



Summer 2025

### 33rd Pumphandle Lecture 2025

From Local Insights to Global Impact: Four Decades of Child Health and Nutrition Epidemiology in Pelotas, Brazil.



Dr Cesar Victora, Emeritus Professor of Epidemiology at the Federal University of Pelotas (Brazil), has held honorary positions at Harvard, Oxford, London, and Johns Hopkins Universities. His research focuses on maternal and child health, nutrition, long-term birth cohort studies, health inequalities, and evaluating global health programmes in developing countries. Victora's findings have influenced global policy on recommending exclusive breastfeeding for six months and the creation of growth standards based on breastfed children, both adopted by over 140 nations. His cohort studies with 40 years of follow-up underscore the critical importance of the first 1,000 days of life for long-term health and human capital.

Actively engaged in monitoring progress towards Sustainable Development Goals as a founder of the Countdown to 2030 global initiative, Victora is also one of the most highly cited epidemiologists in the world. Other achievements include his roles as President of the International Epidemiological Association (2011-2014), as member of the Brazilian Academy of Sciences, recipient of the 2017 Canada Gairdner Global Health Award, and of the Great-Cross Order of Scientific Merit from the President of Brazil in 2023. In 2024, he was elected to the Royal Society.

The lecture will begin at 5:30pm and close at 7pm. This will be followed by the Society's Annual General Meeting (AGM) from 7pm to 7:30pm. All Society members are encouraged to attend the AGM, either in person or remotely. The lecture will be recorded and placed on the Society's website.

After the AGM all members are warmly invited to repair to the John Snow public house in Broadwick Street, Soho, a short walk from LSHTM.

Those unable to attend in person will be able to attend the lecture remotely and to ask questions – via a zoom link which will be available on the Society's website and on the LSHTM website.

# 32nd Pumphandle lecture 2024

"Pandemics, Climate Change and the role of Science" by Dr Soumya Swaminathan

**The 32nd annual Pumphandle lecture was delivered on Tuesday 22nd October, 2024** by Dr Soumya Swaminathan, former chief scientist at the World Health Organisation and current leader of the M S Swaminathan Research Foundation. The lecture was delivered both live, to a packed audience in the John Snow Lecture Theatre, and remotely to a large audience worldwide.

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### 32nd Pumphandle lecture 2024

#### "Pandemics, Climate Change and the role of Science" by Dr Soumya Swaminathan

Dr Swaminathan began by describing her role as Chief Scientist at WHO during the early stages of the COVID-19 pandemic. She was instrumental in convening partners to develop a roadmap for research, including understanding the origins of the virus, epidemiology, immunity, pathogenesis, standards for clinical trials and identification of vulnerable subgroups. Over the first year from the declaration of a Public Health Emergency of International Concern there were huge developments in diagnostics, the launch of COVAX, large-scale clinical trials on therapeutics and the first licensure of a vaccine. Dr Swaminathan went on to discuss the importance of global solidarity among scientists during the pandemic to make progress, the emergence of an "infodemic" underlying high levels of vaccine hesitancy, and the importance of building trust in government and society for health. In a tour de force presentation she also touched on the rapid emergence of vaccine inequity, and pointed to a key remaining scientific challenge: that of understanding and responding to long-COVID.

She next discussed an earlier phase of her work and career, focused on the silent and ancient pandemic of tuberculosis. She spoke eloquently of the burden of death and suffering caused by TB over many thousands of years. *Mycobacterium tuberculosis* remains a hugely challenging pathogen for many areas of science, including diagnostics. She spoke of promising new areas of diagnostics with relevance across the world. She spoke also of the critical importance of social welfare and nutritional supplementation in supporting those with TB to improve outcomes, and of the pipeline and hope for TB vaccine development over the coming years. She next turned her attention to climate change, the top-rated risk for the world over the coming 10 years. She spoke of worrying trends in a number of markers of planetary health and the growing

understanding of the risks of these changes - via infectious diseases, heatwaves, pollution, effects on pregnancy and overall human health. Dr Swaminathan's foundation has done important work in partnership with the government of India on the impact of climate change on women and children. She showed data indicating the relationship between exposure to climate hazards and drought and a range of health and welfare outcomes for women and children. She went on to describe the public health emergency posed by air pollution, amplified by extreme heat, in India and many other settings. Going forward, her work on the Our Common Air Commission will continue to support progress around the world in this critical area. She finished her talk by explaining the history and work of the Foundation established in her father's name which works on an impressive range of health and development projects, having impact through science in India. Scientists, she concluded, need to be the moral and ethical conscience of a divided world.

The talk was warmly received by the assembled audience, and was followed by a lively Q&A session probing a number of areas of the lecture. A vote of thanks was offered by Dr Dilys Morgan, co-founding member and current member of the John Snow Society Steering committee. Finally, in keeping with the traditions of the lecture, Dr Swaminathan was invited by Dr Seyi Soremekum to remove the handle from the replica pump placed at the front of the theatre. She did so with gusto and brandished the pump handle to bring to an end an exhilarating evening.

A recording of the lecture is available on the Society's website: <a href="https://www.johnsnowsociety.org">www.johnsnowsociety.org</a>

### A message from the Co-Chairs of the Society

#### We have had a great year; we really are so lucky to be co-Chairs of this brilliant society!

The highlight, as always was the 2024 Pumphandle Lecture, delivered by Dr Soumya Swaminathan, which continued an unbroken run of fantastic talks stretching back over 32 years. We were thrilled that Soumya was able to join Society members in the John Snow pub after the lecture for some useful networking and spirited epidemiology chat.

The John Snow Society Steering Committee continue their important work. Our social media accounts and website, overseen by Seyi and Patrick, continue to be a great portal into John Snow related information and a source of interesting facts and figures. We appointed two new co-secretaries in Lauren and Pedro who have taken to the role with energy and great ideas. We continue to implement the changes we agreed in the review of the Society's activities two years ago, in particular streamlining the administration of the society and finding more efficient ways

of working, as the society grows in membership year on year. Special thanks to Deborah for continuing to manage the day to day running of the society while we sort ourselves out! Seb has been working hard to re-house and update the society's finances. Our social secretary Jimmy organised a fabulous quiz in June, with precisely 54 questions on the life and times of John Snow, which was at times challenging even for Steering Committee members. So: many congratulations to the winning team! Paul has yet again done a brilliant job producing this Broadsheet newsletter and looking after the society's archive. Last but not least Dilys is busy designing a new mug which we hope will be available this autumn.

#### See you in the pub!

Charlie (Flynn) and James (Hargreaves)

### Chapters

According to our Constitution (https://johnsnowsociety.org/constitution/), we have not given detailed guidance on Chapter formation, but two statements are particularly relevant: "Eligibility to join the Society is defined as wishing to celebrate the memory of John Snow." And: "Members of the Society are encouraged to establish informal groups, chapters (divisions) and meetings in their own countries and localities. Local groups may levy an additional fee to finance their local activities." Another principle enshrined in the Society's Constitution is that: "A John Snow Society meeting can be declared wherever and whenever at least two Members of the Society are present. A photographic record of meetings and events may be sent to the Secretary for inclusion in the Society's archives."

We are aware of at least 14 "chapters" that have been organised in various places over the years, including in Kampala Uganda, Maputo Mozambique, Norway, Iceland, Finland, Auckland New Zealand, Heidelberg (now Berlin) Germany, Bethesda Maryland, San Francisco California, Hanover New Hampshire, Texas and South Carolina in the USA, and Sydney and Melbourne in Australia. The society would welcome hearing about the formation of more chapters and will gladly receive news from chapters for inclusion in this Broadsheet newsletter.

#### <table-of-contents> Maputo Mozambique / Melbourne Australia Chapter Mohsin Sidat, Jim Black, Julie Cliff

#### Dr Ilesh Jani: new chair of GTFCC (Global Task Force on Cholera Control)



Members of the John Snow Society's branch in Mozambique and Melbourne were delighted with the news that Dr Ilesh Jani has been nominated as chair of the steering committee of the Global Task Force on Cholera Control (GTFCC). The GTFCC unites over 50 partners: NGOs, academic institutions, and UN agencies - to combat cholera.

Dr Jani is a Mozambican physician with a PhD in Immunology who headed the Mozambican National Institute of Health (or Instituto Nacional de Saúde, INS) between 2009 and 2023. Under his leadership, the INS significantly contributed to the strengthening of public health in Mozambique. The INS operates under the country's Ministry of Health, but with administrative and technicalscientific autonomy. The institute has the responsibility to generate health evidence that will inform national health policies.

As Director of the INS, Dr Jani played an important role in cholera prevention and control in Mozambique, including the promotion of the use of mass vaccination campaigns for cholera prevention and outbreak control.

In January 2023, Dr Jani was promoted to the position of Vice Minister of Health. In this role, Dr Jani continued to play an active role in strengthening cholera prevention and control interventions, which proved vital for the success of cholera control in the aftermath of natural disasters in Mozambique.

Dr llesh Jani is recognized not only for his technical and scientific work but also for his ability to establish multilateral collaborations in the fight against infectious diseases. He has held academic appointments and contributed over 100 scientific publications in biomedicine and public health. His appointment as Chair of GTFCC represents a milestone for Mozambique. We trust that his impetus on cholera prevention will further contribute internationally to cholera prevention and control.



#### **Texas Chapter**

Betty Bowles, Marth Gibson

#### **News from Texas**

Our own Daniel Nix, the recipient of many awards in his endeavour to have clean sustainable water for Texas was recently a co-author in the Journal of Chemical Education published July 1, 2025 entitled Academia-Industry Collaboration: Water Chemistry and Environmental Education (https://doi.org/10.1021/ acs.jchemed.5c00246). This article emphasizes the importance of relationships, using teamwork with technical and soft skills to prepare potential students and workforce in meeting the demands for practical applications in clean water efforts. Texas has faced many obstacles, vacillating between droughts and the need to preserve needed water sources to recent catastrophic flooding that not only add stress to the water infrastructure but also emphasize the importance of communication and

education in environmental health. Dr. Betty Bowles and Dr. Martha Gibson, members of the Texas chapter of the John Snow Society are nurses who recognize the need for clean water and the importance of educating other nurses on water sustainability and environmental health. These members are working on educating colleagues as part of the



Drs Betty Bowles and Martha Gibson

nursing honor society, Sigma Theta Tau, on Climate and Health. Partnerships such as these will continue to strengthen our role in climate change and water sustainability.

### Sydney, Australia Chapter

Stephen Leeder (Editor of the IJE, our Sister Journal!)

#### View from the Antipodes

Epidemiology is alive and well in the Antipodes! COVID led to a resurgent interest in the subject as a critical element in the international response to the pandemic. Rather than the announcement that one was an epidemiologist stopping subsequent conversation, the title came to be regarded as honourable. Floods of questions followed. The media created new heroes.

Now that COVID is no longer a pandemic threat, the shine on epidemiology had dulled somewhat. Reviews of strategies for handling COVID have begun and critics of lockdowns and guarantine are raising questions. What are the shortand long-term consequences of children missing weeks of school? While the Australian government was admirably quick in putting in place strategies to support people unable to work because of the rules of social disengagement, the consequences as reflected in the national budget will be felt for years. Comparisons with countries that adopted a less draconian approach without much worse outcomes make public policy people uncomfortable.

Controversy swirls around immunisation. How good was it, really? Was the rush to roll out programs without adequate evaluation of the new technology vaccines justified? After all, antigen-based vaccines had been used to good effect for many decades. We switched to mRNA vaccines based on a very different technology. Was the switch unduly influenced by commercial interests and American pharmacopolitics? And what of the various COVID models that sprang up? How good were they and how helpful? These and other questions will be raised and possibly answered by the reviews of COVID management strategies.

Two positive consequences of COVID stand out. First, it put a rocket under the development of IT-based telehealth consultation, which had dawdled along until its value was clearly demonstrated when face-to-face consultations were no longer possible. Its use for non-COVID management expands steadily.



Bondi Beach shut. Not to prevent melanoma, but COVID

Second, the coordination of epidemiological responses to the threat of infectious disease across the six states and two territories of Australia has progressed, with an interim Centre for Disease Control now established. It will not be easy to link together the different approaches of quite disparate geographic public health units. While uniformity across all iurisdictions would stifle local initiative, nevertheless there are obvious facets of the public health response to COVID that would have been better served with common rules of engagement on matters such as social isolation, and restrictions on travel.

Much else is happening to keep epidemiologists busy. Debates – and they are that – about vaping continue with often unhappy contests between those who see vaping as a lesser evil than smoking and those who view it as another manifestation of big tobacco perfidy.

Epidemiology has been quiet about chronic disease this year -COVID has seen to that - although COVID has stimulated new interest in social inequality and its relation to health. I think Snow, ever the pragmatist, would not be unhappy.



### San Francisco Bay Area, USA Chapter

**George Rutherford** 

#### Bay Area lectures

The Bay Area chapter of the John Snow Society co-sponsors an annual (or so) lecture in cooperation with the Department of Epidemiology and Biostatistics at the University of California, San Francisco. The lecture is named the Salvatore Pablo Lucia lecture in honor of the first chair of the Department of Preventive Medicine (a precursor to the current Department of Epidemiology and Biostatistics), whose main field of interest was diet and cancer. The last lecture in May of 2022 featured a panel discussion the future of the COVID-19 pandemic, which included Professor Lee Riley of the School of

Public Health at the University of California, Berkeley (now sadly deceased), Professor Peter Chin-Hong of the Division of Infectious Disease in the Department of Medicine at UCSF, Erica Pan of the California Department of Public Health (of which she is now the Director and State Health Officer) and Professor George Rutherford of the Department of Epidemiology and Biostatistics and Institute for Global Health Sciences at UCSF. We hope the next lecture will be held in 2025 and will focus on Professor Lucia's interest in diet and cancer.

### **Special reports:**

#### The Society on X/Twitter

Fun fact: The John Snow Society X account was temporarily suspended last summer, after an inadvertent typo entered in the 'year of birth' box led to X minions in Texas removing us from your feeds for 3 weeks. I assure you the social media team are all older than 12 years of age, but it took much hand wringing, personal emails to Elon Musk (unanswered) and finally the original birth certificates of account holders and their parents, including one scanned from a registry on a small Caribbean island in St Vincent, to rectify the matter. The positive takeaway from the experience was the growing realization that X not being what it used to be (i.e. Twitter), it was time to hedge our bets and open a Bluesky account. So our main update this year is to inform you that the Society is now also on Bluesky! Our Bluesky account is small compared to our X presence, so if you have a moment and like our content, we would appreciate a follow on Bluesky using the link at the end of this article.

We launched the Bluesky account on the weekend of the 15th March, Dr Snow's 212th birthday, and included two new competitions to celebrate. On Bluesky we posted a picture of a London skyline with the cryptic question "What's interesting about this postcard?" (Figure 1). We're pleased to finally announce the winner was Maebh Ní Fhallúin in Catalunya Nord, and the correct answer is at the bottom of this article, in case you'd like to have a guess.



|                                |  |  |  | Number<br>of houses. | Deaths<br>from<br>Cholera. | Deaths in<br>each 10,000<br>houses. |
|--------------------------------|--|--|--|----------------------|----------------------------|-------------------------------------|
| Southwark and Vauxhall Company |  |  |  | 40,046               | 1,263                      | 315                                 |
| Lambeth Company                |  |  |  | 26,107               | 98                         | 37                                  |
| Rest of London .               |  |  |  | 256,423              | 1,499                      | 59                                  |

Figure 2

On X we posted a table from Dr Snow's book "On the Mode of Communication of Cholera: Second Edition, Much Enlarged" (Figure 2). We asked X users to "Explain the table as a milestone in history of the modern epidemiological method". We received some great answers about the meticulousness of John Snow's research methods in mapping deaths in residents served by different water companies. None however got to the heart of the matter - that this table represents one of the first recorded examples of the results of a 'natural experiment', where a degree of random assignment in households served by Southwark and Vauxhall or Lambeth water company strengthened the causal inference of cholera transmission by water (in this case via the water pipes of the Southwark and Vauxhall company). So no prizes here but do look out for future competitions.

We'd finally like to highlight one of our highest performing tweets (or Xs) this year, a picture of an 1833 cholera map by Dr Eugene-Clement Hellis from Rouen France (https://x.com/JohnSnowSociety/status/1902702664913191069) — whose approach using dots to represent deaths on the map was likely to have been built on by Dr Snow in his 1854 version. If you come across any interesting maps, graphics or stories in the modern (or ancient )history of public health do pass on and we'll highlight them when we can.

#### **Social Media Team**

John Snow Society on:

X: @JohnSnowSociety

Bluesky: @johnsnowsociety.bsky.social

The postcard shows a London skyline ('blue sky') where each star perfectly maps an 1854 Soho cholera death in space. The largest star shows the address location of baby Frances Lewis, the index case (we also accepted answers of "the Broadstreet pump" as the largest star).

#### Something in the Water

#### **Just Three Lines**

Four members of the Steering Committee were delighted to attend the world premiere of a new musical about John Snow's life and work – *Something in the Water (One Man's Struggle to Save the World)* – at Chichester University Assembly Theatre, Bognor Regis in June. Three of us initially went to the wrong theatre, suggesting that some further appreciation of mapping might be needed by the committee.

The musical has been conceived, developed and written by Marc Folan and Paul Mari, both members of the John Snow Society. Various members of the society have interacted with Marc and Paul in the development of the musical ever since we first got wind of it at the John Snow pub after the Pumphandle Lecture in 2024.





At the theatre: Paul Fine, Paul Mari, Jimmy Whitworth, Marc Folan, Charlie Flynn

The musical opens with a reading of John Snow's short obituary in the Lancet which turns into a rousing opening number entitled "Just Three Lines". The first half takes the audience through John's early life in York, attending medical school in Newcastle, medical beliefs of the day, being sent to investigate the cholera outbreak at Killingworth colliery and his early work on anaesthesia in London. The second half was devoted to the Soho cholera outbreak and John's tireless work to control the outbreak by mapping the cases and finding the source.

The musical was performed by students from the Chichester University drama courses who had learnt, rehearsed, staged and performed the musical in only 6 weeks. We were most impressed by the performances, in particular Ellie Phipps as John Snow, Phoebe Jones as Jane Weatherburn and Devran Arslan as Thomas Wakley. The nine-piece orchestra, led by Neil Metcalfe, performed astoundingly, especially considering they were in an adjoining room with a video/audio link.

The authors are planning further performances at key London venues. We will post any updates about these on our X account.

#### John Snow's Life and Times – by Dr Paul Bingham

One of The Society's members, Dr Paul Bingham, has assembled a useful timeline for John Snow enthusiasts, which we reproduce on the following two pages.

Before his "retirement", Paul was CCDC and DPH on the Isle of Wight He has published on William Farr's analysis on 'cholera and elevation' (Farr had been convinced that he had discovered a 'natural law' and this was a factor in leading him to undervalue Snow's work – see Public health, 2004 118: 387-394). He has also published on Dr Arthur Hill Hassall and the greatest missed microscopical opportunity (Broad Sheet summer 2021 p2).

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### Life and times of John Snow (1813-1858)

|       | Pandemics &<br>National events   | Medical<br>events  | Public Health<br>& Poor Law   | John Snow (including JS's major publications)   |
|-------|--|--|---|---|
| 1810s | <b>1817-24</b> 1st cholera pandemic. Affected Far East. Not UK.  | <b>1816</b> René Laennec invented the stethoscope.   |   | <b>1813</b> JS born (15 March) in York, England.  |
| 1820s | <b>1825</b> 1st public steam railway¹.<br><b>1826-37</b> 2nd cholera pandemic. Affected UK 1831-32.  | <b>1823</b> Lancet (journal) founded by Thomas Wakely. Wakely became a nemesis of JS.  |   | <b>1827</b> Aged 14, JS became an apprentice surgeon-apothecary.  |
| 1830s | 1832 Reform Act.<br>1837 Victoria become<br>Queen<br>1838 Chartism: strongest<br>in 39, 42 & 48.<br>1838 Charles Dickens<br>published 'Oliver Twist'.  | <b>1830</b> Joseph Lister greatly improved compound microscope design.   | <b>1834</b> Poor Law<br>Amendment Act   | <ul> <li>1830 JS became vegetarian.</li> <li>1832 JS first encountered cholera (at Killingworth).</li> <li>1835 Signed abstinence (alcohol) pledge.</li> <li>1836 Student of Hunterian School of Medicine.</li> <li>1837 Medical student at Westminster Hospital.</li> <li>1837 Member Westminster Medical Society (WMS).</li> <li>1838 Qualified MRCS &amp; LSA.</li> <li>1839 First publication, letter to Lancet: 'Arsenic as a preservative of dead bodies'.</li> </ul>   |
| 1840s | 1840 Uniform penny post. 1840 Victoria & Albert married. 1845-52 Irish Potato Famine. 1845 SS Great Britain first screw propelled vessel to cross Atlantic. 1846-60 3rd cholera pandemic. Affected UK 1848-49 & 1853-54. 1848-49 Revolutions in Europe.  | 1842 Crawford Long probably the first to use, but did not publish on, ether anaesthesia. 1846 William Morton gave first public demonstration of 'ether'. 1847 Ignaz Semmelweis promoted handwashing to prevent puerperal fever. 1847 James Simpson promoted chloroform <sup>3</sup> as an anaesthetic. | 1842 Chadwick's Report on the Sanitary Conditions of the Labouring Population of Great Britain. 1847 William Duncan appointed the first UK Medical of Health (in Liverpool). 1848 Public Health Act   | 1841'On Asphyxia & Resuscitation of Still-born'. LMG 1843/4 MB/MD Lond. (Then recognised as a physician) 1846 JS became lecturer in forensic medicine Aldersgate School of Medicine. 1847(on) JS increasing reputation as an anaesthetist. 1847 'On the Inhalation of the Vapour of Ether' <sup>5</sup> . 1849 'On the Mode of Communication of Cholera' 1849 'On the Pathology and Mode of Communication of Cholera6. LMG 1850 JS meet Benjamin Ward Richardson  |
| 1850s | <ul> <li>1851 Great Exhibition.</li> <li>1854-56 Crimean War.</li> <li>1857 Indian Rebellion.</li> <li>1858 First transatlantic communication via cable².</li> <li>1859 Charles Darwin published 'On the Origin of Species'.</li> <li>1859 London Epidemiological Society. JS a founder member.</li> <li>1854 Filippo Pacini discovered and published on the cholera vibrio. Not generally understood/ accepted at the time.</li> <li>1855 John Simon became the first Government Chief Medical Officer</li> <li>1858 Rudolf Virchow published 'Cellular Pathology'.</li> <li>1859 Lois Pasteur contributed to Germ Theory.</li> </ul> |  | 1852 Willian Farr's paper on Cholera and 'Elevation'. 1852 Lambeth Waterworks Company moved its River Thames intake upstream. 1852 Metropolis Water Act. 1854 Farr aided JS in ascertaining water supplier in fatal cases <sup>4</sup> . 1854 Arthur Hill Hassall examined Broad Street water & cholera diarrhoea but failed to see cholera organisms. 1858 Great Stink (River Thames). | 1853 & 57 JS administered chloroform to Queen Victoria during childbirth. 1853 'On Continuous Molecular Changes'. Lecture to the Medical Society of London <sup>7</sup> . 1854 (Jul/Aug) JS investigated the household water supply of fatal cases of cholera. Found customers of Lambeth Water Co. had a much lower fatality rate than customers of Southwark & Vauxhall Co4,8. 1854 (Sep) JS investigated Broad Street outbreak9. 1855 2nd Ed 'On the Mode of Communication of Cholera'10. 1855 JS President Medical Society of London. 1858 JS gave evidence to Select Committee11. 1858 'On chloroform and other anaesthetics and their action and administration'12. |

#### **Notes:**

- Stockton & Darlington was a partly steam and partly horse drawn railway.
- 2. The cable functioned for only a few days and transmission was very slow.
- 3. The anaesthetic action of chloroform was discovered by Robert Glover. It was years before it was recognised/ accepted that ether anaesthesia is much safer than chloroform, that is hepatotoxic and induces arrhythmias.
- 4. Farr was impressed with JS's results and accepted in 53-54 cholera was transmitted by water, but as a minor route. By 1866, Farr accepted water is a major vector.
- 5. JS published in Oct. Earlier in Feb, James Robinson (1813-1862)
  English dentist, published 'A treatise on the Inhalation of the Vapour of Ether for the Prevention of Pain in Surgical Operations' pp63 first textbook in the world on anaesthesia. Robinson did not continue in anaesthetics leaving Snow to become the lead authority.
- 6. Presented to WMS. Includes evidence additional to 'On the Mode', obtained from correspondence and literature review.
- In his published lecture, JS laid out a comprehensive infectious theory of communicable disease.
- JS estimated death rates per 10,000 houses: Southwark Vauxhall Co 315, Lambeth Co 37, Rest of London 59.
- JS undertook field work and on the basis of this, advocated removal of the Broad Street pump handle. Later JS published his famous Broad Street map.
- JS's definitive book on cholera.
   Republished 1936 with 'On Continuous Molecular Changes'
- 11. Parliamentary Select Committee on Public Health and Nuisances Removal Bill
- Published posthumously/edited by his friend Benjamin Richardson. Richardson also published a biography of JS.

#### **Abbreviations:**

Co Company, Ed Edition, LMG London Medical Gazette, LSA Licentiate of the Society of Apothecaries (London), MB Bachelor of Medicine (London),

MD Doctor of Medicine (London), MRCS Member Royal College of Surgeons (England), WMS Westminster Medical Society

### **Brief explanation of Parliamentary Acts:**

**1832 Reform Act:** Expanded the UK electorate and made parliamentary constituencies more equal (abolished rotten boroughs etc).

**1834 Poor Law Amendment Act:** Intended to curb the cost of poor relief by restricting relief to that given in workhouses etc.

**1848 Public Health Act:** Created a General Board of Health and in certain circumstances, the formation of local boards of health etc.

**1852 Metropolis Water Act:** Made it unlawful for water companies to extract water from the Thames below Teddington Lock etc.

**1858 Medical Act:** Created the General Medical Council and distinguished qualified from unqualified Medical Practitioners etc.

#### Persons included in timeline:

**Edwin Chadwick** (1800-1890) English social reformer.

**Charles Darwin** (1809-1882) English naturalist. Developed the theory of evolution.

**Charles Dickins** (1812-1870) English novelist and social critic.

**William Farr** (1807-1883) Compiler of scientific abstracts, General Register Office. Pioneer epidemiologist/ statistician.

**Arthur Hill Hassall** (1817-1894) English physician, microscopist and advocate of public health.

**René Laennec** (1781-1826) French professor of medicine and musician.

**Joseph Lister** (1786-1869) English opticist. Father of Joseph Lister who revolutionised the craft of surgery.

Crawford Long (1815-1878) American surgeon. Did not publish on ether until 1849. Involved in dispute with Morton and others over the introduction of ether anaesthesia.

**William Morton** (1819-1868) Amerin dentist and physician. Tried to patent ether and claim 'national recompense' from Congress (both failed).

**Filippo Pacini** (1812-1883) Italian anatomist.

**Lois Pasteur** (1822-1895) French chemist. 'Father of microbiology'.

**Benjamin Ward Richardson** (1828-1896) English physician, friend and biographer of JS.

**Ignaz Semmelweis** (1818-1865) Hungarian obstetrician.

**James Simpson** (1811-1870) Scottish gynaecologist and obstetrician.

**Rudolf Virchow** (1821-102) German physician. 'Father of modern pathology'.

**Queen Victoria & Albert** need no introduction.

**Thomas Wakely** (1795-1862) English surgeon, MP, celebrated coroner. Founder of the Lancet.

### **Society Matters:**

#### Call for nominations to the John Snow Society Steering Committee

The John Snow Society Steering Committee ("J3SC") last met on 13 November 2024, continuing its work to manage the Society and make it sustainable into the future. The current committee comprises: James Hargreaves and Charlotte Flynn (Co-Chairs), Lauren D'Mello-Guyett and Pedro Hallal (co-Secretaries), Sebastian Funk (Treasurer), Seyi Soremekun and Patrick Nguipdop-Djomo (Social Media and Website Officers), Jimmy Whitworth (Social Secretary), Paul Fine (Broadsheet Editor), Alex Mold, Dilys Morgan, George Rutherford and Marta Tufet. Five Committee members reach the end of their 3-year terms this year, and some may be stepping down. According to our Constitution, the J3SC can hold up to 12 members, in addition

to founding members (JWh, DM, PF) and thus there are at least three places open this year.

We invite applications from members in good standing (with intact mug and membership card). Following our constitution (https://johnsnowsociety.org/constitution/) a valid application should be received by the Society by first September, and will consist of "a statement of 54 words describing commitment to - and vision for - the Society. Applications will be considered by the J3SC for ratification by Members present at the AGM, unless it is necessary to conduct an email poll if suitable applicants exceed vacancies."

#### **Exclusive to JSS Members**

The 13th (30th anniversary) edition mugs are still available. Free to new members, additional mugs can be purchased if you wish to add to your collection or as insurance policy against breakage (which, according to our constitution, deactivates your membership).



Members can purchase up to 2 additional mugs. The elegant pump-design silk ties (each has a single pump without handle) and the illustrated book by Dr Spence Galbraith (John Snow: his early years) are also available for purchase. See web site for details.

#### **JSS Earrings: Limited Edition**

A limited supply of solid silver earrings depicting the Broad Street pump (with and without the handle) are now available for members only.

Cost £70. Please email

**johnsnowsociety@lshtm.ac.uk** for orders and enquiries.



## Reminder to Members – update your email address

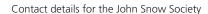
Our cumulative membership total, to whom we will send notice of this Broadsheet, now exceeds 4000. Unfortunately, more than 25 % of emails bounce. We suspect that a few members may have crossed the great divide, but we also suspect that some have merely changed their email addresses. Or some email addresses may have been illegible or otherwise in error from the start... So – if you are/have been a member, but do not receive one email a year from us – please let us know your appropriate (personal generally better than job-related) email. Or if you know of a member who has not heard from us – encourage them to contact us and update their email address.

#### Keeping in touch

The John Snow Society contacts all members once per year, via email, with news about the Society and details of the annual Pumphandle Lecture.

For more interactive participation in the Society, please join the over 2,000 like-minded and follow us on X/Twitter @JohnSnowSociety or Bluesky @johnsnowsociety.bsky.social





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