

professional development, a tougher debate within the profession about conflicts. As the history of conflict of interest sketched in his book shows in detail, the ways in which professional ethics and the professional and regulatory bodies more or less thoroughly mystify the operations of conflict of interest by portraying them as legitimate business practice, necessities of good professionalism, and even, on occasion, union rights, this set of proposals does not inspire hope or confidence. Similarly, Rodwin's practical proposals for institutional and structural reform depend on introducing a greater regulatory role for the state, a more thoroughgoing transition of medical care into the public sector, and more scrutiny and oversight by public officials and the courts. Again, his own historical narrative, and the general lessons of the history and economics of regulation, suggest that regulatory capture is just as serious a risk here as in previous generations and under previous forms of healthcare governance.

All of this gloomy reflection noted, Rodwin does us an important service in bringing these issues into clear sight. Too often medical ethics, health policy and indeed history of medicine focuses on the social, normative, and technological side of medical change. The economic and business side is every bit as important and influential. And while we might despair of ways to *improve* the practice of medicine in the face of conflicts of interest, he does show us how it could get *worse* without continuous public and professional efforts to resist the steady pressure of conflicts of interest on good, patient-centred medical practice.

Richard E. Ashcroft

School of Law, Queen Mary University of London, UK

doi:10.1017/mdh.2012.99

Rachel E. Boas, *In Search of 'Aryan Blood': Serology in Interwar and National Socialist Germany*, CEU Press Studies in the History of Medicine, M. Turda (ed.) (Budapest-New York: Central European Press, 2012), 256 pages, \$50.00/€45.00/£40.00, hardback, ISBN: 8-963-9776-50-0.

Ever since 1919, when Hanna and Ludwik Hirszfild published their serological survey of the bloods of 8,000 prisoners in Salonika at the time of the First World War, race-conscious researchers have hoped to find in blood-group serology something or other that would pinpoint racial origin. The Hirszfilds' most striking finding was that, though all the populations tested had all four blood groups, European bloods mostly typed as either Group O or A, with very little B, but that the further east the homeland of his soldier subjects, the more frequently they typed as Group B or AB. Clearly, in spite of the different frequencies, it was not possible to say that any one group specified a particular racial origin but, broadly speaking, the group frequencies differed from place to place. Blood held a special meaning for Germans in the interwar period: Walther Darré, Minister of Agriculture under the Nazis from 1933 to 1942, saw the transmission of the bloodline through an uncorrupted peasant stock as representing the eternally lit fire on the domestic hearth. His *Blood and Soil* (1930) became the slogan of the *völkisch* ideologists of Nazism.

The first half of Rachel Boas's book details the efforts of German blood-group researchers to live up to the sacred symbolism of German blood. The German Society for Blood Group Research was set up in 1926 by Paul Steffan, a naval surgeon, and Otto Reche, a specialist in racial anthropology at that time at the University of Vienna. The society's organ, the *Journal of Racial Physiology*, ran from 1928 to 1943. Reche

announced proudly in its first number that blood grouping would benefit 'immunology, genetics, eugenics, geneology and anthropology' (p. 79). Surprisingly, Boas has found that Steffan and Reche struggled unsuccessfully to get official funding for their sero-anthropological projects; the senior geneticists, men like Erwin Baur and Eugen Fischer, though they themselves and their institutions were generously supported by the state, were unconvinced of the usefulness of a blood-group as a racial indicator (pp. 79–81). The state preferred to fund Fischer's more traditional physiognomonic anthropology – measurement of height, shape of skull, colour of hair and eyes, and especially the shape of the nose. Blood-groups, Boas has discovered, were put on a secondary list of 'desirable, but not necessary' characters; Reche was not too proud to assist with them.

The most serious drawback of the blood-groups was that they could not be used to identify an individual as Jewish. Laws came into effect in 1933, soon after the Nazi accession, and expanded in 1935, which required 'Aryan' or 'German blood' as a condition of citizenship or state employment. Serological typing should have been exactly what was needed, but it did not work. No one blood type could pinpoint someone who was to lose their job and their civil rights under these laws. Those who like Hermann Gauch still enthusiastically claimed that type B subjects had no Aryan characteristics were not scientifically or even politically acceptable: his publications were censored and his book was confiscated by the Gestapo. Boas cites William Schneider's graph (p. 183) showing how publications on blood-groups beginning in 1919, reached a peak of about 130 annually by 1928, and then fell off steadily to around 50 by 1939. As Boas says, the Nazi intent was to make race a precise, scientific character, but it was not to be. All that could be done was to prohibit interracial blood transfusion and, more particularly, sexual contact between Jews and Germans: Jewish semen, like blood, defiled its recipient forever.

There is an enormous literature on this subject and its surrounding areas. It is not easy to find something here that nobody has heard before. Yet Rachel Boas's recension of the whole matter brings out something that was not obvious: that the effort to scientise the rhetoric of race through serology, apposite as it would have been in interwar Germany, failed mainly through its rejection by the scientists themselves. Even the chemical colour test for race of E.O. Manoiloff was not taken up by the medical community or by the Nazi authorities, though popular journalism touted it excitedly (pp. 124–6; 166–7).

Nonetheless, the attempt to pursue blood group distribution as an indicator of race has persisted. Anthropologists still take blood samples from the groups they are studying, hoping to make a guess at their racial origins; when I worked for the British Blood Transfusion Service in the 1960s, a long-running attempt to characterise the racial affinities of populations of the different Caribbean islands by tabulating donors' blood types was still going on. It seemed that some island populations were predominantly Indian in origin – their blood group distribution matched that of India. But it turned out that the assumption that the London donors were a random sample was just wrong: people of Indian origin were emigrating because of political problems, which could have been discovered by asking them, rather than testing their blood.

I cannot end my review without pointing out some problems with the editing of this book: there are a number of mistranslations. But the most serious problem is that there is no general bibliography, which makes it impossible to get a conspectus on the authors cited. Worse, there is no subject index – names only are listed, without any indication of what they are dealing with: a name is followed by a block of unqualified page numbers – eg. Karl Landsteiner, fifteen page numbers; Otto Reche, twenty-four page numbers; Paul

Steffan, twenty-three page numbers. Walther Darré, however, who is mentioned at some length in the text, is not listed at all – a singularly unhelpful index for a scholarly book.

Pauline M.H. Mazumdar

Institute for the History and Philosophy of Science and Technology,
University of Toronto, Canada