

DIRECTOR'S REPORT

Preamble

1. The current report covers the one year period since the 51st Session of the Governing Council. As is evident from the details below, the last year has been one of considerable change and significant progress in many areas. I would like to begin this report by bringing to the attention of the Governing Council the outstanding competence and commitment of those working at the Agency, as well as the support of our many collaborators and friends outside of IARC, who together have made possible the achievements detailed herein.

Introduction

2. The International Agency for Research on Cancer (IARC) has recently completed a new analysis of global cancer burden, entitled GLOBOCAN 2008. This updates the previous analysis in 2002 with newer sources of data and improved methods. This work reveals an estimated 12.7 million new cancer cases and 7.6 million cancer deaths worldwide in 2008. Fifty-six percent of the new cases and 63% of the deaths occurred in the less developed regions. Cancer is no longer a rare disease in any part of the world.

3. The new estimates also permit projections of future cancer burden. This additional analysis reveals that even with no change in underlying incidence rate, the total number of new cases annually is projected to rise to 21 million in just 20 years time and by that same date of 2030 there will be 13 million deaths. The proportion of new cases and deaths in the less developed regions will rise to 63% and 70% respectively. These are the same areas of the world where the health services are currently least well-equipped to meet this challenge.

4. In Africa, for example, whilst in 2008 there were 715 000 new cases and 540 000 deaths, in 2030 the projection is for 1 335 000 and 1 000 000 respectively, rises of 87 and 85%. This represents a significant additional burden on some of the economically poorest nations.

5. The production of GLOBOCAN 2008 and the release of the print version of Cancer Incidence in Five Continents Volume IX provide prime examples of one of the major objectives of IARC, namely to be the definitive international point of reference for collection, quality control, processing and statistical analysis of reliable cancer incidence and mortality information. This is a vital function to support cancer control programmes at national and regional level.

6. The above information also serves to underline the relevance of an international agency, with a global mandate, dedicated to cancer research. The increasing incidence of cancer means that improvements in diagnosis and treatment alone will not provide the solution, particularly in less-developed regions of the world. The Agency will therefore continue to dedicate its efforts to cancer prevention through its research into the identification of risk factors, the underlying mechanisms of carcinogenesis and the development and implementation of interventions.

7. Reflecting the above focus, at this year's IARC Day the theme is "Environment and Cancer" and the IARC Medal of Honour will be awarded to two scientists who have made major contributions to the identification of two naturally occurring environmental human carcinogens. Professor Gerald Wogan from the Massachusetts Institute of Technology, USA, will present the 18th Roger Sohier Lecture covering his seminal work on aflatoxins, which are potent liver carcinogens contaminating much of the world's food supply in the poorest regions. Professor Julian Peto, from the London School of Hygiene and Tropical Medicine, will present the 7th Sir Richard Doll Lecture on the theme of asbestos and the association with mesothelioma.

8. Whilst major progress in understanding the human genome is beginning to provide exciting insights into the biological pathways of carcinogenesis, the IARC Day provides a timely reminder of the fact that the majority of human cancers develop following an environmental exposure. A parallel effort, therefore, to adapt the latest advances in laboratory sciences to epidemiological studies of environmental risk factors holds great promise in unravelling the complex etiology of the disease.

9. The Agency has a remarkable opportunity to provide leadership in global efforts to reduce the cancer burden. With its focus on international collaboration, its inherent interdisciplinary nature, its worldwide mandate and its reputation for scientific excellence, the Agency is in a position to mobilize others and to drive progress well beyond its own walls.

10. At the same time in the face of these opportunities, the limitations that the current resources place on the Agency, precisely at the time when it could offer so much more, are stark. This is a major challenge for the Governing Council in deciding how significant a role it envisages for the specialized cancer agency of the World Health Organization in the decade ahead.

Summary report: May 2009 to May 2010

Scientific Vision

11. A major activity in 2009–2010 was the development of the IARC Medium-Term Strategy (2010–2014). This process began after the 51st Session of the Governing Council. Internally, the Director was assisted by two senior scientists, Drs Silvia Franceschi and Pierre Hainaut, in developing a draft strategy document. The Director held individual research meetings with each of the scientific Sections, at which staff at all levels participated. The draft document was made freely available in-house and comments were invited.

12. On 1 and 2 October 2009 there was a meeting in Lyon of the Governing Council Working Group comprising six members of the Governing Council (Drs H. Autrup [Denmark – Chairperson of the Working Group], C. Fitzgerald [Canada], P. Flamant [France], J. Harford [USA – *unable to attend*], I. Keinhorst [Germany] and D.-H. Lee [Republic of Korea]), four members of the Scientific Council (Drs H. Comber [Ireland – Rapporteur], B. Kiemeneij [The Netherlands – *unable to attend*], E. Rivedal and E. Ron [USA] and a representative of WHO (Dr A. Ullrich)). The Working Group made a wide-ranging set of comments on both the structure of the document and the content.

13. The Secretariat modified the draft document based on the above meeting and a revised document was submitted to the Scientific Council at its 46th Session in January 2010.

14. The Scientific Council recommended that the IARC Medium-Term Strategy and Implementation Plan for 2010–2014 be approved by the Governing Council at its 52nd Session. The Scientific Council made some suggestions, which were addressed with minor amendments and are incorporated into the version now presented in document GC/52/6.

15. The Medium-Term Strategy is orientated in response to the projected increase in the global cancer burden described above. High quality research aimed at providing the evidence-base for cancer prevention and control remains the heart of the Agency mission. The international reputation for scientific excellence provides the foundation for leadership in complementary areas of importance such as describing the global cancer burden, evaluating carcinogens, establishing international standards for the classification of human tumours, providing training in cancer research, etc.

16. In pursuing its strategy the Agency should play to its strengths as an international organization. The scientific vision is therefore based on principles, presented in the Medium-Term Strategy, as follows: emphasis on research; collaboration; interdisciplinary; worldwide mandate (with a focus on low and middle-income countries); and education and training. These principles guide the specific activities in a series of core areas.

17. A major challenge for the Agency is to create the environment where this vision can be realized. This needs forward planning and decision-making in line with the stated vision. A number of initiatives have been taken over the last year and these are summarized briefly below.

Scientific Organization

18. The scientific organization of the Agency now comprises nine Sections, which in turn have one or more Groups. Each Section has a Head, responsible for its overall leadership and all Section Heads have now been appointed. The Sections reflect the major areas of research included in the Medium-Term Strategy.

19. In addition to the Sections and their composite Groups, there are also four Groups within the Director's Office: the Gambia Hepatitis Intervention Study (GHIS), Communications (COM), Education and Training (ETR), and Laboratory Services and Biobank (LSB). The latter three Groups have activities which are relevant across the Agency.

20. Following the Laboratory Working Group review in 2009, a new committee was created: the Laboratory Steering Committee (LSC). The Committee is chaired by Dr Massimo Tommasino and comprises representation from all the IARC laboratory groups. Among other responsibilities, the committee oversees the core laboratory facilities, seeks to maximize cost recoveries, and identifies required investment in new equipment. This is leading to an increasing degree of shared planning and cooperation.

21. The Agency laboratories were lacking in a number of basic equipment items identified by the LSC. Based on these priorities, funding was made available in 2009 on the regular budget to permit the purchase of a confocal microscope (97 000 euros), a flow cytometer (92 500 euros) and a Luminex machine (48 000 euros). The next phase of investment in key items of equipment is presented in document GC/52/13B.

22. To complement the day-to-day activities of the newly created Laboratory Services and Biobank Group, a Biobank Steering Committee (BSC) was established, chaired by Dr Pierre Hainaut. The BSC has the task of overseeing strategic developments in the IARC Biobank (including external collaborations), advising Agency scientists in the area of biobanking and ensuring that the Agency continues to contribute to the academic developments in this field internationally.

23. An important part of a vibrant scientific environment is having a strong seminar series. Discussions over the last year have resulted in the Agency reinstating the informal weekly Science café to complement the more traditional IARC monthly seminars. These activities are organized and coordinated by the IARC Seminars Series Committee (SSC) chaired by Dr Bakary Sylla and comprising senior scientists, post-doctoral fellows and a number of PhD students.

Administration Organization

24. The Division of Administration and Finance (DAF) is organized into five support services: budget and finance, human resources, administrative services, information technology and grants office, and is led by the Director of Administration and Finance, Dr Hichem Lafif. Changes have been made to the staffing of the Human Resources Office (HRO) and the Communications Group (COM) in order to better structure the support to the functions required.

25. The HRO was under-resourced for the scale of its tasks, particularly in an organization with a naturally high turnover of international staff. In addition, our ambition to be more proactive in staff development could not be achieved with the original staff complement. Therefore two LY5 Human Resources assistant posts were created to replace the previous single LY4 position and the secretary to HRO was increased to a full-time post. The staff member dealing with fellows and students moved from HRO to ETR but retains responsibility for these areas.

26. In COM there is a need for a more web-orientated approach and development of external communication. Retirements of two COM staff plus additional investment permitted a restructuring and recruitment of a P2 webmaster (completed) and an LY4 web assistant (planned). In addition, the Agency will recruit a P2 translator, thus permitting the Head of COM,

who currently is responsible for translation of Agency documents, to focus on the development of the external communications strategy.

27. IARC and WHO have been gradually implementing the International Public Sector Accounting Standards (IPSAS), as part of a United Nations System wide effort. By IPSAS definition, IARC is not considered a "WHO controlled entity" in terms of accounts. This change necessitates amendments to the IARC Statute and Financial Regulations to be considered by the Governing Council and then put before the World Health Assembly (WHA). This situation is explained in more detail in Annex 1. The issue is raised in this year's Director's report in order to bring this to the attention of the Governing Council and provide time for a full discussion at the 53rd session of the Governing Council in May 2011 and presentation to the WHA the same year.

Communication

28. Over the last year a number of initiatives have been taken to improve internal communication.

29. The Agency held its first IARC Staff Day on 11 June 2009. This team-building day had the aim of enabling people across the Agency to better appreciate each others' roles. The day was well-received with a post-event questionnaire showing 94% of respondents considered it worthwhile and 88% were in support of a similar event for 2010. The second IARC Staff Day is scheduled for 30 September 2010.

30. The Director reports to staff in the "Director's News" at the beginning of the IARC monthly seminars. This provides an opportunity to bring staff up-to-date on aspects such as recruitments and new arrivals, scientific highlights, administrative matters, forthcoming meetings and visitors, new grant awards, etc.

31. The Director initiated his "Open Door" sessions and four have been held since May 2009. These sessions were well-attended and staff brought forward excellent ideas about how to improve the Agency. A number of these have led to further work to bring about change e.g. work on the IARC carbon footprint, changes to publication preparation, etc.

32. One of the suggestions at the Director's Open Door was for a similar opportunity with the Director of Administration and Finance (DAF). These sessions were started in January 2010.

33. Regular meetings have taken place with the Staff Association Committee (SAC). In order to improve communication there are now more frequent meetings between the SAC and the DAF and Human Resources Officer (HRO), with five meetings since their inception in August 2009. In addition, there were meetings between the Director, DAF, HRO and the SAC in March, May and October 2009 and March 2010.

34. Changes were made to increase the availability and quality of meeting rooms in the Agency. The former 11th floor Cabinet Room is now used as a videoconference room with state-of-the-art facilities installed during 2009; the Lorenzo Tomatis meeting room was created on the 11th floor in what was previously the VIP room; a meeting room on the 12th floor next to the cafeteria was provided as an IARC staff room with choice of furnishing left to the SAC; an Internet café room has been created on the ground floor for guests during meetings.

35. A previous "work climate survey" at the Agency in 2007 identified a concern over harassment. In response, the administration and the SAC have discussed a way forward both to develop a clear policy of the Agency towards harassment and to provide support to individuals who experience this unacceptable behaviour.

36. The approach involves three steps: first, the WHO Ombudsperson, Dr Athanase Hagengimana, and the WHO HRD, Ms Monika Altmaier, were invited to the Agency to address staff and raise awareness; second, the Agency has developed a document on its intranet, in consultation with the SAC, which makes clear its attitude to harassment and provides information on the support available to staff; third, the SAC will conduct a new work climate survey in 2011 with a more in-depth set of questions on harassment to evaluate whether the proposed processes are having the necessary effect.

Senior Staff Recruitment

37. The last year has been excellent in terms of recruitment of senior scientists of the highest international calibre.

38. Dr David Forman (P5 post) joined as Head of the Section of Cancer Information. David was Professor of Cancer Epidemiology at the University of Leeds, UK, the Analysis and Information Lead of the UK National Cancer Intelligence Network and Director of the Northern and Yorkshire Cancer Registry in the UK.

39. Dr Freddie Bray (P5 post) joined the Section of Cancer Information from the Cancer Registry of Norway and will provide additional senior expertise to the Section, particularly in regard to strengths in statistical analysis of cancer information.

40. Dr Isabelle Romieu (P5 post) is the new Head of the Section of Nutrition and Metabolism and joined the Agency from the National Institute of Public Health, Mexico, following previous appointments at the Pan-American Health Organization and Harvard University.

41. At the time of preparation of this report an appointment to the Head of the Section of Environment (P5 post) has been made, pending recruitment formalities. The strength of applicants for this position was particularly notable.

42. The recruitment to fill the two remaining vacant posts for Heads of Groups (Biomarkers and Genetic Cancer Susceptibility) is underway.

43. In addition to the senior scientists recruited as described above, a major advance came with the appointment of a Director of Administration and Finance, Dr Hichem Lafif, who took up his duties on 22 June 2009, moving from the WHO Regional Office for the Eastern Mediterranean. This ended a period of the first six months of 2009 with an Acting DAF, Mr Philip Knoche.

Staffing

44. In March 2010 there were 269 people working at the Agency. Of these, 176 were fixed-term staff of which 65 professional staff (36 men; 29 women) and 111 general service staff

(27 men; 84 women). Of the 65 professional staff there were 48 in the scientific sections and 17 in the support services. The number of temporary/short-term staff working at the Agency was 17.

45. The people working at the Agency come from 46 different countries. Of the staff on fixed-term contracts, 92% are from Participating States.

46. There are 40 students at the Agency, 29 post-doctoral scientists (of whom seven are fellows supported by IARC awards) and seven visiting scientists from a total of 31 different countries.

47. In order to recognize career-long commitment to the Agency the Director established the IARC Staff Award made to individuals who upon retirement have 30 years of service. The Award comes with a certificate, a souvenir of the Agency and inscription on the IARC Staff Award Honours Board.

48. Since May 2009, thirteen staff members have left the Agency:

Professional and higher category staff					
P. Autier	Dr	EDP/PRE	Statistician	P5	International Prevention Research Institute, Lyon*
P. Boffetta	Dr	ENV/LCA	Medical Officer	P6	International Prevention Research Institute, Lyon* Mount Sinai School of Medicine, New York
M. Boniol	Dr	EDP/PRE	Statistician	P3	International Prevention Research Institute, Lyon*
E. Duell	Dr	ENV/LCA	Scientist	P3	CREAL, Barcelona
J. Haukka	Dr	CIN/DEA	Scientist	P4	University of Helsinki
M. Hashibe	Dr	ENV/LCA	Scientist	P3	University of Utah
M. Pasterk	Mr	DIR/SCO	Scientific Coordinator	P5	International Prevention Research Institute, Lyon*
S. Tavigian	Dr	GEN/GCS	Scientist	P5	University of Utah
General Service staff					
A.M. Aguelon	Ms	INF/ICB	Laboratory Research Assistant	LY5	Retired
M. Bazin	Mr	DAF/ASO/BDM	Maintenance Technician	LY4	Retired
D. Colin	Mr	INF/ICE	Assistant (Statistics)	LY6	Deceased
C. Mogenet	Ms	HRO/SAC	Clerk	LY3	Retired
J. Thevenoux	Ms	DIR/COM	Clerk	LY4	Retired

* IARC staff members who were founder shareholders in the International Prevention Research Institute, Lyon, France, as from 2 March 2009

49. Twelve new professional staff and nine general service staff have either arrived at the Agency or secured positions as follows:

Professional and higher category staff				
V. Bouvard	Dr	IMO	Scientist	P2
F. Bray	Dr	CIN	Scientist	P5
D. Forman	Dr	CIN	Scientist	P5
T. Gheit	Dr	INF/ICB	Scientist	P1
N. Guha	Dr	IMO	Scientist	P2
H. Hernandez Vargas	Dr	MCA/EGE	Scientist	P2
M. Jenab	Dr	NME	Scientist	P2
H. Lafif	Dr	DAF	DAF	D1
R. Muwonge	Dr	EDP/SCR	Technical Officer	P1
I. Romieu	Dr	NME	Scientist	P5
L. Tallaa	Dr	IMO	Scientist	P2
I. Thierry-Chef	Dr	ENV/RAD	Scientist	P3
General Service staff				
A. Chabrier	Ms	GEN/GEP	Laboratory Technician	LY3
A. Colney	Ms	DIR/LSB	Laboratory Technician	LY3
A.-S. Hameau	Ms	IMO	Clerk	LY3
S. Guillot	Ms	DIR/LSB	Laboratory Technician	LY3
H. Lamouchi	Mr	DAF/ASO/BDM	Maintenance Technician	LY4
M. Moissonier	Ms	ENV/RAD	Clerk (Statistics)	LY4
S. Nouveau	Ms	INF/ICE	Clerk	LY3
J.-A. Pedil	Mr	DAF/ASO/BDM	Maintenance Technician	LY4
J. Tieulent	Ms	CIN	Clerk (Statistics)	LY4

Building work and renovation

50. A renewed dialogue with the City of Lyon, the French government and the Agency has been established regarding renovation and maintenance of the IARC tower. This has led to the development of an agreed plan of work and a suggested shared cost between the City and the Agency. Further information is provided in document GC/52/11.

51. The Director met with the Mayor of Lyon on 30 March 2010 in relation to the above planning and in particular raised the question of the replacement of the air conditioning, the age of which represents a significant risk to the Agency.

52. The following building and renovation works have been carried out in the Agency buildings since May 2009:

- The sound system in the Auditorium is in the process of being replaced and an upgrade of the central telephone exchange system was installed as per Governing Council Resolution GC/51/R10;
- As part of a plan to renovate the common areas on each of the floors of the IARC tower, work was concluded on the 8th and 9th floors; these floors had never been

renovated since the opening of the building in 1972. In addition, renovation work on the stairs and access to Sasakawa Halls A and B was also completed;

- In order to comply with safety regulations, several fire doors were replaced on various floors in the tower (904, 802, 706, 713, 719, 204 and R02).

53. Two studies are being carried out by Bureau Veritas concerning IARC's carbon footprint and energy consumption. Measuring apparatuses have been installed throughout the Agency to collect data and a first working group meeting was held in April. The final report should be available by summer 2010.

Staff Publications

54. The Agency has published its Biennial Report 2008–2009 (document GC/52/2) which contains a full publication list for 2008–2009 and highlights a number of scientific achievements. These will not be recapitulated here. However, below is presented an analysis of the publications and specific updates on particular projects.

55. The Agency is seeking to establish a standard methodology in order to analyse the trends in publications by Agency staff, including the number and type of publications but also the proportion which fall within journals classified as in the top 20% (based on impact factor) of their subject categories. A publication is included if one of the co-authors uses an IARC institutional address. It is proposed that this analysis form a part of the Director's report annually.

56. In 2009, Agency scientists published a total of 319 articles in 140 journals (as compared to 294 in 122 journals in 2008). Of these 239 (75%) were in the form of peer-reviewed articles (78% in 2008), 18 were letters to the editor or comments, 34 were various forms of invited reviews, and 28 items were editorials, news or other contributions. As of 25 March 2010, a further 69 articles had been published in 44 journals.

57. In a consideration of whether articles are appearing in the top 20% of journals, the subject categories used are from *Thomson Reuters* databases: *Web of Science* and *Journal Citation Reports* (see Table 1, in Annex below). It should be noted that a given journal can appear in more than one subject category. However, the approach does remove the subjective selection of what represents a "good" journal. In Table 1 (Annex 2) all types of published articles from Agency scientists are considered.

58. The main subject categories where Agency staff published are: Oncology; Public, Environmental and Occupational Health; Nutrition and Dietetics; and Genetics and Heredity. Overall, 157 (49%) of articles are in the top 20% of journals in their subject categories. Remarkably, this reached 73% in the area of Public, Environmental and Occupational Health.

59. Some caution is required when considering the importance of the above parameter. Not least Agency scientists will frequently publish with colleagues from low and middle-income countries in journals which may be of lower impact but still represent important contributions from these underrepresented regions and an opportunity for career development.

60. The total number of IARC books sold in 2009 was 30 943 copies. Of these the vast majority, 28 869 (93%) were the WHO Classification of Tumours Series with 21 964 representing the number of copies sold of the issue on Haematopoietic and Lymphoid Tissues, Fourth Edition. This demonstrates a quite exceptional demand for these books.

61. The revenue from the sales of IARC books amounted to just over 1 million Swiss Francs (1 030 054 CHF) in 2009. This represents an increase of 39.7% compared to 2008. Although heavily influenced by the sales of the volume of the "Blue Books" on Haematopoietic and Lymphoid Tissues, the figures represent a positive trend.

62. The Agency has analysed its sales figures over the last four years and these are presented in terms of volume and revenue in Tables 2 and 3 (Annex 2). As for the scientific publications, it is proposed that this analysis also forms a part of the Director's report on an annual basis.

63. This analysis shows that there is a year-on-year increase in overall sales of IARC books and consequently also in revenue. The majority of sales and revenue depends on the "Blue Book" series. Given the demand for the latter series, the Agency seeks to provide increased support to the Section of Molecular Pathology in order to increase the production of new volumes from one per biennium to one per year. In addition, a new agreement with WHO Press will result in 2010 in increased revenue to the Agency for a given volume of sales. This is further discussed in document GC/52/13A. The Agency is also working with WHO Press to seek ways to increase sales of other IARC publications.

64. Provision of IARC publications in easily available form on the website is a part of our Medium-Term Strategy. The Agency is currently considering which approach to take in order to monitor web access and downloads of our publications so as to present this in a standardized way to the Governing Council on an annual basis. A list of the key IARC publications made available in electronic format on the IARC website (2008–2009) is as follows:

2008

- IARC Scientific Publication No. 153 - Cancer in Africa
- IARC Biennial Report 2006-2007
- IARC Selected Scientific Activities 2007
- World Cancer Report 2008
- IARC Monographs in PDF volumes 84 to 91 inclusive

2009

- Statistical Methods in Cancer Research, Volume I – The analysis of cancer-control studies
- Statistical Methods in Cancer Research, Volume II – The Design and Analysis of Cohort studies
- Statistical Methods in Cancer Research, Volume III – The Design and Analysis of long-term animal experiments
- Statistical Methods in Cancer Research, Volume IV – Descriptive Epidemiology
- IARC Handbook of Cancer Prevention – Tobacco Control - Volume 13 - "Evaluating the Effectiveness of Smoke-free Policies"
- IARC Scientific Publication No. 159 – "Atlas of Cancer Mortality in the European Union and the European Economic Area 1993-1997"

- IARC Scientific Publication No. 160 – "Cancer Incidence in Five Continents, Vol. IX"
- IARC Non-serial Publication "Cancer Epidemiology: Principles and Methods", edited by I. Dos Santos Silva

65. Production of GLOBOCAN 2008 by the Section of Cancer Information represents a major advance. Some of the overall incidence and mortality figures are provided at the beginning of this report. The full dataset comprises 182 countries and 25 regions of the world, by sex and age group, together with basic tabulation and graphic facilities, all to be available through the IARC internet. GLOBOCAN 2008 will be launched on the IARC website early in June 2010.

66. During 2009, IARC completed a series of six meetings to develop Volume 100 of the *IARC Monographs*. This landmark volume updates IARC's assessments of the more than 100 agents classified as *carcinogenic to humans* (Group 1). Volume 100 found stronger evidence of carcinogenicity for most of these agents and extended earlier findings to include additional tumour sites. For example, asbestos is now causally associated with ovarian cancer, hepatitis C virus with non-Hodgkin lymphoma, formaldehyde with leukaemia, UV-emitting tanning devices with ocular melanoma, and parental smoking with hepatoblastoma in the smokers' children, among many other similar findings.

67. After completion of the six meetings for Volume 100, attention turned to eliminating the backlog in publication of Volumes 92–96 and 98–99. Publication of these volumes on IARC's website in 2010 is expected as follows, with printed orange books following six weeks later:

Volume	Subject	Web date
92	Polycyclic aromatic hydrocarbons	April
93	Carbon black, titanium dioxide, talc	July
94	Ingested nitrate/nitrite; microcystins/nodularins	June
95	Household use of solid fuel; high-temp frying	May
96	Alcohol drinking	August
97	1,3-Butadiene, ethylene oxide, vinyl halides	Published
98	Firefighting, painting, shiftwork	June
99	Industrial and cosmetic dyes, hairdressing	August

68. Publication of the international study on mobile phones and brain cancer had been delayed for a number of years but was made a priority in 2009. A manuscript was submitted, reviewed and was accepted for publication at the beginning of 2010. At the time of reporting a definitive publication date is awaited from the journal.

Voluntary contributions to IARC in 2009–2010 (grants and contracts)

69. In 2009 the Agency signed extra-budgetary contracts to a total value of 9 327 000 euros of which 4 172 000 euros (45%) is destined for the Agency. The major awards were from the European Union (57%), the National Institutes of Health, USA (7%), various sources in France (19%) and other funders in Europe and elsewhere (17%).

70. Table 4 (Annex 2), shows by year over the last four years the trends in value of signed contracts, both the total and the funds destined for the Agency. The former figure provides an indication of the degree of funding leveraged through IARC collaborations, whilst the latter figure indicates the degree of participation of IARC to the projects.

71. The Table reveals significant annual fluctuations in total signed contracts and the IARC contribution. This at least partly reflects the timing of signatures on major contracts. For example the US\$ 18 million for IARC in 2007 is a consequence of an award of US\$ 9 million from the Bill and Melinda Gates Foundation. Notwithstanding this, the value of signed contracts attributed to the Agency is lower in 2008 and 2009.

72. In contrast, in the first part of 2010 a number of major contracts are at various stages of negotiation by the Agency with the following income attributed to IARC:

- DG SANCO direct contract: 1.2 million euros
- NCI, USA (IARC Monographs): US\$ 5 million
- DG Research (CAGEKID): 1.1 million euros
- DG Research (EurocanPlatform – European Platform for Translational Cancer Research): 0.74 million euros
- DG Research (ENCCA – European Network for Cancer research in Children and Adolescents): 0.26 million euros

73. The Voluntary Contributions expenditure for 2009 was US\$ 14 486 000. The expenditure against Voluntary Contributions reflects in-year activity on all awards and thus should smooth some of the annual fluctuations seen in signed contracts. However, once again there are annual variations, notably a 2-fold increase between 2008 and 2009 explained in part by the change in the Agency's accounting policy on income recognition (Voluntary Contributions are now recognized on an accrual basis).

74. In Table 5 (Annex 2) an analysis has been made of the Voluntary Contributions expenditure as a percentage of the total IARC Regular Budget expenditure. This provides another means for the Governing Council to monitor the success of the Agency in attracting Voluntary Contributions in relation to an evolving Regular Budget contribution. In 2009 the Voluntary Contributions expenditure was 33.9% of the total Regular Budget plus Voluntary Contribution expenditure; when only the Regular Budget appropriation section 2 (Scientific Programme) is considered the percentage is 39.8% (Table 5).

75. In 2009 the Agency submitted a total of 96 new grant applications, representing a slight increase on the 88 submitted in 2008, despite a year of transition and a number of staff departures. The number of grant submissions in the previous two years was as follows: 97 (2007) and 67 (2006).

Education and Training

76. The Agency held an international ad hoc Advisory Group meeting on its role in education and training on 27 November 2009 on which the Scientific Council was represented. Following the meeting a new Education and Training Group (ETR) was established (effective 1 January 2010), which comprises the IARC Courses and the Fellowship Programmes.

Mary Heanue was transferred from the Section of Cancer Information to be the new Group Head. Dr Rodolfo Saracci also joined ETR on 1 March 2010 as Visiting Scientist.

77. The advice from the Advisory Group was reflected in a document to the Scientific Council at its 46th Session which supported the proposed developments. This is further elaborated in document GC/52/7.

78. Dr Zdenko Herceg is the new responsible officer for the Fellowship Programme. The European Union FP7 Marie-Curie COFUND grant of 0.84 million euros was confirmed in 2009 and coincided with a decision to accept applications from post-doctoral candidates from any country, with priority to those from, or with projects of benefit to, low- and medium-income countries.

79. The Marie-Curie grant, along with an increased investment from the Regular Budget of 237 000 to 400 000 euros, permitted an expansion of the Fellowship Programme to a total of eight new post-doctoral awards and four renewals in 2010 compared to four and four respectively in 2009. In addition, in both 2009 and 2010 there were three extensions for PhD studentships.

80. Two new Visiting Scientist awards were made to Professor Julian Peto (UK) and Dr David Richardson (USA) in 2009 for six months each; announcement of the award for 2010 is pending.

81. The new Scientific Co-director for the IARC Summer School is Dr Kurt Straif. As of end March 2010, the Summer School had 204 applicants from 73 countries in 2010 compared to 189 from 73 countries in 2009 revealing the continued high demand for this course.

82. The Agency proposes to present standardized information on its fellowships and courses to the Governing Council on an annual basis in this report. The data for 2009 are presented in Tables 6 and 7 (Annex 2), in comparison to the previous three years.

IARC Ethics Committee

83. The former IARC Institutional Review Board (IRB) met twice between May 2009 and December 2009 and evaluated 26 projects, of which one was rejected, six were requested to be resubmitted with more information and 19 were given either full or conditional clearance.

84. The new IRB, with a renewed and enlarged membership (see new membership below), had its first meeting on 9 April 2010 and discussed Standard Operating Procedures and Rules and Procedures. It is foreseen that the IRB will meet three to four times during the year.

- Professor Clement Adebamowo (external member)
- Ms Evelyn Bayle (IARC staff member)
- Professor Jean-Pierre Boissel (IRB Chair, external member)
- Dr Béatrice Fervers (external member)
- Dr Marc Guerrier (external member)
- Mr Yazid Ikdoumi (external member)
- Mr Martyn Plummer (IARC staff member)
- Dr Abha Saxena (WHO staff member)

- Dr Pierre-Jean Souquet (external member)
- Dr Bakary Sylla (IARC staff member)
- Professor Paolo Vineis (IRB Vice-Chair, external member)

External relations

Meetings

85. The Agency contributes to scientific collaboration through organizing meetings. These include core activities such as IARC Monograph meetings, the editorial meetings for the “Blue Book” series, those related to advisory or working groups and those related to specific research areas. A list of the major meetings held at the Agency from May 2009 is provided below:

- IARC-NCI-HuGENet meeting (18–20 May 2009);
- Monograph meeting 100D: Radiation (2–9 June 2009); Monograph meeting 100E: Lifestyle factors (29 September–6 October 2009); Monograph meeting 100F: Chemical agents and related occupations (20–27 October 2009);
- Working Group meeting on European Code Against Cancer (10 June 2009);
- Identification of Research Needs to Resolve the Carcinogenicity of High-Priority IARC Carcinogens (30 June–2 July 2009);
- Cancer Registration Advisory Group meeting (24–25 September 2009);
- Governing Council Working Group to consider and finalize a draft Medium-Term Strategy for 2010–2014 (1–2 October 2009);
- Gene-Rad-Risk Final meeting (7–8 October 2009);
- Kidney Cancer Genomics meeting (K2 – CAGEKID) (20–27 October 2009);
- 1st Editorial Board meeting for CI5 (I-IX) (29–30 October 2009);
- ARCH – Experts and Advisors Group meeting (3–4 November 2009);
- SYNERGY Exposure meeting and Fourth SYNERGY Study Group meeting (12–13 November 2009);
- Third International Childhood Cancer Cohort Consortium (14C) Workshop (16–17 November 2009);
- WHO meeting of Directors of Administration and Finance, WHO HQ (19–20 November 2009);
- WHO International Chemical Safety Cards Meeting (23–27 November 2009);
- IARC Advisory Group meeting on Education and Training (27 November 2009);
- WHO comparative risk assessment for indoor air pollution (3 December 2009);
- Consensus and Editorial meeting, WHO Classification of Tumours of the Digestive System (10–12 December 2009);
- Joint meeting of the Steering and Scientific Committees for the European Code Against Cancer (16 December 2009);
- Mycotoxin Book Editorial Meeting (17–18 December 2009);
- International Study of Paediatric CTs (19–20 January 2010);

- Joint IARC/NCI Workshop on HPV-related and non-related head and neck cancer (22–23 February 2010);
- 2nd Editorial Board meeting for CI5 Vols. I-IX (24–25 February 2010);
- Working Group on ICD-O updates (5–6 March 2010);
- ARCH Core Group Meeting (22–23 March 2010);
- IARC Fellowship Selection Committee meeting (24–25 March 2010).

Collaboration with the cancer registry associations

86. In line with its mission of providing a global reference for cancer information, IARC collaborates with the International Association of Cancer Registries (IACR), a non-governmental organization in official relations with WHO. This collaboration is formally recognized by an annual Collaborative Research Agreement. IARC provides a secretariat, including a professional staff member as the Executive Secretary of the Association.

87. IARC also supports the European Network of Cancer Registries (ENCR). Selected core ENCR activities are included in the direct contract between the European Commission (EC) and IARC. For the second annual direct contract, a budget of 311 000 euros has been requested for ENCR. This adds to the budget of 250 000 euros received in a subcontract of the EUROCOURSE project for complementary activities. EUROCOURSE was funded by FP7 for a period of three years, starting in April 2009, and supports optimization of the use of registries for scientific excellence in research.

Collaboration with UICC

88. The Agency seeks close cooperation with the International Union Against Cancer (UICC) on a number of different areas. Notably the UICC was represented on the ad hoc Working Groups that the Agency established in 2009 on cancer registration and on education and training.

89. The Director was consulted in planning of the UICC World Cancer Congress to be held in Shenzhen, People's Republic of China in August 2010 and attended the UICC Board of Directors meeting in Geneva in May 2009.

90. Dr Silvia Franceschi contributed to the 2010 UICC World Cancer Campaign by writing a chapter on HPV and liver cancer which was included in their expert report on protection against cancer-causing infections.

91. The Screening Group collaborates with the UICC concerning training. An IARC-UICC cervical cancer prevention workshop was organized in Dar es Salaam, Tanzania in January 2009. The Screening Group provides UICC with technical advice and teaching manuals and assists in purchasing medical equipment for project sites where the UICC sets up cervical cancer prevention.

Collaboration with WHO

92. The Agency has a wide-range of collaborative activities with WHO, notably concerning activities in the HQ clusters of Noncommunicable Diseases and Mental Health (NMH), Family and Community Health (FCH) and Information, Evidence and Research (IER). These are too numerous to report on in full but some pertinent areas are highlighted briefly below.

93. Collaboration with WHO Classifications, Terminologies and Standards regarding the ICD-O-3 update and the ICD-11 where the Agency is taking the lead on the Topic Advisory Group (TAG) for Neoplasms.

94. IARC Monographs hosted for the third time a WHO International Programme on Chemical Safety (IPCS) Safety Cards Peer-Review meeting (November 2009).

95. Dr Vincent Cogliano attended the 14th International Advisory Committee Meeting of the International Electromagnetic Fields Project (WHO meeting) (June 2009).

96. The Infections and Epidemiology, Quality Assurance and Screening Groups have a number of active areas of collaboration with WHO, notably in relation to HPV and cervical cancer screening and prevention:

- A Gates Foundation-IARC-WHO grant: "Filling gaps in the epidemiology of human papillomavirus (HPV) and cervical cancer in developing countries" 2005–2012 was put in place by IARC, in partnership with WHO (Department of Immunization, Vaccines, and Biologicals (IVB) in FCH). The Gates Foundation support assisted WHO to speed up HPV vaccine prequalification and create a web-based information centre on HPV and cervical cancer.
- HPV Vaccine Advisory Committee (HVAC) and Immunization Strategic Advisory Group of Experts (SAGE); this is an ongoing participation of IARC staff in order to make recommendations regarding acceptability and introduction of vaccination.
- IARC collaborates with WHO within the framework of the Special Programme of Research Development and Research Training in Human Reproduction, put in place in 2007 with collaborators from the Shahid Beheshti Medical University, Tehran, Iran (Principal Investigator: Dr Nahid Khodakarami) to carry out a population-based HPV prevalence survey in Iran.
- The Agency worked closely with WHO on coordinating work on global HPV vaccination surveillance and monitoring in developing countries, and specifically to identify short- and long-term objectives, as well as resources and partners through "HPV surveillance and monitoring" meetings – WHO-EPI Group, 6–7 May 2009, Geneva, Switzerland (G. Clifford), 16–17 November 2009, Geneva, Switzerland.
- The Agency, the NMH cluster and the Department of Reproductive Health Research (RHR) in the FCH cluster organized an internal meeting on cervical cancer screening and HPV vaccine on 23 November 2009. This was to prepare a joint strategy for a later meeting entitled "Human papillomavirus (HPV) vaccines and cervical cancer prevention, the way forward" on 1 December 2009 organized by the RHR/UNFPA/GAVI discussing the next steps to be taken after the global introduction of the HPV vaccine.
- IARC participated in a meeting with the Department of Chronic Diseases and Prevention Management (CPM) and the RHR to plan the update of the WHO guidelines on comprehensive cervical cancer control (C4), 4 March 2010, Geneva, Switzerland. The first part of this project deals with the "Evidence-based guidelines on the use of cryotherapy in treatment of cervical precancer".

- The Infections and Biology Group works closely with the IVB on the Global Laboratory Network which aims to harmonize and standardize laboratory testing procedures worldwide for HPV screening and monitoring the impact of HPV vaccinations.
- IARC has collaboration with the WHO CPM, RHR, WHO EURO and IAEA/PACT on scientific and professional support for development of a cancer control programme for breast and cervical cancer in Albania.
- The Agency provides technical assistance (training of providers; infrastructure; databases; evaluation) to cervical cancer screening studies in sub-Saharan Africa (WHO-AFRO and RHR); with NMH on evaluation of national screening programmes in low- and middle-income countries.

97. The Lifestyle and Cancer Group (LCA) has many joint activities with WHO:

- Interagency Working Group (WHO, ILO, UNEP, UNITAR, Rotterdam Convention, Basel Convention) on sound management of industrial chemicals with special emphasis on asbestos in the Asia-Pacific region.
- WHO global burden of disease: indoor air pollution and occupational cancer.
- WHO Initiative to estimate the global burden of foodborne diseases. Foodborne Disease Burden Epidemiology Reference Group (FERG).
- WHO-EURO Expert Group on indoor air quality guidelines.
- ILO Meeting of Experts on updating of the list of occupational diseases; Invited expert from IARC in collaboration with WHO/IPCS.
- UNEP, ILO and WHO: Peer review meetings of International Chemical Safety Cards (ICSCs).
- Collaboration with the WHO Tobacco Free Initiative (TFI):
 - Preparation for IARC Monographs Vols. 83, 89, 100E;
 - Joint WHO/TFI-IARC Working Group on mandated lowering of tobacco toxicants;
 - Preparation for IARC Handbook Vol. 14 on effectiveness of tax and price policies for tobacco control (planned for 17–22 May 2010);
 - Since 2008, LCA has cooperated with TFI concerning tobacco control research.

98. Dr Nadia Slimani represented the Agency on the WHO Steering Group of the Nutrition Guidance Expert Advisory Group (NUGAG), the first meeting of which took place on 22–25 February 2010.

99. Collaboration with Dr Alexandre Goubarev in (HRH/HEP) on Fellowships and Ms Eveline Coveney (HRD/PML) on training. Dr Jördis Ott (NMH/CHP) represents WHO on the IARC Fellowships Selection Committee.

Annex 1 – Implementation of IPSAS and implications for IARC's Financial Regulations and Statute

As already announced to the Governing Council in May 2008 and in May 2009, and as also mentioned in the Biennial Financial Report for 2008–2009 (Document GC/52/10), IARC and WHO have been gradually implementing the International Public Sector Accounting Standards (IPSAS), as part of a United Nations System wide effort. The aim is for IARC to be fully compliant with these new accounting standards within 2010.

By IPSAS definition, IARC is not considered a "WHO controlled entity" with regard to accounts. Accordingly, WHO Headquarters have decided to no longer show IARC's accounts as a "trust fund" in WHO's annual and biennial financial statements, like for other former WHO "trust funds" (e.g. UNAIDS, The Global Fund, UNITAID). The decision by WHO Headquarters was subsequently confirmed by the External Auditors of WHO in 2008.

IARC remains part of WHO and its legal status unchanged. However, the IARC Statute and Financial Regulations need to be amended in order to reflect the new situation.

The following sentence, that will need to be amended, appears in both the *IARC Statute* (Article VIII.8) and *IARC's Financial Regulations* (Article 2.1):

"The funds and assets of the Agency shall be treated as trust funds under Regulation IX (9.1 and 9.2) of the Financial Regulations of the World Health Organization."

The amendment of the relevant paragraphs of the Statute and the Financial Regulations, mainly through deletion of the quoted sentence, requires two separate procedures:

- *Amendment of Financial Regulation 2.1*

As per Article VII (7.1) of IARC's Financial Regulations, these "may be amended only by the Governing Council", i.e. any amendment requiring only a decision of the Governing Council to be promulgated.

- *Amendment of Article VIII (paragraph 8) of the Statute*

As per Article X of the Statute, amendments to the Statute "shall come into force when adopted by the Governing Council by a two-thirds majority of its members who are representatives of Participating States and accepted by the World Health Assembly." WHA's prior approval is therefore necessary for any change to the Statute to take effect.

To ensure a coherent and uniform approach to the amendment of the Financial Regulation and of the Statute, the Secretariat will bring the proposed amendments to the Governing Council at its next session in May 2011. Should the Governing Council (GC) agree to the amendment of the Statute, it will be put before the World Health Assembly (WHA) at its meeting in May 2011, which occurs immediately after the meeting of the GC, for the WHA's acceptance of the amendment.

Annex 2 – Standard Reporting

Table 1: Publications within top 20% of journals in their subject category in 2009

JOURNAL SUBJECT CATEGORY	No. Journals in SC	Highest IF in SC	20% IF of SC ^a	No. IARC publ. in SC	No. IARC publ. in top 20%	% IARC in top 20%
BIOCHEMICAL RESEARCH METHODS	65	13.651	3.781	2	0	0%
BIOCHEMISTRY & MOLEC. BIOLOGY	275	31.253	4.823	6	3	50%
BIOTECH. & APPLIED MICROBIOLOGY	144	28.69	3.475	4	1	25%
CARDIAC & CARDIOVASC. SYSTEMS	79	14.595	4.015	2	1	50%
CELL BIOLOGY	157	35.423	5.598	4	0	0%
CLINICAL NEUROLOGY	156	14.27	3.48	6	3	50%
DENTISTRY, ORAL SURGERY & MED.	55	3.493	2.038	4	3	75%
DERMATOLOGY	43	5.251	2.973	3	3	100%
ENDOCRINOLOGY & METABOLISM	93	18.562	5.225	3	0	0%
ENGINEERING, BIOMEDICAL	52	10.789	2.784	1	0	0%
ENVIRONMENTAL SCIENCES	163	7.409	2.59	4	2	50%
GASTROENTEROL. & HEPATOLOGY	55	12.591	4.55	8	6	75%
GENETICS & HEREDITY	138	30.259	4.262	20	12	60%
HEALTH CARE SCIENCES & SERVICES	62	5.01	2.681	1	0	0%
HEMATOLOGY	62	14.595	4.605	3	2	67%
IMMUNOLOGY	121	41.059	4.57	8	2	25%
INFECTIOUS DISEASES	51	13.165	3.987	4	3	75%
MATERIALS SCIENCE, BIOMATERIALS	20	6.646	3.298	1	0	0%
MATHEMATICAL & COMPUTAT. BIOL.	29	5.895	3.394	1	0	0%
MEDICAL INFORMATICS	20	3.59	2.754	1	0	0%
MEDICINE, GENERAL & INTERNAL	107	50.017	3.163	14	8	57%
MEDICINE, RES. & EXP.	83	27.553	3.475	8	1	13%
NEUROSCIENCES	221	26.405	4.352	3	3	100%
NUCLEAR SCIENCE & TECHNOLOGY	30	2.178	1.114	1	0	0%
NUTRITION & DIETETICS	59	11.237	3.503	27	8	30%
OBSTETRICS & GYNECOLOGY	61	7.59	2.919	7	2	29%
ONCOLOGY	143	74.575	4.846	151	46	30%
PATHOLOGY	69	7.529	3.66	7	4	57%
PEDIATRICS	86	4.845	2.494	1	0	0%
PHARMACOLOGY & PHARMACY	219	28.69	3.835	1	1	100%
PUBLIC, ENVIRON. & OCC. HEALTH	105	12.13	2.896	63	46	73%
RADIOL., NUC. MED. & MED. IMAGING	92	6.662	3.329	1	0	0%
RESPIRATORY SYSTEM	40	9.792	3.508	2	1	50%
STATISTICS & PROBABILITY	92	3.865	1.647	1	1	100%
SURGERY	148	8.46	2.591	2	2	100%
TOXICOLOGY	75	21.561	3.249	7	3	43%
UROLOGY & NEPHROLOGY	57	7.505	3.568	3	1	33%
VETERINARY SCIENCES	135	3.298	1.559	4	4	100%
VIROLOGY	27	7.13	4.105	2	1	50%

Legend: IF = Impact Factor SC = Subject Category

^a This figure represents the impact factor of the journal at the limit of the 20% top journals

Table 2: Volume of sales of IARC publications 2006–2009

Year	Total sales	Sales of 'Blue Books'
2006	15 252	13 192
2007	18 964	17 395
2008	21 310	19 365
2009	30 943	28 869

Table 3: Revenue from sales of IARC publications 2006–2009 (in Swiss francs)

Year	Revenue from sales of all publications	Revenue and percent from 'Blue Books'	Revenue from sales paid to IARC ^a
2006	511 825	481 380 (94%)	389 433
2007	777 795	744 768 (95%)	520 850
2008	877 604	839 388 (95%)	737 362
2009	1 300 050	1 258 925 (97%)	1 030 054

^a After charges were deducted from overall figure

Table 4: Extra-budgetary funds (US\$) 2006–2009

Year	Total value of signed contracts	Value attributed to IARC	Voluntary contribution expenditure
2006	27 352 000	6 030 000	9 588 000
2007	30 862 000	18 053 000	13 688 000
2008	13 054 000	4 789 000	7 673 000
2009	9 327 000	4 172 000	14 486 000

Table 5: Voluntary contributions (VC), regular budget (RB) and percentage comparison (US\$) 2006–2009

Year	Regular budget (RB)	%VC/RB+VC ^a	Regular budget Appropriation Section 2	%VC/RB2+VC
2006	19 635 000	34.4%	12 472 000	45.2%
2007	19 635 000	36.6%	15 688 400	42.0%
2008	22 375 500	34.2%	15 531 000	42.8%
2009	22 375 500	33.9%	17 354 400	39.8%

^a VC, Voluntary contribution expenditure taken from Table 4

Table 6: IARC Fellowships 2006–2009

Year	No. of IARC Fellowships awarded^a	No. fellows from low- and middle-income countries
2006	9 (4 + 5)	9
2007	10 (6 + 4)	10
2008	11 (6 + 5)	11
2009	8 (4 + 4)	8

^a Post-doctoral fellowships (new and second year renewals)

Table 7: Courses organized by IARC 2006–2009

Year	No. courses organized	No. different countries where courses held	No. courses in low- and middle-income countries	No. participants
2006	6	6	4	146
2007	6	5	5	157
2008	7	6	4	340
2009	13	13	12	405