

Institution: University of Exeter
Unit of Assessment: History
Title of case study: Allergy and Asthma
<p>1. Summary of the impact (indicative maximum 100 words)</p> <p>Professor Mark Jackson's research on the history of allergy and asthma, carried out in the Centre for Medical History, University of Exeter, has been successful in enhancing clinical, commercial and policy understandings of the social, political and cultural, as well as biological, determinants of allergic diseases in the modern world. It has also helped to raise public and patient awareness of historical trends in asthma and allergies and to increase public understanding of evolving methods of diagnosis, prevention and treatment through focused collaboration with the charity Asthma UK as well as through various outreach and engagement activities. Professor Jackson was appointed to the Centre of Medical History at Exeter in 1998.</p>
<p>2. Underpinning research (indicative maximum 500 words)</p> <p>Asthma and allergy constitute a major health problem in the modern world. The World Health Organization estimates that 235 million people suffer from asthma and over 20% of the world's population suffer from allergic diseases. Professor Jackson has provided an evidence base that has contributed to public and professional debates about trends in asthma and allergy. In particular, his research has analysed and contextualised emergent disputes about the health impacts of environmental pollution, lifestyle choices and technological innovations in diagnosis, treatment and prevention.</p> <p>Drawing on his qualifications as an immunologist and clinician as well as on his expertise in the history of modern medicine, Professor Jackson's research explores the global history of allergic diseases such as hay fever, asthma, eczema and food sensitivities. The research was funded by a Wellcome Trust University Award on the history of allergy (1998-2004, £203,000) and two Wellcome Trust Strategic Awards incorporating research on pollution, environmental policies and asthma (2003-8, £705,000; 2008-13, £803,140). Jackson's research findings demonstrate that modern attitudes towards, and patient experiences of, allergies need to be understood within a broad historical and socio-cultural context. The emergence of symptoms, global and regional patterns of morbidity and mortality, and the development of specialist services at local, national and international levels have been shaped not only by changes in the material environment but also by diverse social, cultural and economic factors, including: mounting preoccupations with ecological hazards such as air pollution; concerns about the impact of lifestyle on health; changing attitudes towards psychosomatic health; assumptions about the role of class, gender and race in shaping patterns of disease; debates about the relative validity of orthodox and alternative approaches to health care; and the figurative currency of specific diagnostic labels.</p> <p>Based on extensive research in the archives of major allergy centres such as St Mary's Hospital (London) and the World Health Organization (Switzerland), Professor Jackson's findings have been disseminated in a number of peer-reviewed publications: two single-authored books; an edited volume; and several journal articles and book chapters (one with an accompanying podcast). Together they establish a contextualised history of shifting personal and professional accounts of allergic diseases and promote a constructive framework for exploring the history of chronic disease across time and space, currently an underdeveloped area within the history of medicine.</p> <p>By examining historical links between asthma and indoor and outdoor air pollution and by analysing the continuing popularity of particular remedies, such as medicated cigarettes, this research has also raised questions about how modern populations evaluate the environmental determinants of health and how assessments of risk can shape individual behaviour and patterns of disease. In doing so, the research demonstrates historical and cultural differences in</p>

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approaches to illnesses and their treatment, provides a vehicle for assessing knowledge claims about individual and social responsibility for health, and encourages patients and their doctors to re-evaluate the relationship between illness and identity.

Professor Jackson's publications on allergy and asthma have been reviewed extremely positively in scholarly journals on both sides of the Atlantic. Historians of science and medicine have referred to his work on allergy as 'rich in historical detail, compellingly written and ranging widely and confidently across disciplinary boundaries' (*Annals of Science*), as an 'important contribution' that will be 'required reading on the subject' (*Social History of Medicine*), and as 'an elegant, concise and timely achievement' that will 'surely shape the new history of health for years to come' (*Isis*). Reviews in the medical press have been equally enthusiastic: while the *British Medical Journal* praised *Allergy* as a 'remarkable scholarly work that should serve as an exemplar of its genre', the *New England Journal of Medicine* regarded it as a 'precise and scholarly' work written by a 'consummate historian'. Positive reviews in the *Guardian*, *Times Literary Supplement*, *Irish Times*, *Financial Times*, *Boston Globe*, and *London Review of Books*, amongst others, have led to further dissemination of Professor Jackson's ideas and greater awareness of the relevance of historical scholarship to current debates about policy and practice.

3. References to the research (indicative maximum of six references)

Evidence of the quality of the research: this research was the result of peer reviewed external grant funding from the Wellcome Trust and all the publications were peer reviewed.

1. M. Jackson (ed.), *The Clinical and Laboratory Origins of Allergy*, special issue of *Studies in History and Philosophy of Biological and Biomedical Sciences*, Vol. 34C, (2003).
2. M. Jackson, 'Cleansing the air and promoting health: the politics of pollution in post-war Britain', in Virginia Berridge and Kelly Loughlin (eds), *Medicine, the Market and the Mass Media: Producing Health in the Twentieth Century*, (Routledge, 2005), pp. 219-41.
3. M. Jackson, *Allergy: The History of a Modern Malady*, (London, Reaktion, 2006). Paperback edition published in 2007. Published and distributed in USA by University of Chicago Press. [UK and US sales c. 3,350.] Translated into German as Mark Jackson, *Allergien auf dem Vormarsch: Die Entstehung einer Volkskrankheit*, tr. Dino Heicker, (Parthas, 2007).
4. M. Jackson, '“Allergy con amore”: psychodynamic approaches to asthma and allergy in the post-war period', in Mark Jackson (ed.), *Health and the Modern Home*, (Routledge, 2007), pp. 153-74.
5. M. Jackson, *Asthma: The Biography*, (Oxford University Press, 2009) [Sales c.1,300].
6. M. Jackson, '“Divine stramonium”: the rise and fall of smoking for asthma', *Medical History*, 54 (2010), 171-94. A podcast, included in the journal's 'Highlights of a decade', is available: <http://journals.cambridge.org/action/displaySuppMaterial?cupCode=1&type=4&jid=MDH&volumeld=54&issueld=02&aid=8446423&sessionId=9DB02D95D492B20E2152718A81B7C81C.journals>.

4. Details of the impact (indicative maximum 750 words)

Professor Jackson's research has generated information and advice for the media, charities and commercial marketing companies. He has worked with clinicians and policy-makers to influence how they conceptualise the historical epidemiology of allergic diseases and his research has raised public awareness and understanding of allergies through engagement activities.

International reviews of his research have resulted in regular and on-going requests from newspaper, magazine, radio and television editors and journalists for Professor Jackson to act as historical consultant and to participate in live radio and online debates. He was interviewed for a BBC Radio 4 Today programme on allergy (21 April 2008) and contributed to a live panel discussion on how to explain and tackle modern trends in allergy on the Simon Mayo Show, Radio Five Live (13 May 2008). Professor Jackson provided detailed historical statistics for a Horizon programme 'Allergy Planet', aired on BBC2, 9 December 2008. In January 2012, he contributed historical evidence for an article, which appeared on io9 website, entitled 'Are allergies for real?',

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and was interviewed by an American journalist from Slate.com, to provide information drawn directly from his research on asthma. On both occasions, Professor Jackson's contributions were acknowledged. In March 2012, he was commissioned by American online magazine *Zócalo Public Square* to write a feature article on the death of Anthony Shahid, an American journalist who suffered a fatal asthma attack while reporting in Syria (1).

In 2010, Professor Jackson's research was used by Asthma UK, a charity dedicated to improving the lives of people affected by asthma, to produce an award-winning educational 'Asthma Timeline' (2), which charted the history of asthma and was created to complement the charity's online research pages. Visitors to the website (which attracted nearly 4,000 hits) were introduced to key features of the history of the disease, including how and when novel therapies were introduced, and were made aware of the continuing use of controversial treatments such as 'asthma cigarettes'. Professor Jackson's contributions, which included providing historical depth and reviewing the accuracy of information provided to patients and families, were acknowledged on the website and regarded as having a significant impact. According to the Asthma UK Timeline designer, Professor Jackson's research 'was essential to the creation of the timeline' (3). One of the charity's trustees highlighted the 'invaluable contribution' made by Professor Jackson's 'admirable biography of asthma' to the work of Asthma UK and to patients with asthma (4). The trustee also invited Professor Jackson to serve as a trustee of the charity.

The impact of Professor Jackson's research has extended into the commercial sector. MEAT Brands, a British marketing company, approached Professor Jackson twice to 'provide expert insight' into cultural aspects of allergies and into current and future trends and policies in the field. According to MEAT, Professor Jackson's ability to 'interpret and discuss his work in a way that makes it easily applicable to research projects outside the academy' made his contributions 'invaluable' as part of the branding process for a 'major global pharmaceutical organisation' (5).

Professor Jackson has been invited to present his research to clinical and policy groups. In 2008, he participated in a seminar series hosted by the World Health Organization that brings together policy-makers, scientists and clinicians to discuss global health issues. Professor Jackson's presentation on asthma, which emphasised the importance of history for informing debates about patterns of disease, stimulated subsequent correspondence with participants about the historical epidemiology of asthma (6). Professor Jackson has promoted clinical and scientific awareness of the distribution and cultural identity of asthma by writing articles in the medical press and presenting to research and professional organisations, such as the Medical Research Council & Asthma UK Centre in Allergic Mechanisms of Asthma (December 2008) and the British Society for the History of Pharmacy (February 2009). These activities have led to further engagement with scientists and clinicians: according to a Danish epidemiologist, Professor Jackson's 'impressive and very successful overview' of the history of allergy alerted him to the historical precedents of recent debates (7).

The reach of Professor Jackson's research has been enhanced by invitations to take part in national and local public debates and educational initiatives for young people. In March 2008, Professor Jackson's lecture on the allergy epidemic was 'very much appreciated' by approximately 120 attendees at the Medicine and History seminar series organised by the Thackray Museum, Leeds (8). As a result of his work on Marcel Proust's illnesses, which provided a focus for his book on asthma and which was specifically mentioned in the event description, Professor Jackson participated in the 2008 Times Cheltenham Literature Festival, where he contributed, along with Professor Alison Finch, Peter Guttridge and D. J. Taylor, to an expert panel that discussed, and answered audience questions about, the relationship between illness and creativity (9).

In November 2012, Professor Jackson organized a debating competition for Year 11 students at Colyton Grammar School, Devon. Part of the ESRC's Festival of Social Science, the event was designed to deepen students' understanding of the recent history of asthma, pollution and social policy, raise their awareness of methods in the humanities and social sciences, and introduce them to the challenges of creating evidence-based arguments. Thirteen pupils worked with Professor Jackson to identify sources, themes and questions and presented arguments about how best to

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reduce levels of asthma to an audience of 80 students, 3 staff members and an external judge. Formal evaluation highlighted the impact of the ESRC event. Students directly involved in the research and presentations agreed that the event 'increased my knowledge of the topic' and 'raised my awareness of the benefits social science brings to society'. According to the Head Teacher and the Head of Science, the event was beneficial to all students taking part in the debates, encouraging them to study well beyond the scope of their individual A level specifications. It promoted deeper awareness of research methods and a greater understanding of asthma amongst all students and teachers participating in the debate (10).

5. Sources to corroborate the impact (indicative maximum of 10 references)

1. 'When asthma kills', *Zócalo Public Square*, (1 March 2012), available at <http://zocalopublicsquare.org/thepublicsquare/2012/02/29/when-asthma-kills/read/nexus/>
2. Asthma UK, Timeline of Asthma, due to be re-launched in 2013, referred to at <http://www.asthma.org.uk/research-the-asthma-timeline>. The Timeline was awarded 'Third Sector Digital Campaign of the Week' (3 August 2010) for its interactive website: see <http://www.thirdsector.co.uk/News/DailyBulletin/1020214/Digital-Campaign-Week>.
3. Letter from Research Relations Manager, Asthma UK (2008-11), 20 March 2013.
4. Letters from trustee of Asthma UK, 5 January 2012 and 2 March 2013.
5. Email from MEAT Brands, Unit 01.0G.2, The Leathermarket, 11-13 Weston Street, London SE1 3ER, 19 April 2013.
6. Email from a member of staff at World Health Organization, 29 May 2008.
7. Email from epidemiologist, Glostrup University Hospital, Denmark, 8 September 2012.
8. Medicine and History, Lectures Leaflet, 2007/8, <http://www.thackraymuseum.org/uploads/resources/lecturesleaflet.pdf>; Friends of the Thackray Museum, Newsletter, 28 September 2008, <http://www.thackraymuseum.org/uploads/resources/friendsnewsletterno28september2008.pdf>.
9. Times Cheltenham Literature Festival list of day events, 16th October 2008, available at <http://www.explore Gloucestershire.co.uk/news.asp?NewsArticleID=250>.
10. Responses to Evaluation Questionnaires from 11 students involved directly in the debate at Colyton Grammar School and from 37 attendees.