

## Brother's Brother Foundation in Costa Rica: A Case Study in Public–Private Partnerships and Global Health in the American Century

---

*Sarah B. Snyder*

The chapter analyses a 1967 immunisation campaign led by Dr Robert Hingson and the non-governmental organisation (NGO) he founded, Brother's Brother Foundation, that was aided by key logistical support from the US government. This collaborative effort to promote public health and eradicate disease reveals one of the diverse ways the US government improved public health and fought disease in the American Century. This programme achieved a degree of 'soft power' for the United States, and it intersects with broader narratives about the role of the United States, American NGOs and US citizens in advancing international health.<sup>1</sup> Examining the episode illuminates American approaches to development in the 1960s, and it highlights an understudied bilateral relationship – that between the United States and Costa Rica, or the hawk and the sparrow, as one author has termed it.<sup>2</sup> Finally, the campaign offers us a means of analysing public–private global health collaboration in foreign countries.

Before the Brother's Brother Foundation campaign in Costa Rica, the United States had a record of cooperating with Latin American governments, at least since the 1940s, on sanitation, medical care and public health.<sup>3</sup> These efforts could also be framed in terms of the potential positive economic benefits – enhanced productivity, increased life expectancy and greater development.<sup>4</sup> In the view of Representative Hugh L. Carey (Democrat, NY), we should see these health interventions as 'effective instrument[s] of foreign policy'.<sup>5</sup> He wrote, 'Historically, American medical help has been used to open new frontiers in our hemisphere and around the world.'<sup>6</sup> Such drives were justified in economic, humane and security terms, and facilitated the expansion and protection of US interests in the Western Hemisphere.<sup>7</sup> As other scholars have shown, the spread of disease in Central America and elsewhere in the developing world posed potential threats to development and therefore US strategic

and economic interests.<sup>8</sup> This unchecked transmission of infection therefore represented threats to the ideals, values and capacities of the American Century.

Whereas there is a rich historiography on American corporations and foundations in Costa Rica in the late nineteenth century and first half of the twentieth century, the literature on US–Costa Rican relations in the 1960s is more limited.<sup>9</sup> As US interests shifted during the Cold War, Costa Rica's history as a peaceful country meant that it was not central to US foreign policy and therefore the history of US foreign relations.<sup>10</sup> Yet the United States, in the wake of the 1959 Cuban Revolution, paid heightened attention to the Caribbean region, including Central America. John F. Kennedy travelled to Costa Rica in 1963, and while there he delivered an address that touched on the significance of 'political liberty' and 'social justice'.<sup>11</sup>

One of Brother's Brother Foundation's first missions was a campaign to vaccinate Liberians against smallpox in 1962.<sup>12</sup> Although State Department telegrams characterised the trip as 'strictly private', the organisation coordinated with the Liberian government and US Agency for International Development (USAID) representatives in Monrovia.<sup>13</sup> The US navy also aided the mission by transporting personnel and 200 tons of material to Liberia.<sup>14</sup> Several years later Brother's Brother Foundation's undertook a campaign in Costa Rica in which it secured support from a different branch of the US government – the Pentagon, which loaned the group sixteen jet injectors. Examining Hingson's vaccination campaigns demonstrates the secularisation of development, US government partnerships with non-state actors and a deeper degree of military–private partnerships than the existing literature suggests.<sup>15</sup>

### *Pistolas de la paz*

At the end of August 1967, Costa Rican Minister of Health Alvaro Aguilar wrote to President Lyndon B. Johnson thanking the US Defense Department for loaning sixteen jet injectors, which he termed '*pistolas de la paz*', for a vaccination campaign.<sup>16</sup> The campaign enabled the inoculation of 840,000 Costa Ricans against smallpox and the immunisation of around 210,000 Costa Ricans, primarily babies, against measles. These records, filed under the White House Central Files subject category 'Peace', signalled that the Johnson administration sought to build upon its predecessors' efforts to wage the Cold War by other means and via non-governmental actors. Correspondence in the Lyndon B. Johnson Library reveals that Johnson's intrigue with the minister's language, which transformed vaccine delivery vehicles

into transmitters of peace. A 6 September 1967 note records, ‘Find out what this is and have Covey Oliver develop a program. “Pistols for Peace” – that sounds pretty good.’<sup>17</sup> Despite the notation, I could find no evidence that replication was pursued elsewhere (Figure 9.1).

The immunisation programme in Costa Rica involved collaboration among the United States, the Costa Rican government, and Brother’s Brother Foundation. The foundation provided US medical professionals and utilised resources such as the Pentagon’s loan of the jet injectors, which were termed peace guns in Spanish due to their gun-like appearance and painless effects.<sup>18</sup> At a time when US guns were being deployed overseas increasingly to wage war in Vietnam, the US military continued collaborating with humanitarian organisations towards peaceful ends. As with Hingson’s other missions, the civilian nature of these efforts was key. They also fit within Vice President Hubert Humphrey’s concept of a ‘shirtsleeve war’ – efforts by civilians to improve health and education.<sup>19</sup>

The Brother’s Brother Foundation initiative in Costa Rica built upon earlier undertakings by the Rockefeller Foundation in the region, which began working in Central America and the Caribbean in 1914 and made early efforts regarding international health focused on hookworm, malaria and yellow fever.<sup>20</sup> According to some scholars, the Rockefeller Foundation’s efforts, like those of Brother’s Brother



Figure 9.1 A jet injector in the collection of the Division of Medicine and Science, National Museum of American History, Smithsonian Institution

Foundation, were driven by a 'missionary impulse'.<sup>21</sup> Whereas other observers have asserted Rockefeller's international health initiatives and potentially the efforts of Brother's Brother in Liberia sought to aid economic growth.<sup>22</sup>

The literature on US policy towards Latin America has often contrasted the commitment to development and democracy ostensibly embedded in Kennedy's Alliance for Progress programme with the Mann Doctrine of the Johnson years, which in R. D. Johnson's telling privileged 'stability and restraint of Communism'.<sup>23</sup> Despite this shift in emphasis, it is significant that Johnson kept aid to Central America consistent with Kennedy's commitments, especially given that Congress sought diminished foreign assistance considering the costs of the war in Vietnam.<sup>24</sup>

The Johnson administration's support for Brother's Brother Foundation's Costa Rican campaign complemented the president's rhetoric about the interconnections between national and international health. In 1965 remarks announcing more funding for biomedical research facilities, Johnson repeatedly shifted between his and the country's commitment to domestic and international health. For example, he said, 'Malaria and cholera were conquered in America a long time ago . . . The American goal is the complete eradication of malaria and cholera from the entire world.' He argued that the United States was leading 'a worldwide war on disease'.<sup>25</sup>

The Johnson administration's support for Hingson's efforts in Costa Rica also fit with its international health programme, which Johnson proposed in February 1966, saying that the United States should participate in an international effort 'to rid mankind of the slavery of ignorance and the scourge of disease'.<sup>26</sup> Among other objectives articulated by Johnson in this speech was the creation of a civil service devoted to global health. Speaking in 1964, Johnson had said, 'Those who live in the emerging community of nations will ignore the problems of their neighbours at the risk of their own prosperity.'<sup>27</sup> The International Health Act of 1966 sought to ensure that prosperity. The legislation proclaimed: 'It is in the interest of this Government to develop and strengthen the capability of the United States to provide assistance to those countries who are working to help themselves develop needed health services; and that, therefore, it is both necessary and desirable for this Government to assist in providing our share of the health workers needed to man the posts of the health battle throughout the world.'<sup>28</sup>

The International Health Education Act ultimately failed, and Peter J. Hoetz argues that in the aftermath, the United States pulled back from medical missions abroad. Nonetheless the proposed legislation

should be seen as an expression of the administration's wish to expand its engagement internationally, including in matters of health.<sup>29</sup>

In addition to supporting Brother's Brother Foundation and Hingson's efforts, the United States also benefited from the goodwill and spirit of cooperation such humanitarian missions engendered. Writing to Johnson, the Costa Rican health minister said, 'We believe our governments should unite in the use of the pistols of peace in preference wherever possible to the use of the guns of war.'<sup>30</sup> Johnson responded to the minister of health and congratulated him in the vaccination campaign.<sup>31</sup> Earlier that year, Johnson had indicated to several Central American presidents, including José Trejos of Costa Rica, that he wanted to expand the fight to eradicate screwworm to that region, demonstrating that the American commitment to improving Central American health went beyond facilitating the loan of *pistolas de la paz*.<sup>32</sup>

United States' support for global health projects in the 1960s also represented a potential counterpoint to its most significant interaction in the world in these years – the war in Vietnam. Hingson explicitly connected the two agendas, contrasting his budgets to vaccinate people in Central American countries to US military spending for Vietnam. Hingson claimed that he could immunise the world's population with 'one-tenth of the military personnel and one-fourth of the budget of the United States' expenditure for the war in Vietnam'.<sup>33</sup>

### **Hingson: the man and his jet injector**

Robert Hingson served in the US Public Health Service before working in medical schools in Colombia and Venezuela in the 1950s.<sup>34</sup> An anaesthesiologist, he was focused on diminishing patients' pain. To that end he worked to develop a medical device, the jet injector, which would innovate vaccination efforts in subsequent years. As part of his studies, Hingson practised on cadavers and himself.<sup>35</sup> The multiple-dose jet injector enabled the vaccination of 1,000 people per hour, a dramatic increase over earlier delivery methods.<sup>36</sup> In addition to enabling increased numbers of patients reached, the innovation of the jet injector, or hypospray, offered other advantages over using a needle and a syringe. Most notably, the jet injector was less painful; half of patients reported a 'complete absence of pain'. In addition, the jet injector did not require sterilisation with each use.<sup>37</sup> The name, 'peace gun', came from a Burmese child – who remarked after receiving a typhoid inoculation, that 'it's not a bad gun; it's a peace gun'.<sup>38</sup>

Among Hingson's motivations for his humanitarian work were religious ones – a professed desire to follow the commandment to

love one's neighbour as oneself, as well as potentially a belief in the gospel of public health or the compulsion to protect human life.<sup>39</sup> As one fellow Baptist put it, Hingson felt 'very strongly the commission as expressed in Luke 4:18 that in addition to preaching the gospel to the poor we are to heal the broken hearted'.<sup>40</sup> In 1958, Hingson led the first inter-racial, interfaith and interdisciplinary team of medical professionals to undertake a mission internationally by embarking on an around-the-world-trip to assess medical needs.<sup>41</sup> Funded by the Baptist World Alliance, the team travelled to Japan, the Philippines, Burma, South Korea, India, Hong Kong, Egypt, Kenya, Iran, Tanganyika, Southern Rhodesia, the Belgian Congo, French Equatorial Africa, Nigeria and Liberia. During its journey, the group visited hospitals, performed operations, administered vaccines and delivered medical supplies, among other activities.<sup>42</sup>

### Brother's Brother Foundation

After their trip, those involved created a committee to try to address the medical needs they catalogued on their journey.<sup>43</sup> Supported by the Baptist World Alliance, Hingson established Brother's Brother Foundation in Pittsburgh. The organisation took its name from a Nigerian medical student who told Hingson, 'We don't need a keeper; we need a brother'.<sup>44</sup> The organisation's objective was to utilise US medical resources in global health challenges given the overwhelming need its organisers identified in the world. It raised money from wealthy individuals such as Baptist Maxey Jarman and sought and received in-kind donations from pharmaceutical companies. The group also made direct appeals to donors via talks to religious and civic organisations in their community and across the country.

One way to conceive of Hingson and his interdenominational medical colleagues is as medical missionaries. There are examples of Americans serving as medical missionaries as early as 1834, such as Peter Parker in China, but the phenomenon became more prevalent later.<sup>45</sup> The 1932 'Hocking Report' urged American missionaries to move away from their long-standing focus on conversion to prioritise social services such as medical care.<sup>46</sup> Thereafter, American missionary activity evolved away from the 'Christian imperialism' that Emily Conroy-Krutz and others have documented.<sup>47</sup>

Brother's Brother Foundation's immunisation campaign in Costa Rica built upon and was facilitated by its earlier work, especially in Liberia and Honduras.<sup>48</sup> The campaign in Liberia demonstrated that mass vaccination against smallpox was possible. In subsequent years as the World Health Organization (WHO) focused its attention on

smallpox eradication in Africa and then Asia, the Americas received less attention. Given that gap, Dr Donald Henderson, who worked for the US Communicable Disease Center and then led the WHO's smallpox campaign, urged Hingson and the foundation to undertake immunisation efforts in the Americas like those they had pursued earlier in Liberia.<sup>49</sup> Hingson emphasised the complementary nature of their efforts in a letter to Johnson in January 1966.<sup>50</sup> Hingson and his fellow medical professionals all held full-time positions and devoted themselves to intensive, international medical missions only occasionally. After Liberia, the next significant Brother's Brother Foundation initiative was a joint effort in 1965 with *Amigos de Honduras*, a group of Texan doctors and volunteers affiliated with the River Oaks Baptist Church in Houston.<sup>51</sup> The group benefited from financial and in-kind donations in its efforts to vaccinate Hondurans against diseases including polio, tuberculosis, smallpox and diphtheria, among others. The team dispensed hundreds of thousands of shots.<sup>52</sup>

### Medical intervention in Costa Rica

Brother's Brother Foundation reached out to Latin American governments in 1967 offering medical missions to immunise against polio, tuberculosis, leprosy, smallpox and measles.<sup>53</sup> By responding to requests from health ministers and other government officials, Brother's Brother Foundation worked to avoid 'volunteer colonialism', when locals are not adequately involved in developing and implementing projects.<sup>54</sup> Hingson reported that Brother's Brother Foundation, a small and highly founder-driven NGO, was concentrating its work in Central America because the region was in 'our own backyard'.<sup>55</sup>

Aguilar, the health minister of Costa Rica, responded in early June asking for help in combating a measles epidemic in the country.<sup>56</sup> Health ministry officials estimated that 10,000 Costa Rican children had measles, and one in eleven Costa Rican children with measles were dying.<sup>57</sup> In response, Hingson and Brother's Brother Foundation organised a complex operation that vaccinated 846,000 Costa Ricans against smallpox and immunised them against measles and polio.<sup>58</sup> Hingson pledged that the volunteers would 'be traveling by truck, jeep, plane, boat, horse, donkey, and afoot' to reach 50,000 Costa Ricans a day.<sup>59</sup> At the time, only 60 per cent of Costa Ricans regularly received medical attention.<sup>60</sup>

United States government officials in San José and reporters in the United States tracked the effort. Before the mission commenced, US embassy reporting predicted 9,000 Costa Ricans under the age of

ten would be inoculated against measles and smallpox by Brother's Brother Foundation. It also noted that the organisation planned to immunise as many as 1 million Costa Ricans against leprosy, polio and tuberculosis.<sup>61</sup> The *New York Times* covered the eighty-four volunteers, which included members of the Hingson family, as they travelled to Costa Rica for a month-long campaign. Potentially minimising the skills and commitment of the Brother's Brother Foundation participants, the *New York Times* characterised them as 'U.S. medical vacationers', rather than as medical practitioners or missionaries.<sup>62</sup> Local reports revealed that the volunteers would 'eat and sleep wherever they find themselves'.<sup>63</sup>

The team worked together with the Costa Rican public health department as well as the Pan American Health Organization (PAHO), a regional office of the WHO.<sup>64</sup> When Brother's Brother Foundation faced challenges in securing sufficient doses of the measles vaccine, the PAHO was able to provide some doses of the vaccine.<sup>65</sup> The health department of New York City contributed from its stockpile as well.<sup>66</sup> Brother's Brother Foundation also turned to the US ambassador to Costa Rica Clarence S. Boonstra for assistance.<sup>67</sup> Given the scope and urgency of the epidemic, Brother's Brother Foundation ultimately bought vaccine doses beyond its available funds.<sup>68</sup> The Costa Rica mission left Brother's Brother Foundation \$101,000 in debt, an amount it tried to reduce through subsequent fundraising activities.<sup>69</sup>

Beyond vaccines, Brother's Brother Foundation also needed jet injectors to deliver the doses. Significantly, the US Department of Defense lent sixteen injectors, which fit into the evolution of the role of the US military in those years.<sup>70</sup> The 1959 US Mutual Security Act had emphasised a shift to focus on 'socio-economic improvement'.<sup>71</sup> Civic action was the component of military assistance that addressed development needs, including medicine and health. This element made up 15.8 per cent of US military assistance to Latin America in 1966.<sup>72</sup> The medical department of the US military services participated in the delivery of medical services and therefore facilitated development efforts. An army report noted, 'Civic action has, therefore, become a strategic concept rather than a military tactic.'<sup>73</sup> Intriguingly, Hingson framed his work in terms of a 'war' against death in which the 'enemy' was disease. The 'army', his band of medical professionals, confronted these challenges with 'weapons' such as vaccine and 'artillery' like the jet injector, making explicit connections with more conventional battles at the time.<sup>74</sup>

The measles immunisations had dramatic effects with total measles cases and deaths decreasing significantly. In contrast to the 3,811



Costa Ricans who were hospitalised with measles in 1967, that number dropped to 97 in 1968.<sup>75</sup> In a sign of the significance with which the Costa Rican government treated the mission, Hingson and Brother's Brother Foundation team members met with the Costa Rican president José Joaquín Trejos to discuss their campaign.<sup>76</sup> Reporting on the endeavour, the US embassy characterised the efforts a 'success' and pointed specifically to the benefits of the jet injector method as easing the process.<sup>77</sup> Boonstra wrote later to Hingson, 'There is no question but that your program was indeed successful.' The ambassador added, 'The campaign has immeasurably strengthened the bonds of friendship and goodwill between Costa Rica and our country,' suggesting it enhanced American soft power in the country.<sup>78</sup>

## Conclusion

Historians of development and modernisation have shown that NGOs and non-state actors such as missionaries have long aided the US government in achieving such goals.<sup>79</sup> Historian Amanda McVety has shown a recognition, dating back at least to the 1920s, that security could be facilitated through 'the expansion of human welfare'.<sup>80</sup> Dispensing vaccinations and medicine produced an immediate improvement in health and development as opposed to other types of development that might take much longer to reveal their benefits.<sup>81</sup> A number of voluntary associations, including the health organisations Project Hope and MEDICO were founded after Hingson's medical survey trip. In the view of one observer, these organisations, as well as the Peace Corps, were inspired by similar humanitarian impulses.<sup>82</sup> They also reveal non-governmental responses to the expansion of US power internationally.

Efforts relating to international health in the Johnson years, such as lending the jet injectors, were also part of a broader pursuit of modernisation and economic development at this time. Missionaries, foundations and other groups increased their modernisation efforts in the early years of the Cold War.<sup>83</sup> Historian Amy Staples writes about the years after the Second World War as 'the birth of development' or when the idea began 'that development was an international obligation'.<sup>84</sup> But rather than an obligation, other scholars have argued the United States often saw overseas assistance, including in health, as a 'tool' of its Cold War foreign policy.<sup>85</sup>

United States' support for Brother's Brother Foundation in Costa Rica fit into attempts to internationalise Johnson's domestic vision of a Great Society.<sup>86</sup> United States' efforts regarding disease were driven, in part, by a conviction that many tropical diseases were not necessarily

linked to their geography but rather to 'poverty, social deprivation, malnutrition and insanitary conditions'.<sup>87</sup> These factors might also leave a country vulnerable to communist influence, a development of grave concern to US Cold War era leaders. Matthew Connelly argues that defence officials in the Johnson administration saw national and social security as two elements in a 'continuum'.<sup>88</sup> Brother's Brother Foundation's campaign therefore should be considered in the context of the Cold War consensus shaping Americans' conceptions of their individual and collective positions in the world. Support for discrete efforts to eradicate disease and therefore economic under-development and political instability fit into broader reconfigurations of the role of the United States internationally within the American Century.

## Notes

1. The author expresses her appreciation to Lauren Carruth, Daniel Fine, Julia Irwin, Jennifer Johnson, Amanda McVety, Amanda Moniz, Inderjeet Parmar, Andrew Preston and Giles Scott-Smith for their feedback and suggestions; to Jaclyn Fox, Matthew Hartwell, Patrick Kendall and Ingrid Korsgard for research assistance; and to American University's School of International Service for research support. Joseph S. Nye Jr, *Soft Power: The Means to Success in World Politics* (New York: Public Affairs, 2004). Like the United States, Cuba has also sought 'symbolic capital' through health diplomacy. Julie M. Feinsilver, 'Cuba as a "World Medical Power": The Politics of Symbolism', *Latin American Research Review* 24:2 (1989), 18.
2. Kyle Longley, *Sparrow and the Hawk: Costa Rica and the United States during the Rise of Jose Figueres* (Tuscaloosa: University of Alabama Press, 1997).
3. Luther L. Terry, 'The Appeal Abroad of American Medicine and Public Health', *Annals of the American Academy of Political and Social Science* 366:1 (1966), 80.
4. Some members of Congress were cautious about disease eradication efforts, fearing that, say the end of malaria, might lead to an explosion in world population. Marcos Cueto, *Cold War, Deadly Fevers: Malaria Eradication in Mexico, 1955–1975* (Washington, DC: Woodrow Wilson Center Press, 2007), 57, 59.
5. Hugh L. Carey, 'A War We Can Win: Health as a Vector of Foreign Policy', *Bulletin of the New York Academy of Medicine* 46:5 (1970), 339.
6. *Ibid.*, 335.
7. Sunil S. Amrith, 'Internationalising Health in the Twentieth Century', in Glenda Sluga and Patricia Clavin (eds), *Internationalisms: A Twentieth-Century History* (New York: Cambridge University Press, 2017), 263–4.
8. Cueto, *Cold War, Deadly Fevers*, 5, 7, 57–61; Randall Packard, 'Visions of Postwar Health and Development and Their Impact on Public

- Health Interventions in the Developing World’, in Frederick Cooper and Randall Packard (eds), *International Development and the Social Sciences: Essays on the History and Politics of Knowledge* (Berkeley: University of California Press, 1997), 98; Amrith, ‘Internationalising Health in the Twentieth Century’, 263–4; Bob H. Reinhardt, *The End of a Global Pox: America and the Eradication of Smallpox in the Cold War Era* (Chapel Hill: University of North Carolina Press, 2015), 65; A. E. Brin, ‘Backstage: The Relationship between the Rockefeller Foundation and the World Health Organization, Part I: 1940s–1960s’, *Public Health* 128 (2014), 130; Amanda Kay McVety, *The Rinderpest Campaigns: A Virus, Its Vaccines, and Global Development in the Twentieth Century* (New York: Cambridge University Press, 2018), 45; Christina Klein, *Cold War Orientalism: Asia in the Middlebrow Imagination, 1945–1961* (Berkeley: University of California Press, 2003), 9; Erez Manela, ‘Smallpox and the Globalization of Development’, in Stephen J. Macekura and Erez Manela (eds), *The Development Century: A Global History* (New York: Cambridge University Press, 2018), 97–8.
9. See, for example, Steve Marquardt, ‘Pesticides, Parakeets, and Unions in the Costa Rican Banana Industry, 1938–1962’, *Latin American Research Review* 37:2 (2001), 3–36; Lara Putnam, *The Company They Kept: Migrants and the Politics of Gender in the Caribbean Costa Rica, 1870–1960* (Chapel Hill: University of North Carolina Press, 2002); Steve Marquardt ‘“Green Havoc”: Panama Disease, Environmental Change, and Labor Process in the Central American Banana Industry’, *American Historical Review* (2001), 49–80; Kirk S. Bowman, ‘¿Fue el Compromiso y Consenso de las Élités lo que Llevó a la Consolidación Democrática en Costa Rica?: Evidencias de la Década de 1950’, *Revista De Historia* 41 (2000), 91–127; Steven Palmer, ‘Central American Encounters with Rockefeller Public Health, 1914–1921’, in Gilbert M. Joseph, Catherine C. LeGrand and Ricardo D. Salvatore (eds), *Close Encounters of Empire: Writing the Cultural History of US–Latin American Relations* (Durham, NC: Duke University Press, 1998), 311–32.
  10. Rodolfo Cerdas Cruz, ‘Costa Rica since 1930’, in Leslie Bethell (ed.), *Central America since Independence* (Cambridge: Cambridge University Press, 1991), 299; Jon Hurwitz, Mark Peffley and Mitchell A. Seligson, ‘Foreign Policy Belief Systems in Comparative Perspective: The United States and Costa Rica’, *International Studies Quarterly* 37:3 (1993), 248. Through the 1960s, Costa Rica had a Guardia Civil, whose members numbered around 1,200. Graeme S. Mount, ‘Costa Rica and the Cold War, 1948–1990’, *Canadian Journal of History* 50:2 (2015), 296; Juan Carlos Zarate, *Forging Democracy: A Comparative Study of the Effects of US Foreign Policy on Central American Democratization* (New York: University Press of America, 1994), 29.
  11. John F. Kennedy, ‘Remarks at the University of Costa Rica in San Jose’, 20 March 1963, American Presidency Project, available at:

- <https://www.presidency.ucsb.edu/documents/remarks-the-university-costa-rica-san-jose>, last accessed 21 September 2016.
12. For more on Brother's Brother Foundation's origins and initial mission to Liberia, see Sarah B. Snyder, 'Guns of Peace and an Early Campaign Against Smallpox', *Historical Journal* 65:2 (2022), 462–81.
  13. Monrovia to Secretary of State, 12 January 1962, 876.55/1-1262, Box 2769, Central Decimal File, 1960–1963, Record Group 59 General Records of the Department of State, National Archives and Records Administration, College Park, MD (hereafter RG 59 and NARA); Department of State to Monrovia, 19 January 1962, *ibid.*; Orr to Adler, 12 January 1962, Brother's Brother, Container 2, Entry #P616, Subject Files, 1961–1969, Record Group 286 Records of the Agency for International Development, NARA (hereafter RG 286); Orr to McConnell, 16 January 1962, *ibid.*
  14. USS *Diamond Head* (AE-19) Ship's History, Naval History and Heritage Command, Washington, DC.
  15. This literature will be enhanced by Julia Irwin, *Catastrophic Diplomacy: US Foreign Disaster Assistance in the American Century* (Chapel Hill, University of North Carolina Press, forthcoming).
  16. Telegram 15167, 30 August 1967, PC 3, Confidential File Box 75, White House Central Files, Lyndon B. Johnson Library, Austin Texas (hereafter LBJL).
  17. Note, 6 September 1967, PC 3, Confidential File Box 75, White House Central Files, LBJL.
  18. Rostow to Johnson, 5 September 1967, PC 3, Confidential File Box 75, White House Central Files, LBJL; "'Peace Gun' Kills Inoculation Pains: Jet Injector can Administer Vaccines without Needle', *New York Times*, 5 October 1968, 58. Hingson asserted that the Pentagon's contribution 'made the difference between success and failure' given problems with Brother's Brother Foundation's injectors. Hingson to President, 30 August 1967, Hingson, Robert Name File, White House Central Files, LBJL.
  19. Scott Felipe, 'The Latest Casualty of War: Catholic Relief Services, Humanitarianism, and the War in Vietnam, 1967–1968', *Peace and Change* 27:2 (2002), 251.
  20. Alison Bashford, 'Global Biopolitics and the History of World Health', *History of the Human Sciences* 19:1 (2006), 71; James L. A. Webb Jr, *Humanity's Burden: A Global History of Malaria* (New York: Cambridge University Press, 2009), 146; Palmer, 'Central American Encounters with Rockefeller Public Health, 1914–1921', 311.
  21. Marcos Cueto and Steven Palmer, *Medicine and Public Health in Latin America: A History* (New York: Cambridge University Press, 2015), 109.
  22. Brin, 'Backstage', 130.
  23. Robert David Johnson, 'Constitutionalism Abroad and at Home: The United States Senate and the Alliance for Progress, 1961–1967', *International History Review* 21:2 (1999), 434; Robert A. Packenham,

- Liberal America and the Third World: Political Development Ideas in Foreign Aid and Social Science* (Princeton, NJ: Princeton University Press, 2016), 95.
24. John H. Coatsworth, *Central America and the United States: The Clients and the Colossus* (New York: Twayne Publishers, 1994), 111; Thomas M. Leonard, *Central America and the United States: The Search for Stability* (Athens: University of Georgia Press, 1991), 153.
  25. Lyndon B. Johnson, 'Remarks at the Signing of the Health Research Facilities Amendments of 1965', 9 August 1965, American Presidency Project, available at: <https://www.presidency.ucsb.edu/documents/remarks-the-signing-the-community-mental-health-centers-act-amendments-1965>, last accessed 21 March 2023; Elena Conis, *Vaccine Nation: America's Changing Relationship with Immunization* (Chicago: University of Chicago Press, 2015), 53.
  26. Lyndon B. Johnson, 'Special Message to the Congress Proposing International Education and Health Programs', 2 February 1966, American Presidency Project, available at: <https://www.presidency.ucsb.edu/documents/special-message-the-congress-proposing-international-education-and-health-programs>, last accessed 2 April 2018.
  27. Francis J. Gavin and Mark Atwood Lawrence, 'Introduction', Francis J. Gavin and Mark A. Lawrence (eds), *Beyond the Cold War: Lyndon Johnson and the New Global Challenges of the 1960s* (New York: Oxford University Press, 2014), 1.
  28. H.S. 12453 [Report No. 1317], 11 March 1966.
  29. Peter J. Hoetz, 'Vaccines as Instruments of Foreign Policy', *EMBO Reports* 21:101 (2001), 864; Bob H. Reinhardt, 'The Global Great Society and the US Commitment to Smallpox Eradication', *Endeavour* 34:4 (2010), 169.
  30. Telegram 15167, 30 August 1967, PC 3, Confidential File Box 75, White House Central Files, LBJL.
  31. American Embassy San Jose, 1 September 1967, PC 3, Confidential File Box 75, White House Central Files, LBJL.
  32. Memorandum of Conversation, 11 April 1967, Costa Rica, vol. I 4/64-10/68, Box 15, National Security File, LBJL.
  33. Cyril E. Bryant, *Operation Brother's Brother* (Old Tappan, NJ: Fleming H. Revell, 1968), 32. For more on the intersection of peace, the Vietnam War, and the Cold War, see Petra Goedde, *The Politics of Peace: A Global Cold War History* (New York, Oxford University Press, 2019). For more on the intersection of the war in Vietnam and smallpox eradication, see Reinhardt, *The End of a Global Pox*, 91, 101.
  34. Abram to Moyers, 7 September 1965, Hingson, Dr Robert, Box 263, Office Files of John Mach, LBJL; Biographic Data, Hingson, Dr Robert, Box 263, Office Files of John Macy, LBJL.
  35. Bryant, *Operation Brother's Brother*, 37.
  36. 'Robert Hingson, Founder Of Brother's Brother Foundation', Brother's Brother Foundation, available at: <http://www.brothersbrother.org/bbfs-founder>, last accessed 23 June 2017; Robert A. Hingson, Hamilton S.

- Davis and Michael Rosen, 'The Historical Development of Jet Injection and Envisioned Uses in Mass Immunization and Mass Therapy Based upon Two Decades of Experience', *Military Medicine* 128:6 (1963), 516–524. Aaron Ismach also played a role in developing jet injectors. Erez Manela, 'Globalizing the Great Society: Lyndon Johnson and the Pursuit of Smallpox Eradication,' in Francis J. Gavin and Mark Atwood Lawrence (eds), *Beyond the Cold War: Lyndon Johnson and the New Global Challenges of the 1960s* (New York: Oxford University Press, 2014), 170.
37. Robert A. Hingson, 'The Development of the Hypospray for Parenteral Therapy by Jet Injection', *Anesthesiology* 10:1 (1949), 66–75; Robert A. Hingson, 'America's Challenge in the Field of Public Health', *Journal of the National Medical Association* 50:2 (1958), 114–16; Robert A. Hingson, Hamilton S. Davis and Michael Rosen, 'Clinical Experience with One and a Half Million Jet Injections in Parenteral Therapy and in Preventive Medicine', *Military Medicine* 128:6 (1963), 525–8; Hingson, Davis and Rosen, 'The Historical Development of Jet Injection and Envisioned Uses in Mass Immunization and Mass Therapy Based Upon Two Decades of Experience', 516–24.
  38. Bryant, *Operation Brother's Brother*, 39, 63.
  39. Ibid., 22; Charles E. Rosenberg, *The Cholera Years: The United States in 1832, 1849, and 1866* (Chicago: University of Chicago Press, 1987), 213.
  40. Robert S. Denny, 'Dr. Hingson's Magnificent Obsession', *Baptist World* (1965), 16.
  41. Hingson and Brother's Brother Foundation repeatedly demonstrated a commitment to religious and racial inclusion in the composition of their missions. Bryant, *Operation Brother's Brother*, 56–7.
  42. Ibid., 62–7; 'Bishop to Preach on Vietnam War', *Washington Post*, 15 April 1967, E13.
  43. Bryant, *Operation Brother's Brother*, 70.
  44. 'Robert Hingson, Founder of Brother's Brother Foundation', Brother's Brother Foundation, available at: <http://www.brothersbrother.org/bbfs-founder>, last accessed 23 June 2017.
  45. John R. Haddad, *America's First Adventure in China: Trade, Treaties, Opium, and Salvation* (Philadelphia, PA: Temple University Press, 2013), 100–8.
  46. Melani McAlister, *The Kingdom of God Has No Borders: A Global History of American Evangelicals* (New York: Oxford University Press, 2018), 21.
  47. Emily Conroy-Krutz, *Christian Imperialism: Converting the World in the Early American Republic* (Ithaca, NY: Cornell University Press, 2015), 52.
  48. The focus on Brother's Brother Foundation in this chapter is not intended to neglect the role of non-American actors in smallpox eradication. For a call to foreground those contributors, see Sanjoy Bhattacharya and Carlos Eduardo D'Avila Pereira Campani, 'Re-assessing the Foundations: Worldwide Smallpox Eradication, 1957–67', *Medical History* 64:1 (2020), 71–93.

49. Bryant, *Operation Brother's Brother*, 100–1.
50. Hingson to Johnson, 15 January 1966, Hingson, Robert Name File, WHCF, LBJL.
51. Cleland to Johnson, 25 September 1965, Hingson, Robert Name File, WHCF, LBJL.
52. Gainer F. Bryan Jr, 'Doctor Gives Honduras Shot in the Arm', *Plain Dealer Sunday Magazine*, 12 August 1965.
53. In these years, the Bacille Calmette-Guérin (BCG) vaccine was utilised in many cases against tuberculosis and leprosy.
54. Joseph H. Blatchford, 'The Peace Corps: Making It in the Seventies', *Foreign Affairs* 49:1 (1970), 129.
55. "Peace Gun" Kills Inoculation Pains: Jet Injector Can Administer Vaccines Without Needle', *New York Times*, 5 October 1968, 58.
56. Robert J. Holmes, 'Costa Rican Plea for Aid Answered', *Cleveland Plain Dealer*, 28 July 1967, 1; Bryant, *Operation Brother's Brother*, 119–20. Such steps were necessary because as historian Steve Marquardt argues, the Costa Rican government historically 'legitimized its rule through a paternalistic hygienicist stance'. Marquardt, 'Pesticides, Parakeets, and Unions in the Costa Rican Banana Industry, 1938–1962', 30.
57. Bryant, *Operation Brother's Brother*, 122, 153. Costa Rican President Jose Trejos was also concerned about outbreaks of smallpox cases in Colombia and Peru, as well as polio in Nicaragua and Panama. Holmes, 'Costa Rican Plea for Aid Answered'.
58. Wolfgang Saxon, 'Robert Andrew Hingson, 83, A Pioneer in Public Health', *New York Times*, 12 October 1996.
59. Holmes, 'Costa Rican Plea for Aid Answered'. Hingson also pulled a team together to combat a polio epidemic in Nicaragua at the same time. 'Nicaragua Polio Aid is Organized', *Cleveland Plain Dealer*, 5 July 1967, 29; Jon Bixler, 'Westlake Firm Helps Fight Nicaragua Polio', *Cleveland Plain Dealer* 11 July 1967, 27. See also Bryant, *Operation Brother's Brother*, 112–18.
60. American Embassy San Jose to Department of State, 7 April 1967, POL 2-1 Costa Rica 1/1/67, Box 2004, Central Foreign Policy Files, 1967–1969, RG 59, NARA. The population of Costa Rica in 1967 was 1.695 million. 'Costa Rica', available at: <http://data.worldbank.org/country/costa-rica>, last accessed 29 June 2017.
61. American Embassy San Jose to Department of State, 24 June 1967, POL 2-1 Costa Rica 1/1/67, Box 2004, Central Foreign Policy Files, 1967–1969, RG 59, NARA.
62. 'US Medical Vacationers to Immunize Costa Ricans', *New York Times*, 29 July 1967, 25; Bryant, *Operation Brother's Brother*, 127; and Interview with Ralph Hingson, 29 May 2018.
63. Mary Hirschfeld, '85 Ohio Nurses, Doctors Pack for Antimeasles War', *Cleveland Plain Dealer*, 18 July 1967, 13.
64. Interview with Ralph Hingson, 29 May 2018.
65. Bryant, *Operation Brother's Brother*, 124.

66. Holmes, 'Costa Rican Plea for Aid Answered'. Unfortunately, the records of New York City Health Commissioner Edward O'Rourke did not reveal the genesis of this donation.
67. Bryant, *Operation Brother's Brother*, 123.
68. In a letter 'to Americans', Hingson expressed some frustration that the US government or USAID would not support this effort through allocation of funding for vaccine doses. 'A Plan to Save 1500 Costa Rican Children from Death and Eliminate Measles and Smallpox', Hingson, Robert Name File, White House Central Files, LBJL. Later correspondence shows support from Catholic charities, the First Baptist Church of Cleveland, and the American Baptist Convention. Hingson to President, 30 August 1967, Hingson, Robert Name File, White House Central Files, LBJL.
69. Bryant to Denny, 16 September 1967, Folder 5.6D, Box 57, Baptist World Alliance Archives, American Baptist Historical Society, Atlanta, Georgia (hereafter BWA Archives); Bryant, *Operation Brother's Brother*, 126, 147.
70. Although documentary evidence to support such a claim does not exist, Hingson's brother James worked in the Pentagon and perhaps marshalled its resources to support Brother's Brother Foundation's work. Hingson to Tolbert and Tolbert, 10 May 1965, Folder 5.6C, Box 57, BWA Archives. The PAHO also provided one jet injector gun. Bryant, *Operation Brother's Brother*, 124.
71. US Army Civic Action Report, LATAM vol. V 1963-1967, Box 7, Accession Number 338-99, Record Group 530 US Southern Command, NARA (hereafter RG 530).
72. Leonard, *Central America and the United States*, 165-6.
73. US Army Civic Action Report, LATAM vol. V 1963-1967, Box 7, Accession Number 338-99, RG 530, NARA.
74. Robert A. Hingson, 'Amigos de Honduras Fight War with "Peace Guns"', *Medical Tribune*, 16-17 October 1965, 6.
75. Bryant, *Operation Brother's Brother*, 162.
76. *Ibid.*, 125.
77. American Embassy San Jose to Department of State, 8 September 1967, POL 2-1 Costa Rica 1/1/67, Box 2004, Central Foreign Policy Files, 1967-1969, RG 59, NARA.
78. Bryant, *Operation Brother's Brother*, 135.
79. David Ekbladh, *The Great American Mission: Modernization and the Construction of an American World Order* (Princeton, NJ: Princeton University Press, 2010), 23.
80. McVety, *The Rinderpest Campaigns*, 45.
81. Manela, 'Smallpox and the Globalization of Development', 85.
82. Bryant, *Operation Brother's Brother*, 146.
83. *Ibid.*, 154.
84. Amy L. S. Staples, *The Birth of Development: How the World Bank, Food and Agriculture Organization, and World Health Organization*



- Changed the World, 1945–1965* (Kent, OH: The Kent State University Press, 2006), 2.
85. Julia F. Irwin, *Making the World Safe: The American Red Cross and a Nation's Humanitarian Awakening* (New York: Oxford University Press, 2013), 2. Some sceptics suggest these Cold War era efforts were often driven by political motivations. Gavin and Lawrence, 'Introduction', 7.
  86. See, for example, Sheyda Jahanbani, 'One Global War on Poverty: The Johnson Administration Fights Poverty at Home and Abroad, 1964–1968', in Francis J. Gavin and Mark Atwood Lawrence (eds), *Beyond the Cold War: Lyndon Johnson and the New Global Challenges of the 1960s* (New York: Oxford University Press, 2014), 97–117; Nick Cullather, 'LBJ's Third War: The War on Hunger', in Francis J. Gavin and Mark Atwood Lawrence (eds), *Beyond the Cold War: Lyndon Johnson and the New Global Challenges of the 1960s* (New York: Oxford University Press, 2014), 118–40.
  87. David Arnold, 'Introduction', in D. Arnold (ed.), *Warm Climates and Western Medicine: The Emergence of Tropical Medicine, 1500–1900* (Atlanta, GA: Rodopi, 1996), 4. Historian David Engerman has emphasised that development aid 'helped shape new patterns of relations between nations'. David C. Engerman, 'Development Politics and the Cold War', *Diplomatic History* 1:1 (2017), 1. But, due to lack of Costa Rican records from the Trejos years, we cannot see to what extent Costa Rica made claims utilising Cold War or development rhetoric with Hingson and the US government.
  88. Matthew Connelly, 'LBJ and World Population: Planning the Greater Society One Family at a Time', Francis J. Gavin and Mark Atwood Lawrence (eds), *Beyond the Cold War: Lyndon Johnson and the New Global Challenges of the 1960s* (New York: Oxford University Press, 2014), 145.