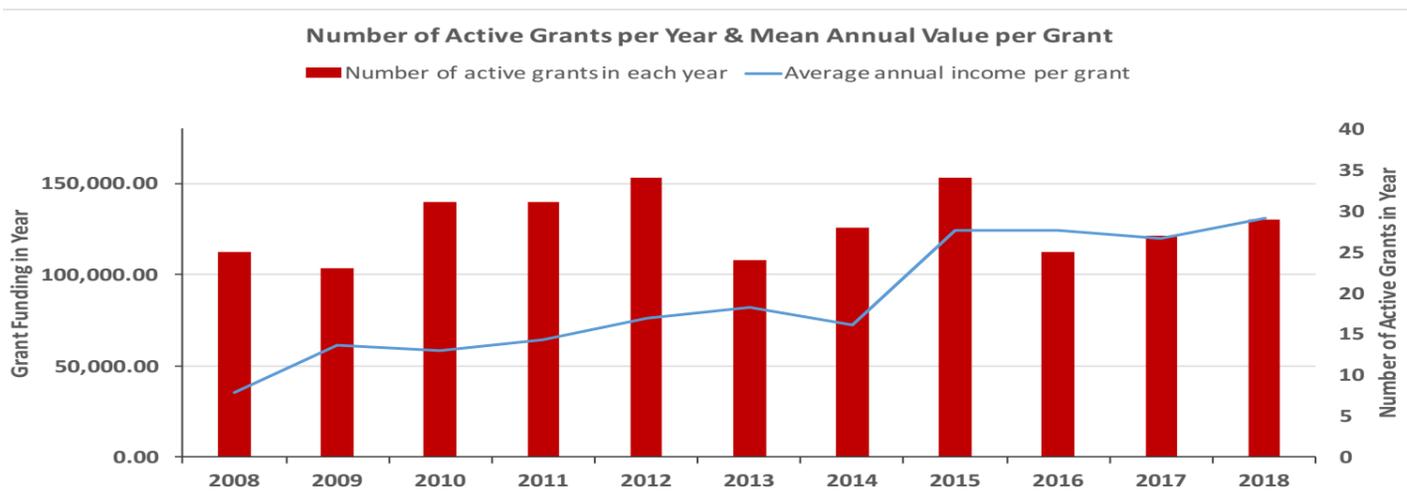
There are also a number of potentially important impact statements particularly around drug discovery and innovation in functional imaging (**Damian Mole**) and Global Surgery (**Ewen Harrison** and **Tom Weiser**).

In terms of research funding we are also doing well with new grant income for 2018 totalling £850,00

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total Number of publications	64	39	54	61	54	79	81	92	79	97
Minimum Impact Factor	0.39	0.57	0.44	0.21	0.29	1.12	0.94	0.29	0.31	0.99
Maximum Impact Factor	28.41	30.76	10.89	38.28	17.22	30.39	39.21	45.22	40.14	32.62
Median Impact Factor	2.64	3.5	3.07	3.05	2.50	3.07	3.51	3.24	4.3	3.75

and the available spend for the year £3.7 million. All of this puts the department in a very healthy position as we move towards the Research

Wishing you all a very Merry Christmas and here's to a very successful 2019



Congratulations & Recent Grant Awards

Ewen Harrison & The NIHR Global Health Research Unit on Global Surgery.
Feasibility of a cluster randomised trial of a nutritional intervention to improve outcomes after cancer surgery in low-income countries
 MRC Pump Priming Grant
 01/11/2018 - 31/10/2020
 £200,000

Riinu Ots, Ewen Harrison, Catherine Shaw, Julius Juurmaa, Stephen Tabiri & Mark Gyamfi Adu.
HealthyR Notebooks: Democratising open and reproducible data analysis in resource-poor environments
 Wellcome Trust: Open Research Fund
 01/01/2019 - 31/12/2019
 £41,656.00

Richard Skipwoth
Human NMJs in cancer cachexia
 Royal College of Surgeons (Edinburgh) Small Research Grant
 2018-2019
 £8500

News Round Up

Dr Oluseye Ogunbayo, from the Edinburgh Surgery Online team presented the poster, 'Impact of Online Surgery Masters Programmes on Surgical Training in Low & Middle Income Countries' at the first NHS Global Citizenship Conference in Glasgow in November.

Rob O'Neill was awarded the AUGIS Poster Prize at the September 2018 meeting of AUGIS in Edinburgh for the poster entitled, 'High content phenotypic profiling can determine drug mechanism of action and uncovers clinically approved drugs with novel in vitro activity against Oesophageal Adenocarcinoma'. RE Hughes, RJR Elliot, A Makda, TR Hupp, NO Carragher, JR O'Neill

The NIHR Global Health Research Unit on Global Surgery met in Kigali, Rwanda for their annual research prioritisation meeting. The week long meeting



provided an opportunity for partners from across the world to come together to discuss and plan clinical trials,

international surgical guidelines and research priorities over the coming year. Members of the department of Clinical Surgery we also involved in delivering research training sessions at the University of Rwanda and had the pleasure of meeting some of the students of our online degree programmes



Edinburgh Surgery Online have celebrated the first two students to graduate from both the MSc and ChM programmes. Chhe Wong & Olusegun Kehinde both graduated from the MSc in Surgical Sciences in July 2015 and went on to undertake the ChM General Surgery from which they graduated in November this year.



Edinburgh Fellows Reunion 2018

In September this year, Fellows past and present who have worked in the Department of Clinical Surgery were invited back to Edinburgh for a reunion dinner. The meeting and dinner



were attended by more than a hundred former fellows their partners and friends of the department, and coincided with the retirement from clinical practice of Professor James Garden and Mr Simon Paterson-Brown and from the University by Professor Jim Ross

Mr Richard Skipworth gave several invited lectures throughout the Autumn including, *Update on the definition of cancer cachexia and update on clinical trials and potential new treatments*, at the 4th Cancer Cachexia Conference, Philadelphia, Sept 2018. *'My preclinical experience with the Versius robotic system.'*, at the AUGIS Congress, in Edinburgh, Sept 2018.

Sarcopenia, myosteatosis and cachexia at the ESPEN Symposium on Perioperative Nutrition, in Nottingham, Oct 2018, and *Three decades of translational research in cancer cachexia*, at the Ken Fearon Memorial Cancer Cachexia Symposium in Edinburgh, Sept 2018.

The Edinburgh School of Surgery Day 2018

The annual School of Surgery day, showcasing the research of the department was held on December 7th 2018 in the Royal College of Surgeons of Edinburgh.

This year saw the return of the Undergraduate Symposium, organised by Mr Doug Speake. Medical students and aspiring surgeons from across the country were invited to give oral and poster presentations on their own research, as well as hearing presentations from Clinical

Research Fellows about their experiences of post-graduate research and how they can become involved in National Research Collaboratives. The prize for best oral presentation was awarded to **Khadija Khamdan**, with **Ben Fox** as runner up. **Shivali Dawda** was awarded the poster prize.

The afternoon sessions began with presentations of research projects submitted for the Chiene and Ian B. Macloud medals for basic science and clinical research respectively. The standard of all presentations was particularly high across a wide range of research topics including quantifying liver health in surgical patients by **Ahmed Sherif**, outcomes of radiological drainage of diverticular abscess by **Stephanie Au** and the use of Vitamin D in colorectal cancer in two presentations by **James Blackmur** and **Peter Vaughan-Shaw**.



Khadija Khamdan receives the prize for best oral presentation from Professor Steve Wigmore



Chiene medal winner, Kevin Gallagher

The Ian B Macleod Medal was awarded to **Peter Vaughan-Shaw** for his clinical research project, *'Vitamin D deficiency is an easily modifiable risk factor, which predicts survival after colorectal cancer surgery independent of systemic inflammatory response.'*



Peter Vaughan-Shaw is awarded the Ian B Macleod medal

This year saw the inaugural award of the Professor Fearon Memorial Medal. This new medal, dedicated in the memory of our much missed colleague Professor Ken Fearon, is awarded to the surgeon in training (or consultant within 1 year of appointment) and working in South East Scotland, who in the opinion of the judging panel has published the most outstanding contribution as a single paper in the field of surgery. This year **Felicity Creamer** and **Chris Johnston** were short listed for the award. Both presented their papers at this year's School of Surgery day, however judging of this medal is by an independent panel prior to the meeting and is based on the published papers.



Professor Marie Fallon presents Chris Johnston with the inaugural Professor Ken Fearon Memorial Medal

Congratulations to Chiene Medal winner **Kevin Gallagher** for his presentation, *'RIP1 Kinase inhibition for acute ischemic kidney injury'* and runner up **James Blackmur** for his presentation, *'Identification of vitamin D modifiable genetic effects on colorectal cancer risk'*.

We were delighted that Professor Marie Fallon, Ken's wife, was able to join us for dinner and to present the award to **Chris Johnston** for his paper, *'A structurally distinct TGF-beta mimic from an intestinal helminth parasite potently induces regulatory T cells.'* *Nature Communications* 2017, 8 (1):1741.

This year's guest lecturer was **Professor Gordon Carlson**, Consultant General and Colorectal Surgeon at Salford Royal NHS Trust, who described the work of his specialist unit which deals with national referrals for acute severe intestinal failure. Prof Carlson described the importance of *'getting it right second time'* when rescuing complications of abdominal surgery and the critical need to ensure basic sepsis and nutrition are adequately managed before attempting re-constructive surgery.



Guest Lecturer Professor Gordon Carlson

The guest lecture concluded the formal part of the School of Surgery day, after which delegates retired to the Fellows Library for dinner and the award of the medals including the final award of the evening - The Edinburgh Trainees' Award. Nominated by the surgical trainees, and supported by the RCSEd Faculty of Surgical Trainers, this new award recognises the Best Surgical Trainer in South East Scotland.

Voted for by the Surgical Trainees the overall winner of the Trainer of the Year award was **Mr Graeme Couper**.



2018 Trainer of the Year: Mr Graeme Couper

This year's SoS was organised by Mrs Susan Keggie, Professor Stephen Wigmore & Mr Andre Soromenho and supported by Chiesi.

Clinical Trials Update

Currently Recruiting

The **OPTIMISE II** Trial

A large-scale, pragmatic, international, multi-centre study aiming to recruit >2500 patients globally, and seeking to provide definitive evidence on the value of a cardiac-output guided fluid and inotrope protocol in preventing infectious complications for patients >65 years of age.

This NIHR Portfolio study is sponsored by Queen Mary University of London, and the local PI is Dr Mort Kelleher (Consultant Anaesthetist). We are particularly targeting patients undergoing Whipple's procedure and gastrectomy at RIE, although patients undergoing other procedures involving the luminal GI tract may also be eligible.

For more information, please contact Dr Kelleher (mortimer.kelleher@nhslothian.scot.nhs.uk) or Rachael Campbell, Perioperative Research coordinator (rachael.campbell@nhslothian).

The **ROMIO** Trial

A multicentre randomised controlled trial comparing minimally invasive versus open esophagectomy for esophageal cancer.

This trial is being run by the University of Bristol. NHS Lothian is open as a trial site and recruitment has begun.

For more information please contact **Mr Peter Lamb** or **Mr Richard Skipworth**

OCCAMS—Oesophageal Cancer Clinical and Molecular Stratification.

A Multicentre Study to Determine Predictive and Prognostic Biomarkers and Therapeutic Targets for Oesophageal and Junctional Adenocarcinoma including Whole Genome Sequencing

This study, part of the International Cancer Genome Consortium (ICGC2), has been refunded by CRUK for 5 years and recruitment is ongoing

For more information please contact **Mr Rob O'Neil** or **Mr Richard Skipworth**

The **NeoAegis** Trial

A phase III, open-labelled RCT comparing the MAGIC neoadjuvant/adjuvant chemotherapy regimen with the CROSS neoadjuvant chemoradiation protocol in patients with cT2-3 N0-3 M0 adenocarcinoma of the oesophagus

or junction. The primary objective is to evaluate 1, 2 and 3-year survival.

This trial is currently recruiting. For more information contact **Mr Richard Skipworth**.

TWIST—Tracking Wound Infection with Smart Phone Technology

A randomised controlled trial to investigate if a smartphone tool can shorten time to diagnosis of surgical site infections.

All patients (>16) undergoing abdominal surgery who own a smartphone are eligible to enter the study. Visually impaired patients are excluded.

Patients will be randomised to receive either standard post-operative care or standard post-operative care plus use of the smartphone tool.

Those in the smartphone group will receive a series of questions via text message and have the facility to upload a photograph of their surgical wound.

Primary outcome measure is time to diagnosis of an SSI and secondary outcome measures will consider use of A&E and GP services

RIE and WGH sites are both recruiting patients to this study.

For more information please contact Principle Investigator, **Mr Ewen Harrison**

Coming Soon....

The **HOT-2** Trial

HOT-2 is a blinded randomized controlled investigation into the efficacy of heme arginate in improving primary graft function in deceased donor kidney transplantation. Professor Lorna Marson is the Chief Investigator and Edinburgh will be the lead centre for this multicentre trial

It is anticipated that Edinburgh will open as the first trial site and begin recruitment late in 2018.

For more information about HOT-2 please contact Chief Investigator, **Professor Lorna Marson**.

Recently Completed

The **EMPIRIKAL** trial

A Double Blind Randomized Controlled Investigation into the efficacy of Mirococept (APT070) for preventing ischaemia-reperfusion injury in kidney allograft, EMPIRIKAL is a multi-centre study run by King's College London and has just completed the first round of recruitment

Recent Publications

Adam R, Karam V, Cailliez V, O Grady JG, Mirza D, Cherqui D, Klempnauer J, Salizzoni M, Pratschke J, Jamieson N, Hidalgo E, Paul A, Andujar RL, Lerut J, Fisher L, Boudjema K, Fondevila C, Soubrane O, Bachellier P, Pinna AD, Berlakovich G, Bennet W, Pinzani M, Schemmer P, Zieniewicz K, Romero CJ, De Simone P, Ericzon BG, Schneeberger S, Wigmore SJ, Prous JF, Colledan M, Porte RJ, Yilmaz S, Azoulay D, Pirenne J, Line PD, Truneka P, Navarro F, Lopez AV, De Carlis L, Pena SR, Kochs E, Duvoux C; all the other 126 contributing centers (www.eltr.org) and the European Liver and Intestine Transplant Association (ELITA). 2018 **Annual Report of the European Liver Transplant Registry (ELTR) - 50-year evolution of liver transplantation.** *Transpl Int.* 2018 Dec;31(12):1293-1317. doi: 10.1111/tri.13358

GlobalSurg Collaborative. **Management and Outcomes Following Surgery for Gastrointestinal Typhoid: An International, Prospective, Multicentre Cohort Study.** *World J Surg.* 2018 Oct;42(10):3179-3188. doi: 10.1007/s00268-018-4624-8

Forsythe R, McBride O, Robson J, Graham C, Conlisk N, Hoskins P, Wee F, Newby D. **Magnetic resonance imaging using ultrasmall superparamagnetic particles of iron oxide for abdominal aortic aneurysm: a risk prediction study.** *Southampton (UK): NIHR Journals Library; 2018 Sep*

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GlobalSurg Collaborative. **Laparoscopy in management of appendicitis in high-, middle-, and low-income countries: a multicenter, prospective, cohort study.** *Surg Endosc.* 2018 Aug;32(8):3450-3466. doi: 10.1007/s00464-018-6064-9

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McGregor RJ, Chau YY, Kendall TJ, Artibani M, Hastie N, Hadoke PWF. **WT1 expression in vessels varies with histopathological grade in tumour-bearing and control tissue from patients with breast cancer.** *Br J Cancer.* 2018 Oct 30. doi: 10.1038/s41416-018-0317-1. [Epub ahead of print]

O'Neill JR. **An Overview of Mass Spectrometry-Based Methods for Functional Proteomics.** *Methods Mol Biol.* 2019;1871:179-196. doi: 10.1007/978-1-4939-8814-3_13

Forrester JA, Torgeson K, Weiser TG. **Minimum Specifications for a Lifebox Surgical Headlight for Resource-Constrained Settings.** *JAMA Surg.* 2018 Nov 14. doi: 10.1001/jamasurg.2018.4205. [Epub ahead of print]

Rosenberg GM, Stave C, Spain DA, Weiser TG. **Patient-reported outcomes in trauma: a scoping study of published research.** *Trauma Surg Acute Care Open.* 2018 Sep 4;3(1):e000202. doi: 10.1136/tsaco-2018-000202.

Gallagher KM, Christopher E, Cameron AJ, Little S, Innes A, Davis G, Keanie J, Bollina P, McNeill A. **Four-year outcomes from a multiparametric magnetic resonance imaging (MRI)-based active surveillance programme: PSA dynamics and serial MRI scans allow omission of protocol biopsies.** *BJU Int.* 2018 Aug 16. doi: 10.1111/bju.14513. [Epub ahead of print]

Weiser TG, Haynes AB. **Ten years of the Surgical Safety Checklist.** *Br J Surg.* 2018 Jul;105(8):927-929. doi: 10.1002/bjs.10907

Connor KL, Denby L. **Urinary angiotensinogen as a biomarker for acute to chronic kidney injury transition - prognostic and mechanistic implications.** *Clin Sci (Lond).* 2018 Nov 13;132(21):2383-2385. doi: 10.1042/CS20180795

Sawas T, Killcoyne S, Iyer PG, Wang KK, Smyrk TC, Kisiel JB, Qin Y, Ahlquist DA, Rustgi AK, Costa RJ, Gerstung M, Fitzgerald RC, Katzka DA; OCCAMS Consortium. **Identification of Prognostic Phenotypes of Esophageal Adenocarcinoma in 2 Independent Cohorts** *Gastroenterology.* 2018 Aug 27. pii: S0016-5085(18)34923-0. doi: 10.1053/j.gastro.2018.08.036.

Miller J, Wells L, Nwulu U, Currow D, Johnson MJ, and Skipworth RJE. **Validated screening tools for the assessment of cachexia, sarcopenia, and malnutrition: a systematic review.** *The American Journal of Clinical Nutrition* 2018;108:1196–1208.

Søreide K, Guest RV, Harrison EM, Kendall T, Garden OJ, Wigmore SJ. **Management of incidental gallbladder cancer after cholecystectomy.** *BJS* (accepted In Press). 2018

Kirkegård J, Aahlin E, Al-Saiddi M, Bratlie SO, Coolen M, de Haas R, den Dulk M, Frstrup C, Harrison EM, Mortensen M, Nijkamp M, Persson J, Soreide JA, Wigmore SJ, Wik T, Mortensen F. **Multidisciplinary Team Assessments of Pancreatic Cancer Resectability and Treatment Allocation Between Centers: A Multicenter Study.** *BJS*. 2018 (accepted In Press)

Srinivasa S, Wigmore SJ. **Shining a light on cholangiocarcinoma- a new dawn for photodynamic therapy?** *Alimentary Pharmacology and Therapeutics*. 2018 (accepted In Press)

Harms M, Janssen Q, Adam R, Duvoux C, Mirza D, Hidalgo E, Watson C, Wigmore SJ, Pinzani M, Isonemi H, Pratschke J, Zieniewicz, K, Klempnauer J, Bennet W, Karam V, van Buuren H, Hansen B, Metselaar H. **Trends in Liver Transplantation for Primary Biliary Cholangitis in Europe over the past three decades.** *Alimentary Pharmacology and Therapeutics*. 2018 (accepted In Press)

Upcoming Events

Clinical Research Fellow Vacancy:

Clinical research post available to continue longstanding and successful research programme into skeletal muscle and fat wasting in upper GI cancer patients. Successful applicant will be expected to register for postgraduate degree (MD/PhD).

Commencement date August 2019.

If interested, please contact Mr Richard Skipworth richard.skipworth@nhslothian.scot.nhs.uk

PURE Reminder

Have you had a manuscript accepted for publication recently?

In order to increase the accessibility of Edinburgh University research, call manuscripts must now be deposited in PURE within **3 months of acceptance**.

Any publications not deposited in PURE within 3 months of acceptance will not be eligible for the next ref.

What do you need to do?

The Clinical Surgery Research Manager, Dr Katie Shaw, will deposit manuscripts in PURE on your behalf.

More information about PURE can be viewed at: www.ed.ac.uk/governance-strategic-planning/research/pure



HealthyR: R for healthcare data analysis

The HealthyR course in January 2019 is now Sold Out. The next course suitable for complete beginners will be May 15-17th 2019 - bookings will open in late Jan/early Feb.

Places sell out quickly; to be kept informed of bookings openings please register interest by emailing Data Manager, Dr Riinu Ots (R.Ots@ed.ac.uk).

Further information can be found of the course website

www.healthyr.surgicalinformatics.org

Items of News to Share?

If you have any items of news you would like to feature in this newsletter or events you'd like to promote please contact the Clinical Surgery Research Manager, **Dr Katie Shaw** (catherine.shaw@ed.ac.uk). The next edition will be published in March 2019.

Future Conference Submission Deadlines

Conference	Date	Location	Abstract Submission & Registration
Society of Academic and Research Surgery (SARS) http://surgicalresearch.org.uk	7th - 8th Jan 2019	London, UK	Abstract submission closed, registration open
14th Annual Academic Surgical Conference https://academicsurgicalcongress.org	5th - 7th Feb 2019	Texas, USA	Closed
ALPS HPB meeting	6th -10th Feb 2019	Madonna Di Campiglio, Italy	Abstract submission closed; registration open
Americas Hepato-Pancreato-Biliary-Association (AHPBA) https://www.ahpba.org/	20-24th March 2019	Miami beach, Florida, USA	Abstract submission closed; registration open
British Transplant Society (BTS) https://bts.org.uk	6th -8th March 2019	Harrogate, UK	Abstract submission closed; registration open
American Surgical Association (ASA) http://meeting.americansurgical.org	11 - 13th April 2019	Fairmont Dallas, USA	Abstract submission closed; registration open
Royal Australasian College of Surgeons Annual Scientific Congress https://asc.surgeons.org	6-10th May 2019	Bangkok, Thailand	Abstract deadline 27th January 2019 Early registration rate until March 17th 2019
Association of Surgeons of Great Britain and Ireland (ASGBI) http://www.asgbi.org.uk	7th- 9th May 2019	Telford, UK	Abstract deadline 12:00 noon 18th January 2018
International Association of Medical Science Educators http://www.iamse.org/	8th-11th May 2019	Roanoke, Virginia, USA	Abstract submission closed; registration opens January 2019
European Surgical Association (ESA) https://www.europeansurgicalassociation.org	16-18th May 2019	Madrid, Spain	Abstract deadline February 2019; Early registration until 11th March 2019
Behune Round Table https://bethuneroundtable.com	6th-9th June 2019	Edmonton, Alberta, Canada	Early abstract submission 31st January 2019 Final abstract submission 28th February 2019
Association for Medical Education (AMEE) https://amee.org/conferences/amee-2019	24-28th August 2019	Vienna, Austria	Abstract submission 6th February 2019
Association of Upper GI Surgeons of Great Britain & Ireland (AUGIS) http://www.augis.org	25-27 September 2019	Liverpool, UK	Save the Date
American College of Surgeons Clinical Congress https://www.facs.org/education/clincon/future-clinical-congresses	27th-31st Oct 2019	San Francisco, USA	Save the Date