

# HSTM NETWORK IRELAND CONFERENCE 2018

FRIDAY	SATURDAY
<p><b>9:30-10:30 Registration</b></p> <p><b>10:30-11:00 Introduction</b></p> <p><b>11:00-12:00 First session (2 papers)</b></p> <ul style="list-style-type: none"> <li>- 1: From conception to infancy</li> </ul> <p><b>12:00-13:00 Lunch</b></p> <p><b>13:00-14:00 Second parallel sessions (4 papers)</b></p> <ul style="list-style-type: none"> <li>- 2A: Finding the patient</li> <li>- 2B: Religious engagement with evolution</li> </ul> <p><b>14:00-14:30 Tea Break</b></p> <p><b>14:30-15:30 Third parallel sessions (4 papers)</b></p> <ul style="list-style-type: none"> <li>- 3A: Science under the microscope</li> <li>- 3B: Medicine in Ireland.</li> </ul> <p><b>15:30-16:00 Tea Break</b></p> <p><b>16:00-17:00 Fourth parallel sessions (4 papers)</b></p> <ul style="list-style-type: none"> <li>- 4A: The popular reception of science</li> <li>- 4B: Medicine in Belfast</li> </ul> <p><b>17:15 - 18:15 Keynote</b></p> <p><b>18:45 - Conference dinner</b></p>	<p><b>9:30 - 11:00 Fifth parallel sessions (6 papers)</b></p> <ul style="list-style-type: none"> <li>- 5A: Science and fiction</li> <li>- 5B: Medicine and commercialism</li> </ul> <p><b>11:00 - 11:30 Tea break</b></p> <p><b>11:30 - 13:00 Sixth parallel sessions (6 papers)</b></p> <ul style="list-style-type: none"> <li>- 6A: Women in science</li> <li>- 6B: Heredity in the long 19<sup>th</sup> century</li> </ul> <p><b>13:00 - 14:00 Lunch</b></p> <p><b>14:00 - 15:00 Seventh parallel sessions (4 papers)</b></p> <ul style="list-style-type: none"> <li>- 7A: Biology and measurement</li> <li>- 7B: Science and commercialism</li> </ul> <p><b>15:00 – 15:30 Closing comments</b></p>

- Lunch and tea provided.
- Information on Conference dinner to follow separately.

# FRIDAY

REGISTRATION 9:30 – 10:30

INTRODUCTION 10:30-11:00

FIRST SET: PARALLEL SESSIONS 10:30 – 12:00

SESSION 4	P. 6	FROM CONCEPTION TO INFANCY
<b>Merav Amir</b>	QUB	<b>The Commercialization of Reproductive Technologies and the Biological Clock: How IVF Transformed Our Understanding of the Female Reproductive Body</b>
<b>Maria Björkman</b>	Uppsala University	<b>Defining, valuing, and negotiating fetuses and infants: examples from the Swedish thalidomide case</b>

LUNCH 12:00-13:00

SECOND SET: PARALLEL SESSIONS 13:00 – 14:00

SESSION 2A	P. 7	FINDING THE PATIENT
<b>Triona Waters</b>	University of Limerick	<b>Remedying the ‘growing evil’: The curable and incurable patients of the Limerick District Lunatic Asylum, 1827-1847.</b>
<b>Aisling Shalvey</b>	Universite de Strasbourg	<b>Recreating an ethical patient narrative through the use of pathology records in Strasbourg during Nazi occupation, 1941-1944</b>

SESSION 2B	P. 8	RELIGIOUS ENGAGEMENT WITH EVOLUTION
<b>Emma Swain</b>	QUB	<b>Humans, Animals, and Evolution in the late-Victorian Wesleyan-Methodist Magazine</b>
<b>Stuart Mathieson</b>	QUB	<b>‘Science, falsely so called’ – the extinction of the gentleman amateur, anti-Darwinism, and pseudoscience at the Victoria Institute, 1865-1903</b>

LUNCH 14:00-14:30

THIRD SET: PARALLEL SESSIONS 14:30 – 15:30

SESSION 3A	P. 9	SCIENCE UNDER THE MICROSCOPE
<b>Nicola Williams</b>	University of Leeds	<b>Whose Authority? Disciplinary Entanglements in Electron Microscopy and 1950s Plant Cellular Architecture</b>
<b>Dmitriy Myelnikov</b>	University of Manchester	<b>Soviet narratives of bacteriophage therapy in the early Cold War</b>
SESSION 3B	P. 10	MEDICINE IN IRELAND
<b>Niall Murray</b>	Independent	<b>Medical Irish revolutionaries – a Co Cork case study</b>
<b>Juliana Adelman</b>	DCU	<b>The Irish Dietary Survey and the rise of nutrition science, c. 1940-1950.</b>

TEA BREAK 15:30-16:00

FOURTH SET: PARALLEL SESSIONS 16:00 – 17:00

SESSION 4A	P. 11	THE POPULAR RECEPTION OF SCIENCE
<b>Rory Mahwhinney</b>	QUB	<b>“Nature’s Great Gala Performance” – The expeditions, receptions and mobilities of the 1927 eclipse</b>
<b>Diarmid Finnegan</b>	QUB	<b>Celebrity scientists and the lecture circuit in Gilded Age America</b>
SESSION 4B	P. 12	MEDICINE IN BELFAST
<b>Robyn Atcheson</b>	QUB	<b>Women and syphilis: institutional medical relief for venereal disease in Belfast, 1800–1851</b>
<b>Gillian Allmond</b>	QUB	<b>Purdysburn and Alt-Scherbitz: the German asylum in Belfast</b>

KEYNOTE 17:15 – 18:15

**NICK HOPWOOD**, on *“Why you expect embryos when you’re expecting.”*

CONFERENCE DINNER 18:45-LATE

# SATURDAY

## FIFTH SET: PARALLEL SESSIONS 9:30 – 11:00

SESSION 5A	P. 13-14	SCIENCE AND FICTION
<b>Amy Chambers</b>	Manchester Metropolitan University	<b>'Somewhere Between Science and Superstition': Religious Outrage, Horrific Science, and The Exorcist</b>
<b>Natasha Kennedy</b>	QUB	<b>"Memory, identity, and originality in the works of Samuel Butler"</b>
<b>Caroline Sumpter</b>	QUB	<b>Feminism, sympathy and the nineteenth-century eugenic utopia</b>
SESSION 5B	P. 15-16	MEDICINE AND COMMERCIALISM
<b>Lynda Payne</b>	University of Missouri-Kansas City	<b>"Shunned as a loathsome object": The invention and marketing of a mechanical bed for bedridden patients in the early nineteenth century</b>
<b>Patricia Marsh</b>	Independent	<b>'Fight the Deadly influenza': Established and commercial cures for influenza in Ireland during the 1918-19 pandemic</b>
<b>M.A. Katritzky</b>	The Open University, Milton Keynes	<b>Parasitic conjoined twins: some early modern case studies.</b>

TEA BREAK 11:00-11:30

SIXTH SET: PARALLEL SESSIONS 11:30 – 13:00

SESSION 6A	P. 16-17	WOMEN IN SCIENCE
<b>Kathleen Miller</b>	University of Toronto/QUB	<b>Women, Public Health and Print During the Great Plague of London in 1665</b>
<b>Lucy Havard</b>	UCL	<b>'Preserving practices in the early modern kitchen'.</b>
<b>Nuala Johnson</b>	QUB	<b>Illustrating Nature: Charlotte Wheeler-Cuffe and the Natural History of Colonial Burma.</b>

SESSION 6B	P. 18-19	HEREDITY IN THE LONG 19TH CENTURY
<b>David Ceccarelli</b>	University of Rome	<b>From Foetal Infection to Epigenetic Inheritance: the Case of Telegony</b>
<b>Max Meulendijks</b>	QUB	<b>Hungry Cells, Darwinian Struggles: Medical translations of Phagocytic theory into British evolutionary debates.</b>
<b>John Durnin</b>	UCL	<b>The Intemperate Brain: debates over habit and heredity in the 19th century</b>

LUNCH 13:00-14:00

SEVENTH SET: PARALLEL SESSIONS 14:00 – 15:00

SESSION 7A	P. 19-20	BIOLOGY AND MEASUREMENT
<b>Thomas Quick</b>	University of Manchester	<b>A "New Race" in the Making: Anthropometry, Genetics, and the Albino Dogs of University College London.</b>
<b>Matthew Holmes</b>	University of Cambridge	<b>Philosophies of Transformation: Demonstrating D'Arcy Thompson's Science of Form</b>

SESSION 7B	P. 20-21	SCIENCE AND COMMERCIALISM
<b>Sam Robinson</b>	University of York	<b>Anticipating Ocean Exploitation and the Law of the Sea (1968-84).</b>
<b>Jonathan Coopersmith</b>	Texas A&M University	<b>Like Flies to Honey: Fraud, Froth, and Investing in Emerging Technologies</b>

CLOSING COMMENTS 15:00-15:30

## LIST OF ABSTRACTS (IN ORDER OF CONFERENCE PROGRAMME)

**Merav Amir**                      QUB                      **The Commercialization of Reproductive Technologies and the Biological Clock: How IVF Transformed Our Understanding of the Female Reproductive Body**

**Abstract:** The field of reproductive medicine experienced fundamental transformations in the late 1970s with the successful development of the in-vitro fertilization (IVF) procedure. The greatest novelty of IVF did not only stem from the fact that conception took place in a Petri dish, but that IVF is not a method of treating infertility, but a technology for bypassing any deficiency which hinders conception. The development of IVF therefore disassociated the field of assisted reproductive technologies from infertility as a medical condition with a particular history and with demographic characteristics, and shifted the emphasis of medical intervention to the production of a pregnancy. Concurrently, the introduction of IVF raised considerable objections among the American religious right which was gaining significant political clout during this period. These objections forced the federal government to stop all funding to medical centers researching or offering IVF treatments, and propelled the commercialization of this field, as its technology became too politically controversial. This talk will track the social effects of this reconfiguration of the field of assisted reproductive technologies. It will claim that the age-related decrease in the fecundity of women was attributed with a financial value, since unlike other types of infertility, it was one of the primary causes of impregnation difficulties among the targeted clients of this emerging market. This new-found interest in the declining fertility of premenopausal women did not only change public perceptions of infertility, but also transformed the social regulation of women's reproductive bodies through the concept of the biological clock, both on the individual level, and in biopolitical apparatuses.

**Keywords:** Artificial reproductive technologies, IVF, infertility, gender, biological clock

**Maria Björkman**                      Uppsala University                      **Defining, valuing, and negotiating fetuses and infants: examples from the Swedish thalidomide case**

**Abstract:** The presentation analyzes the Swedish thalidomide case from three different perspectives: how fetuses and infants were defined, valued, and negotiated during the first years of the 1960s. It is inspired both by anthropological scholarship on notions of personhood, i.e. how the recognition of an individual as an accepted member of society, is negotiated through cultural, social, and political processes to create, or produce, personhood, and by the concept of biological citizenship. The latter acknowledges the influence of science, state practice, and medical technology on how an acceptable member of society is constructed. The backdrop is the Swedish welfare state with generous maternal and child support services, as well as eugenic attitudes. Three strands of the debate are examined. One strand tried to define the affected fetuses and infants. Were they even to be considered as human beings, or as something else? Was euthanasia, or "mercy-killing" an understandable solution? Another strand grasped with understanding the effects as well as the future life of the affected. What quality of life could they expect? A third strand argued that it was a national moral responsibility to provide care

QUB

and make sure that the affected were granted all prerequisites for a decent future. The account draws primarily on press material, which provides unique insights into the impromptu reactions and standpoints voiced in different strands of the debate.

**Keywords:** thalidomide, Sweden, personhood, biological citizenship, fetus.

**Triona Waters** University of Limerick **Remedying the 'growing evil': The curable and incurable patients of the Limerick District Lunatic Asylum, 1827-1847.**

**Abstract:** Giving a voice to patients within nineteenth century lunatic asylums is a feat that is considered near impossible within the scholarship of psychiatric history. Indeed, sources relaying personal opinion from those admitted are highly uncommon. However, the records of St. Joseph's Psychiatric Hospital, formally known as the Limerick District Lunatic Asylum, offer an insight into the psychiatric experience and outcome of those admitted into such an institution. The curable and incurable patients of this asylum were faced with the daily battle of maintaining their in-patient status, due to excessive levels of constant overcrowding. In order to 'apply some remedy to that daily growing evil of which this Board has long complained the increasing number of incurables,' the next of kin, friends, other custodial institutions as well as members of the Clergy were all called upon to take the onus of these people's outcome. By reconstructing this history, the voice of the patient, or rather lack of, is exhibited in terms of their admittance, treatment, discharge or continued incarceration. This paper will delineate the history of the Limerick asylum over the course of two decades concerning the struggles met in facilitating the insane, and will elaborate on how and why incarcerating the incurable idiot took precedence over the treatment of the curable lunatic.

**Keywords:** Medicine, Psychiatry, Lunatic, Asylum, Limerick.

**Aisling Shalvey** Universite de Strasbourg **Recreating an ethical patient narrative through the use of pathology records in Strasbourg during Nazi occupation, 1941-1944**

**Abstract:** Current research in medical history is driven to create patient centric analyses of primary source materials. In the absence of extensive patient records, other sources must be utilised to identify patient names and narratives. This research paper is based on primary source materials, focusing on the paediatric clinic in the university hospital of Strasbourg. This paper looks at the pathology records during the era of Nazi occupation in Alsace (1941 - 1944), and reconstructs information about the patient, their history, treatment, life, and death. The narrative of patient treatment, potential research undertaken with specimens, and the ethical basis of these records will also be analysed. This paper focuses on case studies to illustrate the narrative that can be constructed from doctors notes and autopsy records, highlighting the connections and collaborations within institutions and also with external clinics. Each one of these cases provides varying degrees of information, from those who were private patients for whom a large volume of records exists, to those who are used for research and student examination on dissection techniques. The cooperation with external and internal institutions within the hospital will be illustrated through these case studies, and will contribute to knowledge about how the hospital worked in the era. It will also show how detailed knowledge of a patient can be gathered from brief case histories. Finally, this research will briefly look into the ethical implications of pathology files and the use of patient specimens and data in historical perspective.

**Keywords:** Pathology, patient, medical research, methodology.

**Emma Swain**      QUB      **Humans, Animals, and Evolution in the late-Victorian Wesleyan-Methodist Magazine**

**Abstract:** This paper will reconsider the role of science in nineteenth century British Methodism by examining its official printed journal, *The Wesleyan-Methodist Magazine*. Complementing recent work which has moved away from a focus on elite spaces of knowledge, it will place the evolutionary science of late-Victorian Britain within the wider Wesleyan-Methodist tradition. Contributing to research highlighting the situated and social nature of science, it will examine how the magazine was a social space where scientific knowledge was produced, consumed, and circulated (Finnegan 2008). Emphasising the role of periodicals and their editors in shaping scientific meaning, it will examine how a network of Methodist ministers worked to actively construct accounts of science inoffensive to Christianity. In forming a different community of scientific interest, the magazine worked to mobilise science to serve the cultural and religious interests of British Methodism. Tracing the science contributions of a variety of Wesleyan ministers, including Rev. William Spiers and microbiologist William Henry Dallinger, this paper will consider their participation in debates surrounding human evolution. Concerned with the implications of evolutionary theory, Wesleyan contributors grappled with the concept of human uniqueness, and the physical similarities between humans and apes.

**Keywords:** Methodism, Evolution, Animals, Periodicals, Nineteenth Century.

**Stuart Mathieson**      QUB      **'Science, falsely so called' – the extinction of the gentleman amateur, anti-Darwinism, and pseudoscience at the Victoria Institute, 1865-1903**

**Abstract:** By the mid-nineteenth century, works by scientists such as Charles Lyell, Alfred Russel Wallace, and Charles Darwin had threatened traditional conceptions of the natural world, drawn heavily from scripture and from the natural theology of William Paley. Much attention has been paid to debates with the scientific community about evolution, human origins, and the age of the earth. Yet much of this has concentrated on the rapidly professionalising area of the natural sciences in academia. Debates within other fields, particularly those of well- educated amateurs, have received rather less attention. This paper attempts to remedy that situation, by examining the nineteenth century's leading anti-evolutionary organisation. Established in 1865, the Victoria Institute had as its prime objective the defence of 'the great truths revealed in Holy Scripture' from 'the opposition of science, falsely so called.' Bringing together professional scientists, clergymen, and gentlemen amateurs, the Victoria Institute aimed to investigate the latest developments in science from a religious perspective. Initially, this resulted in attempts to buttress religious belief against scientific discoveries; later, it developed into an opportunity for scientists of faith to discuss their beliefs with a sympathetic audience. Drawing on lectures delivered at the Victoria Institute, correspondence, and



proceedings, this paper charts the relationship between religious belief, anti-Darwinism, and pseudoscience in Victorian Britain and Ireland and offers a perspective on scientific developments from an underexplored viewpoint.

**Keywords:** science and religion, professionalisation, pseudoscience, epistemology.

<b>Nicola Williams</b>	University of Leeds	<b>Whose Authority? Disciplinary Entanglements in Electron Microscopy and 1950s Plant Cellular Architecture</b>
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**Abstract:** In the early 1950s at the Institution of Leeds, UK, two scientists working in plant cellular architecture were engaged in a power struggle over access to a brand-new electron microscope. At this time the Botany Department enjoyed an international reputation, cultivated by the separately operating laboratories of each party. Irene Manton, a classically trained botanist, helped source the Philips EM100 electron microscope and happened to be head of the department. Reginald D. Preston was a biophysicist operating within the department, who retained funding for research in connection with the new instrument, having already achieved success with electron microscopy. The ongoing problems over access were less about who got there first and more about the relative differences in disciplinary status. Hierarchical divisions at the cellular level, which could be expected to inspire the interest and composite skill set of each party, in turn mirrored the practical organisation of their respective scientific disciplines. The relationship was, and is, an ill-defined and often implicit one. While electron microscopes in the early 1950s could in theory achieve a resolution to the molecular level of detail, in actual biological practice, such aspirations were limited. So, what really separated Manton and Preston in terms of their work with the Philips EM100 electron microscope? This case study reveals that in the 1950s, divisions of social authority based on so-called disciplines were ill-founded. Yet in terms of social authority, scientific legitimacy and thus, ultimately, the funding needed to build scientific knowledge, the implications of these divisions were profound.

**Keywords:** Scientific Authority, Electron Microscope, Disciplines, Cytology, Biophysics.

<b>Dmitriy Myelnikov</b>	University of Manchester	<b>Soviet narratives of bacteriophage therapy in the early Cold War</b>
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**Abstract:** The term 'bacteriophage' (devourer of bacteria) was coined by Felix D'Herelle in 1917 to describe both the phenomenon of spontaneous destruction of bacterial cultures and an agent responsible, which D'Herelle believed to be a virus. Debates about the nature of bacteriophage raged in the 1920s and 30s, until the viral hypothesis was accepted with electron microscope evidence in the 1940s; there were also extensive attempts to use the phenomenon to fight infections. While it eventually became a crucial tool for molecular biology, therapeutic uses of 'phage' declined sharply in the West after World War II, but persisted in the Soviet Union, particularly Georgia. In this paper, I will focus on how researchers at the Tbilisi Institute of Microbiology, Epidemiology of Bacteriophage, a key centre for phage therapy, built narratives

around phage, its healing properties, and its liveliness, and recruited them in drug development as well as communication to medical professionals and patients. While viruses have been largely seen as barely living, phage narratives featured heroic animacy, conceiving of a specific agent in the destruction of bacteria and an ally to human immunity. Spanning the transition from wartime Ally collaboration to the isolationism of the early Cold War, and the growing dominance of Lysenkoism post-1948, these narratives helped navigate turbulent political waters, were key in promoting the efficacy of phage therapy, and ensured its survival in Soviet healthcare.

**Keywords:** bacteriophage therapy, Soviet medicine, microbiology, viruses, communication

**Niall Murray**

Independent

**Medical Irish revolutionaries – a Co Cork case study**

**Abstract:** The revolutionary classes who formed the nucleus of the IRA and Sinn Fein have been linked by many historians to the farming, labourer and artisan classes - but many medical students and graduates help to disrupt this narrative of the Irish revolution (1913-23). While names like Dr Kathleen Lynn and University College Dublin student Kevin Barry more immediately spring to mind, other less-known (and unknown) names who studied for and practiced medicine had roles of varying importance in revolutionary activities. This paper will examine some of those who engaged in military and political revolution in the Bandon and Macroom districts, two of Co Cork's deadliest areas in terms of revolutionary violence. The paper presents a case study of a relatively small and mainly rural area where failed, contemporary and graduated medical students were among those who acted as labour organisers, Irish Volunteers/IRA commanders, Cumann nam Ban scouts and messengers, and medics to the wounded and dying. Through some of their stories and experiences, it will pose new questions about class, motivation, influence and other themes which have not been widely probed by historiography of Irish revolutionaries.

**Keywords:** Revolution, Class, Women, Medical students, Rural.

**Juliana Adelman**

DCU

**The Irish Dietary Survey and the rise of nutrition science, c. 1940-1950'**

**Abstract:** This paper examines the scientific context of the Irish Dietary Survey, begun after the Second World War. The survey followed the example of other national programmes to study and combat perceived nutritional deficiencies and needs to be understood comparatively. The survey drew its methodology from the work of Scottish nutritional scientist and medical doctor John Boyd Orr and adopted the nutritional standards set by the League of Nations. However, the survey also reflected specific Irish concerns about nationhood, poverty and development. This paper suggests that Irish Dietary Survey can shed new light on how nutrition science was interpreted and adapted to suit local needs.

**Keywords:**

**Rory Mahwhinney**      QUB      **“Nature’s Great Gala Performance” – The expeditions, receptions and mobilities of the 1927 eclipse**

**Abstract:**

The total solar eclipse of June 1927 was the first to occur over mainland in Britain in over two hundred years. British astronomers made the most of the occasion, with astronomers both professional and amateur making plans to undertake expeditions to the path of the eclipse across north Wales and England to make observations. The eclipse was of national interest, with the excitement generated by travel companies and news outlets contributing to an unprecedented movement of people from across Great Britain on trains, buses and cars to areas where the spectacle could be seen. As well as the general public becoming more mobile, this period had also brought about changes in the mobilities of eclipse viewing for astronomers, as new methods of viewing including making observations from aeroplanes provided stunning new ways of seeing the eclipse. This paper will explore various aspects of the eclipse viewing in 1927. Using the expeditions on behalf of the Astronomer Royal Sir Frank Dyson and some smaller parties as a starting point, it will branch out to discuss the popular cultural reception to the eclipse through opinions published in periodicals including *The Saturday Review*. It will also analyse the mobilities of eclipse viewing by both astronomers and the general public, and how geography and astronomy were intertwined in the representations of the eclipse produced in publications for various institutions including the Royal Geographical Society and Royal Astronomical Society.

**Keywords:** Astronomical expeditions, mobilities, cultural reception, geography, astronomy.

**Diarmid Finnegan**      QUB      **Celebrity scientists and the lecture circuit in Gilded Age America**

**Abstract:** Lecture tours in late nineteenth-century America were a lucrative business. Visiting lecturers in particular attracted huge audiences, often generating large fees for the speaker. A number of British scientists capitalised on this and on their celebrity status by conducting widely praised speaking tours in the United States. These tours not only advanced careers and reputations but also shaped public opinion about the cultural importance of science. This paper draws from work on the American lectures John Tyndall, Thomas Henry Huxley, Alfred Russel Wallace and others to explore the personal and wider public significance of these often-explosive speech events. The tours took place in a period and national context in which scientific thought was emerging as a powerful but also fiercely contested cultural force. To better appreciate the role of public speech in driving and directing science’s rising public profile, the paper places the lectures within the elaborate infrastructure supporting platform culture, including the mediating role of sensationalist journalism and other new forms of print media.

**Keywords:** science lectures, Gilded Age America, platform culture, popularisation.

**Robyn Atcheson**      QUB      **Women and syphilis: institutional medical relief for venereal disease in Belfast, 1800–1851**

**Abstract:** In July 1843 the Board of Guardians of the Belfast workhouse requested that they be kept informed of every case of syphilis that entered the workhouse infirmary. The majority of patient names in medical reports to the Guardians were female and enquiries into the discipline of these women were regular. The emphasis on women with venereal disease was not confined to the workhouse and its associated infirmary and Union Hospital. Other medical institutions and charitable organisations in the town also dealt with syphilitic women, notably the General Hospital and the District Lunatic Asylum. This paper seeks to interrogate how these patients were viewed by those overseeing their treatment and care while also providing an analysis of the moral judgements that were inherent in how society viewed these women. Belfast offers a unique case study, an Irish town with strong British connections, burgeoning as an urban centre and dominated by a Presbyterian elite. The medical network of the town, due to close links with Scotland and the short-lived medical school equipped the physicians of Belfast with a wide range of opinion and debate. The records of the institutions and charities that came into contact with women with syphilis will be used to track how this distinct town dealt with this specific public health issue. This paper offers original research into an aspect of Belfast's history that is often overlooked, while also showing how and why Belfast can be used as a case study.

**Keywords:** syphilis, women, Belfast, institutions, morality.

**Gillian Allmond**

QUB

**Purdysburn and Alt-Scherbitz: the German asylum in Belfast**

**Abstract:** There is a persistent historiographical contention relating to the Asylum Age, which holds that it began with high hopes for the cure of large numbers of patients through the provision of therapeutic asylums. These hopes were, it is claimed, dashed by the ever-increasing accumulation of chronic, long-term patients which, by the end of the nineteenth century, saw the mentally ill shut away in what had become 'warehouses', intended simply to sequester society's unwanted. Such a narrative glosses over the complexity of medical and social responses to insanity at this period, and has been challenged on many levels. However, this presentation will focus on the material aspects of asylum life, taking as a case study, the early twentieth century asylum for Belfast, Purdysburn, an institution that was innovative at the period. Unlike English asylums at this time, Purdysburn was built on a 'colony' model, composed of segregated villas distributed around a large rural estate, in emulation of a village or suburban settlement. The inspiration for this asylum layout came from Germany, then at the forefront of research and treatment for the insane, and a particular asylum, Alt-Scherbitz near Leipzig. This presentation will explore the ways in which Purdysburn emulated the German model and the ways in which it differed from it, in order to highlight the concerns of asylum builders in the North of Ireland. It will be demonstrated, through buildings, furnishings, spaces and layouts, that a range of motivations can be attributed to those responsible for building Purdysburn, that go beyond simply 'warehousing the insane'.

**Keywords:** Asylum, Purdysburn, Alt-Scherbitz, colony, insanity

Amy Chambers Manchester Metropolitan University 'Somewhere Between Science and Superstition': Religious Outrage, Horrific Science, and The Exorcist

**Abstract:** Science and religion pervade the 1973 horror *The Exorcist* (1973) and the film exists, as the movie's tagline suggests, 'somewhere between science and superstition'. Recently released archival materials show the depth of research conducted by writer/director William Friedkin in his commitment to presenting and exploring emerging scientific procedures and accurate Catholic ritual. Where clinical and at times seemingly barbaric science fails, faith and ritual save the possessed child, Reagan MacNeil (Linda Blair) from her demons. *The Exorcist* created media frenzy in 1973 with increased reports in the popular press of demon possessions, audience members convulsing and vomiting at screenings, and apparent religious and specifically Catholic moral outrage. However, the official Catholic response to *The Exorcist* was not as reactionary as the press claimed. The United States Conference of Catholic Bishops' Office of Film and Broadcasting (USCCB-OFB) officially and publically condemned the film as being unsuitable for a wide audience, but reviews produced for the office by priests and lay-Catholics, and correspondence between the Vatican and the USCCB-OFB show that the church at least notionally interpreted it as a positive response to the power of faith. Warner Bros. Studios were however keen to promote stories of religious outrage to boost sales and news coverage – a marketing strategy that actively contradicted Friedkin's respectful and collaborative approach to working with both religious communities and medical professionals. Reports of Catholic outrage were a means of promoting *The Exorcist* rather an accurate reflection of the Catholic Church's nuanced response to the film and its scientific and religious content.

**Keywords:** science, US Catholic Church, medical procedure, William Friedkin, moral outrage, film history, science communication

Natasha Kennedy QUB "Memory, identity, and originality in the works of Samuel Butler"

**Abstract:** This paper will examine the intersection of literature and memory sciences in the nineteenth century by exploring the confictions that occur between philosophical and biological conceptualisations of memory. To exemplify this, I will use Samuel Butler's dystopian novel *Erewhon* (1872). Butler's understanding of 'memory' shifts from the first edition of *Erewhon* in 1872 to its revised 1901 publication, producing a contradictory text. Butler was an avid follower of the 'organic memory' movement that gained momentum in the mid to late nineteenth century. His texts *Life and Habit* (1878) and *Unconscious Memory* (1880) proposed that memory-substance was contained in the ovum, and theorised that habits were accumulated and passed down through successive generations, eventually becoming an 'unconscious' action, or memory. Previous critical engagements with Butler's work have argued for his scientific influences but have neglected his early lack of interest in science. Evidence shows that Butler's knowledge of scientific literature was scarce when writing the 1872 edition. As a result, this first edition's conceptualisations of personal identity and memory are rooted in metaphysical seventeenth- and eighteenth-century conceptions of selfhood. This paper will therefore argue that Butler is a less systemic thinker than previously thought, and his 1901 edition still bears the marks of his earlier philosophical and theological conceptions of memory. By illustrating a less systemic Butler than has formerly been portrayed, I question whether Butler's contribution to the 'organic memory' canon is an original hypothesis, and whether the paradoxes evident in his work are intentional to stimulate further debate.

**Keywords:** Memory, Nineteenth-century, Samuel Butler, Psychology, Dystopia.

**Caroline Sumpter**

QUB

**Feminism, sympathy and the nineteenth-century eugenic utopia**

**Abstract:** How was sympathy employed in debates over women’s social and reproductive rights at the *fin de siècle*? This paper explores the utilization of scientific debates around sympathy by first wave feminists, and foregrounds its complex relationship with feminist eugenics. In the utopia imagined by Jane Hume Clapperton, *Margaret Dunmore; or, a Socialist Home* (1888) and in her sociological work *Scientific Meliorism and the Evolution of Happiness* (1885) moral elitism takes what now seems a deeply dystopian turn. Here, the ‘transitional’ stage towards feminism allows the supposedly morally advanced to claim the right to control the reproductive destiny of those deemed less physically and emotionally fit. From the 1889 anti-suffrage petition, and its concerns over the vote as a threat to female ‘disinterestedness and sympathy’, to feminist perceptions that the widening of sympathetic impulses was the harbinger of gender equality in the future, I examine eugenic feminists' troubled relationship with the concept of feeling with and for others.

**Keywords:** eugenics, sympathy, evolution, reproduction, utopia.

**Lynda Payne**

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**“Shunned as a loathsome object”: The invention and marketing of a mechanical bed for bedridden patients in the early nineteenth century**

**Abstract:** In 1808 the well-known London surgeon, Sir James Earle, appended “An Account of a Contrivance to Administer Cleanliness and Comfort to the Bed-Ridden or persons confined to bed by Age, Accident, Sickness, or any other Infirmity” to an essay on treating patients with multiple fractures. Using diagrams, Earle explained how it consisted of an upper bed that could be raised and a lower bed, which was stationary. This made it much easier to change bedding and insert bedpans. The Earles financed construction of the beds and successfully promoted their use in hospitals, workhouses, and insane asylums in Europe and America. This paper analyzes what the invention and marketing of what came to be known as the “Earle Bed” tells us of the experiences of those who were confined to their beds and frequently “shunned as a loathsome object” in early nineteenth-century England. Being bedridden was a physical, sensual, emotional, and economic state that many would have experienced at some point in their lives, due to illness, accidents, violence, insanity and old age. This is a subject that has not been studied in any detail save for works on the concept of voluntary invalidism among Victorian women. Analyzing the rationale behind the invention and success of a contrivance to aid the bedridden, offers glimpses of the physical and mental worlds of the many who were forced, rather than chose, to take to their beds.

**Keywords:** Patients, Bedridden, Invention, Poverty, Surgeons.

Patricia Marsh Independent

**'Fight the Deadly influenza': Established and commercial cures for influenza in Ireland during the 1918-19 pandemic**

**Abstract:** The 1918-19 Influenza pandemic may have been responsible for fifty million deaths worldwide. Unsurprisingly, as the real cause of influenza was unknown at the time and as there is still no known cure for the disease, there was little consensus among the Irish medical profession on the best treatment for, or, prevention against the disease. However, this did not prevent a myriad of preventions and influenza cures being suggested. Irish people, like those elsewhere had to resort to over-the-counter remedies to help treat the disease. Consequently a vast assortment of products and patent medicines were advertised in Irish newspapers, which claimed to have curative or preventative powers against influenza. The paper will discuss recommended treatments for influenza along with the debate among Irish physicians on the use of vaccines or alcohol to prevent or treat the disease. It will illustrate that in Ireland, as elsewhere, the medical profession were found wanting during this pandemic, which resulted in a large number of varied products that claimed to prevent or cure the disease. It will show how manufacturers exploited public fears by making tenuous links between their products and influenza and conclude that the lack of medical consensus on treatment of influenza in Ireland forced the public to resort to other measures to help combat the disease.

**Keywords:** Pandemic, Cures, Spanish Influenza, Vaccines, Treatments.

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**Parasitic conjoined twins: some early modern case studies.**

**Abstract:** During the early modern period, intensive scrutiny was directed at anatomically non-typical humans, in particular live **conjoined twins**. Exceptionally for pre-modern conjoined twins, the sub-category now known as human parasitic conjoined twins then survived beyond the first year of life in significant numbers. This paper overviews some dozen pairs of parasitic conjoined twins who earned their living as itinerant performers between the 16<sup>th</sup> and 18<sup>th</sup> centuries. They range from Jacques Floquet, a Spanish boy at the early 16th century Papal court, through Shackshoon, a non-European imported for show at the royal court of King James II by the voyager Sir Thomas Grantham, to the Italian Antonio Martinelli, who toured 18th century Europe with his wife and performing children and, despite hiding his parasitic twin during public performances, was examined, described, even depicted, by physicians of several nations. Their target audiences were elite royalty, nobility and religious leaders at the courts of England and Europe, as well as public fairground spectators, but also medical students and qualified physicians. Most offered the option of private physical examinations, for the payment of a substantial premium. Extensive and invasive examinations of live twins by early modern healthcare professionals and others, recorded in numerous brief allusions and several detailed accounts, provide insights into their shared skin, blood and urine.

**Keywords:** early modern, renaissance, parasitic conjoined twins.

Kathleen Miller

University of  
Toronto/QUB**Women, Public Health and Print During the Great  
Plague of London in 1665**

**Abstract:** *London's Dreadful Visitation, or, A Collection of all the Bills of Mortality for this Present Year* (1665), a collection of the bills of mortality published weekly by the Company of Parish Clerks during the Great Plague of London in 1665, is prefaced by a letter describing the printer's reasoning for bringing the set of bills to a reading audience, to "render a faithfull Account, why I undertook this Publication". Publishing the collection is an act of posterity, the printer explains, allowing each reader to "search out the PLAGUE of his own HEART and BRAIN, and PURGE OUR SELVES". The printer, identified on the cover of the text as E. Cotes, was Eleanor Cotes, the official printer for the Company of Parish Clerks in 1665. In this paper, I examine the numerous places in which gender emerged in the process of collecting and printing the bills of mortality in 1665, recovering female agency where it is often obscured at first glance. From the searchers' medical authority over establishing the cause of death of plague victims to critiques and defences of the searchers' role to the publication of their findings, women were essential to the official management and communication of public health measures in plague-ridden 1665 London. This paper addresses a range of texts that demonstrate, comment upon, or critique the female role in officially managing pestilence, including the plague orders, John Graunt's *Natural and Political Observations* (1662; reprinted in 1665), John Bell's *Londons Remembrancer* (1665) and Eleanor Cotes' letter preceding *London's Dreadful Visitation*.

**Keywords:** Bills of mortality, Print culture, Gender , Great Plague of London, 1665, Eleanor Cotes.

Lucy Havard

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**'Preserving practices in the early modern kitchen'**

**Abstract:** Early modern receipt books have become increasingly popular sources for historical research over recent years. Eclectic compilations of food recipes, medicinal remedies and household tips, these manuscripts provide rich, multi-faceted opportunities for historical study and discussion. Furthermore, the descriptive rather than prescriptive nature of these sources suggests that they provide us with a more realistic impression of what really went on in the early modern household. Building on the work of Elaine Leong, this paper explores women's culinary activities in the seventeenth-century domestic sphere, and how they can be interpreted as forms of 'experiment' in their own right. Focusing on the practice of preserving various foods in the home – an essential task to ensure adequate supplies over the long winter months – I will consider the testing and editing of recipes, and the concept of proof with reference to the various 'efficacy claims' that feature in receipt books. This paper also examines seventeenth-century receipt books as sources representative of domestic knowledge-making. Not only are these manuscripts instructive in terms of the advice offered in their pages, but they also give some sense of the assumed level of domestic knowledge in the early modern period. By restaging various seventeenth-century recipes, I consider what steps or instructions in recipes remain unwritten because such details were considered commonly known. As a result of this research, might we need to recalibrate our view of what comprised early modern 'science'?



**Keywords:** domestic, cooking, receipt books, early modern kitchen, household 'science'.

Nuala Johnson

QUB

### **Illustrating Nature: Charlotte Wheeler-Cuffe and the Natural History of Colonial Burma.**

**Abstract:** Natural history was one of the areas of late nineteenth-century science where women could make some significant contributions, albeit through informal and unofficial avenues. In particular, in the fields of plant illustration and plant collecting women formed part of an invisible army of knowledge producers, often working outside the recognised channels of the emerging discipline of botany. Isla Forsyth has claimed that “The where of scientific practice at times was liberating, the colonies in particular affording women space for practicing science”. For Charlotte Wheeler-Cuffe colonial Burma did appear to provide her with the freedom to explore, collect, travel and illustrate the natural history of the region. But as Felix Driver has observed representations of scientific exploration often continue to “privilege the actions of heroic individuals... [and] tends to be dominated by the actions of European and American men, venturing forth on incredible journeys”. In this paper I will enumerate some of the ways in which Wheeler-Cuffe transgressed familiar gender categories during her time as a servant of empire in late nineteenth and early twentieth-century Burma. How she negotiated her position as the wife of an imperial official and also developed as an enthusiastic and talented amateur illustrator, traveller and plant-collector, in ways that both accommodated and challenged the gendered understandings of empire, will be explored.

**Keywords:** Botany, Illustrators, Charlotte Wheeler-Cuffe, Burma, Empire

David Ceccarelli University of Rome

### **From Foetal Infection to Epigenetic Inheritance: the Case of Telegony**

**Abstract:** Telegony, i.e. the idea that the characteristics of previous mates can influence the hereditary constitution of the female parent, represented a distinguishing issue in nineteenth-century biology. Since Lord Morton’s observations on the crossbreed between a mare and a quagga stallion, examples of “foetal infections” became part of veterinary studies, being afterwards reframed in the later debates on inheritance and evolution. Though the rise of Mendelian genetics challenged its theoretical basis, discussions of telegony had taken on a specific meaning for evolutionists between the 1880s and the 1890s. The present proposal aims at analysing how neo-Lamarckian evolutionists addressed telegony as a key argument for epigenetic inheritance against August Weismann’s doctrine of the separation of germplasm from the somatoplasm. In particular, I will explore the role that the so-called American School of neo-Lamarckism played in reifying such a concept. Furthermore, I will discuss how the use of telegony to substantiate theories about inheritance gave United States a remarkable role in the international debate, especially as far as humantelegony was concerned.

**Keywords:** telegony, evolution, inheritance, neo-Darwinism, neo-Lamarckism.

Max Meulendijks

QUB

### **Hungry Cells, Darwinian Struggles: Medical translations of Phagocytic theory into British evolutionary debates.**

**Abstract:** In the early 1880s, Elie Metchnikoff claimed to have synthesised the findings of Pasteur, Virchow and Darwin through his ‘cellular’ theory of immunity. Supported by the Pasteur Institute, he compiled observations on unicellular and multicellular animals, and argued that phagocytes, or ‘devouring cells’, could be traced along evolutionary history as the main weapon of organisms against disease. In the 1890s, this would face increased resistance from the German ‘humoral’ school supported by Robert Koch, which argued that chemical properties of the blood were crucial in fighting disease. This paper argues that its connection to Darwinism made the phagocytic theory popular in Britain in the early 1890s. However, whilst Metchnikoff’s reliance on Darwinian theory has been well observed, it should be noted that he was supportive of Lamarckian theories of the inheritance of acquired characters as well. With the growing fault line between neo-Darwinians and Lamarckians in 1890s Britain, medical professionals began to reinterpret the theory to fit this new ideological landscape, and provide support for the side of their choice. Two prominent medical professionals are used as case studies to show how phagocytic theory was adapted to the British context. Firstly, John George Adami, a Cambridge graduate who had worked with Metchnikoff, and became Professor of Pathology at McGill University, Montreal. Secondly, John McFadyean, an Edinburgh veterinarian and Professor of Pathology, whose *Journal of Comparative Pathology and Therapeutics* was salient among his profession. This aims to show the use of evolutionary debates in medical professionalization.

**Keywords:** Immunity, neo-Darwinism, neo-Lamarckism, Bacteriology, Geography.

John Durnin

UCL

### **The Intemperate Brain: debates over habit and heredity in the 19<sup>th</sup> century**

**Abstract:** What effect, if any, does alcohol have upon the nervous system? As the temperance movement gained popularity and political influence in the 19th century, the potential influence of intemperate habits on human heredity became a pressing topic for concern in both the medical and the religious press. The shared anxieties of medical and religious institutions led to an abundance of Christian phrenological pamphlets and treatises that attempted to unite the religious and phrenological views on the dangers of intoxication. Often overlooked by both historians of phrenology and historians of the temperance movement, the ‘Christian phrenologists’ (as David de Giustino called them) worked to compile medical cases and testimonies that linked the consumption of alcohol to mental degeneration. In this paper, I argue that by examining the significance of phrenological thought to the temperance movement, we can better understand how ideas of the transmission of illnesses and vices from parent to offspring were diffused in the 19th century to the reading public. Drawing on John van Wyhe’s characterisation of phrenology as a popular medium through which scientific naturalism gained prominence, I show that the temperance movement provided a site of discourse that communicated not only the dangers of alcohol, but also theories of

reproduction, heredity, and the transmission of acquired traits. As such, the temperance movement prioritised some understandings of the laws of heredity while overlooking or downplaying others.

**Keywords:** Heredity, popular science, phrenology, temperance movement, alcoholism.

**Thomas Quick**

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**A “New Race” in the Making: Anthropometry, Genetics,  
and the Albino Dogs of University College London.**

**Abstract:** How and why did animal breeding gain epistemic primacy in discussions relating to the nature of human biological difference? Historians have identified the early twentieth century as a time of increasing scientific scepticism regarding the claims of physical anthropology. This paper complicates this narrative via an examination of the enrolment of dogs within scientific discussions of race at this time. It examines how the British biometrician Karl Pearson and his collaborators Edward Nettleship and Charles H. Usher used an established Chinese breed to produce a population of albino dogs between 1908 and 1928. In detailing the ways in which these scientists applied anthropometric techniques and medical hereditarian ideas to establish and cultivate this ‘new race’, it demonstrates that early genetic experimentation was more closely related to nineteenth-century anthropology than has hitherto been recognised. The dogs of University College London were made to simultaneously stand in for harder-to-manipulate Chinese humans and promote a specific set of ideals regarding the overall biological control of Britain’s (official and unofficial) empire. They thereby point to the emergence of new approaches to the establishment of racial claims. Whereas nineteenth-century race science focused almost exclusively on the study of human bodies and human-made objects, twentieth-century genetics enrolled non-human animals as experimental proxies for the evaluation of human biological difference. Animal experiments were valued because they allowed race scientists to reconcile disparate nineteenth-century concepts relating to blood, inheritance, and breeding.

**Keywords:** Race, Empire, Anthropology, Genetics, Animality.

**Matthew Holmes**

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Cambridge

**Philosophies of Transformation: Demonstrating  
D’Arcy Thompson’s Science of Form**

**Abstract:** D’Arcy Wentworth Thompson’s ‘Science of Form’ – the explanation of biological development and morphology through physical forces and mathematical laws – has long been viewed as an idiosyncratic, even heretical, episode in the history of evolutionary biology. Recent scholarship has sought to overturn this view, demonstrating that Thompson was not an isolated figure, but part of a network of like-minded “romantic” biologists across Europe and North America. This paper argues that a key influence upon Thompson’s seminal work, *On Growth and Form* (1917), may be far more practical, and lie closer to home, than previously realised: experimental demonstrations of basic concepts in physics. Thompson claimed that forces such as surface tension

dictated the shape and function of organisms. Louis Compton Miall, Professor of Biology at the University of Leeds, also linked surface tension to morphology. In a 1982 lecture, Miall explained how his views were shaped by textbook physics experiments: from Van de Mensbrugghe's float to Plateau's oil globules. Fifteen years later, these examples were also cited in *On Growth and Form*. Harnessing correspondence between Thompson, Miall, and like-minded physicists, this paper will explore the influence of experimental demonstrations on Thompson's *Science of Form*. These exchanges not only indicate extensive crosstalk between early-twentieth century physics and biology, but suggest that Scottish physicist James Maxwell may have left a formerly unappreciated biological legacy.

**Keywords:** D'Arcy Thompson, evolution, experiment, *On Growth and Form*, morphology.

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Coopersmith**      Texas A&M  
University

**Like Flies to Honey: Fraud, Froth, and Investing in Emerging Technologies**

**Abstract:** The promise of emerging technologies has long attracted inventors, developers, promoters and investors seeking to profit from "the Next Big Thing." Fraudulent and "frothy" firms – firms that intended to succeed commercially but quickly failed – also appeared, reflecting both the enthusiasm of promoters and investors and the reality of technological and market uncertainty. The development and diffusion of emerging technologies depended on the overinvestment of capital by profit-seeking investors acting irrationally instead of conservatively. That lack of market discipline and the concomitant flows of eager money provided opportunities for fraudulent and frothy as well as more grounded firms. Hundreds of thousands of people eager for a piece of the Next Big Thing invested neither wisely nor well in the emerging technologies such as gas lighting in the 1880s-90s, telephony in the 1890s-1910s, and internet firms in the 1990s. Fraudulent and, to a lesser degree, frothy firms raised the cost of doing business for all firms by absorbing financing and resources, not only directly but by requiring entrepreneurs and investors to perform due diligence and comply with regulations developed to prevent fraud. These firms acted as an invisible "scam tax" on legitimate firms by creating distrust and doubt, sometimes to the extent of painting all firms with the taint of dishonesty. By linking fraud and froth closely with the rise of new investment opportunities, this paper will significantly enhance our understanding of the culture of commercialization of new technologies.

**Keywords:** Emerging technologies, fraud, speculative bubble, failure.

**Sam Robinson**      University of York      **Anticipating Ocean Exploitation and the Law of the Sea (1968-84).**

**Abstract:** The UN Law of the Sea (1968-1984) was intended to legislate for the new capabilities that developments in underwater science and technology opened up for developed nations. In reality the negotiations became a point when the superpower technological hegemony of the global ocean was challenged by the 'Group of 77' – nations that saw the negative potential of new technologies in terms of the external exploitation of their resources. Science policy was formed in response to the anticipated capabilities of such technologies which far outweighed the realities of extracting deep-sea minerals and resource exploitation in remote and inhospitable environments. Thus, the

discussion of ocean science and technology within the treaty negotiations were built on anticipatory understandings of the potential exploitation of the oceans. This paper will argue that international law-building for science and technology can be framed as an anticipatory response to claims made for potential future use. Thereby these negotiations, based on unsettling scientific futures, are themselves forms of scientific imaginaries. The navigation of potential uses of science, by diplomats, reveals the role of science communication within complex negotiations, and the importance of the distinction (and sometimes the blurring) of the real and the imagined in international relations. The Law of the Sea was a site where scientific futures were imagined in several contexts; a uniquely challenging moment in international law creation where lawmakers looked to the future rather than responding to their past or present situations.

**Keywords:** Cold War, Ocean Science, Ocean Exploitation, UN Law of the Sea, Anticipation Studies