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Sohier R, Sutherland AGB (1990). The Origin of the International Agency for Research on Cancer. IARC Technical Report No. 6. Lyon, France: IARC. Available from: <http://www.iarc.fr/en/publications/pdfs-online/treport-pub/treport-pub6/index.php>.

Vignes CH (1967). Le Centre international de Recherche sur le Cancer. *Annuaire français de droit international*. 13:531–544.

WHO (1968). The Second Ten Years of the World Health Organization, 1958–1967. Geneva: WHO. Available from: http://www.who.int/global_health_histories/who_history/en/.

WHO (2008). The Third Ten Years of the World Health Organization, 1968–1977. Geneva: WHO. Available from: http://www.who.int/global_health_histories/who_history/en/.

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page 61 Data for 1947–1951: Compiled from Shimkin MB, Griswold MH, Cutler SJ (1984). *Classics in oncology. Survival in untreated and treated cancer*. *CA Cancer J Clin*. 34(5):282–94. <http://dx.doi.org/10.3322/canjclin.34.5.282> PMID:6432240 (data of the Connecticut Tumor Registry). Data for 1975–1977 and 2003–2009: Compiled from American Cancer Society (2014). *Cancer Facts & Figures 2014*. Atlanta, Georgia: American Cancer Society (from nine registration areas within the USA; data for all ethnicities and both sexes combined).

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page 69 Compiled from Baade PD, Youlten DR, Valery PC, Hassall T, Ward L, Green AC, et al. (2010). Population-based survival estimates for childhood cancer in Australia during the period 1997–2006. *Br J Cancer*. 103(11):1663–70. <http://dx.doi.org/10.1038/sj.bjc.6605985> PMID:21063404; Bao PP, Zheng Y, Wu CX, Peng P, Gong YM, Huang ZZ, et al. (2012). Population-based survival for childhood cancer patients diagnosed during 2002–2005 in Shanghai, China. *Pediatr Blood Cancer*. 59(4):657–61. <http://dx.doi.org/10.1002/pbc.24043> PMID:22302759; Swaminathan R, Rama R, Shanta V (2008). Childhood cancers in Chennai, India, 1990–2001: incidence and survival. *Int J Cancer*. 122(11):2607–11. <http://dx.doi.org/10.1002/ijc.23428> PMID:18324630; Wiangnon S, Veerakul G, Nuchprayoon I, Seksarn P, Hongeng S, Krutvecho T, et al. (2011). Childhood cancer incidence and survival 2003–2005, Thailand: study from the Thai Pediatric Oncology Group. *Asian Pac J Cancer Prev*. 12(9):2215–20. PMID:22296359.

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TEXT

Unless otherwise indicated, all text quotations included in this book are extracted from interviews conducted by IARC for this book.

page 12 (Tomatis quotation) From Sohier R, Sutherland AGB (1990). The Origin of the International Agency for Research on Cancer. IARC Technical Report No. 6. Lyon, France: IARC. Available from: <http://www.iarc.fr/en/publications/pdfs-online/treport-pub/treport-pub6/index.php>.

pages 13–14 (“Emmanuel d’Astier de La Vigerie – liberation from the burden of cancer”) From Crémieux F (1966). Entretiens avec Emmanuel d’Astier. Paris: Éditions Pierre Belfond; and d’Astier de La Vigerie G (2010). Emmanuel d’Astier de La Vigerie: Combattant de la Résistance et de la Liberté, 1940–1944. Chaintreaux: Éditions France-Empire Monde.

page 14 (line 4) From Crémieux F (1996). Entretiens avec Emmanuel d’Astier. Paris: Éditions Pierre Belfond; (line 28) From Emmanuel d’Astier (1963). Une Requête. Le Monde, 21 November 1963.

page 15 (line 11) From Emmanuel d’Astier (1963). Une Requête. Le Monde, 21 November 1963; (Co-signatories to the open letter) From Sohier R, Sutherland AGB (1990). The Origin of the International Agency for Research on Cancer. IARC Technical Report No. 6. Lyon, France: IARC. Available from: <http://www.iarc.fr/en/publications/pdfs-online/treport-pub/treport-pub6/index.php>.

page 18 (“Reply from General de Gaulle”) From Sohier R, Sutherland AGB (1990). The Origin of the International Agency for Research on Cancer. IARC Technical Report No. 6. Lyon, France: IARC. Available from: <http://www.iarc.fr/en/publications/pdfs-online/treport-pub/treport-pub6/index.php>.

page 19 (line 13) From WHO interview with AGB Sutherland, IARC archives.

page 21 (lines 23 and 33) From WHO (2008). The Third Ten Years of the World Health Organization, 1968–1977. Geneva: WHO. Available from: http://www.who.int/global_health_histories/who_history/en/.

page 23 (lines 31–34) From Alexander Haddow’s opening speech at the UICC conference in Stockholm, September 1964, IARC archives.

page 24 (line 3) From an interview between AGB Sutherland and Jean-Francois Delafresnaye, IARC archives.

pages 27–28 (“Places, names, and dollars”) From minutes of meetings, IARC archives.

page 29 (lines 13–20) From minutes of meetings, IARC archives.

page 31 (“The first IARC Scientific Council”) From Sohier R, Sutherland AGB (1990). The Origin of the International Agency for Research on Cancer. IARC Technical Report No. 6. Lyon, France: IARC. Available from: <http://www.iarc.fr/en/publications/pdfs-online/treport-pub/treport-pub6/index.php>.

page 32 (lines 2–3) From letter from Richard Doll to John Higginson, IARC archives.

page 35 (line 5) From John Gray’s address at the inauguration of the IARC new building in 1972, IARC archives; (lines 8–10) From IARC archives.

page 38 (lines 27–30) From Jacob F (1997). La Souris, la Mouche et l’Homme. Paris: Éditions Odile Jacob.

page 46 (Ricoeur quotation) From Ricoeur P (1992). Lectures 2, La Contrée des Philosophes. Paris: Seuil, p. 202.

page 50 (line 1) Schoenheimer R (1942). The Dynamic State of Body Constituents. Cambridge, Massachusetts: Harvard University Press.

page 51 (lines 10–11) From Klug A (1968). Rosalind Franklin and the discovery of the structure of DNA. Nature. 219(5156):808–44. <http://dx.doi.org/10.1038/219808a0> PMID:4876935.

page 52 (line 33) From Cutler SJ, Griswold MH, Shimkin MB (1956). Survival in untreated and treated cancer. Ann Intern Med. 45(2):255–67. <http://dx.doi.org/10.7326/0003-4819-45-2-255> PMID:13355149.

pages 54–55 (“Preventing cancer”) From Doll R (1967). Prevention of Cancer: Pointers from Epidemiology. London: Nuffield Provincial Hospitals Trust. Reprinted with permission. © 1967 by The Nuffield Provincial Hospitals Trust, London.

page 55 (lines 33–36) From Higginson J (1979). Cancer and environment: Higginson speaks out. Science. 205(4413):1363–4, 1366. <http://dx.doi.org/10.1126/science.472753> PMID:472753.

page 56 (line 5) Clemmesen J (1965). Statistical Studies in the Aetiology of Malignant Neoplasms: A Manual of Cancer Epidemiology. Copenhagen, Denmark: Munksgaard Publishers.

page 64 (“Health and disease are socially determined”) From WHO (2008). Closing the Gap in a Generation: Health Equity Through Action on the Social Determinants of Health: Final Report of the Commission on Social Determinants of Health. Geneva: World Health Organization. Reprinted with permission. © World Health Organization 2008.

page 100 (line 14) Plummer M (2008). Penalized loss functions for Bayesian model comparison. Biostatistics. 9(3):523–39. <http://dx.doi.org/10.1093/biostatistics/kxm049> PMID:18209015.

page 102 (lines 18–19) From Ferrari P, Carroll RJ, Gustafson P, Riboli E (2008). A Bayesian multilevel model for estimating the diet/disease relationship in a multicenter study with exposures measured with error: the EPIC study. Stat Med. 27(29):6037–54. <http://dx.doi.org/10.1002/sim.3444> PMID:18951369.

page 106 (lines 3–4) From Clemmesen J (1965). Statistical Studies in the Aetiology of Malignant Neoplasms, Vol. 1, Review and Results. Copenhagen, Denmark: Munksgaard Publishers, p. 248.

page 108 (“Cancer Incidence in Five Continents, Volume I”) From Doll R, Payne P, Waterhouse JAH, editors (1966). Cancer Incidence in Five Continents, Vol. I. Geneva: International Union Against Cancer (UICC).

page 137 (lines 2–4) From Stewart BW, Wild CP, editors (2014). World Cancer Report 2014. Lyon, France: IARC, p. xi.

page 142 (lines 9–13) From Turusov V, Rakitsky V, Tomatis L (2002). Dichlorodiphenyltrichloroethane (DDT): ubiquity, persistence, and risks. *Environ Health Perspect.* 110(2):125–8. <http://dx.doi.org/10.1289/ehp.02110125> PMID:11836138.

page 143 (lines 18–23) From Tomatis L (2002). Primary prevention protects public health. *Ann N Y Acad Sci.* 982(1):190–7. <http://dx.doi.org/10.1111/j.1749-6632.2002.tb04933.x> PMID:12562637; (lines 23–27) From Tomatis L, Huff J (2002). Evolution of research in cancer etiology. In: Coleman WB, Tsongalis GJ, editors. *The Molecular Basis of Human Cancer*. Totowa, New Jersey: Humana Press Inc., pp. 189–201; (lines 29–32) From Tomatis L (2006). Role of experimental and epidemiological evidence of carcinogenicity in the primary prevention of cancer. *Ann Ist Super Sanita.* 42(2):113–7. PMID:17033130.

page 150 (lines 1–5) From IARC (1971). *IARC Annual Report 1970*. Lyon, France: IARC, pp. 86–7.

page 151 (lines 4–5) From IARC (1976). Some naturally occurring substances. *IARC Monogr Eval Carcinog Risk Chem Man*, 10:1–342. PMID:992652.

page 156 (line 4) Doll R, Hill AB (1964). Mortality in relation to smoking: ten years' observations of British doctors. *Br Med J.* 1(5396):1460–7. <http://dx.doi.org/10.1136/bmj.1.5396.1460> PMID:14132080.

page 157 (lines 12–14) From IARC (2004). Tobacco smoke and involuntary smoking. *IARC Monogr Eval Carcinog Risks Hum*, 83:1–1438. PMID:15285078.

page 162 (lines 1–4) From Tannenbaum A, Silverstone H (1953). Nutrition in relation to cancer. *Adv Cancer Res.* 1:451–501. [http://dx.doi.org/10.1016/S0065-230X\(08\)60009-3](http://dx.doi.org/10.1016/S0065-230X(08)60009-3) PMID:13057710, © 1953, with permission from Elsevier.

pages 178–179 (Margaret Chan quotation) From World Health Organization Director-General Dr Margaret Chan's opening address at the World Conference on Social Determinants of Health, Rio de Janeiro, Brazil, 19 October 2011. Available from: http://www.who.int/dg/speeches/2011/social_determinants_19_10/en/.

page 203 (lines 8–13) From Lenoir GM, O'Connor GT, Olweny CLM, editors (1985). *Burkitt's Lymphoma: A Human Cancer Model*. IARC Scientific Publication No. 60. Lyon, France: IARC, p. 11.

page 206 (lines 4–6) From Doll R, Peto R (1981). The causes of cancer: quantitative estimates of avoidable risks of cancer in the United States today. *J Natl Cancer Inst.* 66(6):1191–308. PMID:7017215.

page 208 ("1989: Cervical cancer and infection – growing evidence amid much uncertainty") From Muñoz N, Bosch FX, Jensen OM, editors (1989). *Human Papillomavirus and Cervical Cancer*, IARC Scientific Publication No. 94. Lyon, France: IARC.

page 215 ("Liver cancer as seen in 1969") From IARC (1971). *Liver Cancer: Proceedings of a Working Conference held at the Chester Beatty Research Institute, London, England, 30 June to 3 July 1969*. IARC Scientific Publication No. 1. Lyon, France: IARC.

page 225 (lines 5–7) From Shimkin MB (1977). *Contrary to Nature*. Washington, DC: United States Department of Health, Education and Welfare, p. 384.

page 245 (lines 8–9) From IARC (1971). *Liver Cancer: Proceedings of a Working Conference held at the Chester Beatty Research Institute, London, England, 30 June to 3 July 1969*. IARC Scientific Publication No. 1. Lyon, France: IARC, p. 5.

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^a First meeting of the Scientific Committee.

^b Elected chair after the death of J.H.F. Maisin.

^c Could not attend; was replaced by the vice-chair (J. Siemiatycki, Canada, in 2007 and E. Ron, USA, in 2008).

ENABLING RESEARCH SUCCESS

This book charts the history of IARC from its origins to the present day. In so doing it has highlighted just a few of the Agency's scientific achievements and contributions to cancer prevention. These achievements have been widely recognized and appreciated. Scientists originating from all over the world at different stages of their careers have subsequently moved on from IARC to make valuable contributions to international cancer research elsewhere. Indeed, a major feature of the Agency is this flow-through of researchers, who leave better equipped for their future by the experience gained.

There is another category of people at IARC who underpin all that is achieved and who move on less frequently. This is the group of people most often referred to as "support staff" but to whom the word "support" does not do sufficient justice. IARC has to provide an infrastructure for its scientists, without which nothing could be achieved, and these colleagues provide that necessary environment. This type of "support" means a building that remains open, safe, and functional (not always an easy task); it means administrative structures for human resources, finance, budgets, contracts and grant management, procurement, information technology, and the ever-busy helpdesk; experts who can operate the sophisticated equipment

used in laboratories, those who maintain the cleanliness of those same laboratories, and those who can manage and analyse the terabytes of scientific data collected; those who greet visitors; those who manage the mountains of correspondence, electronic and otherwise; those who oversee the ever-expanding biobank; those who ensure that the scientists are in the right place at the right time; those who edit the books, publicize the accomplishments, translate the documents, and present content on the web; and those who feed us and keep us healthy and safe. This group includes all those here now and the many more who have gone before, who are quietly and effectively dedicated to the mission of IARC and are proud to share in the successes of the organization.



IARC is successful due in large part to these valued colleagues. In 2009, the Agency established the IARC Staff Award to capture just a little of this value, by recognizing those who upon retirement had spent 30 or more years of their career at the Agency. In 2011, the IARC Recognition Programme was introduced to capture a little more, by allowing peers within the Agency to highlight the exceptional contributions their colleagues have made, often in these "support" areas. These efforts, however, only begin to scratch the surface of acknowledging the commitments made.

Therefore, this commemorative book also celebrates and pays tribute to all those who have enabled the science of IARC to be successfully performed over five decades. The success belongs also to you.



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