Tom Kelsey

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Education & Qualifications

- 2000 – PhD in Computer Science, University of St Andrews
- 1995 – MSc in Numerical Analysis & Programming, University of Dundee
- 1994 – BSc in Mathematics, Heriot Watt University

Appointments

- **School of Computer Science, University of St Andrews**
  - August 2019 – Present   Professor of Health Data Science
  - August 2017 – July 2019   Reader in Health Data Science
  - August 2013 – July 2017   Senior Lecturer
  - September 2010 – July 2013   Lecturer
  - September 2003 – August 2010   Senior Research Fellow
  - November 1999 – August 2003   Research Fellow

Scholarly Activities

REF 2021

7 peer-reviewed and published papers currently proposed as outputs:

1. The impact of cancer on subsequent chance of pregnancy: a population-based analysis; Jul 2018; **Human Reproduction** 33(7)
2. Fertility preservation for girls and young women with cancer: Population-based validation of criteria for ovarian tissue cryopreservation; Sep 2014; **The Lancet Oncology** 15(10)
3. Non-growing follicle density is increased following adriamycin, bleomycin, vinblastine and dacarbazine (ABVD) chemotherapy in the adult human ovary; Jan 2017; **Human Reproduction** 32(1)
4. Follicle Size on Day of Trigger Most Likely to Yield a Mature Oocyte; **Frontiers in Endocrinology** 9(193). With over 342,000 views, this article is the most viewed of 3,944 Frontiers in Endocrinology articles, and the 14th most viewed of 170,467 Frontiers articles
5. A validated age-related normative model for male total testosterone shows increasing variance but no decline after age 40 years; Oct 2014; **PLoS One** 9 e109346
6. Cancer treatment and gonadal function: experimental and established strategies for fertility preservation in children and young adults; Jul 2015; **The Lancet Diabetes & Endocrinology** 3(7)
7. Perinatal complications in female survivors of cancer: a systematic review and meta-analysis; April 2019; **European Journal of Cancer** 111, 126–137

REF 2014 & RAE 2007

Research outputs, together with number of citations since publication:

1. Human ovarian reserve from conception to the menopause; 2010; PLoS One. 5, e8772; **554 citations**
2. A validated model of serum anti-Müllerian hormone from conception to menopause; 2011; PLoS One. 6, e22024; **392 citations**
3. Which follicles make the most anti-Müllerian hormone in humans?: Evidence for an abrupt decline in

AMH production at the time of follicle selection; 2013; Molecular Human Rep. 19(8); **274 citations**
4. Can Anti-Müllerian hormone predict the diagnosis of polycystic ovary syndrome?: A systematic review and meta-analysis of extracted data; 2013; J Clinical Endocrinology & Metabolism 98(8); **239 citations**
5. Tractable symmetry breaking using restricted search trees; 2004; Proceedings of the 16th European Conference on Artificial Intelligence; **90 citations**
6. The radiosensitivity of the human oocyte; 2003; Human Reproduction 18(1); **581 citations**
7. Predicting age of ovarian failure after radiation to a field that includes the ovaries; 2005; International Journal of Radiation Oncology Biology Physics. 62(3); **545 citations**
8. Ovarian reserve and reproductive age may be determined from measurement of ovarian volume by transvaginal sonography; 2004; Human Reproduction 19(7); **171 citations**

Awards

1. Optimising fertility in cancer survivors through novel approaches to assessment, prediction and recovery from germ cell and gonadal damage. PI: R Anderson – **£3,880,000** MRC spring 2020 – under review
2. Detecting high-risk smokers in Primary Care Electronic Health Records: An automatic classification, data extraction and predictive modelling approach, The Melville Trust, **£120,000** 1/08/2019 – 31/07/2022
3. Reproductive function in young adult cancer patients in the UK, TYA CSG of the National Cancer Research Institute, **£150,000** 1/08/2019 – 28/02/23
4. SERUMS Project. EU Horizon2020 project 826278 (St Andrews Component of €4.5m award). PI: K Hammond – **£800,000** 1/011/18 – 30/10/23
5. UK Institute for Health & Bioinformatics Research (St Andrews component of £37m award). PI: F Sullivan – MRC: **£450,000** 1/04/18 – 30/06/23
6. Development and feasibility of a communication training package for therapeutic radiographers to manage emotional talk with breast cancer patients in treatment. PI: G Humphris – Breast Cancer Now: **£88,168** 1/02/18 – 31/01/20
7. A Constraint Modelling Pipeline: A Constraint Modelling Pipeline. PI: I Miguel – EPSRC: **£886,923** 1/04/17 – 30/09/20
8. Pilot of the Mini-AFTERc intervention to manage fear of cancer recurrence. PI: G Humphris – CSO: **£249,495** 1/01/18 – 31/08/21
9. A Constraint Solver Synthesiser: A Constraint Solver Synthesiser. PI: I Miguel – EPSRC: **£929,076** 1/10/09 – 30/09/14
10. Fife Health and Social Care Partnership; MapMySmoke development; **£1,500**
11. NHS Fife R & D; Smart device applications for smoking cessation; **£20,000**
12. EPSRC Impact Acceleration Award; Medical and Healthcare mobile apps; **£16,808**

Collaborations & Contributions

o Edinburgh Fertility – I work closely with Professors Anderson, Telfer and Wallace (resp. Reproductive Endocrinology, Reproductive Physiology and Paediatric Oncology) at the University of Edinburgh. We have a long established track record of publication in high-impact journals such as The Lancet Oncology, The Lancet Diabetes & Endocrinology, the European Journal of Cancer and Human Reproduction. My contribution is
  - the careful identification, aggregation, imputation and linkage of data suitable for studies into the late effects of cancer treatments on survivors of cancer
  - the use of modern AI machine learning techniques to derive and validate predictive models related to fertility in the healthy and treated populations
  - collaboration with colleagues at ISD and NSS to perform population-based analyses that compare fertility outcomes for cancer survivors with other members of the same community
  - critical evaluation of how our models and results relate to oncofertility research disseminated by groups in other countries
o Copenhagen University Hospital – I provide non-clinical expertise to the group headed by Professor Anderson investigating cryopreservation of ovarian tissue as a fertility preservation technique for a range

of conditions. We have an established track record of publication in high-impact journals such as Fertility & Sterility, Science of the Total Environment and Molecular Human Reproduction. My contribution is

- the accurate prediction of attributes (that are unmeasurable *in vivo*) needed to quantify differences in the populations under investigation
- the application of AI and statistical learning methods to quantify the certainty of results based on small samples

o Reproductive & Maternal Medicine, Glasgow – I work with Professor Nelson and Dr Iliodromiti at the University of Glasgow, investigating endocrine markers as diagnostic tools. We have an established track record of publication in high-impact journals such as the Journal of Clinical Endocrinology & Metabolism, Diabetologia and Molecular Human Reproduction Update. My contribution is

- the use of hierarchical summary ROC analysis to accurately combine published diagnostic results into a single estimate
- the careful combination of local data with summaries of published data to increase the power of investigations and provide enhanced clinical utility

o The Wolfson Fertility Centre – I am a regular visitor to the group headed by Professor Dhillo of Imperial College, London, working on individualised approaches to assisted conception, with recent publications in journals such as Clinical Endocrinology and Frontiers in Endocrinology. My contribution is

- the adaptation of the tools and techniques I have developed for fertility after cancer to the wider problem of helping subfertile couples to have children
- the careful combination of baseline, longitudinal and outcome IVF data from centres in London, Copenhagen and Vietnam
- the use of modern AI knowledge discovery techniques to identify multivariate combinations of features that maximise chances of a live birth
- advanced dose-response modelling using combinations of nonlinear regression, generalized (non)linear regression, and parametric survival analysis

o The University of St Andrews – I am an active researcher within

- the Artificial Intelligence Research Group
- the Population and Behavioural Science Division of the School of Medicine
- the Digital Health Science Initiative
- the St Andrews Institute for Data-Intensive Research
- the Health Informatics Group within the School of Computer Science

Academic Organisation

o 2010 – 2017 Programme Committee Member, AAAI Conference on Artificial Intelligence, International Joint Conference on Artificial Intelligence; Workshop on Knowledge Engineering, Discovery and Dissemination (IEEE International Conference on Bioinformatics & Biomedicine); International Conference on Artificial Intelligence and Symbolic Computation; Workshop on Combining Constraint solving with Mining and Learning.

o 2010 – 2015 St Andrews Representative, Scottish Informatics and Computer Science Alliance (SICSA), Modelling and Abstraction theme.

Peer Review Activities

o 2019 – 2020 **Associate Editor** for Human Reproduction Update (Impact Factor 11.852).

o 2018 – 2020 **Associate Editor** for Frontiers in Physiology (Impact Factor 3.394).

o 2018 – 2020 **Associate Editor** for Frontiers in Endocrinology (Impact Factor 3.519).

o 2018 – 2020 **Research Topic Editor**; Ovarian Ageing: Pathophysiology and Recent Development of Maintaining Ovarian Reserve; Frontiers in Endocrinology

o 2009 **Editor**: Symmetry and Search, Annals of Mathematics and Artificial Intelligence, 57(1).

o 2008 – 2015 **Research Council Reviewer**: EPSRC; BBSRC; Singapore A-star Joint Council Office.

o 2004– 2020 **Reviewer**: International Journal of Radiation Oncology Biology Physics, Nature Scientific Reports, British Medical Journal, AAAI Conference on Artificial Intelligence, BMJ Open, Human

Reproduction Update, Optimization Letters, Systems Biology in Reproductive Medicine; International Conference on Principles and Practice of Constraint Programming; Human Reproduction; International Conference on Artificial Intelligence and Symbolic Computation; Conference of the Association for the Advancement of Artificial Intelligence; Mathematical Medicine & Biology; International Joint Conference on Artificial Intelligence; Journal of Pediatric Endocrinology and Metabolism; The Computer Journal; European Journal of Obstetrics & Gynecology and Reproductive Biology; Conference on Automated Deduction; International Conference on Logic for Programming, Artificial Intelligence, and Reasoning; Molecular Human Reproduction; Psychoneuroendocrinology; Health Education Journal.

Engagement

Professional Bodies
- 2011 – 2020   Fellow, The Royal Society of Medicine
- 2011 – 2020   Member, The International Society for Fertility Preservation
- 2008 – 2011   Member, The Royal Society of Medicine

Steering Committees & Advisory Bodies
- 2011 – 2019   Board Member, Managed Services Network for Children and Young People with Cancer, NHS Scotland, also specialist advisor on Working Groups:
  - Operational Delivery – detailed oversight of neuro-oncology, palliative care, psychosocial care, pharmacy and Multidisciplinary Team organisation
  - MyStoryNow e-Passport App – pan-Scotland linkage of EHR, TRAK & scan data
  - Safety checklists – pan-Scotand linkage of TRAK data to improve patient safety and resource utilisation
  - Clinical Governance
- 2011 – 2014   External Assessor, eHealth Clinical Portal Benefits Realisation, NHS Scotland, South and East Boards.
- 2006 – 2011   Board Member, The Children and Teenagers Scottish Cancer Network, NHS Scotland Managed Clinical Network, also specialist advisor on Working Groups:
  - Multidisciplinary Team Communications
  - eHealth Strategy for Chemotherapy

Adjunct & Visiting Positions
- 2010 – 2020   Scientific Director, The Wallace-Kelsey Research Foundation
- 2017 – 2019   Visiting Professor, The Wolfson Fertility Centre at Hammersmith Hospital
- 2016 & 2020 Visiting Professor, Laboratory of Reproductive Biology, Copenhagen University Hospital
- 2015 – 2016   Visiting Professor, Faculty of Medicine, Imperial College, London
- 2012   Visiting Professor, Universidade de Lisboa, Portugal
- 2008 – 2010   Visiting Professor, La Universidad de la República, Montevideo, Uruguay

Smart Device Applications
In order to promote knowledge transfer of AI research results in health data science, I design, implement, validate and release apps for Apple iOS and Google Android devices.
- MyStoryNow – ePassport for survivors of childhood cancer, containing scans & treatment history. NHS Public Benefit and Privacy Panel for Health approval in March 2019; Community Health Index Advisory Group approval in Feb 2019; Android app to be released later in 2019
- ivfPredict – calculation of individualised chances of a live birth after an IVF cycle. iOS and Android app released in 2012
- MyGraine – recording and visualisation of migraine-related symptoms & events. Android release 2015
- MapMySmoke – recording and logging craving and smoking events during quit attempts. iOS and Android versions currently being validated in conjunction with NHS Fife.
- Forecast2 & Mini-AFTERc – recording and logging fears of recurrence of breast cancer. iOS and Android

versions being developed for validation in conjunction with NHS Lothian & NHS Tayside.
- o Freya – visualisation and logging of ultrasound and endocrine tests that inform users about ovarian reserve and age at menopause. iOS and Android versions in pre-validation development.

Career Development
Specialist methodology support for fellowships
- o MRC Experimental Challenges Fellowship – Ali Abbara of Imperial College London, project title "Individual Luteal-phase Support", funded Jan 2019
- o Senior Clinical Fellowship from the Chief Scientist Office – Rod Mitchell of the University of Edinburgh, project title "Protect, Preserve, Restore – Fertility Preservation in Prepubertal Boys with Cancer", funded Nov 2018

Invited Talks
- o Paediatric Visiting Club, North Berwick, September 2019
- o 11th Advanced Paediatric Oncology Course, Edinburgh, May 2019
- o Fear of reoccurrence of breast cancer smartphone apps demonstration, EPSRC Impact Festival, Glasgow, March 2019
- o Computing AI and Machine Learning Live expert panel member for the launch event on the future of artificial intelligence and machine learning, London, November 2018
- o EPSRC Impact Festival, Edinburgh, March 2018
- o NHS Scotland MSN CYPC Mortality & Morbidity Event, November 2017
- o 10th Advanced Paediatric Oncology Course, Edinburgh, May 2017
- o Scottish Smoking Cessation Conference, November 2016
- o Edinburgh Fertility Preservation, Edinburgh, June 2016
- o Keynote invited speaker at the 4th Biennial World Congress of the International Society for Fertility Preservation held in Shanghai, PRC in November 2015
- o 61st Annual Meeting of the Canadian Fertility and Andrology Society, Halifax, Nova Scotia, Canada in October 2015
- o 9th Advanced Paediatric Oncology Course, Edinburgh, May 2015
- o ADUP (App Data as a Utility for Public Health) Workshop, Glasgow, April 2015
- o ISFP meeting on "Freezing of oocytes, embryos and ovarian tissue: focus on fertility management and fertility preservation", held in Bruxelles, Belgium in January 2015
- o European Symposium On Late Complications After Childhood Cancer, September 2014
- o 8th Advanced Paediatric Oncology Course, Edinburgh, May 2013
- o International Symposium on Fertility preservation: from endometriosis to ovarian tissue cryopreservation, Bruxelles, September 2012
- o International Conference on Mathematical Modeling in Physical Sciences, Budapest, September 2012
- o Workshop on Constraint Based Methods for Bioinformatics, Budapest, September 2012
- o SICSA workshop on Biology and Computation, May 2012
- o 15th International Conference on the Development and Function of Reproductive Organs, Edinburgh, September 2011
- o Workshop on Eulerian and Lagrangian approaches towards quantitative prediction of premature labour, normal and dysfunctional full term labour, Edinburgh, August 2011
- o International Conference on Computational Science, Singapore, June 2011
- o 7th Advanced Paediatric Oncology Course, Edinburgh, May 2011
- o SICSA workshop on Systems Medicine, Dundee, May 2011
- o Workshop on Knowledge Engineering, Discovery and Dissemination, Hong Kong, September 2011
- o University of Aberystwyth, April 2010
- o University of Birmingham, December 2010
- o Institut Pasteur - Montevideo, February 2010
- o International Society for Computational Bioloby, Latin America meeting- Montevideo March 2010

- SBF/SBMN meeting on biological research image processing and visualisation in the context of modeling, Edinburgh, March 2009
- 36th Jornadas Agentinas de Informatica, Mar del Plata, Argentina, February 2008
- 11th International Conference on Principles and Practice of Constraint Programming, Sitges, Oct 2005
- 7th International Conference on Artificial Intelligence and Symbolic Computation, Linz, Sept 2004

Teaching

I support and practise the self-blended model of learning. In addition to traditional face-to-face lectures and tutorials, I provide online implementations of worked examples of the concepts, techniques and technologies being taught. This enables students to develop understanding and practical skills at their own pace, and in the setting of their choice. My aim is to augment traditional planned learning requiring physical colocation of students/tutees and lecturer/tutor, with less-structured learning that utilises internet and digital media technologies.

To this end, I have produced a suite of interactive web applications that enable students to visualise and experiment with important and complex concepts in datamining and knowledge discovery. The applications were designed for postgraduate students at St Andrews, but are also available to anyone with internet access. Examples include:
- tkelsey.shinyapps.io/shinyoverfit - interactive modelling of population data for an Italian city
- tkelsey.shinyapps.io/shinyctreetuning - tuning parameters for letter recognition data
- tkelsey.shinyapps.io/shinymodelselect - model selection for simulated data
- tkelsey.shinyapps.io/shinyregression - model evaluation for simulated data
- tkelsey.shinyapps.io/sensspec - accuracy & precision of model predictions

Undergraduate & PGT
- 2019 – 2020 Programme Co-director, MSc in Digital Health
- 2017 – 2018 Honours and MSci Coordinator, School of Computer Science
- 2015 – 2018 Programme Director, MSc in Data Intensive Analysis
- 2012 – 2017 Projects Coordinator, School of Computer Science
- 2012 – 2019 Module Developer, ID5059 Datamining & Knowledge Discovery
- 2018 Module Developer, CS5002 Programming Principles and Practice.
- 2010 – 2019 design and delivery of modules
  - Pre-honours: CS1005, CS1006, CS2001, CS2002, CS2003, CS2101
  - Honours: CS3302, CS3052, CS3302, CS4303, CS4052
  - MSc: CS5010, IS5101, CS5002, IS5102, ID5059
- 2010 – 2020 supervision of 93 single-student projects
  - 29 at CS4000-level
  - 40 at CS5000-level
  - 24 at IS5000-level

Postgraduate Research Supervision
- 4 current PhD students under supervision at St Andrews
- 7 PhD students previously supervised at St Andrews
- Co-supervision of a PhD with the Universitat Polytécnica de Valéncia, Spain

Postgraduate Examination
- 2012 External Examiner, University of Dundee, Computer Science, PhD
- 2011 – 2020 Internal Examiner, University of St Andrews, Computer Science, PhD
- 2011 – 2020 Exam convener, University of St Andrews, Computer Science, PhD
- 2008 External Examiner, Queen Mary University of London, Computer Science, MPhil

Internships

I have funded and supervised 18 paid summer internship projects, giving students experience of collective working to satisfy managers and clients, in addition to their work towards a good degree. The primary aim is providing education and training in mobile app design, development and deployment.

Publications

3 manuscripts currently in press:

- Editorial: Ovarian Ageing: Pathophysiology and Recent Development of Maintaining Ovarian Reserve; K Kawamara, T W Kelsey, O Hiraike; Frontiers in Endocrinology
- Model behaviour: how in silico simulations can improve tuberculosis treatment; M Pitcher, R Bowness, S Dobson, T W Kelsey, S Gillespie; The International Journal of Tuberculosis and Lung Disease
- Endocrine requirements for oocyte maturation following hCG, GnRH agonist and kisspeptin during in vitro fertilization (IVF) treatment; A Abbara et al.; Frontiers in Endocrinology

87 peer-reviewed publications − 16 as first author; 31 as second author; 14 as last author.

h-index: 34   •   i10-index: 68   •   Citations in 2020 to date: 536   •   Total citations: 6,347

C. Y. Andersen, T. Kelsey, L. S. Mamsen, and L. N. Vuong. Shortcomings of an unphysiological triggering of oocyte maturation using human chorionic gonadotropin. *Fertil. Steril.*, 114(2):200–208, Aug 2020.

Maria Phylactou, Ali Abbara, Maya Al-Memar, Pei Chia Eng, Alexander N Comninos, Chioma Izzi-Engbeaya, Sophie A Clarke, Edouard Mills, Rans Nadir, Mark Sykes, T Kelsey, and W Dhillo. Kisspeptin as a biomarker for pregnancy complications. *Journal of the Endocrine Society*, 4(Supplement_1):OR20–06, 2020.

A Abbara, S Clarke, R Brewster, A A Simonnard, P Eng, M Phylactou, D Papadopoulou, C Izzi-Engbeaya, A Sam, F Wernig, E Jonauskyte, A Comninos, K Meeran, T Kelsey, and W Dhillo. Pharmacodynamic response to anti-thyroid drugs in graves' hyperthyroidism. *Frontiers in Endocrinology*, 11:286, 2020.

W. Shi, T. Kelsey, and F. Sullivan. Efficient identification of patients eligible for clinical studies using case-based reasoning on Scottish Health Research register (SHARE). *BMC Med Inform Decis Mak*, 20 (1):70, 04 2020.

C. T. McHale, S. Cruickshank, C. Torrens, J. Armes, D. Fenlon, E. Banks, T. Kelsey, and G. M. Humphris. A controlled pilot trial of a nurse-led intervention (Mini-AFTERc) to manage fear of cancer recurrence in patients affected by breast cancer. *Pilot Feasibility Stud*, 6:60, 2020.

Andrea Rosales Sanabria, Thomas W. Kelsey, Simon Dobson, and Juan Ye. Representation learning for minority and subtle activities in a smart home environment. *J. Ambient Intell. Smart Environ.*, 11(6): 495–513, 2019a. doi: 10.3233/AIS-190541. URL https://doi.org/10.3233/AIS-190541.

Ali Abbara, Aaran Hitesh Patel, Tia Hunjan, Sophie Clarke, Germaine Chia, Pei Chia Eng, Maria Phylactou, Alexander Comninos, Stuart Lavery, Geoffrey Trew, Tom Kelsey, and Waljit Dhillo. FSH requirements for follicle growth during controlled ovarian stimulation. *Frontiers in Endocrinology*, 10:579, 2019a.

Ali Abbara, Pei Chia Eng, Maria Phylactou, Sophie A Clarke, Hunjan Tia, Rachel Roberts, Sunitha Vimalesvaran, George Christopoulous, Rumana Islam, Kate Purugganan, Tom Kelsey, and Waljit Dhillo. Anti-müllerian hormone (AMH) in the diagnosis of menstrual disturbance due to polycystic ovarian syndrome. *Frontiers in Endocrinology*, 10:656, 2019b.

Maria Phylactou, Ali Abbara, Maya Al-Memar, Pei Chia Eng, Alexander N Comninos, Chioma Izzi-Engbeaya, Sophie A Clarke, Edouard Mills, Rans Nadir, Mark Sykes, Tom Kelsey, and Waljit Dhillo. Kisspeptin

as a novel biomarker for pregnancy complications. In *Society for Endocrinology BES 2019*, volume 65. BioScientifica, 2019.

Mara van Beusekom, Josie Cameron, Carolyn Bedi, Elspeth Banks, Tom Kelsey, and Gerry Humphris. Development, acceptability and feasibility of a communication skills training package for therapeutic radiographers to reduce fear of recurrence development in breast cancer patients (FORECAST2). *Pilot and feasibility studies*, 4(1):148, 2018a.

Tom Kelsey, Chia-Ho Hua, and W. Hamish B. Wallace. The effect of radiotherapy on the human reproductive system. In Samuel Kim and Jacques Donnez, editors, *Fertility Preservation: Principles & Practice (in press)*, chapter 2. Cambridge University Press, 2nd edition, 2019.

Andrea Rosales Sanabria, Thomas W. Kelsey, and Juan Ye. Representation learning for minority and subtle activities in a smart home environment. In *2019 IEEE International Conference on Pervasive Computing and Communications, PerCom, Kyoto, Japan, March 11-15, 2019*, pages 1–7. IEEE, 2019b. doi: 10.1109/PERCOM.2019.8767417. URL https://doi.org/10.1109/PERCOM.2019.8767417.

A. L. F. van der Kooi, T. W. Kelsey, M. M. van den Heuvel-Eibrink, J. S. E. Laven, W. H. B. Wallace, and R. A. Anderson. Perinatal complications in female survivors of cancer: a systematic review and meta-analysis. *European Journal of Cancer*, 111:126–137, Apr 2019.

L. S. Mamsen, K. Charkiewicz, R. A. Anderson, E. E. Telfer, M. McLaughlin, T. W. Kelsey, S. G. Kristensen, D. A. Gook, E. Ernst, and C. Y. Andersen. Characterization of follicles in girls and young women with Turner syndrome who underwent ovarian tissue cryopreservation. *Fertility & Sterility*, Mar 2019.

T Hunjan, A Abbara, A Patel, S Clarke, G Chia, PC Eng, M Phylactou, A Cominos, S Lavery, G Trew, Tom Kelsey, and Waljit Dhillo. FSH requirements for follicle growth during controlled ovarian stimulation in ivf cycles. In *BJOG*, volume 126, pages 193–194. Wiley, 2019.

M. van Beusekom, J. Cameron, C. Bedi, E. Banks, T. W. Kelsey, and G. Humphris. Development, acceptability and feasibility of a communication skills training package for therapeutic radiographers to reduce fear of recurrence development in breast cancer patients (FORECAST2). *Pilot & Feasibility Studies*, 4:148, 2018b.

R. A. Anderson, D. H. Brewster, R. Wood, S. Nowell, C. Fischbacher, T. W. Kelsey, and W. H. B. Wallace. The impact of cancer on subsequent chance of pregnancy: a population-based analysis. *Human Reproduction*, 33(7):1281–1290, Jul 2018.

L. S. Mamsen, T. W. Kelsey, E. Ernst, K. T. Macklon, A. M. Lund, and C. Y. Andersen. Cryopreservation of ovarian tissue may be considered in young girls with galactosemia. *Journal of Assisted Reproduction & Genetics*, May 2018.

A. Abbara, L. N. Vuong, V. N. A. Ho, S. A. Clarke, L. Jeffers, A. N. Comninos, R. Salim, T. M. Ho, T. W. Kelsey, G. H. Trew, P. Humaidan, and W. S. Dhillo. Follicle Size on Day of Trigger Most Likely to Yield a Mature Oocyte. *Frontiers in Endocrinology*, 9:193, 2018a.

A. Abbara, R. Islam, S. A. Clarke, L. Jeffers, G. Christopoulos, A. N. Comninos, R. Salim, S. A. Lavery, T. N. L. Vuong, P. Humaidan, T. W. Kelsey, G. H. Trew, and W. S. Dhillo. Clinical parameters of ovarian hyperstimulation syndrome following different hormonal triggers of oocyte maturation in IVF treatment. *Clinical Endocrinology*, 88(6):920–927, Jun 2018b.

T. W. Kelsey, L. McConville, A. B. Edgar, A. I. Ungurianu, R. T. Mitchell, R. A. Anderson, and W. H. B. Wallace. Follicle Stimulating Hormone is an accurate predictor of azoospermia in childhood cancer survivors. *PLoS ONE*, 12(7):e0181377, 2017.

R. S. Schick, T. W. Kelsey, J. Marston, K. Samson, and G. W. Humphris. MapMySmoke: feasibility of a new quit cigarette smoking mobile phone application using integrated geo-positioning technology, and motivational messaging within a primary care setting. *Pilot & Feasibility Studies*, 4:19, 2018.

L. S. Mamsen, B. A. G. Jonsson, C. H. Lindh, R. H. Olesen, A. Larsen, E. Ernst, T. W. Kelsey, and C. Y. Andersen. Concentration of perfluorinated compounds and cotinine in human foetal organs, placenta, and maternal plasma. *Science of the Total Environment*, 596-597:97–105, Oct 2017.

M. McLaughlin, T. W. Kelsey, W. H. Wallace, R. A. Anderson, and E. E. Telfer. Non-growing follicle density is increased following adriamycin, bleomycin, vinblastine and dacarbazine (ABVD) chemotherapy in the adult human ovary. *Human Reproduction*, 32(1):165–174, 01 2017.

M. El Issaoui, V. Giorgione, L. S. Mamsen, C. Rechnitzer, N. Birkebaek, N. Clausen, T. W. Kelsey, and C. Y. Andersen. Effect of first line cancer treatment on the ovarian reserve and follicular density in girls under the age of 18 years. *Fertility & Sterility*, 106(7):1757–1762, Dec 2016.

C. Y. Andersen, R. Fischer, V. Giorgione, and T. W. Kelsey. Micro-dose hCG as luteal phase support without exogenous progesterone administration: mathematical modelling of the hCG concentration in circulation and initial clinical experience. *Journal of Assisted Reproduction & Genetics*, 33(10): 1311–1318, Oct 2016.

T. W. Kelsey, E. Ginbey, M. M. Chowdhury, L. E. Bath, R. A. Anderson, and W. H. Wallace. A Validated Normative Model for Human Uterine Volume from Birth to Age 40 Years. *PLoS ONE*, 11(6):e0157375, 2016a.

G. Humphris, J. Spyt, A. G. Herbison, and T. W. Kelsey. Adult Dental Anxiety: Recent Assessment Approaches and Psychological Management in a Dental Practice Setting. *Dental Update*, 43(4):388–389, May 2016.

K. A. Phillips, I. M. Collins, R. L. Milne, S. A. McLachlan, M. Friedlander, M. Hickey, C. Stern, J. L. Hopper, R. Fisher, G. Kannemeyer, S. Picken, C. D. Smith, T. W. Kelsey, and R. A. Anderson. Anti-Müllerian hormone serum concentrations of women with germline BRCA1 or BRCA2 mutations. *Human Reproduction*, 31(5):1126–1132, May 2016.

T. W. Kelsey, A. Miles, R. T. Mitchell, R. A. Anderson, and W. H. Wallace. A Normative Model of Serum Inhibin B in Young Males. *PLoS ONE*, 11(4):e0153843, 2016b.

S. Iliodromiti, J. Sassarini, T. W. Kelsey, R. S. Lindsay, N. Sattar, and S. M. Nelson. Accuracy of circulating adiponectin for predicting gestational diabetes: a systematic review and meta-analysis. *Diabetologia*, 59 (4):692–699, Apr 2016.

W. H. Wallace, T. W. Kelsey, and R. A. Anderson. Fertility preservation in pre-pubertal girls with cancer: the role of ovarian tissue cryopreservation. *Fertility & Sterility*, 105(1):6–12, Jan 2016.

M. McLaughlin, T. W. Kelsey, W. H. Wallace, R. A. Anderson, and E. E. Telfer. An externally validated age-related model of mean follicle density in the cortex of the human ovary. *Journal of Assisted Reproduction & Genetics*, 32(7):1089–1095, Jul 2015.

M. Depmann, M. J. Faddy, Y. T. van der Schouw, P. H. Peeters, S. L. Broer, T. W. Kelsey, S. M. Nelson, and F. J. Broekmans. The Relationship Between Variation in Size of the Primordial Follicle Pool and Age at Natural Menopause. *Journal of Clinical Endocrinology & Metabolism*, 100(6):E845–851, Jun 2015.

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