

**The Rockefeller Foundation's Attempts to Seed Scientific Medicine in  
Europe, Britain and the Empire after 1919:  
The Welsh National School of Medicine, Cardiff**

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The Rockefeller Foundation (RF) archives show the strength of its post-World War I policy program to facilitate the development of European medical education and research, where possible, along the lines of the German full-time system recently embodied in the Johns Hopkins Medical School. In 1914 Hopkins adopted full-time academic chairs in the clinical departments of Medicine, Paediatrics and Surgery. These new professors - like their colleagues in the University medical science departments - now orientated their entire professional lives around the university ethos of linked teaching and research. The Clinical Professors sought to bring this ethos into the hospital, and were geared toward the symbiotic co-development of laboratory-informed teaching, research and patient care, rather than private practice.

This medical modernization project was particularly associated with two highly motivated RF Officers: Dr. Alan Gregg and Richard M. Pearce. In early 1919, the RF's International Health Board was authorized to develop a plan for the expansion of activities in medical education and public health. On December 3, a new Division of Medical Education was created to carry out a program for developing medical education outside of the US. Its functions were further clarified in 1927: it was to be concerned with stimulating the teaching (including linked research) of the premedical and medical sciences, of public health, and nursing. Gregg used the RF Paris office as his base for a packed itinerary of surveys of medical education in various European countries. Pearce was Director of the Division of Medical Education from 1920-28, and then of the new Medical Sciences subject group from 1929-30, when Gregg (an Associate Director, 1929-30) took over.

What is very clear from my initial researches on the British program is that Pearce and Gregg revised their medical educational policies almost continuously in the light of events. In Europe generally, they are medical educational pragmatists, not dogmatists: as Gregg put it, paraphrasing Burke: 'Principles are of the utmost importance but a statesman must know when to bend or modify in order to deal effectively with concrete situations.'<sup>1</sup> Although motivated by a specific vision of a global reformed scientific medicine, and willing to consider any feasible scheme that would promote this goal, they were also economically scrupulous, determined that national governments and individual academic institutions would not exploit the RF coffers to get scientific medicine on the cheap. Individual institutional grants had to be rigorously shown to be beneficial to the training of a national cadre of scientific medical practitioners, and were carefully disbursed at a level that would not discourage local fund matching. A full historical study of the British program is clearly needed which will explore all the nuances of how

and why the RF's overall strategy and specific plans changed so frequently from c. 1919 up until Pearce's retirement in 1930, or even until Gregg's move to Foundation Vice-President in 1951, and the same case could easily be made for the entire European programme. What I present here is a thumbnail sketch of developments informed by recent archival work, with a particular focus on developments at the Welsh National Medical School in Cardiff, which will be the subject of a later comprehensive scholarly article.

Pearce claimed that of all the European medical education interventions, the British programme was the only one that he had the opportunity to work out carefully for himself as a 'consistent program according to his own ideas'. As he wrote to Gregg in 1925: 'There I have been able to work out a program which I considered wise for the empire, the dominions and the colonies - that is for the English speaking world outside of the U.S.'<sup>2</sup>

On taking up his new post in December 1919, Pearce turned his attention first to the UK. He saw the British medical education problem as consisting of four aspects: Anatomy, Physiology, Pathology, and Clinical Medicine. The first of these needs had been addressed by substantial funding to University College, London which helped build their new Institute of Anatomy, where up-to-date anatomical, histological and embryological teaching and research facilities were provided. Physiology, the Foundation felt, was more highly developed in the UK than elsewhere, bacteriology was to be provided for by the London School of Hygiene and Tropical Medicine (founded in 1899). This left Pathology, which the Foundation developed with their support for the new Pathological School at Cambridge University, opened in 1928, as a national training school in pathology, while Biochemistry was strengthened with a new department at Oxford in 1926. The Foundation then felt that Britain had sufficient facilities to train up adequate numbers of highly-skilled laboratory workers in all contemporary areas of the medical sciences.<sup>3</sup>

The problem remained of how to get the new knowledge into the clinic so that it had an impact on the training of future generations of doctors, the advance of medical knowledge via clinical research, and on everyday patient care. Voluntary Hospitals had to be turned into University Teaching Hospitals. This meant bringing the German/U.S. educational model to Britain, where a very different social and epistemological model of medical education dominated, based on the control of the main teaching hospitals by local cliques of elite practitioners who earned their money in private practice. The fact that they were called 'Visiting' Physicians and Surgeons by the Hospitals exactly captures the peripheral role the institutions had in the elite clinicians' worldview. The institutional and professional power of this traditional clinical elite was built on the epistemological/professional primacy of their clinical experience and intuition based on observation and experience, over laboratory knowledge formed via experiment. It was this British suspicion of science, founded on the fear of a real professional threat from laboratory scientists, and from supportive academics, intruding into the former clinical enclave of the hospital, that the clinical medicine part of the Rockefeller Foundation's four-pronged strategy had to tackle. However, there were key groups of national and local medical modernizers of the RF type in Britain who worked with the Foundation, although, in the end, this turned out to be a mixed blessing.

In 1912, in his report on the state of European medical education, the Carnegie Trust's key medical educationalist, Abraham Flexner, had criticised British medical education as being overly practical and clinical. This stimulated the indigenous debate as did the influence of George Newman, Chief Medical Officer of the British State's Board of Education (BoE) which funded the Universities via the University Grants Commission (UGC), and senior politician and educationalist R. B. Haldane. As the heavily Flexner-influenced Report of the Haldane Commission on the University of London of 1913 argued, in order to foster scientific hospital medicine of a university standard, ideally the medical schools of (at least) three London hospitals should be fully incorporated into the University of London, and full-time

clinical professorships in Medicine, Surgery, and Obstetrics and Gynaecology should be established in them to create hospital academic units, as a precursor to University Hospitals. The report defined the academic 'hospital unit' along Flexnerian lines as:

[A] professor with control of wards; an outpatient department; assistants nominated by the professor with a view to complementing his own knowledge and affording him the special assistance he requires to carry on research in the direction in which he is interested; and, finally, laboratory accommodation in close proximity to the wards, not only for the service of the wards and the examinations and procedures connected with the diagnosis and treatment of the cases, but also for the purposes of research.

Pearce saw the achievement of one model modern medical school in London as the key to permeating the entire British Empire with scientific academic medicine. He was advised by Dr. Alonso Taylor, Pathologist and Rush Professor of Physiological Chemistry at the University of Pennsylvania, that London was ripe for a modern medical school in connection with the University of London. Taylor suggested a ten year development program and even supplied Pearce with a list of progressive clinicians who, as a group, had already begun to work together towards a modernisation of medicine in the Imperial capital following the Johns Hopkins model pioneered by Flexner and endorsed by the Rockefeller Foundation in which the academic goals and standards were brought into the very different world of the teaching hospital.<sup>4</sup>

Crucially for ensuring RF support (and for the development of British medicine) if the Rockefeller Foundation's unit plan succeeded, Newman had undertaken to extend it to other London and provincial medical schools in four to five years. The BoE itself had established academic units at four of the major London Teaching Hospitals (Bart's, St Thomas', the London, and St Mary's Hospitals itself) from 1920, but with a limited remit that did not include permeating the rest of their hospitals with the new teaching and research based ethos and practice of academic medicine, nor their long-term absorption into London University.

After weighing up all the relevant factors, Pearce chose University College Medical School (with its University College Hospital) as his target project because, unlike all other London Medical Schools it had not developed as an adjunct to a hospital, but the other way around: 'to give a University faculty a hospital for teaching purposes'.<sup>5</sup>

Pearce's praise for Dr T. R. Elliott, the Director of the Medical Unit at UCH, reveals very specific medical educational goals, ones perhaps insufficiently appreciated by some previous historians of the development of clinical research and academic medicine in Britain in this period. Elliott was particularly prized because his methods embodied the Rockefeller Foundation's ideal of seeding not just clinical research using laboratory methods, but also the incorporation of laboratory techniques into a reformed medical education, to forever fix scientific medicine into the future national medical culture. Scientising medical education would develop future generations of properly laboratory-trained clinical researchers which would ensure that 'research would...develop in the units at a much higher level'. Unlike other London hospitals, Elliott had minimal opposition from an established local clinical elite wishing to maintain the old epistemological/professional order. Nor did he consider his unit to be an insulated, isolated research centre. Conversely, the eminent clinically-trained physiologist E. H. Starling, who headed St. Thomas' Medical Unit, and the biologically trained clinician chemist, Sir Archibald Garrod, head of St. Bartholomew's Medical Unit, 'promised to advance clinical research in England, but not to affect appreciably the education of the medical student.' Garrod offered no courses to students, though they could work under him as clerks, where they would indulge in, 'clinical study by the methods of biological

chemistry'. Garrod in fact, 'frankly deprecated the policy of Dr. Elliott...who had adapted his unit to the systematic teaching of medical students'.<sup>6</sup>

For the RF, Elliott was the complete package:

The plan of the units was to combine the care of patients, clinical research and thorough instruction of the student. In the medical unit Dr Elliott was to direct and be responsible for all teaching in medicine and every student was to be obliged to serve as clinical clerk under his direction as well as have opportunity to clerk under non-unit teachers. Moreover, in order to concentrate on the medical student and on research, postgraduate teaching was to be discouraged. This Dr Elliott alone had developed at University College Hospital a plan which centred in the medical student and which recognizing the importance of research to all activities in relation to the cure of the sick, thus approaching, as closely as English medical tradition allowed, the American 'full-time plan'.<sup>7</sup>

The London units developed under Pearce's close scrutiny over the next ten years or so. In 1930 Walter Morley Fletcher, Secretary of the British Medical Research Council was able to report to Pearce that, although there had been much opposition from the existing clinical staffs at some hospitals, Bart's and St. Thomas's had now also been involved in 'fundamental instruction in medicine'.<sup>8</sup> However, as early as 1923, Pearce was convinced that the Units had brought the methods, approach and ethos of academic science into the undergraduate medical curriculum, rather than solely being used for higher teaching and research. UCH was attracting medical students of equal calibre to the two older schools and had exemplary relations between clinical school and hospital - in fact a tunnel had been built in early 1928 under the street that (had) separated them! Medical students could now get into the Physiology laboratory as easily as into the Hospital - the reason the tunnel was constructed. Elliott reported that, 'we are continually in and out of each other's building'.<sup>9</sup>

The Rockefeller Foundation perceived that these three units were a success and, 'it was believed that the influence of these would be felt not only in medical teaching and research but in all medical activities throughout the Kingdom'. The Units' Professors served on all the relevant government and Royal Society Committees, and the units had become the conduit to the higher reaches of the profession for both academic and non-academic careers.<sup>10</sup> Given this relative success for the units, in these wider terms, in 1923 Pearce recommended similar aid for the University of Edinburgh Medical School, and the Welsh National College of Medicine at Cardiff.

Christopher Lawrence and Steve Sturdy<sup>11</sup> have examined the development of scientific medicine in Edinburgh and the Rockefeller Foundation's key role in it, but little has been written on Cardiff, the largest city in the Principality, the site of its only Medical School at this time, and the capital city of Wales from 1946. The Rockefeller Foundation archives contain much material on the initial visits and delicate negotiations around securing RF funding for the development of scientific medicine in Wales. In time, supplementing the Foundation's perspective with evidence drawn from local and national archives in Cardiff and elsewhere in Wales, I will develop a more comprehensive analysis of this important episode in the development in the history of academic medicine, clinical research and scientific medical education in the UK. This will address the question of to what extent developments in Cardiff were able to follow the ideal comprehensive pattern rehearsed by Elliott at UCH: was a thoroughgoing reform of work patterns, epistemological and professional goals and affiliations away from hospital and private practice and towards academic research and teaching achieved? But in the remainder of this report I will outline my findings so far. The fact that RF monies went largely towards building a new state-of-the-art university-style laboratory for the Medical Unit might indicate that the integration of laboratory research into teaching, and patient care was as important as developing a cutting-edge clinical research unit.

## **The Welsh National Medical School (WNSM)**

The School of Medicine of the University College of South Wales and Monmouthshire opened in Cardiff in 1894 for the teaching of the pre-clinical sciences (Chemistry, Physics, Zoology, Botany, Anatomy, Physiology, and Materia Medica and Pharmacology). In 1909 a Department of Pathology and Bacteriology was added; new laboratories following at the King Edward VII Hospital in 1911. In 1918 the Mansel-Talbot Chair of Preventive Medicine was founded by endowment and in 1921 the David Davies Chair of Tuberculosis was established on similar lines. In 1921 full time chairs in Medicine and Surgery were established, enabling the School to teach the clinical subjects and thus to offer a complete medical degree. A part-time chair in Obstetrics and Gynaecology was added in 1922. In 1921 the School became the Welsh National School of Medicine (WNSM).

Pearce was first attracted to WNMS as a promising centre for full-time unit development, in addition to UCH and Edinburgh, because it was the only medical centre outside of London that was receiving British government funding to establish and maintain such a system of academic medicine.<sup>12</sup> In addition to a generous portion (nearly £15,000 in 1923-6) of the University Grants Commission's UK Treasury block educational grant, redirected from the federal University of Wales to the Medical School (as part of the Cardiff College, one of the University's constituent institutions) the WNMS also received £5,000 per annum from the Welsh local government authorities, and an extra £5,000 (from 1914) from the Treasury to build a complete (scientific and clinical) medical school. Although, unlike the London Hospital Units, which received £6,000 per year from the UGC to support their academic clinical units, Cardiff had no direct unit supporting funds, the existence of this extra government support, effectively for a full-time system, greatly impressed Pearce. The school also fulfilled the key RF criterion of having national influence: it was the Welsh national medical school after all, but moreover it was integrated into the national tuberculosis service (the Professor of Tuberculosis was also, until 1927, part-time Principal Medical Officer to the Welsh National Memorial Association - a national body which coordinated TB policy on behalf of, and funded by, the Welsh local authorities). In addition, the Medical School's Department of Preventive Medicine, trained Welsh sanitary and health inspectors, worked on miner's diseases (pneumoconiosis and nystagmus) and provided a national routine bacteriological testing service, thus providing access to wider national public health networks.

What Pearce would also have known well was that the Welsh School had been shaped by the inputs of some of the key contemporary British medical modernizers. Sir William Osler had first visited Cardiff in November 1905 as guest of the Cardiff Medical Society, where he spoke on the history of John Hopkins and the importance of, and prerequisites for, establishing a full university medical school in Cardiff. He struck up a long-lasting friendship with the Society's then President, eminent local surgeon John Lynn Thomas, which brought Osler back to the city on many occasions. One of these was his appearance to talk about the reform of the school before Haldane's Royal Commission on University Education in Wales of 1918. Haldane was fresh from his work on London University, which we noted above. The Commissions' Report stressed that in order to ensure that the extension of the Cardiff course into clinical training happened via the modern the unit system:

The Hospital should be organized so as to be brought directly within the sphere of the University and adapted to the scientific study of disease and the training of students on a scientific basis comparable to that afforded in other branches of University study. The Professor in each clinical subject will have a definite number of beds in the hospital assigned to him with the proper staff on both the clinical and educational side, and with laboratories and lecture rooms and all that is required for teaching and

research.<sup>13</sup> However, the School's Medical Faculty had already prepared a memorandum in January 1914 (for a meeting to campaign for funds with David Lloyd George, then Chancellor of the Exchequer) which specified their desire to appoint full-time professors to the medical and surgical units.

All in all, then the WNSM looked like a very good bet to Pearce: it was the first medical school outside of London to adopt as a founding ethos the principle of the full-time unit system. Although Welsh financial difficulties had meant that Sheffield University's 1920 appointment of Edward Mellanby as Clinical Professor in Pharmacology (with Royal Infirmary beds) had pipped Cardiff, the Welsh School remained, in 1922, the only medical school in Britain in which students were required to take an initial degree in medical science.

What must also have impressed Pearce was that the clinical Professors controlled clinical teaching in the final years. However, what seemed like a wholly positive feature in fact came a sting in the tail that was indicative of the obstacles to scientific medicine in Wales, and clearly demonstrate what was perhaps the Achilles' Heel of the whole RF European medical educational policy: failure to grasp the implications of the fact that knowledge is embedded in local hierarchies of social and professional power. Laboratory science, especially as seeded in the hospitals via an interlocking academic unit system, threatened both the epistemological and professional leadership of the existing national clinical elite and its local cadres (whose science was empirical, whose skill was experiential and intuitive, whose money was made in private practice, and who spent little time in hospitals, yet controlled them). The Foundation claimed to be sensitive to local traditions and medical cultures, and was certainly aware that they existed; but they were viewed as reactionary relics of outmoded styles of medical life now superseded by the fitter Johns Hopkins model. In spite of the fact that the local clinical elites had ruled their local clinical kingdoms - student access to which was so essential to the scientizers' plans - since the mid-eighteenth century, there was little truck with tradition: what should have been a strategy of subtle permeation was too often an all-out, no-holds-barred attack on the local traditional clinical elite, and thus the entire local medical culture. In Ireland and Edinburgh, the RF didn't understand the nuances of local medical education, which was controlled by a number of different medical bodies, nor did they understand, at anything but a superficial level, the local politics of knowledge and practice.<sup>14</sup> Similarly in Cardiff, they openly sided with the rather oppositional local band of vocal modernisers and attempted to impose conditions on their grant which tended to inflame pre-existing local disputes.

These local tensions were clearly reflected in the selection of the new full-time Professor of Clinical Surgery. Ernest William Hey Groves (founding member of the British Orthopaedic Association, Professor of Surgery at Bristol in 1922, and very soon after a major international figure in orthopaedic surgery) was overlooked in favour of local man William Arthur Sheen. Sheen's Father had been a founder surgeon of the King Edward VII Hospital, and Sheen himself had been a surgeon there for so many years that, having exceeded maximum service, he was temporarily forced to practice in London before returning as Professor. The RF found this very discouraging, comparing it with St. Mary's appointment of what Elliott called a ' "common place clinician"' without, as the Rockefeller Foundation source history puts it, 'any scientific interests or even ability'. The RF described the Welsh situation as an: ...effort to force the similar appointment of a man with local interest and no particular merit. These were both lamentable instances of retrogression to the old habits of local promotion. They were especially unfortunate at this time because they seemed to indicate that young men entering on careers of scientific medicine could not hope in England to rise to the topmost posts, even at medical schools that declared their acceptance of ideas of scientific teaching and work.<sup>15</sup>

Sir Alfred Davies, Permanent Secretary to the Welsh Department at the Board of Education (source, remember, of the UGC funds that were partly funding the new full-time chairs) received vociferous

criticism of this decision from notable surgeons Sir Robert Jones, Sir John Lynn-Thomas and Thelwell Thomas. Moreover Sir Wilmot Herringham, medical adviser to the UGC, and then a British champion of the unit system for spreading scientific medicine, who had visited the RF in New York the previous year with MRC head Sir Walter Fletcher, was incensed. He called the Council of the Cardiff College up to London to account for their actions and told them of the "wickedness of their jobbery". According to Elliott and in the view of the Rockefeller Foundation, this directly resulted in the appointment of an outsider - 'a promising young man from Glasgow' - to be Professor in the Medical Unit.

This was Arthur Mills Kennedy. Like Winston Churchill's description of Russia in the 1940s, Kennedy emerges from the RF papers only as a riddle wrapped in a mystery inside an enigma. The fiery red-haired Scot, known as 'Jock' to and adored by his students, came with a strong scientific pedigree, having worked as assistant to the eminent Professor of Pathology at Glasgow University, Sir Robert Muir, and then as Senior Assistant Pathologist at the Glasgow Royal and Glasgow Maternity and Women's Hospitals, and having written pathological papers on the heart. However, his unit was criticised at the time for grossly underperforming in terms of research output. More research is needed here (!) but, in part, the explanation may lie in the new Professor's acute lack of facilities in the Medical Unit (he had to personally scrounge chairs for his lectures) and in the hostility of the hospital's (after 1923 known as the Cardiff Royal Infirmary [CRI]) regular clinical staff towards their academic 'guests'. As one of Kennedy's obituarists wrote:

Many will still remember the bitter controversies of those years with the closing down for 12 months of medical teaching owing to the withdrawal of the beds of certain members of the consultant staff, but few now realize the difficulties with which Professor Kennedy had to contend. He carried out a task which would have crushed or embittered a lesser man, but he stood up to local prejudices unflinchingly, sacrificing nothing which he considered important, and eventually guided the Medical Faculty, and later the Welsh National School of Medicine, into calmer and more tranquil times. At all times he held firmly to his high standards of what was required for the proper training in clinical medicine and to the standards he considered necessary to obtain the M.B. of the University of Wales. The Welsh National School of Medicine must always be grateful to him for his help and guidance in those early years, and for the sound basis on which he started and for many years upheld the standard of training in medicine at Cardiff.

Another factor may have been Kennedy's medical epistemology. Products of the Glasgow School tended to be medical holists and to maintain the primacy of clinically-derived experiential knowledge over laboratory work. What we know of Kennedy chimes with this characterisation. Another obituarist described him first and foremost as a first-class clinician from whom they learned the basic of clinical medicine but also how to behave as a clinician and how to approach the patient and his/her illness:

To him medicine was an art, difficult to acquire but infinitely rewarding. While insisting on accuracy of perception and the writing of a lucid history, he always emphasized the importance of treating every patient as a whole person. His approach to medicine was coloured and enriched by his wide knowledge of literature, poetry, and the arts.<sup>16</sup>

The tensions were so intense that Pearce heard (and believed) rumours about Kennedy's mental stability, describing him as self-pitying. Kennedy didn't help this impression by writing to Pearce that the RF's interest in reconstructing his Unit and funding an integrated clinical laboratory had given him "interest in life again".<sup>17</sup>

Ironically it was Sheen who produced more research, and who backed a plan to turn the CRI into a full university hospital, but, for the RF, as an internal candidate, his card had already been marked.

By the end of March 1923, on Pearce's advice, the RF had decided to award the WNSM's Medical Unit under Kennedy £14,000 (\$65,000) with promises of further monies if the Medical School became part of the University and if 'good men'<sup>18</sup> were found to head the units in the future: 10,000 to build the new clinical laboratory in the Medical Unit, 2,000 for equipment, and, unusually, a further £2,000 for alterations to the CRI which would result in all the clinical teaching wards being near each other and near the laboratory, but which in practice involved building new home for nurses!<sup>19</sup> The laboratory itself was situated off the hospital's main corridor between the entrance and administrative block and the ward block housing the Medical Unit. Kennedy's article on the laboratories in the Rockefeller Series on Methods and Problems of Medical Research takes the whole of its first five pages to stress the strenuous efforts made in building the new lab block to ensure maximum interconnectedness with the clinical wards. Lab and wards embedded in their geography the RF philosophy of the integration of bench and bedside in medical teaching, clinical research, and patient care.<sup>20</sup>

The intransigent idealism of RF policy, in which complex local medical cultures were reduced to irritations to be ironed out, rather than worked with, is demonstrated time and again in the negotiations towards the final giving of the grant in 1925. For example, Pearce continually pressed for (and hinted darkly that the grant would be conditional on) the decoupling of the Medical School from the local Cardiff College and its absorption as part of the national University.<sup>21</sup> In fact these two intensely controversial questions of the affiliation of the Medical School and University-CRI clinical staff relations rumbled on for years and the latter paralyzed the Medical School in 1928 when a clinical teaching strike by the clinical staff meant that students had to be sent to London Medical Schools. It is ironic, yet indicative of the intensity of the pressure that Pearce was willing to put on local institutions to adhere to RF models if they wanted RF money, that the solution to the problem of the Medical School's affiliation that was finally concluded in 1931 (that the pre-clinical scientific departments remained part of the local College) was specifically ruled out by Pearce in 1923. He threatened that if such a split was effected, ' "we should lose all interest"', although he warned not to use his letter as leverage, ' "for we have no desire to influence in any way local action"'.<sup>22</sup>

The RF archives allow the historian fortunate enough to be able to visit a unique window on the detail of the above themes and are especially rich on the interface between RF policy and local tensions. We are able to see the would-be grant recipients as they would like to present themselves to the Foundation, and also to see Pearce's careful scratching at the surface of that public image as the very presence of the RF fuels pre-existing local power struggles between academic modernizers and clinical traditionalists. This is the story that I will now be able to tell in the paper that will emerge from these researches, once corresponding research has been undertaken on the CRI and UGC papers on the leads gained from the special source which is the RF archives. This article will also analyze the other medical research activities funded by the Rockefeller Foundation in Cardiff, that were rather more successful than those at the Clinical Units of the Medical School (especially the dynasty of brain chemistry researchers at the Cardiff Mental Hospital/ Neuropsychiatric Research Centre at Whitchurch Hospital) This incorporation of the first research laboratory set up in a hospital for mental disease in the whole of the UK, should help also to broaden out the exclusive focus in the historiography of science/clinic relations away from physical illness.



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## ENDNOTES

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1. RF, RG1.1, Series 700 A, Box 16, Folder 116, Alan Gregg. "Memorandum for Dr. Pearce." 14 September 1922, p. 1.
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3. See RF, RG3.1, Series 900, Box 11, Folder 82, History 2 Source Material, volume 16, Medical Aid in Europe (3) Capital Programs (1919 1939), p. 4194-4268, passim.
4. RF, RG 3.1, Series 900, Box 11, Folder 82, History 2 Source Material, volume 16, Medical Aid in Europe (3) Capital Programs (1919-1939), p. 3919, citing W. Rose. "Conference with Alonzo Taylor.", 11/15/1919.
5. RF, RG 3.1, Series 900, Box 11, Folder 82, History 2 Source Material, volume 16, Medical Aid in Europe (3) Capital Programs (1919-1939), pp. 3919-20.
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8. Ibid., p. 3947.
9. Ibid., p. 3948.
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16. Obituary of Alexander Mills Kennedy, *BMJ*, 8 October 1960, pp. 1094-95.

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22. RF, RG 3.1, Series 900, Box 11, Folder 82, History 2 Source Material, volume 16, Medical Aid in Europe (3) Capital Programs (1919-1939), p. 4173.