

artificial fertilizer was being used on agricultural lands. Himmler also wanted to examine the blood of persons confined to concentration camps, to see whether a blood test could be developed that would signal cancer's early onset (ibid.).

24. Otmär Freiherr von Vershuer, *Erbpathologie, Ein Lehrbuch für Ärzte und Medizinstudierende* (Munich: Lehmann, 1937), pp. 86, 103, 159, 182, 137.

25. Karl Heinrich Bauer, "Fortschritte der experimentellen Krebsforschung," *Archiv für klinische Chirurgie* 189 (1937): 123-84; compare also his "Krebs und Vererbung," p. 479. The Berlin pathologist Robert Rösle concluded that cancer was only rarely heritable, though Wolfgang Denk in Vienna in 1939 argued from twin and genealogical evidence that heredity must account for "a minimum of 20 percent" of all cancers; see his "Zur Frage der Erbllichkeit des Carcinoms," *Zeitschrift für Krebsforschung* 49 (1939): 241.

26. Bauer, "Krebs und Vererbung," pp. 475-79.

27. Arthur Hintze, "Kultur und Krebs," *Jahreskurse für ärztliche Fortbildung* 7 (1939): 67-71. Hintze was named head of radiology at the Rudolf Virchow Hospital's newly created Allgemeines Institut gegen die Geschwulstkrankheiten in 1935. He was aware that lifestyle factors could impact occupational cancers—the custom of daily bathing, for example, to which he attributed the low Japanese incidence of occupational cancers caused by oil, tar, or soot; he was also aware that anecdotal impressions of cancer incidence could be misleading if a certain class of people—Muslim women, for example—would not allow themselves to be examined by Western physicians.

28. Ibid., p. 73.

29. Vershuer, *Leitfaden*, pp. 159-61.

30. Martin Staemmler and Edeltraut Bieneck, "Statistische Untersuchungen über die Todesursachen der deutschen und jüdischen Bevölkerung von Breslau," *Münchener medizinische Wochenschrift* 87 (1940): 447-50. The *British Medical Journal* pointed out that Staemmler and Bieneck had failed to discuss the role of state violence in producing these statistics; see "German Medicine, Race, and Religion," *British Medical Journal*, August 17, 1940, p. 230.

31. Hintze, "Kultur und Krebs," pp. 75-76.

32. A review of *Konstitutionslehre* can be found in Gerhard Koch, *Die Gesellschaft für Konstitutionsforschung: Anfang und Ende 1942-1965* (Erlangen: Palm und Enke, 1985).

33. Hans Weselmann, "Über die Nicotिंगastritis," *Die Genussgifte* 36 (1940): 23.

34. Robert Hofstätter, *Die rauchende Frau: Eine klinische, psychologische und soziale Studie* (Vienna: Hölder-Pichler-Tempsky, 1924), p. 71.

35. Friedrich Voltz, "Pigmentbildung und Strahlenbehandlung," *Radiologische Rundschau* 1 (1933): 96.

36. Friedrich Voltz, "Biologische Probleme in der Röntgenstrahlentherapie," *Strahlentherapie* 47 (1933): 137-43.

37. Robert Ritter, "Rothaarigkeit als rassenhygienisches Problem," *Volk und Rasse* 10 (1935): 385-90.

38. Hien, *Chemische Industrie*, p. 219.

39. George Reid, "Weltanschauung, Haltung, Genussgifte," *Die Genussgifte* 35 (1939): 66-67.

40. Klarner, *Vom Rauchen*, pp. 18-19. The body-type categorization mentioned here traces back to the psychiatrist Ernst Kretschmer.

41. "Erkennung und Bekämpfung der Tabakgefahren," *Deutsches Ärzteblatt* 71 (1941): 185.

42. Kleine, *Ernährungsschäden als Krankheitsursachen*, pp. 62-63.

43. The official commentary on the law specified that sufferers from retinoblastoma should be sterilized; see Arthur Gütt, Ernst Rüdén, and Falk Ruttké, *Kommentar zum Gesetz zur Verhütung Erbkranken Nachwuchses* (Munich: Lehmann, 1934).

44. August Wagenmann, ed., *Bericht über die einundfünfzigste Zusammenkunft der Deutschen Ophthalmologischen Gesellschaft in Heidelberg 1936* (Munich: Bergmann, 1936), pp. 91-102; compare also Karl A. Reiser's critique of Clausen's views in "Bemerkungen zur Erblchkeitsfrage beim Glioma retinae," *Klinische Monatsblätter für Augenheilkunde* 99 (1937): 350-55.

45. Fischer-Wasels, "Die Bedeutung der besonderen Allgemeindisposition," p. 26; compare Kurt Blome's similar views in "Krebsforschung und Krebsbekämpfung," *Ziel und Weg* 10 (1940): 412.

46. Fischer-Wasels, "Bekämpfung der Krebskrankheit," pp. 92-95. The gynecologist Wilhelm Lahm prior even to 1933 argued that marital counselors should use cancer registry data to counter the pairing of persons genetically predisposed to cancer; see his "Die ärztliche Fortbildung auf dem Gebiet der Krebsbekämpfung," *Strahlentherapie* 37 (1930): 397-401; also the similar views expressed in W. Helmreich, "Erblichkeit, Rassenhygiene und Bevölkerungs-politik," *Münchener medizinische Wochenschrift* 83 (1936): 484.

47. Hien, *Chemische Industrie*, pp. 219 and 271-304.

48. Gunther Lehmann, "Die Bedeutung des Staubbindungsvermögens der Nase für die Entstehung der Lungensilicose," *Arbeitsphysiologie* 8 (1934): 218-50; also his "Untersuchungen an Staubmasken," *Arbeitsphysiologie* 9 (1936): 182-205. Rostoski, Saupe, and Schmorl in 1926 had urged Schneeberg's miners to breathe through their noses to lower their risk of developing lung cancer (by trapping carcinogenic particulates); the authors had also advised workers "not to be shy" about having their nasal passages surgically enlarged to enable better nasal ventilation ("Die Bergkrankheit," p. 375).

49. Lehmann's efforts were part of an attempted "Lösung des Staubproblems"; see Otto Schulz, "Gesundheitliche Schäden durch gewerblichen Staub," *Die Gasmasken* 11 (1939): 57-66.

50. Hans Waniek, "Die Verhütung der Staublungenkrankheiten, insbesondere der Silikose," *Klinische Wochenschrift* 23 (1944): 288-89.

51. H. Hamperl, U. Henschke, and R. Schulze, "Vergleich der Hautreaktionen beim Bestrahlungserthem und bei der direkten Pigmentierung," *Archiv für pathologische Anatomie und Physiologie* 304 (1939): 21.

52. Hueper, *Occupational Tumors*, p. 765.

53. Wilhelm C. Hueper, "Causal and Preventive Aspects of Environmental Cancer," *Minnesota Medicine*, January 1956, pp. 10-11.