



# Historical Economic Demography Group

*Research at* LSE ■

## **HEDG Thematic Workshop 2025**

### Health Transitions in the Global South

9, 10 June 2025, MAR 204, Marshall Building, LSE

Organisers: Eric Schneider and Neil Cummins, LSE



Department of  
**Economic History**



To date, much of the research on the health transition has focussed on Europe and North America. Thus, the experience of the health transition in the Global North is often contrasted with that of the Global South: the transition in the Global South happened later, happened more quickly and was more strongly influenced by medical innovations and global health campaigns than the transition in the Global North. While there is truth in this description, the North-South dichotomy may underemphasise the variation in the health transition within the Global South. For instance, mortality decline in the Caribbean (Cuba, Puerto Rico and Jamaica) began in the early twentieth century and child stunting rates were far lower there than in countries with similar levels of income in sub-Saharan Africa and Asia (Riley 2005; Schneider et al. 2024).

This workshop seeks to understand these variations within the Global South by bringing together researchers studying a wide range of contexts. By emphasising a South-South comparison (Frankema 2024), it hopes to shift our default reference from the Global North and yield insights into key questions about how the health transition varied across populations. Thus, we are seeking papers studying the following questions: 1) what explains the heterogeneity in the timing of the health transition across the Global South; 2) how did colonialism shape the health transition in the Global South; and 3) what were the main drivers of the health transition in the Global South. Studies can either include cross-country comparisons or focus on the health transition in one country or context. We also welcome both quantitative and qualitative approaches to these questions with the aim of hearing different perspectives from economic historians, development economists, historical demographers and historians of medicine and health.

The workshop is sponsored by the LSE Historical Economic Demography Group, and the Economic History Society to cover the workshop fee and meals during the workshop for all participants. Unfortunately, we are not able to cover travel or accommodation costs for the workshop.

## **Day 1 – 9<sup>th</sup> June 2025**

### **9.30-10.00am: Coffee, registration and welcome**

#### **10.00-11.30am Session 1: Health Transition: Long-Run Trends**

Chair: Neil Cummins (LSE)

Kristina Thompson, Wageningen University: *Epidemiological transition theory at colonial crossroads: the case of Suriname 1903-1949*

Eric Schneider, LSE: *The Long-Run History of Child Stunting in India: A State-Level Analysis*

Robert Stelter, University of Basel: *Out of Africa: using genealogical data to assess the health impact of major historical events*

### **11.30am-12noon: Coffee break**

#### **12noon-1.30pm Session 2: Geographical Perspectives**

Chair: José Manuel Aburto (LSHTM)

Anggi Novianti, LSE: *Mortality of the 1918-1919 Influenza pandemic in Java and the drivers of disparities*

Hampton Gaddy, LSE: *The Missing Pacific Influenza Epidemics, 1918-21*

Maanik Nath, Utrecht University: *Railroads and Health: Evidence from Colonial India*

### **1.30-2.30pm: Lunch**

#### **2.30-4.00pm Session 3: Sexual and Reproductive Health**

Chair: Eric Schneider (LSE)

Shane Doyle, University of Leeds: *Maternal Mortality from the Local to the Global*

Ivana Zečević, University of Groningen: *Medicalization of reproductive health in Villa Maria and Mua Mission Hospitals, 1900s-1980s*

Tiziana Leone, LSE: *Fertility and Crisis in Indonesia: Five Decades of Climate Disasters*

### **4.00-4.30pm: Coffee break**

#### **4.30-5.30pm Session 4: Colonial Medicine**

Chair: Sarah Walters (LSHTM)

Grietjie Verhoef, University of Johannesburg: *Modern health care, modern hospitals in Africa. A historical perspective on health care developments in the Global South, with a focus on African hospitals.*

Jutta Bolt, University of Groningen: *Geographies of Healing: The Long-Term Impact of Colonial-Era Healthcare Facilities in British Africa*

### **5.30-6.30pm Drinks at local pub**

**7.00pm Dinner, Cinnamon Bazaar** (more information here: <https://cinnamon-bazaar.com/covent-garden/>)

## **Day 2 – 10<sup>th</sup> June 2025**

### **10.00-11.30am Session 5: Gender and the Health Transition**

Chair: Romola Davenport (Cambridge)

Astrid Krenz, LSE: *Male Excess Mortality During the Epidemiological Transition: Theory and Evidence from India*

Wen Su, University of Oxford: *The Burden of HIV and Life Expectancy Sex Gap: Evidence from rural South Africa amid AIDS epidemic, 1994-2022*

Juliana Jaramillo Echeverri (Eric Schneider), LSE: *Gender disparities in Global Child Stunting*

### **11.30-12.00noon: Coffee break**

### **12noon-1.30pm Session 6: Health Campaigns**

Chair: Megan Vaughan (UCL)

Leigh Gardner, LSE: *A rocky start? Colonialism, state capacity and the impact of Rockefeller Foundation public health programmes in Africa*

Eric Strobl, University of Bern: *The Public Hookworm Campaign and Mortality in early 20th Century Colonial Jamaica*

Jeanne Cilliers, Lund: *Historical Patterns of Disease and Intervention in British Africa: The Nigerian Experience with Yaws*

### **1.30-2.30pm: Lunch**

### **2.30-4.00pm Session 7: Inequality in Mortality**

Chair: Ian Timaeus (LSHTM)

Nick Fitzhenry, LSE: *Mortality in the Century of Apartheid, 1940-1970: Spatial and racial health inequalities during the Antibiotic Revolution*

Dinos Sevdalakis, University of Groningen: *Infant mortality decline in urban Senegal: The case of colonial Saint-Louis, 1880- 1921*

Johan Fourie, Stellenbosch University: *Inequality in infant mortality: Evidence from a South African town, 1900-1930*

### **4.00pm: Reception, The Pear Tree Café, Lincolns Inn Field**

## **Abstracts by session**

### **Session 1 – Health transition: long-run trends**

**Kristina Thompson** Epidemiological transition theory at colonial crossroads: the case of Suriname 1903-1949

Since 1850, countries worldwide have experienced a shift in mortality patterns, transitioning from a dominance of infectious diseases towards a regime of mostly degenerative and man-made diseases. Omran's epidemiological transition theory provides scholars with a useful framework for comparison of the various phases of this transition across different temporal and geographical contexts. So far, research within the field of historical demography has largely focused on causes of death in European and North American settings. This study extends the application of the epidemiological transition framework to a markedly different societal context: Suriname between 1903 and 1949. During this period, Suriname, then a Dutch colony, exhibited a demographically diverse population. By 1935, 39 percent of the population was identified as descending from enslaved Africans, 24 percent as having ancestors from British India, and 20 percent as coming from present day Indonesia, with the remainder consisting of Europeans, Chinese and natives from South America. This demographic diversity created a unique epidemiological environment, encompassing diseases from all corners of the world. Using aggregated cause-of-death statistics, this study investigates whether, to what extent, and when Suriname underwent a transition from infectious to degenerative and man-made diseases, thereby broadening the geographical and contextual scope of this current line of research.

**Eric Schneider** The Long-Run History of Child Stunting in India: A State-Level Analysis

**Robert Stelter** Out of Africa: using genealogical data to assess the health impact of major historical events

The lack of historical census data has resulted in an almost complete absence of reliable mortality estimates for Africa before 1960. This is particularly concerns true for robust estimates of major health crises in the first half of the twentieth century, such as the Spanish Influenza or World War I. In this paper, we present new estimates of mortality trends in general and the mortality crises in particular for Africa in the first half of the twentieth century at the country, regional, and continental levels, using crowd-sourced online genealogies.

Previous studies, such as Colasurdo & Omenti (2024), have argued that individual genealogical platforms provide insufficient data for demographic analysis outside the Western world. In contrast, we argue that crowd-sourced online genealogies are a suitable alternative once we pool data from multiple platforms to overcome data limitations. To this end, we construct a new dataset by integrating records from four major genealogical platforms: Geni.com, Geneanet.org, Ancestry.com and FamilySearch.org. This new dataset provides a promising quantitative and geographic coverage, allowing for time series estimates of country- and sex-specific age-standardised mortality rates. To estimate excess mortality due to major historical

events, we follow Murray et al. (2007) and compare the annual mortality rates to estimated baseline mortality. In addition, we disentangle excess mortality associated with World War I and the Spanish Influenza by using sex-specific mortality rates.

Our findings challenge the dominant narrative in the literature that epidemics were the primary driver of the mortality crisis in early twentieth-century Africa. Instead, we show that conflicts and wars were significantly more deadly. Preliminary estimates indicate a total excess mortality for Africa of 0.9 million deaths from the Spanish influenza and 3.8 million deaths from World War I. Importantly, our time series estimates reveal another important insight: Many countries experienced even worse local events such as the Second Boer War, which caused the mortality peak in South Africa in 1901.

## Session 2 – Geographical perspectives

### **Anggi Novianti** Mortality of the 1918-1919 Influenza pandemic in Java and the drivers of disparities

In Java, the 1918–1919 Influenza pandemic resulted in high mortality rates, claiming an estimated 800,000 to 1.1 million lives (around 3% of the population), with some estimates suggesting fatalities exceeded 4.5 million. The highest mortality rates were recorded in the eastern part of Java, while western regions, such as Batavia (now Jakarta), fared better—possibly due to early exposure and herd immunity, as well as its status as the capital city, which provided better access to knowledge and information.

To better understand the mortality impact of the Spanish Flu in Java, a regional-level assessment is crucial. Analysing the drivers of mortality differences will provide insight into how various regions experienced and responded to the pandemic, considering factors such as population density, healthcare access, economic activity, and social structures.

The context of Dutch colonisation in Indonesia in the early 20th century is essential to understanding the pandemic's impact. By examining data from the annual Civil Medical Service reports (*Mededeelingen van den Burgerlijken Geneeskundigen Dienst in Nederlandsch-Indië*), this study will also highlight the socioeconomic conditions during the pandemic under colonial administration.

This paper will lay the foundation for future research on a critical question: how did high mortality rates coexist with economic expansion driven by the commodity boom and plantation economy? The 1918–1919 Influenza pandemic is rarely mentioned as having disrupted this so-called golden period. Hence, a fundamental question arises: why did a pandemic with such a high death toll have little apparent impact on the Indonesian economy? This suggests a disconnection between the effects of the Spanish Flu and the economic boom, which has not been thoroughly examined.

Another important avenue for future research is to broaden the perspective through a comparative analysis of Java and other regions in Southeast Asia. This approach will help to better understand how colonial policies and economic structures shaped the socioeconomic outcomes of the pandemic.

### **Hampton Gaddy** The Missing Pacific Influenza Epidemics. 1918-21

Influential accounts of the 1918 influenza pandemic state that many Pacific populations escaped the pandemic uninfected. In particular, Papua New Guinea, the Solomon Islands, Tuvalu, Kiribati, Vanuatu, New Caledonia, and Norfolk Island are supposed to have escaped the pandemic in 1918–20, due to an Australian policy of protective sequestration. Accounts from local colonial officials, newspapers, and missionaries document that each of these ‘protected’ territories did, in fact, have severe influenza epidemics in 1918–20 and then again in 1921. We also document how it was originally said that these islands escaped the pandemic: scholars trusted the most senior colonial officials from the time, for whom early twentieth-century biomedical hubris intersected with early twentieth-century racist notions of Indigenous islanders’ health, preventing the officials from recognising the pandemic as it was. Finally, we contrast these cases with genuinely successful Covid–19 sequestration policies in the Asia–Pacific region in 2020–21.

### **Maanik Nath** Railroads and Health: Evidence from Colonial India

Does public investment in transport infrastructure improve economic outcomes? There is an extensive literature that studies this question in the context of railroads – perhaps the most important transport intervention in the nineteenth and twentieth centuries (Fogel, 1986; Donaldson and Hornbeck, 2016; Jedwab et al., 2016; Donaldson, 2018). In an accepted view, railroad connectivity led to an increase in volume of goods traded and a rise in average incomes. British India housed one of the world’s largest railway networks, and has been the subject of much discussion on the economic effects of growth in railway access. Recent works on the subject demonstrate positive effects of railways on price convergence, income, urbanisation, and literacy rates (McAlpin, 1983; Burgess and Donaldson, 2017; Chaudhary and Fenske, 2023; Fenske et al., 2023).

Understudied in the global and regional literature, however, is the relationship between railways and health. Herein lies a puzzle. On the one hand, and as the aforementioned literature has shown, market access arising out of railway connectivity could protect incomes from shocks. This, in turn, could improve nutrition intake and reduce mortality rates. On the other hand, railway connectivity could increase population density, mobility, and the transmission rate of diseases (Tang 2017; Zimran 2020). This project investigates the puzzle of transport and health by exploiting novel, municipal-level data on diseases, mortality rates and railway connectivity.

We construct an annual data set of disease and mortality rates at the municipal-level between 1877 and 1912. This was a distinctive period in the expansion of the railroad network. The Indian railways project started in the late 1850s though railroads did not connect much of rural India until decades later. The 1880s and 1890s were significant as regions in hinterland India, those away from coastal cities, started to receive access to railway lines (Andrabi and Kuehlwein, 2010; Bogart et al., 2015). We adapt data on the timing of railroad access from existing literature to assign the first year of rail access for every municipality, and analyse changes in disease and mortality conditions before and after each municipality received access to a railroad network. We use difference-in-differences as well as event study techniques to causally test the effects of railway investments on health outcomes.

The paper contributes to the global economic history of health and wellbeing. Income, social class, nutrition, living and working conditions as well as sanitation have been signalled as determinants of mortality within and across pre-industrial societies (Kelly and Ó'Gráda 2014; Cummins 2017; Gallardo-Albarran 2020; Ogasawara et al., 2020; de Zwart et al. 2022). Transport and disease transmission has received little attention in this work. By studying the unprecedented expansion of railway networks and concurrent increase in mortality rates across the subcontinent, we aim to generate lessons that intersect economic history, health economics and policy.

### Session 3 – Sexual and reproductive health

#### **Shane Doyle** Maternal Mortality from the Local to the Global

Maternal mortality is commonly portrayed as an exemplar of health transitions. The universality of childbirth has granted it a centrality within both family histories, and national or regional narratives of relative progress, around the world.

In the UK, for example, the decline in Maternal Mortality Ratios (MMRs) from c.1,700 per 100,000 in the mid-seventeenth century to 13 by 2022 has been explained as the outcome initially of generalised improvements in underlying health, and then of antibiotics reducing infections and making caesarean sections a safe response to complications. In the contemporary world, high levels of maternal mortality can be understood as marking Africa's imperfect adherence to global trends. In 2000, the lifetime risk of maternal death for African women (1 in 16) was higher than it had been for English women between 1550 and 1800 (Reid 2024). While maternal mortality is substantially higher today in the global south compared to the global north, it is only in Africa where the WHO categorises the phenomenon as 'a disaster' (WHO 2023).

This paper would seek to historicise maternal mortality in Africa, noting diversity over time and space. While the continent's MMRs remain high as an average, they were much higher in the past; national levels today range from 1,223 to 3; and recent years have seen remarkable upward (Kenya) and downward (Sierra Leone) trends in reported deaths.

The paper will focus on the case study of Kenya, in order to highlight three factors of wider significance. One is that national-level data, within Africa at least, are often profoundly misleading – Kenya's maternal mortality 'problem' is concentrated within 13 of its 47 counties. A second is that maternal health, due to its ubiquity, is particularly revealing of the inconsistency of global health priorities over the past century. The third is that maternal mortality in Kenya has not been high over the past decade because of poor policy or technological 'backwardness' – rather high MMRs reflect issues of policy delivery and compliance. These factors, then, suggest that health transitions can only be understood through units of analysis of varying scale, and through consideration of policy not as an end in itself, but as a phenomenon whose significance is defined by implementation and response.



## **Ivana Zečević** Medicalization of reproductive health in Villa Maria and Mua Mission Hospitals, 1900s-1980s

Taking off in the metropolises at the beginning of the twentieth century, the medicalization of childbirth, and reproductive health in general was slowly transferred to colonial settings in the interwar period. By the 1920s, the majority of African colonies were faced with rapid population decline, high infant and maternal mortality rates, and low birth rates. Fearing that this depopulation would result in economic inefficiency, colonial governments started to introduce policies aimed at the welfare of mothers and children. In many African colonies, missionaries aligned their healthcare policies with those of the colonial governments and opened maternity wards, antenatal clinics, and childcare centres in their mission posts. They also taught locally trained nurses and midwives new techniques in childbirth and focused on reshaping indigenous ideas and practices around motherhood, hygiene, and child-rearing.

This paper compares and contrasts the process of medicalization of reproductive health in two missionary hospitals in Southeast Africa – Villa Maria Hospital in Uganda and Mua Hospital in Malawi – both founded by the Missionary Sisters of Our Lady of Africa. It utilizes mission diaries, annual reports, handbooks on nursing and midwifery, and 40 oral history interviews as sources, and focuses especially on practices around antenatal care, childbirth, and postnatal care. It seeks to understand better how the medicalization of reproductive health developed in these two places and how it reflected the goals of missionaries and colonial and independent governments regarding maternal and child health care in Uganda and Malawi; to what extent these goals arose from global developments in reproductive health and how much they were influenced by local circumstances and needs; and what was the response of people from local communities towards the new medical practices offered to them.

Through exploring similarities and differences between these two hospitals, the paper contributes to the literature on medical pluralism both in sub-Saharan Africa and in biomedicine in general. It emphasizes the adaptive nature of biomedicine and aims to understand how and why it adapted in those two places. Furthermore, by looking at the experiences of both healthcare providers and patients, it shows not only that biomedical practices multiplied when transferred to different contexts, but that acceptance and resistance to those practices multiplied as well and influenced the development of medical pluralism in these two case studies.

**Tiziana Leone** Fertility and crisis in Indonesia: 5 decades of climate disasters  
Natural disasters, and being directly affected by it, bring large shocks to women's life-cycle outcomes. Among those, fertility could be affected both positively above all through mortality replacement effect mechanisms, as well as negatively due to exposure to stress, increased partner's mortality as well as increased risk of miscarriages and decline in fecundity due to disruptions in the food chain and consequently deficiencies in nutrition. The empirical evidence stemming from the research in the field has produced inconclusive or contradicting findings so far. In this paper, we aim to systematically analyse historical data at both national and local level comparing populations that were affected by disasters versus those that were not. Using eight rounds of the Indonesian Demographic and Health Surveys, DHS (1976-

2017), we investigate the effect of high intensity climatic disasters (e.g.: floods, cyclones, typhoons, etc.) on completed fertility of women aged 40-49 years. The number of disasters, i.e., the events affecting over a million people, is computed by linking DHS data with EM-DAT, International Disaster Database, at province level for all the types of disaster events experienced by the women over their reproductive lives. We apply multilevel models which acknowledge the hierarchical structure of individuals clustered in provinces and examine the impact of contextual variables while controlling for micro-level socio-economic (i.e.: education, residence, wealth, and marital status). Results show a cohort relative impact of disasters, whether just one or more than one, on fertility with older cohorts having a positive relation and younger ones negative with significant between-province variance. Socioeconomic characteristics generally show with lower levels fertility for more educated, urban women. This paper is situated within the wider research on exposure to crises across the fertility transition and offers a historical report of the impact of disasters on childbearing outcomes.

#### Session 4 – Colonial medicine

**Grietjie Verhoef** Modern health care, modern hospitals in Africa. A historical perspective on health care developments in the Global South, with a focus on African hospitals.

Hospital systems developed in the contexts of private welfare extension all over the world. In Africa private missionary initiatives were the agents of introduction of modern Western medicine and the treatment of illness at institutions known in the West as hospitals. The provision of health care in Africa, aligned to Western medicine, developed along a complex path of co-existence with indigenous health systems since the later nineteenth century. Deep rooted intricacies of indigenous health practices articulating with new medical knowledge and practices had a profound impact on the development of health systems in Africa. The political economy transition from colonial control to independent states during the latter half of the twentieth century, impacted health policy and practice. This paper will explore the historical trajectory of health care systems in Africa from the private missionary hospitals to the institutionalisation of health care as a public function. This development occurred at different periods in Africa, with the development in South Africa first leading in terms of the sophistication of medical services, to the current context of depletion thereof. This paper will focus specifically on the symbiosis between private health care provision and public health care in Africa as this market developed, especially since the late twentieth century and the first decades of the twenty-first century. These developments were closely related to pandemics.

In this analysis the historical unfolding of health care provision as a function of public policy in Africa epitomises post-decolonisation policy frameworks, public infrastructure, policy territories, reactivity to pandemics and market sensitivities. Reflecting on macro data on public expenditure on health care, per capita expenditure on health care and the growing participation of private health care providers across Africa, this paper will explore the contribution of private health care provision to Africa's health care landscape. The entrance of corporate health care providers to supplement public health care services, characterises modern health care in Africa. The complexity

of hospital organisation and management in the policy context of the different African states impacted market developments and private investments in the hospital sector. These developments were impacted by public infrastructure provision, maintenance, and innovation. Public policy contexts created path dependencies for decades with respect to efficient governance and economic sustainability of health care provision. By the mid-twentieth century private actors again entered the sector, leading to questions of how, why, by whom new hospitals would be constructed, populated, financed, and organised to supplement health care provision in Africa.

This paper will turn the attention to the twentieth century turn to private health care provision in Africa, as represented in modern private hospitals.

### **Jutta Bolt** Geographies of Healing: The Long-Term Impact of Colonial-Era Healthcare Facilities in British Africa

Geography is universally recognized as a critical component of healthcare access, particularly important for dispersed rural or remote populations (Joseph & Phillips, 1984; Jones and Moon, 1987). The global concern for health policymakers and planners revolves around achieving equitable provision of primary healthcare services, with an emphasis on meeting the needs of impoverished populations (Peters et al, 2008). In Sub-Saharan Africa, where large healthcare disparities persist, access to hospitals stands as a key determinant of population health and development (Tsoka & Le, 2004, Blanford et al., 2012). This paper delves into historical patterns of hospital distribution to unravel its long-term impacts on contemporary health landscapes. Specifically, it investigates the enduring impact of colonial-era healthcare infrastructure in former British Africa with an emphasis on the spatial dynamics of persistence and change in both hospital establishment and longevity.

Drawing on a comparative analysis of former British colonies, we explore the determinants of initial hospital establishment during the colonial period and the enduring effects of these hospitals, considering their physical persistence and the sunk costs associated with these types of immobile facilities (Huillery, 2009; Jedwab et al., 2017; Baumert, 2022). We chart the location and timing of state- and missionary-funded hospital expansion across 12 colonies, during the twentieth century. Historical hospital data come from the hospitals and charitable institutions sections of Blue Books, supplemented with data from reports from various missionary societies providing health services. These archival records have been geocoded, contributing to the development of a novel spatial database that enables cartographic representations of historical healthcare facility distribution. These are supplemented by contemporary GIS data derived from a spatial database of health facilities managed by the public health sector in Sub-Saharan Africa (Maina et al., 2019). As the first comprehensive attempt to map both historical hospital locations and explore the extent of locational persistence across different countries, this paper fills a critical gap in our existing knowledge. By doing so, it aims to provide a more nuanced understanding of the dynamic processes of change in healthcare infrastructure and its implications for contemporary development in African nations.

## Session 5 – Gender and the health transition

### **Astrid Krenz** Male Excess Mortality During the Epidemiological Transition: Theory and Evidence from India

For a given age, adult men die at a higher rate than women. In many developed countries, increasing excess mortality of men has been demonstrated for cohorts born in the late 19th century and thereafter. It has been surmised that the decline in infectious diseases environment contributed to the increase in excess male mortality. Here, we focus on India 1990-2019, a period in which the Indian states experienced to varying degrees the epidemiological transition. We show that excess male mortality evolves positively over the observation period, is greater in later-born cohorts, and is strongly associated with the decline in infectious disease mortality. We propose a simple theory that explains these facts by a greater influence of infections on the biological aging of women compared to men. We calibrate the model with Indian data and show that it can replicate the feature of rising excess male mortality over time and birth year of cohorts.

### **Wen Su** The Burden of HIV and Life Expectancy Sex Gap: Evidence from rural South Africa amid AIDS epidemic, 1994-2022

The life expectancy sex gap provides critical insights into patterns of human mortality. A positive life expectancy sex gap has been observed globally in recent decades. However, there has been limited focus on such gaps in low- and middle-income countries, particularly in Sub-Saharan Africa. The epidemiological profiles of males and females in Sub-Saharan Africa differ greatly from those in high-income countries. Both sexes in this region have been affected by the AIDS epidemic over the past decades. Among Sub-Saharan nations, countries like South Africa have been most affected by the AIDS epidemic, alongside other challenges such as maternal mortality and weaker healthcare infrastructures compared to that of high-income countries. Our study quantifies the life expectancy sex gap across time in two rural South African populations using Demographic Surveillance data. We disaggregate the age- and cause- contributions to the life expectancy sex gap to identify the age groups and causes of death driving these time changes.

### **Juliana Jaramillo Echeverri (Eric Schneider)** Gender disparities in Global Child Stunting

## Session 6 – Health campaigns

### **Leigh Gardner** A rocky start? Colonialism, state capacity and the impact of Rockefeller Foundation public health programmes in Africa

Before the establishment of international organisations after World War II, American charitable foundations played a key role in pioneering modern global health campaigns. Subsequent assessments of both their aims and the impact of their efforts have been mixed. This paper assesses the goals and impacts of Rockefeller Foundation programmes in Sub-Saharan Africa during the interwar period. The Rockefeller Foundation was established in 1913 and became an early leader in global public health campaigns. Starting in 1917, the Foundation became one of the first American

foundations to engage seriously in Africa, when the International Health Board (later International Health Division) embarked on efforts to eradicate hookworm, treat yellow fever, and expand medical education in various parts of the continent. Though Africa comprised only a small part of IHD's global activities, Rockefeller spending was expansive compared to the limited public health budgets of colonial states. As a result, many sought out Rockefeller funds and actively assisted IHD staff despite concerns about the growing influence of the United States.

However, this paper argues that Africans saw few benefits from this spending, in contrast to the populations of other colonies like Jamaica. This limited success was in part because of the structure of Rockefeller spending, which was restricted to short-term projects and required that a rising share of costs be contributed by local governments. Their stated aim was to build capacity rather than providing permanent charity. In Africa, low levels of state capacity meant they were unable to maintain public health infrastructure or sometimes even access Rockefeller funding in the first place. The limited impact of these programmes was also shaped by the changing aims of the Foundation itself, which shifted from aiming to treat disease to seeing Africa as a laboratory for scientific investigation. Finally, conflicts between the aims of Rockefeller and the policies of colonial state meant offered funding was not always accepted. The paper forms part of a larger project on the economic impacts of American trade, investment and charitable giving in Africa during the interwar period.

### **Eric Strobl** The Public Hookworm Campaign and Mortality in early 20th Century Colonial Jamaica

Despite stagnant economic and living conditions, early 20th-century colonial Jamaica experienced one of the most rapid increases in life expectancy beginning in the 1920s. Life expectancy doubled, rising from 35 to 70 years by 1977 — a phenomenon often referred to as the Jamaica Paradox. One key factor in this transformation was the Hookworm Campaign (1919–1936), an island-wide public health initiative introduced by the Rockefeller Foundation in collaboration with the Jamaican government. The campaign aimed to eradicate hookworm, a parasitic disease prevalent in tropical regions with poor sanitation and healthcare, which weakens the immune system and heightens susceptibility to infectious diseases like malaria and tuberculosis. The campaign combined medical treatment, sanitation infrastructure, and public health education. Using parish-level mortality data and an event study framework, this paper investigates the role of the Hookworm Campaign in reducing mortality rates across all age groups and genders. Results show that infant mortality declined by 10 per cent in the campaign's first year, cumulating to a nearly 33 per cent reduction within ten years. Mortality among the elderly fell by 6 per cent initially and reached a 16 per cent decrease over ten years. The findings demonstrate the campaign's long-term, cumulative benefits, highlighting the importance of comprehensive public health interventions in improving living conditions. This study provides the first empirical analysis of the Hookworm Campaign's impact outside the United States and its effect on mortality, contributing to research on the effectiveness of historical public health initiatives in early developing colonies.

**Jeanne Cilliers** Historical patterns of disease and intervention in British Africa: The Nigerian experience with yaws

The Nigerian anti-yaws campaign of 1953–54 represents an early and pioneering instance of mass antibiotic treatment for the control of a Neglected Tropical Disease. As one of the most significant medical initiatives under British colonial rule, yaws control efforts initially relied on pre-penicillin therapies that offered only temporary relief. Although limited in curative power, these early interventions laid the groundwork for later mass eradication efforts. This study examines the British colonial government's recognition of yaws as a public health concern and traces three decades of localized interventions leading up to the nationwide campaign. Drawing on Annual Medical Reports from 1900 to 1960, we offer an overview of anti-yaws measures in colonial Nigeria, focusing on drug development and availability, community engagement, the role of African medical staff, and the integration of yaws treatment with sleeping sickness control. We argue that while the introduction of penicillin was crucial to the success of the 1953–54 campaign, it was the commitment of local health workers and the trust they fostered in rural communities that proved decisive. By illuminating the historical trajectory of yaws control in colonial Nigeria, this research highlights the interplay of medical, sociocultural, and political dynamics that underpinned the eventual success of eradication efforts.

#### Session 7 – Inequality in mortality

**Nick Fitzhenry** Mortality in the Century of Apartheid, 1940-1970: Spatial and racial health inequalities during the Antibiotic Revolution

This paper describes and explores a paradox in apartheid-era South Africa: The 'Coloured' population (a legally defined racial group in South Africa during apartheid, distinct from both Black-African, Indian and White populations) experienced significant health improvements during the 1950s—a period marked by intensifying racial segregation and economic stagnation. Using newly constructed district-level data on Crude Mortality Rates (CMR) for White and 'Coloured' populations (1940–1960) and detailed records on the universe of South African physician addresses, the study examines how healthcare access shaped the diffusion of antibiotics and mortality trends. Employing a difference-in-differences framework, it finds that high physician density districts saw rapid mortality declines among the Coloured population following the introduction of antibiotics, with diminishing returns as non-physician providers expanded access. Conversely, White populations, with lower infectious disease burdens, showed limited responsiveness to these innovations. These findings demonstrate that while antibiotics mitigated some health inequalities by disproportionately benefiting marginalised groups with high infectious disease burdens, the persistence of systemic disparities constrained long-term convergence. This study highlights the interplay between medical innovation and entrenched inequalities, showing how technological progress can produce counterintuitive outcomes in deeply unequal societies.

### **Dinos Sevdalakis** Infant mortality decline in urban Senegal: The case of colonial Saint-Louis, 1880- 1921

This paper is an to quantify infant mortality change in an early-colonial urban context and investigates whether inequalities were exacerbated in that period. We focus on the town of Saint-Louis, Senegal, which historians consider a forerunner in mortality declines in West Africa. So far, however, no attempt has been made to quantify changes in mortality rates. Using birth and death certificates issued by the municipality of Saint-Louis, we make the first attempt to quantify the level and trends in mortality by focusing on infant mortality rates between 1880 and 1921. We find evidence for a substantial decline in infant mortality rates between 1895 and 1912, which were primarily driven by a drop in neonatal mortality.

To analyse the determinants associated with higher risks of infant mortality, we sample individual-level data from all birth and infant death certificates for the years 1880, 1891, 1904, 1912, and 1920 (N = 6,061). To this end, we employ a Cox proportional hazards model. We focus occupational class, French literacy, and birth location, to examine whether socioeconomic differences explain inequalities in infant mortality. Relative to skilled manual labourers, only the infants of food-producing groups show statistically significant lower mortality, with salaried classes and colonial elites showing no significant advantage. Our analysis, however, finds that French literacy was associated with a significantly lower risk of infant death—infants with a signature in Latin characters on their birth certificates had a 19 to 36 per cent lower change of passing in the first year of life compared to unsigned certificates. This indicates that there was a substantial advantage to infants whose parents were closer to colonial institutions, such as the colonial education system.

A final aspect which is explored, is whether this advantage of the literate group changed over time. Historians have argued that in the period 1903-05, mortality declined as a result of colonial public health investments. Depending on which social groups benefitted mostly from these public health investments, inequalities in mortality may have grown at the time, as a result of differential access to amenities. To examine this, we check whether relative risks of infants passing changed by social class in 1912 and 1920, compared to the 1880, 1891, and 1904. By splitting our sample into two periods, we find preliminary evidence that the literacy advantage in infant mortality was greater in the post-1905 period. We argue that, although mortality declines probably benefitted a large section of urban society, those closely associated with colonial institutions, as proxied by French literacy, benefitted to a greater extent.

### **Johan Fourie** Inequality in infant mortality: Evidence from a South African town, 1900-1930

Infant mortality is an economic indicator. A life that does not begin fully is one that never enters the labour force, never accumulates human capital, never demands or supplies anything. It is wealth unmade. This is why economists have long treated early-life health as a determinant of later productivity, earnings, and economic mobility. Mortality rates reveal where a society's economic system fails. If certain groups of infants die more often than others, the problem is structural. Studying these disparities

is not only an exercise in historical accounting but a way of tracing the mechanisms through which inequality persists.

This paper examines infant mortality in Paarl, South Africa, between 1900 and 1930, using historical death certificate data. Paarl in the early twentieth century is a useful setting for this study. The town was neither a major industrial centre nor a rural backwater but something in between – a place where economic and social divisions were pronounced, but where institutions had not yet fully hardened into the rigid frameworks of later apartheid. It was a time of transition. The 1919 Public Health Act promised improved healthcare, but its effects were uneven. The Spanish flu pandemic revealed stark differences in who received medical care and who did not. This study allows us to see how racial inequality functioned before it was codified into law.

The results do not fit the usual explanations. Poverty, poor sanitation, lack of medical care – these factors matter, but they do not fully account for the racial gap in infant deaths. The issue is not simply one of scarcity but of distribution, not just unequal access but a system that sustains inequality. Using econometric techniques, we test whether income, environment, or healthcare availability explain these disparities. The findings suggest otherwise. The data resists simple conclusions.

These findings are relevant today. Racial disparities in health persist in many countries, including those with universal healthcare. If poverty alone does not explain these differences, policy must target the structural barriers that prevent access to quality medical care. Historical research does not simply describe the past – it shows us how inequality is made, and how it might be unmade.



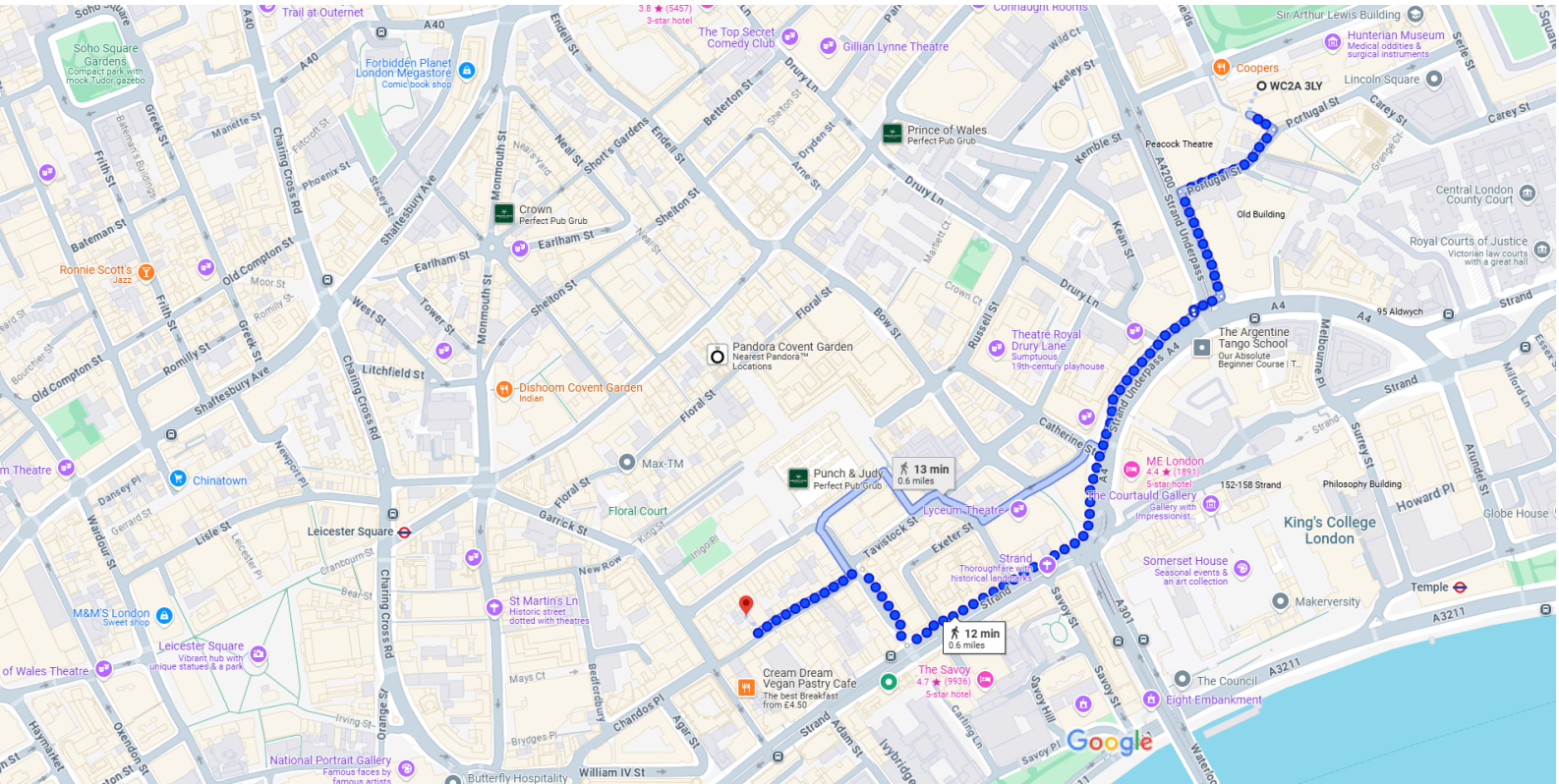
## Campus map:



## Key:

**CBG** – Centre Building  
**CKK** – Cheng Kin Ku Building  
**CLM** – Clement House  
**COL** – Columbia House  
**CON** – Connaught House  
**COW** – Cowdray House  
**FAW** – Fawcett House  
**KGS** – King's Chambers  
**KSW** – 20 Kingsway  
**LAK** – Lakatos Building  
**LCH** – Lincoln Chambers  
**5LF** – 5 Lincoln's Inn Fields  
**35L** – 35 Lincoln's Inn Fields  
**49L** – Coopers Restaurant)  
**50L** – 50 Lincoln's Inn Fields

**51L** - 51 Lincoln's Inn Fields  
**LRB** – Lionel Robbins Building, Library  
**MAR** – The Marshall Building  
**OLD** – Old Building  
**OCS** – Old Curiosity Shop  
**PAN** – Pankhurst House  
**PAR** – Parish Hall  
**PEA** – Peacock Theatre  
**PEL** – Pethick-Lawrence House  
**POR** – 1 Portsmouth Street  
**SAL** – Sir Arthur Lewis Building  
**SAR** – Sardinia House  
**SAW** – Saw Swee Hock Student Centre  
**SHF** – Sheffield Street  
**STC** – St Clement's, Clare Market



Map data ©2025 Google 50 m

	via A4	12 min	0.6 mile
	via Aldwych/A4	13 min	0.6 mile
All routes are mostly flat			