

Welcome

It is with the greatest pleasure that we welcome you to a day of science, nestled within its implications for life, celebrating the contributions of our friend and colleague Professor Martin H Johnson. Martin's seminal work on the very early embryo identified the emergence of two distinct cell lineages, one on the outside that is polarised and the other on the inside that is not. The outside cells will develop into the placenta and the inside cells will become the embryo proper¹. This work sits at the foundations of a field of reproduction and fertility that touches us all. The programme, entitled *Inside-Outside: Challenges and Prejudices* recognises an exemplary career pursuing activities that link basic science and communication at all levels, with our responsibilities to society as a whole. *Inside-Outside: Challenges and Prejudices* therefore also describes the promises and prejudices that have been, and continue to be faced, when science meets a society that is not ready to accept or understand it. Martin's tireless, creative, and usually successful, endeavours to forge new paths, facilitate understanding and build new bridges, have been the gifts of a visionary scholar, considerate teacher and very generous human being. In that spirit, we hope that today you will be educated, stimulated, challenged and have lots of fun.

The Organising Committee would also like to thank Peter Braude, Fiona Duncan, Gina Glover, Rhiannon Williams, and all of the generous sponsors of the event, as well as the conference coordinators Nicola Harris and Jill Rogers.

Professor Anne Ferguson-Smith and Professor Sarah Franklin

On behalf of the organising committee:

Professor Peter Braude, King's College, London

Professor Graham Burton, University of Cambridge

Professor Anne Ferguson-Smith, University of Cambridge

Professor Sarah Franklin, University of Cambridge

Professor Bill Harris, University of Cambridge

Professor Azim Surani, Gurdon Institute, Cambridge



Photo: Dr C Wong

Martin and Charles at the Royal Society on the day of Martin's induction into the Fellowship - July 11th 2014



Contents

	Page
Programme	4
Venue information	5
Reproductive challenges session Part 1	6-7
Reproductive challenges session Part 2	8-9
Development conundra session Part 1	10-11
Development conundra session Part 2	12-13
Open Public Lecture	14-15
Formal dinner	16-17
About Martin ...	18-19

Programme

Monday 21 September 2015		
08.30	Registration opens	
09.00-10.30	Session: Reproductive challenges (part 1) Chaired by: Professor Sarah Bray, Dr Nick Hopwood <i>'Proof and publicity in claims to human in vitro fertilization'</i> Poem: <i>'Inversnaid'</i> by Gerard Manley Hopkins. Read by Carl Spencer Professor Ashley Moffett <i>'Border control: biological mechanisms that define the territorial boundary between the mother and her fetus'</i>	Auditorium, The Yusuf Hamied Theatre
10.30	Refreshments	Function room
11.00-12.30	Session: Reproductive challenges (part 2) Chaired by: Professor Peter Braude Professor Emily Jackson <i>Bypassing regulation: DIY assisted conception and cross-border reproduction</i> Poem: <i>'Piano'</i> by DH Lawrence. Read by Mike Roberts Dr David-Emlyn Parfitt <i>'Decoding human fertility: zeroing in on the genetic markers of reproductive failure and success'</i>	Auditorium, The Yusuf Hamied Theatre
12.30	Lunch	The Dining Hall
13.30-15.00	Session: Development conundra (part 1) Chaired by: Professor Sarah Franklin Gina Glover <i>'A.R.T outside the frame'</i> Poem: <i>'Naming of parts'</i> by Henry Reed. Read by Michael Hastings Dr Andrew Sharkey <i>'No one is an island entire of itself....' Embryology and John Donne</i>	Auditorium, The Yusuf Hamied Theatre
15.00	Refreshments	Function room
15.30-17.00	Session: Development conundra (part 2) Chaired by: Professor Virginia E. Papaioannou Dr Evelyn Houlston <i>'Inside-out and upside-down: a jellyfish perspective on mammalian egg and embryo polarity'</i> Poem: <i>'Warning to children'</i> by Robert Graves. Read by Hester Goddard Professor Nancy Papalopulu <i>'Dynamics of gene expression lead to a new understanding of cell state transitions'</i>	Auditorium, The Yusuf Hamied Theatre
17.00	Drinks reception	Christ's lawn
18.00-19.00	Open Public Lecture Chaired by: Professor Anne Ferguson-Smith Professor Azim Surani <i>'Germline: The eternal link between all generations'</i>	Anatomy Building, Downing Site
19.30	Pre-dinner drinks	Christ's College
19.45	Formal dinner	The Dining Hall, Christ's College

Venue information

The venue

Christ's College is located in the historic city centre, within 15 minutes of Cambridge mainline station.

Internet access

Free wireless internet access is available throughout the site.

Where to eat

Lunch will be served in the dining hall for all conference participants.

The celebration dinner will also take place in The Hall for those participants who have pre-booked a place.

The College grounds

Whilst guests are most welcome to walk through the grounds of the College at all times, it is requested that you do not walk or sit on any of the lawn areas around the College grounds.

The College is a non-smoking site.

Taxis

There is a taxi rank outside the Porter's Lodge on St Andrews Street.

If you wish to pre-book a taxi we have two local taxi firms:

1. Panther taxis, Tel: +44 (0)1223 715715

Phone app: <http://www.panthertaxis.co.uk/index.php/mobile-booking-apps>

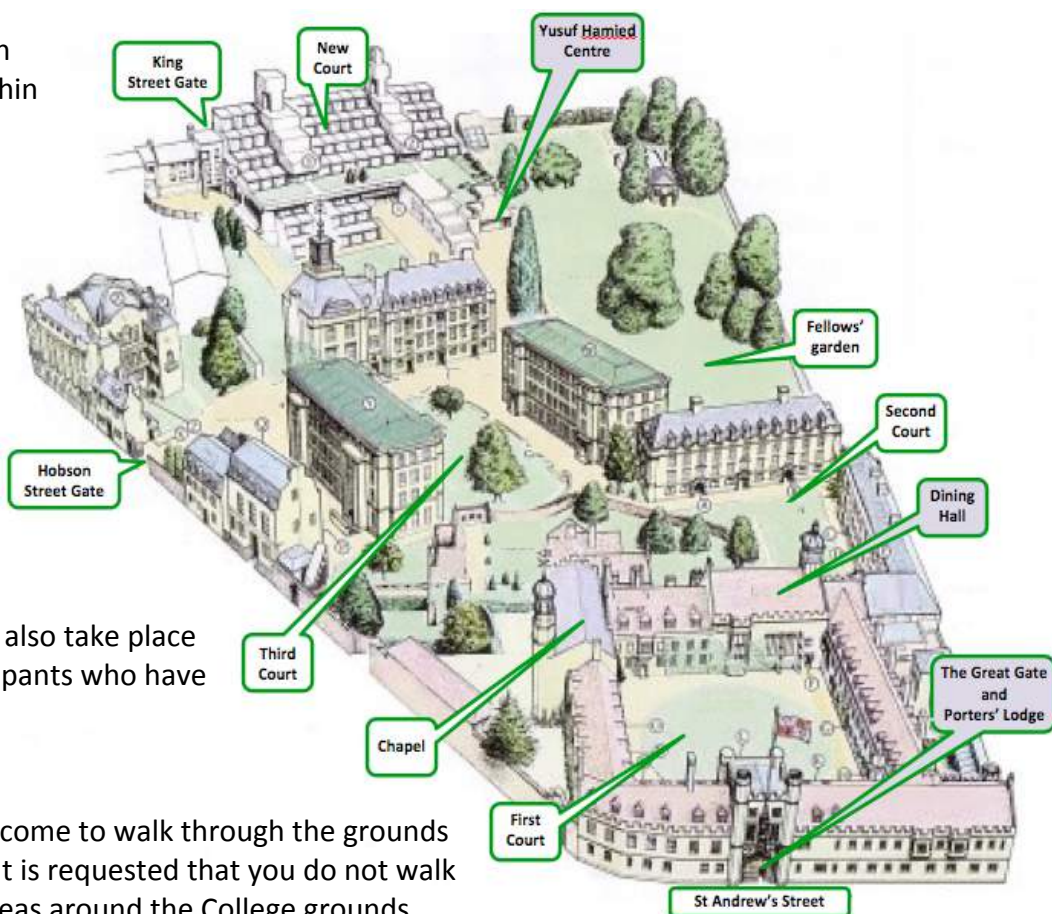
2. A1 Cabco Taxis, Tel: +44 (0)1223 313131

Phone app: <https://itunes.apple.com/gb/app/a1-cabco-taxis-cambridge/id456639147?mt=8>

Open Public Lecture

The Anatomy Building, Downing Street site at 18.00

Professor Azim Surani, Director of Germline and Epigenomics Research at the Gurdon Institute, University of Cambridge, UK will present the Open Public Lecture at 18.00 in the lecture theatre of the Anatomy Building on the University of Cambridge Downing Street site. It will take approximately 15 minutes to walk from Christ's College to the Anatomy Building and we will have printed maps available on the registration desk to show the walking route.



Reproductive challenges

Part 1

Session chaired by:

Sarah Bray

Professor of Developmental Biology, University of Cambridge

Sarah runs a research group at the University of Cambridge where she teaches medical students in the early stages of their training. Sarah is also co-director of a Wellcome Trust 4 year PhD programme that she helped to set up in 2000. Sarah's research focuses on understanding fundamental genetic mechanisms that allow our bodies to form correctly. Sarah's passion for science started when she was an undergraduate given the opportunity to work with inspiring people, and this led her to continue with a PhD after her first degree (when she met Martin Johnson who was her PhD examiner!). This was followed by a post-doctoral stint at Harvard, which cemented Sarah's motivations and taught her many new things, setting the foundations for her subsequent work in Cambridge. Sarah joined the then Anatomy department in 1991 and had two fantastic mentors, Martin Johnson and Rob White, who welcomed her into their domain and helped her get started on her independent career. Since then Sarah's research group has gone on to achieve international recognition and they continue to be excited about and fascinated by the mechanisms underlying cell-cell communication during development.



INVERSNAID

By Gerard Manley Hopkins

This darksome burn, horseback brown,
His rollrock highroad roaring down,
In coop and in comb the fleece of his foam
Flutes and low to the lake falls home.

A windpuff-bonnet of fáwn-fróth
Turns and twindles over the broth
Of a pool so pitchblack, féll-frówning,
It rounds and rounds Despair to drowning.

Degged with dew, dappled with dew
Are the groins of the braes that the brook treads through,
Wiry heathpacks, flitches of fern,
And the beadbony ash that sits over the burn.

What would be world be, once bereft
Of wet and of wildness? Let them be left,
O let them be left, wildness and wet;
Long live the weeds and the wilderness yet.

Reproductive challenges

Part 1

Nick Hopwood

Reader in History of Science and Medicine, Department of History and Philosophy of Science, University of Cambridge

'Proof and publicity in claims to human in vitro fertilization'

Nick runs the Wellcome Trust-funded 'Generation to Reproduction' programme that is reassessing the history of reproduction over the very long term. Nick trained in developmental biology, he is the author of *Embryos in Wax* (Whipple Museum, 2002) and *Haeckel's Embryos: Images, Evolution and Fraud* (Chicago, 2015), co-editor of *Models: The Third Dimension of Science* (2004) and co-curator of the online exhibition *Making Visible Embryos*

(www.hps.cam.ac.uk/visibleembryos). He is currently co-editing a book for CUP on *Reproduction: Antiquity to the Present*, writing a visual history of human embryos and working, with Martin Johnson and Sarah Franklin, on the history of IVF.



Ashley Moffett

Professor of Reproductive Immunology, Department of Pathology, University of Cambridge

'Border control: biological mechanisms that define the territorial boundary between the mother and her fetus'

After medical training at University of Cambridge and Middlesex Hospital, Ashley trained as a histopathologist, eventually running the Pathology service for the Rosie Maternity Hospital, Cambridge. Since 1990, she has worked as an immunologist in the Department of Pathology, University of Cambridge studying a unique population of immune cells present only in the uterine lining. Ashley's main interest is to understand how the mother's immune system in the uterus regulates placentation to ensure that both the demands of baby and the future health of mother are met. This balance goes wrong in major disorders of pregnancy such as pre-eclampsia, still-birth, recurrent miscarriage and poor fetal growth.



Reproductive challenges

Part 2

Session chaired by: Peter Braude
Emeritus Professor of Obstetrics and Gynaecology, King's College London

At King's, Peter was Head of the Department of Women's Health and directed the Centre for Preimplantation Genetic Diagnosis for the Guy's and St Thomas' NHS Foundation Trust. He has been involved in assisted reproduction and embryo research for nearly 40 years, first in Cambridge where he worked with Martin Johnson in the Anatomy Department and with whom he shared two MRC programme grants, and then in London where he became Head of Department at Guy's and St Thomas Hospital. He was a member of the HFEA (1999–2004), Chairman of the RCOG Scientific Advisory Committee (2004–2007), and also chaired the expert advisory committee on multiple birth after IVF, which produced the report *One Child at a Time*. More recently he was a member of the HFEA core panel that reviewed the scientific methods to avoid mitochondrial disease, and the Nuffield Council on Bioethics panel that considered the ethics of these emerging technologies. He was awarded an OBE in the 2015 New Year's Honours for Services to Reproductive Medicine.



PIANO

By D.H. Lawrence

Softly, in the dusk, a woman is singing to me;
Taking me back down the vista of years, till I see
A child sitting under the piano, in the boom of the tingling strings
And pressing the small, poised feet of a mother who smiles as she sings.

In spite of myself, the insidious mastery of song
Betrays me back, till the heart of me weeps to belong
To the old Sunday evenings at home, with winter outside
And hymns in the cosy parlour, the tinkling piano our guide.

So now it is vain for the singer to burst into clamour
With the great black piano appassionato. The glamour
Of childish days is upon me, my manhood is cast
Down in the flood of remembrance, I weep like a child for the past.

Reproductive challenges

Part 2

Emily Jackson

Professor and Head of Law, London School of Economics

‘Bypassing regulation: DIY assisted conception and cross-border reproduction’

Emily is a Professor of Law at the London School of Economics. She is a member of the BMA’s Medical Ethics Committee and the MRC’s Ethics and Public Involvement Committee. She was a member of the Human Fertilisation and Embryology Authority from 2003-2012, and its Deputy Chair from 2008-2012. Since 2013, she has been a Judicial Appointments Commissioner.



David-Emlyn Parfitt

Research Scientist, Celmatix, New York

‘Decoding human fertility: zeroing in on the genetic markers of reproductive failure and success’

After receiving his undergraduate degree in Veterinary Science from the University of Liverpool, Emlyn went on to do his PhD in Embryology at the University of Cambridge, in the laboratory of Magdalena Zernicka-Goetz. It was there that he met Martin Johnson, who became a close mentor. Martin encouraged him to explore the possibility of living further afield, and Emlyn went on to do his postdoctoral research at Columbia University in New York, where his research focused on defining the gene networks underlying embryonic development and stem cell biology. For the past two years he has been applying similar principals to investigate the genetics of human fertility at a Celmatix, a personalized medicine company based in New York.

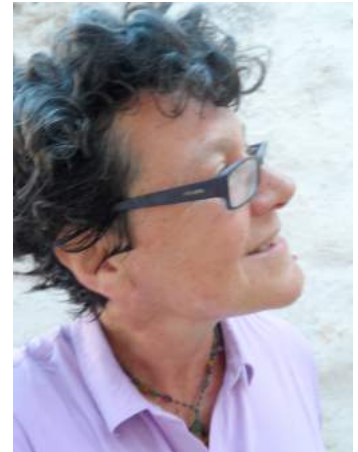


Development conundra

Part 1

Session chaired by: Sarah Franklin
Professorial Chair of Cambridge Sociology

Sarah is the Sociology Professor at the University of Cambridge where she directs the Reproductive Sociology Research Group (ReproSoc). She is a Wellcome Trust Senior Investigator and a Fellow of Christ's College. Sarah's research concerns the social and cultural dimensions of new reproductive technologies and her most recent book is *Biological Relatives: IVF, Stem Cells and the Future of Kinship* (Duke 2013).



NAMING OF PARTS

By Henry Reed

To-day we have naming of parts. Yesterday,
We had daily cleaning. And to-morrow morning,
We shall have what to do after firing. But to-day,
To-day we have naming of parts. Japonica
Glistens like coral in all of the neighboring gardens,
And to-day we have naming of parts.

This is the lower sling swivel. And this
Is the upper sling swivel, whose use you will see,
When you are given your slings. And this is the piling swivel,
Which in your case you have not got. The branches
Hold in the gardens their silent, eloquent gestures,
Which in our case we have not got.

This is the safety-catch, which is always released
With an easy flick of the thumb. And please do not let me
See anyone using his finger. You can do it quite easy
If you have any strength in your thumb. The blossoms
Are fragile and motionless, never letting anyone see
Any of them using their finger.

And this you can see is the bolt. The purpose of this
Is to open the breech, as you see. We can slide it
Rapidly backwards and forwards: we call this
Easing the spring. And rapidly backwards and forwards
The early bees are assaulting and fumbling the flowers:
They call it easing the Spring.

They call it easing the Spring: it is perfectly easy
If you have any strength in your thumb: like the bolt,
And the breech, and the cocking-piece, and the point of balance,
Which in our case we have not got; and the almond-blossom
Silent in all of the gardens and the bees going backwards and forwards,
For to-day we have naming of parts.

Development conundra

Part 1

Gina Glover

Photoartist and Co-founder of Photofusion Photography Centre

'A.R.T outside the frame'

Gina is a recipient of the Royal Photographic Society's Hood Medal, and twice winner of the Medical Research Council's Visions of Science Award. Her work ranges from playful explorations of the biomedical sciences, long term studies of way in which the landscape has been altered by human conflict, to social-psychological explorations of the landscape. Gina's biomedical studies are exhibited in around 20 hospitals, clinics and private collections in Britain and worldwide, including the Gregor Mendel Institute, Austria. Her latest book, *The Metabolic Landscape, Perception, Practice and the Energy Transition* is published by Black Dog Publishing.



Andrew Sharkey

Director of Studies in Pre-clinical Medicine and Associate Lecturer of Pathology, University of Cambridge

'No one is an island entire of itself....' Embryology and John Donne

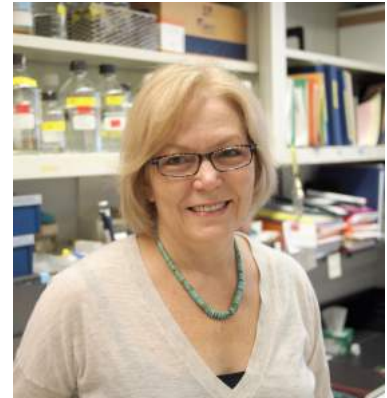
Andrew read Natural Sciences at Christ's College, where he was supervised by Martin Johnson, followed by a PhD at Edinburgh studying genetic variation in malaria. His interest in how genetic variation affects reproductive success began through work in Edinburgh in which he showed that many infertile men have microdeletions in the Y-chromosome. In 1998, Andrew established a research group based in Cambridge in the Department of Pathology to study mammalian implantation. Using transgenic mice, primate and human models, the group seeks to understand the molecular basis of endometrial receptivity and early implantation. A second major interest involves collaboration with Ashley Moffett, studying interactions between fetal trophoblast and maternal uterine NK cells during early pregnancy. The aim is to understand how the maternal immune system regulates placental development and how this is compromised in some pregnancies, leading to diseases such as pre-eclampsia.



Development conundra

Part 2

Session chaired by: Virginia E. Papaioannou
Professor of Genetics and Development, Columbia University
Medical Center, New York



Virginia (Ginny) did an undergraduate degree at the University of California, Davis, and a PhD in Genetics at the University of Cambridge. She did postdoctoral work in the Marshall Laboratory (where she met and became friends with Martin Johnson) and later at Oxford University working with Richard Gardner. She became Assistant Professor at Tufts University Schools of Medicine and Veterinary Medicine, Boston, Massachusetts in 1989 and developed a research program in early embryology in the Department of Pathology, making use of gene targeting technology to produce developmental mutations. In 1993 Ginny joined Columbia University in the City of New York as a Professor in the Department of Genetics and Development at Columbia University Medical Center. She has been the Director of Graduate Studies for the Training Program in Genetics and Development for the past 20 years. Her research has been continuously funded by NIH and she is currently the holder of an NIH MERIT award. Ginny has served as an editor of several journals including *Differentiation*, *Mechanisms of Development* and *Development*. Her research interests center on the T-box family of transcription factor genes and their roles in early development, embryonic stem cells, left/right asymmetry, somite formation and early organogenesis.

WARNING TO CHILDREN

By Robert Graves

Children, if you dare to think
Of the greatness, rareness, muchness
Fewness of this precious only
Endless world in which you say
You live, you think of things like this:
Blocks of slate enclosing dappled
Red and green, enclosing tawny
Yellow nets, enclosing white
And black acres of dominoes,
Where a neat brown paper parcel
Tempt you to untie the string.
In the parcel a small island,
On the island a large tree,
On the tree a husky fruit.
Strip the husk and pare the rind off:
In the kernel you will see
Blocks of slate enclosed by dappled
Red and green, enclosed by tawny
Yellow nets, enclosed by white
And black acres of dominoes,
Where the same brown paper parcel -
Children, leave the string alone!

For who dares undo the parcel
Finds himself at once inside it,
On the island, in the fruit,
Blocks of slate about his head,
Finds himself enclosed by dappled
Green and red, enclosed by yellow
Tawny nets, enclosed by black
And white acres of dominoes,
With the same brown paper parcel
Still untied upon his knee.
And, if he then should dare to think
Of the fewness, muchness, rareness,
Greatness of this endless only
Precious world in which he says
he lives - he then unties the string.

Development conundra

Part 2

Evelyn Houliston

Director of Research, Villefranche sur Mer Marine Station

‘Inside-out and upside-down: a jellyfish perspective on mammalian egg and embryo polarity’

Following undergraduate training at the University of Sussex, Evelyn completed her PhD in Martin Johnson’s group in Cambridge, working extensively with Bernard Maro on cytoskeletal organisation in preimplantation mouse embryos. As a post-doc she then spent three years with Rick Elinson in Toronto, dissecting microtubule based movements driving the amphibian egg cortical rotation, a classic developmental biology problem that she continued to address after moving on to France. Evelyn obtained a CNRS permanent research post at the Villefranche sur Mer Developmental Biology Laboratory (LBDV) in 1994. Initially within Christian Sardet’s group, she showed by parallel studies in the ctenophore *Beroë* and in *Xenopus* that localised intracellular cell cycle activation can influence embryo organisation. Evelyn became a group leader in 1996, and has been preoccupied since 2004 with developing a new laboratory model, the small jellyfish *Clytia hemisphaerica*, which has provided a fresh perspective on diverse biological questions in eggs, embryos and evolution. Since 2009 she has been Director of the Laboratoire de Biologie du Développement de Villefranche sur Mer Marine Station, France.



Nancy Papalopulu

Professor of Developmental Neuroscience, Faculty of Life Sciences, University of Manchester

‘Dynamics of gene expression lead to a new understanding of cell state transitions’

Nancy obtained her PhD at the National Institute for Medical Research, UK and was a post-doc at the Salk Institute for Biomedical Research, US. She was a Group Leader at the Gurdon Institute, Cambridge, from 1997 to 2006. In Manchester, she has served as Research Grouping Leader for Developmental Biology (2007-2011) and Section Head for Tissue Systems (2011-2014). She is a Wellcome Trust Senior Research Fellow, an elected member of EMBO and a Fellow of the Academy of Medical Sciences. Nancy is interested in understanding how cells make transitions between cell states such as differentiation, proliferation and quiescence. In neural progenitors single cell imaging with unstable reporters has revealed asynchronous pulsatile fluctuations in regulatory gene expression, which is masked by static measurements of population averages. Nancy’s group have discovered that a simple transcription factor/microRNA network (Hes1/miR-9) controls this pulsatile expression, drives cell state transitions and provides a mechanism by which cells may time their ‘exit’ from the progenitor state. Mathematical modeling predicts some beneficial properties of stochasticity in this network. They use *Xenopus tropicalis*, zebrafish and mouse cultured cells as model systems.



Open Public Lecture

The Open Public Lecture will take place in the lecture theatre of the Anatomy Building on the University of Cambridge Downing Street site at 18.00.

Session chaired by: Anne Ferguson-Smith

Professor of Genetics and Head of Department of Genetics, University of Cambridge

Anne is Professor of Genetics and Head of the Department of Genetics at the University of Cambridge. She received her PhD from the Department of Biology at Yale University and subsequently spent five happy years as a postdoc with Azim Surani from 1989-1994 where she learnt the wonders of genomic imprinting. She joined the Department of Anatomy in 1994 and from the start benefitted from the generous support, wisdom and mentorship of Martin Johnson. For the past two decades, her team has studied genomic imprinting in development and disease and the epigenetic control of genome function in a wider context. Her current research focuses on three themes: stem cells and the epigenetic programme, functional genomics and epigenomics and development, environment and disease. She is a Wellcome Trust Senior Investigator, elected member of EMBO and a Fellow of the UK Academy of Medical Sciences.



Open Public Lecture

Azim Surani PhD, CBE, FMedSci, FRS

**Director of Germline and Epigenomics Research at the Gurdon Institute,
University of Cambridge**



Azim, born in Kenya received his PhD in 1975 at Cambridge University under Professor Sir Robert Edwards FRS (Nobel Laureate, 2010). He joined the Babraham Institute in 1979, and discovered 'Genomic Imprinting' in 1984, and subsequently, novel imprinted genes and their functions, with contributions to the mechanisms through establishment and erasure of DNA methylation. In 1992, he joined the Wellcome Trust Cancer Research UK Gurdon Institute when he was elected as the Marshall-Walton Professor in the Department of Physiology, Development and Neuroscience, and subsequently, Director of Germline and Epigenomics Research at Cambridge University. More recently he has worked on the genetic basis of germ cell specification in mouse and human, on the derivation of germ cells from stem cells in vitro, and on the mechanism of epigenetic programming in early germ cells. He was elected a Fellow of the Royal Society in 1990, Fellow of the Academy of Medical Sciences in 2001. He is a member of EMBO and a Fellow of the Third World Academy of Sciences. He has received several awards including Royal Society's Gabor Medal (2002), and a Royal Medal (2010). He was awarded a Nehru Fellowship by the Indian Government, and the International Society of Stem Cell Research's McEwen Award for Innovation in 2014.

'Germline: the eternal link between all generations'

Germ cells are immortal as they alone can perpetuate the species. Sperm and eggs, the end products of germline generate a totipotent zygote. Primordial germ cells, the precursors of sperm and eggs, are established during early postimplantation development. Recent advances allow derivation of primordial germ cells (and potentially gametes) from pluripotent stem cells from embryos and skin cells in culture. These advances provide significant insights on the origin and the unique properties of mouse and human germline.

Germline transmits genetic and epigenetic information in the form of reversible tags associated with the DNA (DNA methylation). An egg contains all essential information for totipotency, and some organisms can develop to adulthood without any contribution from sperm; this however is not the case in mammals. Mammalian sperm and eggs are 'imprinted' with heritable memory tags (imprints) of their parental origin that persist into adulthood and they regulate expression of some key genes. For this reason, parthenogenetic development in mammals is not possible. These tags are erased and reset appropriately in the germline for each generation; faulty imprinting results in human diseases. Environmental factors might also potentially induce epigenetic changes, which could be transmitted to subsequent generations. Whether environmental factors, including diet and stress has such an effect on the body and behaviour transgenerationally is under intense investigation. Recent advances in genome editing methods could also be used to advance our knowledge of early human development, and potentially for the eradication of heritable disease related genetic mutations. Parliament recently approved the use of manipulations of human eggs for the eradication of the devastating mitochondrial diseases from afflicted families.

Formal dinner



Formal dinner

The Hall, Christ's College

19.45 - 23.00

The formal dinner will take place in the magnificent Hall at Christ's.

The Hall is one of the finest amongst the Cambridge Colleges and dates from 1857-1879.

The Hall boasts fine stained glass panels, making it a unique historic setting this special evening.

Menu

Wild mushrooms in a
cream and garlic sauce

*Touraine Sauvignon, 2012,
Domaine de Bruyeres*

Duck with cherry and port sauce

*Chateau Meaume, 2010,
Bordeaux*

Vegetarian option:
Aubergine and fig moussaka

Caramelised lemon tart with
blackcurrant coulis

Muscat de Beaumes de Venise, 2011

Coffee, selection of teas and mints

Christ's College Port

An after dinner speech will be given by Peter Braude, Emeritus Professor of Obstetrics and Gynaecology at King's College London.

About Martin ...



From: Catherine Twilley, Fellow, Developmental Director, Christ's College

Martin Johnson has been a member of Christ's College since 1963 when he came to the College as an undergraduate. He has had many roles, such as Tutor, Vice-Master and President, and in each of them he has demonstrated his care and warmth for the College and its people. He has been a particular champion of staff and students at Christ's and is remembered with great affection by generations of students. He currently acts as President of the Christ's College Medical Alumni Association, through which he seeks to bring together alumni in medical professions and students currently studying medicine.

From: Susan Golombok, Centre for Family Research

In March 2011, the Centre for Family Research hosted a reprise of the lecture that Martin delivered in honour of Bob Edwards' Nobel Prize in Stockholm in December 2010, entitled 'Bob Edwards: The early years'. At the Centre, we study the children and families created as a result of IVF, so it was a particular honour for us to host this lecture. And what better person could tell us the story of Bob's early years! The lecture provided an illuminating insight into Bob the scientist and Bob the man, and was much appreciated by all who were there including the Mayor of Cambridge, Bob and Martin's colleagues from Cambridge and beyond, researchers and students. Martin has been connected with the Centre for Family Research for many years. Martin Richards and I hugely value his intellectual and social contributions to our seminars and workshops and consider him to be a highly influential figure in our history.

About Martin ...

From: Bill Harris, Head of Department, Professor of Physiology, Development and Neuroscience

It is a pleasure and an honour to write about Martin's immense, indeed unique, contribution to the Department of Physiology, Development and Neuroscience. The long and fruitful association stretches back to 1964 when two of his first-year undergraduate subjects were anatomy and physiology. Along with Azim Surani, he was in the first cohort of Bob Edwards' graduate students, igniting an enduring interest in reproductive physiology.

I am personally grateful to Martin for acting as head of the Department of Anatomy for the first year of my time in Cambridge which allowed me valuable time to establish my research programme. Characteristically, Martin brought great energy and vision to the role, radically restructuring the support services and introducing major changes to teaching. He pulled off the difficult trick of effecting real change whilst taking people with him through the clarity of his exposition and his understanding of their concerns. For several years after Martin had stepped down as acting head of department, I turned to him for his wise and generous counsel. Superb administrator as he was, Martin's passions were always research and teaching.

Martin's distinction as a researcher is well documented in this celebration of his scientific work, so I will focus here for a moment on his contribution to teaching. He was, and still is, a wonderfully lucid and intellectually engaging lecturer, supporting scientific rigour with clear, elegant expression, and a sense of history. These qualities are very evident in *Essential Reproduction*, the deservedly popular textbook which he co-authored with Barry Everitt and which has run to seven editions.

Martin was also the primary architect of the highly regarded Part II Anatomy B course, Disease, Society and Sexuality. The course was incredibly innovative and risqué for this University, perhaps too much so, although it may have been the best course that many of our students ever had. We could no longer run this course in the new merged department, certain aspects of it have had long-lasting positive reverberations through all our teaching. Although we no longer teach this course, those in the department who taught the course, remember it with excitement and passion.

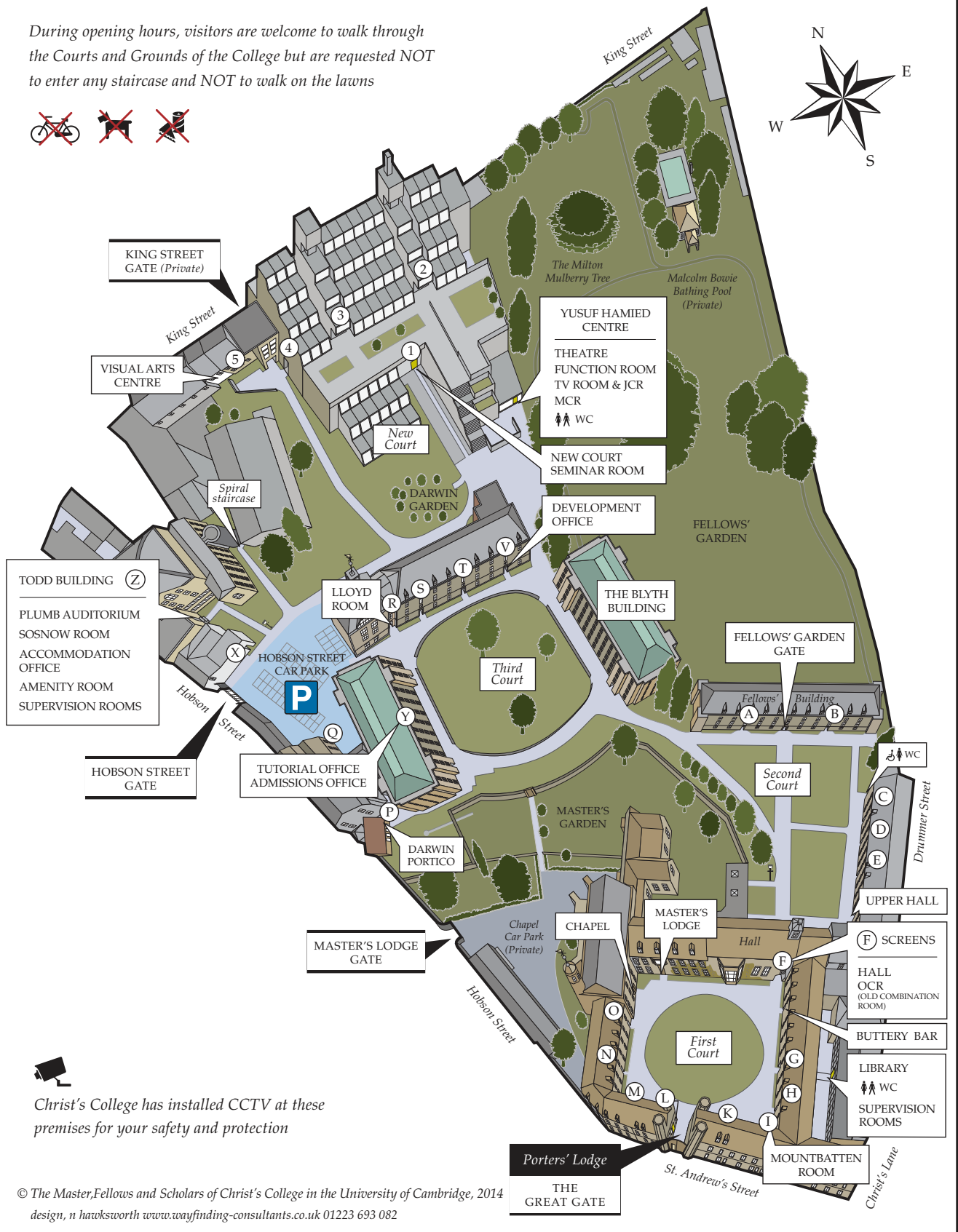
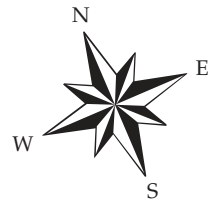


CHRIST'S COLLEGE

College Map

Christ's College
St Andrew's Street
Cambridge
CB2 3BU
Tel. 01223 334900

During opening hours, visitors are welcome to walk through the Courts and Grounds of the College but are requested NOT to enter any staircase and NOT to walk on the lawns



Christ's College has installed CCTV at these premises for your safety and protection

© The Master, Fellows and Scholars of Christ's College in the University of Cambridge, 2014
design, n hawksorth www.wayfinding-consultants.co.uk 01223 693 082