

## Impact case study (REF3)

<b>Institution:</b> University of Kent		
<b>Unit of Assessment:</b> 28: History		
<b>Title of case study:</b> Chemical warfare: engaging governments, NGOs, and the public to increase knowledge, raise awareness and combat misinformation		
<b>Period when the underpinning research was undertaken:</b> 2004 - 2020		
<b>Details of staff conducting the underpinning research from the submitting unit:</b>		
<b>Name(s):</b> Ulf Schmidt	<b>Role(s) (e.g. job title):</b> Professor	<b>Period(s) employed by submitting HEI:</b> 2001 - 2020
<b>Period when the claimed impact occurred:</b> 2015-2020		
<b>Is this case study continued from a case study submitted in 2014?</b> N		
<b>1. Summary of the impact</b>		
<p>Schmidt's research into the history of chemical and biological weapons research in Britain, the United States and Canada has impacted policy making, civil society engagement and the public sphere by:</p> <ul style="list-style-type: none"> <li>• Contributing to, and shaping, international responses to chemical weapons' incidents (Syria; Salisbury) through engagement with the Organization for the Prevention of Chemical Weapons (OPCW) and the UK Foreign and Commonwealth Office (FCO).</li> <li>• Influencing policy makers on responses to Chemical-Biological Warfare threats by stressing the need to pool expertise and increase public understanding through 'Global Partnership Workshops' and engagement with the OPCW, FCO, experts and civil society</li> <li>• Countering disinformation, by contextualising two major chemical weapons incidents (Malaysia, Salisbury) through OPCW presentations.</li> <li>• Transforming understanding of the environmental impact of chemical and biological warfare by engaging communities and individuals through UK-wide Community Exhibitions.</li> </ul>		
<b>2. Underpinning research</b>		
<p>Schmidt's research, which underpins this case study, examines the history of chemical and biological weapons research by the former Allied powers during the twentieth century, specifically at the UK Defence, Science and Technical Laboratory, Porton Down. Focusing on Britain, the United States, and Canada, Schmidt's <i>Secret Science</i> (2015) [R3] traced, for the first time, the history of chemical and biological weapons research involving experiments on humans by the former Allied powers during the twentieth and twenty-first centuries. It charted the ethical trajectory and culture of military science, from its initial development in response to Germany's first use of chemical weapons in the First World War to the ongoing attempts by the international community to ban these types of weapons once and for all. The study threw new light onto the evolving field of military medical ethics by exploring continuity and change in the understanding and application of military medicine and science.</p> <p>Key findings were derived from extensive archival research at: The National Archives, Kew; the National Archives and Records Administration, Washington D.C.; the Churchill Archives Centre, Cambridge; the Imperial War Museum; Liddell Hart Centre for Military Archives, King's College London; the Medical Research Council; the Library and Archives Canada, Ottawa; Sussex University, Brighton; and the Wellcome Trust, London. The research was also informed by Schmidt's Wellcome funded project on <i>Medical Ethics and the Legal Dimension of Britain's Biological and Chemical Warfare Programme</i>. The research revealed that:</p> <ul style="list-style-type: none"> <li>• Breaches of medical ethics were significantly more widespread and systemic than previously assumed, and were carried out over a prolonged period of time [R3].</li> <li>• Experiments were unusual in the magnitude of the risks to individuals and the environment. From 1946-76 Porton carried out more than 750 biological warfare 'Open Air' trials across cities and open countryside, exposing UK citizens and livestock to BW agents (E.coli, zinc-</li> </ul>		

cadmium, plague, anthrax). In 1963-64, Porton released *B. globigii* into the London underground [R3, R5].

- A growing number of subjects were exposed to increasing dosages of chemical and biological warfare agents (CBW) known to be highly toxic and potentially lethal. Porton's nerve agents experiments in the 1950s were by far one of the largest nerve agent trials ever performed, involving over 1500 subjects [R2, R3, R4].
- The highest degree of safety and the most rigorous standards of research ethics known at the time should have been applied [R1, R3, R6].
- None of the evidence indicated that any of the civilians and subjects were ever informed about the specific objective of the trials. This challenges the claim by previous governments that ethics violations on both civilians and soldiers were isolated incidents [R2, R3, R4].
- The history of human and animal experimentation cannot be restricted to national contexts alone but must be embedded in more global and transnational network of expert scientists (UK, US, Canada, Australia, India, Africa etc) [R2, R3, R6].

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

[R1]: Ulf Schmidt (2004), *Justice at Nuremberg: Leo Alexander and the Nazi Doctors' Trial* (Palgrave/Macmillan, Basingstoke, 2004). 386 pp. ISBN 0-333-92147-X.  
<https://kar.kent.ac.uk/911/>

[R2]: Ulf Schmidt (2006), 'Cold War at Porton Down: Informed Consent in Britain's Biological and Chemical Warfare Experiments', in *CQHE*, 15 (2006), No. 4, 366-380.  
<http://dx.doi.org/10.1017/S0963180106060488>

[R3]: Ulf Schmidt (2015), *Secret Science: A Century of Poison Warfare and Human Experiments* (OUP, Oxford, 2015). 637 pp. ISBN 978-0-199-29979-9. <https://kar.kent.ac.uk/50642/>

[R4]: Ulf Schmidt (2017), 'Preparing for Poison Warfare: The Ethics and Politics of Britain's Chemical Warfare Programme, 1915-1945', in: Friedrich, B., Schmaltz, F., *Proceedings of the Symposium "100 Years of Chemical Warfare"* (Berlin, 2017), pp. 1-28.  
[https://doi.org/10.1007/978-3-319-51664-6\\_6](https://doi.org/10.1007/978-3-319-51664-6_6)

[R5]: Ulf Schmidt et al. eds. (2019), *Propaganda and Conflict: War, Media and the Shaping of the Twentieth Century* (London, Bloomsbury, 2019) 380 pp. ISBN 978-1788314039.  
<https://kar.kent.ac.uk/74039/>

[R6]: Ulf Schmidt, Andreas Frewer, Dominique Sprumont eds. (2020), *Ethical Research: The Declaration of Helsinki—Past, Present and Future of Human Experimentation* (OUP, Oxford, 2020) 610 pp. ISBN: 978-0190224172. Link: <https://kar.kent.ac.uk/86851/>

[G1]: Ulf Schmidt, 'Cold War at Porton Down: Medical Ethics and the Legal Dimension of Britain's Biological and Chemical Warfare Programme, 1945-89'. The Wellcome Trust (No. 073435, 2004). Value: £189,000.

### 4. Details of the impact

#### Influencing policy makers at the FCO and OPCW

As a result of his research expertise on the history of Porton Down and cholinesterase-inhibiting agents (drawn from his 10-year study *Secret Science* (2015) and other related publications), Schmidt has 'participated in ongoing debates to influence and raise awareness of the historical context surrounding the use of chemical and biological weapons. Schmidt's contribution to these debates provided invaluable information for numerous authorities and policy makers to consider when shaping their responses to the global CBW threat. This expertise was made particularly

valuable following the alleged use of nerve agents in Syria (since 2012), and confirmed use in Malaysia (2017), the United Kingdom (2018), and Russia (2020). In October 2015, the Foreign and Commonwealth Office (FCO) invited Schmidt to attend an invitation-only meeting entitled 'Arms Control at 50 – Does Arms Control have a Future?' where delegates considered the national and international challenges to arms control and disarmament [a]. Following this, he was invited to provide critical historical context at the Organization for the Prevention of Chemical Weapons' (OPCW) Twenty-Second Session of the Conference of 133 States Parties in 2017, when he delivered a keynote address on the subject of 'Preparing for Poison Warfare: The Ethics and Politics of Britain's Chemical Weapons Programme, 1915-1945'. This was followed by a further invitation from OPCW to provide the first plenary address, as one of only 8 non-governmental officials to 106 States Parties at the 'Fourth Special Session' (The Hague, 26<sup>th</sup> June 2018). During this he highlighted the importance of a 'rules-based approach' in tackling both the context and complexity of the global threat from chemical and biological warfare agents (CBW) and called for recognition of his plan for a new 'Global Partnership Programme' (GPP), which he had successfully trialled a month earlier (see below). Schmidt's contribution supported the UK government's desire to strengthen the OPCW's role in combatting CBW use, the proliferation of CWs, and the identification of those involved either as 'perpetrators, organisers or sponsors'. This resulted in the OPCW's 'Decision Addressing the Threat from Chemical Weapons Use' [b] dated 27 June 2018. It also provided support for the Global Partnership Programme. Writing about the Special Sessions Schmidt had addressed, a senior FCO representative stated that he was 'delighted with the outcome of the special sessions' and deemed the outcomes 'an important victory for arms control' [c].

Following on from this, in November 2018, Schmidt co-organised a plenary session of the Chemical Weapons Convention Commission, where he gave a paper on 'Chemical Weapons and the Environment' highlighting the role of civil society in contextualising the dangers of CW use [d]. Also in 2019, Schmidt presented his research at the Brocher Foundation in Geneva, to an audience of scientists, NGOs and experts on the ethics of medical and biotechnological research. His presentation on the 'Origins of Research Ethics Committees in the UK Military Medical Research' was described by a senior World Health Organization official as 'intriguing' and which 'probably created the most interest among the participants on that day'. The official went on to express the desire to maintain the useful working relationship that had been established [e]. Through engaging with officials, civil servants and policy makers at the Foreign and Commonwealth Office, the Organization for the Prevention of Chemical Weapons, the Chemical Weapons Convention Commission and at the Brocher Foundation, Schmidt has increased historical understanding, countered disinformation and influenced decision making within inter-governmental organisations, the UK government and NGOs.

### **Civil Society Engagement**

In May 2018, Schmidt pioneered the concept of the Global Partnership Programme, which would bring together policy makers and civil society and operate through a rolling series of Global Partnership Workshops. Reacting to the Salisbury attack, Schmidt realised the need for such events to allow a rapid response and space for confidential critical reflection between these stakeholders. Conducted under Chatham House rules, these workshops were attended by representatives from the OPCW, FCO, Chemical Weapons research facilities (Defence Science and Technology Laboratory (DSTL), Porton Down), and the NGO Green Cross International, as well as the academic community. The first Global Partnership Workshop (GPW) in October 2018, centred on the history of nerve agents and the role of the Chemical Weapons Convention. Feedback was extensive and positive with a significant number of delegates reporting an increased appreciation of the importance of historical perspective to contemporary understandings. Attendees noted that 'it essential to know the history of your area so that you can demythologise practices', and that historical understanding 'plays an incredibly important role [...] different perspectives, new information, different issues all contribute to development of questions, analysis [and the] identification of new sources' [f].

A second Global Partnership Workshop, 'CBW and the Public Sphere' was held in May 2019 and focused on how the expert community could engage with the general public on CBW issues. A

senior DSTL official stated that the event was, 'absolutely bloody crucial. Lessons ignored = future mistakes' and that 'it is vital to learn from the past and to use historical information to understand further the contemporary situation'. Another attendee reported the importance of analysing the past in order 'to contextualise, and disentangle, the complexity and different elements of hybrid warfare – propaganda/information warfare and chemical warfare – that we face today and must counter as best we can'. Others stated: 'These are absolutely invaluable and will have a significant legacy in public understanding over coming years' and 'The great advantage of this workshop is the diversity of expertise and views of the participants, which lead to new ways of thinking and creative insights into how to tackle a difficult subject and policy area.' Participants reported an enhanced understanding that will help to 'improve and transmit expertise and to maintain standards' [g]. Plans were then made to organise a third GPW that would bring together local civic leaders, expert scientists, academia and community representatives. As a result of Covid-19, these plans are in the process of being modified to facilitate an online exchange.

The second strand of Schmidt's Global Partnership Programme was to ensure a link between policy makers, researchers and wider society. He did this by collaborating with the photographer, Dara McGrath, developing 10 Community Exhibitions under the title 'This Poisoned Isle'. The exhibition was staged at seven community venues (September 2018 to October 2019) in Cornwall, Dorset, Swansea, Cambridgeshire, Canterbury, Yorkshire, and Ullapool (in the Scottish Highlands) and engaged over 640 residents, policy makers, scientists, and academics. (The remaining three that had been scheduled for 2020 had to be postponed due to the pandemic.)

The exhibit explored the risk of residual contamination to communities that had been used to host the manufacture, storage, trials, and disposal of chemical weapons. With the Salisbury attack inspiring much public discussion, the Community Exhibitions engaged with, informed and contextualised their communities' relationship with chemical weapons. Intrinsic to the project was active engagement with visitors. All were encouraged to become involved in reciprocal conversations with McGrath and Schmidt about the issues explored in the exhibition. Public responses to these exhibitions were then presented at the GPWs to provide policy makers with vital civic feedback to further inform decision making.

The qualitative data from visitor surveys reveals the project created, and informed, community awareness, demonstrating:

- i. Measurable change in the awareness of the extent to which CBW testing impacted upon, and contaminated, the environment. ['an eye opener'; 'this exhibition brings home the importance of making people aware of what governments do on their behalf'; 'it certainly raised awareness of the scale of activity and the geographical spread throughout the UK which was surprising especially the experiments carried out in some of the most beautiful places and the apparent lack of care for the environment and the population']
- ii. Greater awareness about the value, and fragility, of community cohesion and belonging, raising the potential for future involvement in local CBW policy issues. ['Projects need to be made public so communities are aware and kept well-informed of purposes & effects'; 'People should be made aware of the dangerous or potential dangerous projects being undertaken on their doorstep']
- iii. How problems for rural communities in accessing CBW knowledge can be overcome. ['It's increased my awareness of the preponderance of these sites and made me realise the banality of the locations in today's landscape'; 'thank you for reminding us of our legacy.'; 'our villagers were generally not very informed [...] we had heard about it but with no real detail, so it was good to be informed']
- iv. Increased awareness about government secrecy, lack of transparency, and failure to engage adequately with communities. ['The Government needs to talk to local community'; 'people should be made aware of the dangerous or potential dangerous projects being undertaken on their doorstep – but also aware that the majority of people would be against them – regardless of how 'safe' they would be']
- v. A renewed sense of pride about CBW sites in contributing to local economies and CBW preparedness. ['I love the fact that this touring exhibition has come to this community hall, something that doesn't usually take place here and at the real heart of the community of the Gower'] [h].

The exhibitions created a dialogue between local communities, Schmidt's research, and the policy making community (via the Global Partnership Programme), thus connecting chemical and biological weapons policy-making more strongly with civil society, achieving the goals set out by the Global Partnership Workshops. Schmidt and McGrath intended to continue the exhibition series in 2020, with a further emphasis on building a national community of regions impacted by historical chemical and biological weapons policy via a forum and events that would bring disparate communities together to share experiences and engage in further historical research. However, these plans are currently on hold until the health crisis abates.

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

**[a]** Email correspondence from senior staff member at the Arms Control and Disarmament Research Unit, FCO. Documentation which corroborates Schmidt's involvement in the 2015 FCO arms control meeting.

**[b]** Compiled selection of OPCW (and related) documents evidencing Schmidt's ongoing involvement with the OPCW and of informing the OPCW 2018 Fourth Special Session debate, the outcome of which was the 'Decision: Addressing the Threat from Chemical Weapons Use'.

**[c]** Email from senior FCO official corroborating Schmidt's contribution to the OPCW Decision.

**[d]** Details of delegates and contributions to the CWC Coalition Convention (2018).

**[e]** Email from senior WHO official, evidencing Schmidt's contribution to a meeting at the Brocher Foundation, Geneva and ongoing collaboration.

**[f]** 2018: Feedback from attendees of the first Global Programme Workshop, which describes the ways that increased historical understanding contribute to contemporary debates and the shaping of national and international response to CBW threats.

**[g]** 2019: Feedback from attendees of the second Global Programme Workshop, which evidences the extent to which the programme contributed to best practice in engaging civil society and local communities with CBW issues

**[h]** 2018-2019: The Poised Isle Community Exhibitions (co-curated by Schmidt). Visitor feedback corroborates social and cultural impacts on visitors and changed community understanding and awareness.

All evidence sources are confidential and held by the University of Kent for audit.