

## **DIRECTOR'S REPORT**

1. This Director's Report covers the period since the 53<sup>rd</sup> Session of the Governing Council.
2. The IARC Biennial Report 2010–2011 contains an extensive review of the scientific achievements of the Agency over the last two years. The current Report provides, therefore, complementary information on other aspects of the Agency's overall portfolio of activities.

### **Introduction**

3. Over the last year the Agency has continued involvement in the international effort on noncommunicable diseases (NCD). Following the "First Global Ministerial Conference on Healthy Lifestyles and Noncommunicable Diseases" organized by the Russian Federation in collaboration with the World Health Organization (WHO) in April 2011 the Agency worked closely with WHO in preparation for the high-level meeting of the United Nations General Assembly held in New York on the 18–19 September 2011. The Director participated in both meetings and the Agency had earlier contributed to the preparation of the first WHO Global Status Report on Noncommunicable Diseases, setting out the challenge of the worldwide burden, associated risk factors and prevention strategies for NCD.

4. These meetings highlighted the direct relevance and value of the activities of the Agency in the context of the global NCD agenda. Based on its expertise, international status and reputation, IARC is ideally placed for a significant future role, particularly in low- and middle-income countries. In particular the distinction of IARC as a research agency is important. The Agency can contribute to the necessary evidence-base on global cancer burden, the causation and prevention of cancer, and help with capacity building through its education and training activities. IARC has a unique collaborative network in low- and middle-income countries which provides an excellent platform for these various components. Positioning the Agency to participate in global and regional collaborative efforts is an important part of our future plans.

5. If the Agency is to realize its full potential to contribute to cancer control it needs to establish new partnerships and identify new resources. One strategy is to welcome new Participating States, a goal supported by the Governing Council Subcommittee on the Admission of New Participating States which met in October 2011. In this regard, the Director visited Brazil in December 2011 and met with the Minister of Health, Dr Alexander Padilha, as well as the Director of the National Cancer Institute, Dr Luiz Santini. The Minister expressed the desire of Brazil to rejoin IARC as a Participating State as soon as possible. A Memorandum of Understanding was also signed with the

National Cancer Institute of Argentina, with one of the areas of agreement being to explore Argentina rejoining IARC. Contacts with other potential Participating States continue to be explored.

6. In relation to new partnerships, the Agency organized the IARC-Latin America Collaboration (I-LAC) Meeting which was attended by Directors from fifteen different National Cancer Centres from the region together with representatives from WHO, the Union for International Cancer Control (UICC), the National Cancer Institute, USA (NCI USA) Centre for Global Health and the Pan American Health Organization. The meeting took place on the 26–27 March 2012 in Lyon and resulted in a series of high priority areas being identified including: cancer registration; cancer screening; cancer etiology and prevention (particularly breast and head and neck cancer) as well as training in cancer research. It was also agreed that IARC would work closely with the Network of National Cancer Institutes (RINC) in the region.

7. The above approach to developing key partnerships is one way to ensure that the Agency is able to play a critical role in promoting international collaboration in a changing environment. The I-LAC proved a great success in identifying areas of common priority in a defined geographic region and in placing the Agency at the heart of regional networks. The plan is to extend this process to other areas over time, notably to the Middle-East, south-east Asia and Africa.

8. Such partnerships reflect the evolving global cancer research community. The Agency has established an enormous reservoir of collaborators over its 45 year history. The IARC Alumni is one approach taken to cultivate contacts with ex-staff, fellows and visiting scientists. Many of those past colleagues now work in parts of the world where cancer research is increasingly counted as a priority. Therefore whilst creating the high-level partnerships which enable the Agency to play a leading role in the international effort against cancer, we are also drawing on our own heritage of goodwill from individual researchers around the world to maximize the collaborative opportunities for IARC.

### **International ranking**

9. The Director's Report contains a number of key performance indicators (KPI) for the calendar year 2011 which permit trends over a four year period to be considered.

10. A complementary approach is to refer to exercises that produce global rankings of research organizations. For the moment the majority of these focus on universities or higher education institutions (HEIs). However over the last three years there is an analysis covering not only HEIs but also other research organizations (health system, government agencies, private corporations and others) of different sizes and working across all subject areas, i.e. not restricted to health.

11. The SCImago Institutions Report (SIR) is produced by the SCImago research group in Spain. The report ([http://www.scimagoir.com/pdf/sir\\_2011\\_world\\_report\\_ni.pdf](http://www.scimagoir.com/pdf/sir_2011_world_report_ni.pdf)) encompasses 3042 institutions responsible for more than 80% of worldwide scientific output during the period 2005–09 as indexed in Elsevier's Scopus database.

12. The SIR "Normalized Impact Report" ranks organizations according to impact, based on citation of published work. The calculated value is expressed in percentages and shows the relationship of an institution's average scientific impact compared to the world average, which is 1: i.e. a score of 0.8 means the institution is cited 20% below average and 1.3 means the institution is cited 30% above average.

13. Of the 3042 institutions worldwide, the Agency ranks 32<sup>nd</sup>, being 8<sup>th</sup> in Europe and 1<sup>st</sup> in France. The normalized impact of the Agency's publications is 2.74, revealing a remarkably high citation rate. For the Agency to be in the top 1% of all organizations included worldwide is an outstanding achievement. The Report also measures the ratio of publications that an institution publishes in the journals ranked in the first quartile (Q1, 25%) in their categories. The Agency has a Q1 of 86.6% (i.e. in 31<sup>st</sup> place overall).

14. It is informative to compare the Agency specifically to other dedicated cancer research centres. For information, Annex 1 of this Report contains comparative data extracted from the SIR World Report 2011. The highest ranked cancer research institute is the Dana Farber Cancer Institute, ranked 9<sup>th</sup>, followed by the Agency at 32<sup>nd</sup>, the Catalan Institute of Oncology at 33<sup>rd</sup>, the "Fondazione IRCCS Istituto Nazionale Tumori di Milano" at 43<sup>rd</sup>, the Institute for Cancer Research UK at 44<sup>th</sup> and the Fred Hutchinson Cancer Centre at 52<sup>nd</sup>.

15. The Governing Council requested some measure of the collaborative nature of the research at the Agency. The SIR World Report 2011 includes a measure of international collaboration which examines the institution's publications that include co-authors from research organizations in countries other than the one in which the institution itself is based. The figure for the Agency is 87%; ranking 9<sup>th</sup> overall (i.e. almost 90% of papers have authors outside of France); there are only five institutions with a higher collaboration index among the organizations in the SIR.

16. The Agency is continuing to explore other in-house measures to provide KPIs that represent the wide-ranging collaborations of scientific staff with partners in different countries.

### **Highlight events**

17. The Agency held a meeting of stakeholders in July 2011 to discuss how to increase the coverage and quality of cancer registration in low- and middle-income countries. This led to the Global Initiative for Cancer Registry Development in Low- and Middle-Income Countries (GICR). GICR was launched on 18 November 2011 during the UICC World Cancer Leaders' Summit in Dublin, Ireland. Currently the Agency is working with UICC, NCI USA and other partners to seek resources for the funding of this initiative. The strategy is to establish a number of regional "hubs" of expertise in cancer registration which would serve as a resource to other cancer registries in a region.

18. The inaugural hub was established in Mumbai, India at the Tata Memorial Centre in 2011. It is planned to establish a second hub in Izmir, Turkey in 2012 with valuable support having been committed by the new NCI Centre for Global Health in collaboration with the Agency. During 2011 it was of interest that new legislation in South Africa required that the new national cancer registry "conforms to the norms and standards as determined by IARC".

19. The Agency has hosted a number of important events over the past year. Notable among these was the visit of the Director of the newly established National Cancer Centre of the People's Republic of China, Professor Jie He on 5 October 2011. He was accompanied by Dr Min Dai, an ex-staff member at IARC. The Director of the Agency has a reciprocal visit to Beijing planned for later in 2012.

20. A Spanish delegation, led by Dr Navas, the Director of the Instituto de Salud Carlos III, Madrid, Spain and accompanied by Dr Marina Pollán and Dr Carlos Segovia from the Scientific and Governing Councils respectively, visited the Agency on 4 November 2011 in order to identify potential for cooperation between the organizations, including in the area of training fellowships.

21. A two-day research meeting was also held between scientists from the German Cancer Centre (DKFZ) and IARC on 17–18 October 2011, which led to a number of ideas and new collaborative projects across the two organizations. A scientific meeting on "Emerging Oncogenic Viruses" has been jointly organized with the DKFZ and will be held in Italy in the early summer 2012.

22. The World Cancer Day in 2012 (4 February) took as its theme: "Together it is possible". The Agency highlighted this initiative with a web-based feature including podcasts by the Director and by Dr Rolando Herrero (Head, Prevention and Implementation Group), focusing on cervical cancer.

23. For logistic reasons the IARC Day 2012 will be held on 23 October this year. The theme will be Nutrition and Cancer and the two recipients of the IARC Medal of Honour will be Drs John Potter (20<sup>th</sup> Roger Sohler Lecture) and Walter Willet (9<sup>th</sup> Sir Richard Doll Lecture).

24. A new event has also been planned, the IARC Cancer and Society Lecture, to be held on 28 June 2012. The inaugural speaker will be Dr David Michaels, Assistant Secretary of Labor for Occupational Safety and Health, Washington, USA. It is planned that this event, open to all Agency staff, will take place as a New Year lecture in 2013.

## **Scientific organization and highlights**

### ***Scientific organization***

25. Dr Rolando Herrero arrived in June 2012, representing an exciting new appointment for the Agency. Given the strategic emphasis being placed on prevention and Dr Herrero's experience, a new Group was created in September 2012 entitled the Prevention and Implementation Group (PRI) with Dr Herrero as Head. The Group is part of the Section of Early Detection and Prevention led by Dr Sankaranarayanan.

26. Dr Ramatoulie Njie was recruited to Head the Gambia Hepatitis Intervention Study (GHIS) as from 31 May 2011. Dr Njie is based in The Gambia and her appointment was enabled by support from the Voluntary Undesignated Contributions (Resolution GC/51/R9). This is the first time for

many years that the Agency has had a scientist based in The Gambia and dedicated to GHIS. The appointment also opens the possibility to develop other research projects in West Africa on the foundation provided by this long-term project.

27. In the area of Mechanisms of Carcinogenesis, the Molecular Carcinogenesis Group has been renamed the Molecular Mechanisms and Biomarkers Group, to reflect a greater emphasis on the application of the laboratory science to epidemiological studies. A new Group Head is being recruited following the departure of Dr Hainaut in December 2011.

28. A new Head of Education and Training (ETR), Anouk Berger, was recruited with an appointment made in March 2012. The Agency specifically sought someone with skills in distance learning, consistent with our strategy in this area. One consequence of the delay in recruitment was that the review of ETR (Resolution GC/52/R5) did not take place at the 48<sup>th</sup> session of the Scientific Council. This has been discussed with the Chairs and Vice-Chairs of the Governing and Scientific Councils and the Governing Council is requested to approve the scheduled discussion for the 49<sup>th</sup> session of the Scientific Council in February 2013, with a report to the Governing Council at its 55<sup>th</sup> session in May 2013.

29. In order to promote research themes across the Agency, the first Research Leadership Forum meeting for IARC Group Heads and senior scientists took place on 5 December 2011 on the subject of breast cancer. All Agency scientists working on this topic came together for the day to identify future opportunities for collaborative research. The format was much appreciated and will be followed for other subjects in the future.

30. Following internal discussion among the staff, the Division of Administration and Finance has been renamed the Section of Support to Research (SSR). This reflects the motivation of the support staff to focus on service provision to the scientific Sections in their research.

### ***Scientific highlights***

31. The Biennial Report details the remarkable body of research and related achievements over the last two years; it represents work of the highest scientific quality with a direct relevance to cancer prevention. The Biennial Report is also characterized by certain features inherent to the strategy of the Agency. These include international collaboration, interdisciplinary research, and research training and capacity building, both through the research projects themselves as well as more formal delivery of courses and award of fellowships.

32. Following the successful completion of the IARC Monograph Volume 100 (in six parts) the Agency has recommenced its programme of three Monograph meetings per year. After the last Governing Council the first meeting was volume 102 on Non-Ionizing Radiation, Part II, Radiofrequency Electromagnetic Fields [including mobile phones] in May 2011. The Working Group classified Radiofrequency Electromagnetic fields as "possibly carcinogenic to humans" (Group 2B). This meeting generated an unprecedented level of interest. Over 100 journalists joined a telephone press conference immediately after the meeting ended and the Agency news release had over 200 000 downloads.

33. The above meeting was followed by volume 103: Bitumen and bitumen fumes, and some heterocyclic polycyclic aromatic hydrocarbons in October 2011 and volume 104: Polyomaviruses (SV40, BK, JC, and Merkel cell viruses) and malaria in February 2012.

34. This year, the IARC Monographs Programme completed its review of the human carcinogens identified over its 40 years of activity. A publication in the Journal of the National Cancer Institute in December 2011 provided an overview of established human carcinogens, along with target organ sites. This permits searches either by exposure, or by organ site, a valuable resource for scientists and decision-makers alike.

35. During the last year the Agency has made major strides in establishing its biobank facility, including cataloguing all biospecimen collections and the step-by-step inclusion of these into a shared database. The IARC Biobank (IBB) hosts one of the largest, most varied and richest international human sample collections in the world (over 5 million). In order to highlight this facility to the international scientific community, the Laboratory Services and Biobank Group launched the IBB web site on 7 November 2011.

36. The IBB web site provides details of the biospecimen collections and who to contact to propose collaborative research. An access policy is under development. The various Standard Operating Procedures are also now available on the web site. The further development of the IBB will be considered by the Scientific Council at its 49<sup>th</sup> session in January 2013, including the potential role for the Agency in providing specific support to biospecimen resources in low-income countries.

37. A number of new collaborative studies were launched over the last year. One example is the EU-funded "Epidemiological study to quantify risks for paediatric computerized tomography and to optimize doses (EPI-CT)" coordinated by IARC across nine European countries. This represents an important area of concern in relation to the rapidly expanding use of multiple diagnostic procedures using X-rays in young children. Similarly the Agency is the coordinating centre of a major EU-funded study on the "Role of human papillomavirus infection and other co-factors in the aetiology of head and neck cancer in Europe and India" (HPV-AHEAD) involving nine partners from six European countries plus seven centres in India.

38. The Agency expanded its work on cancer burden to provide global estimates of cancer prevalence through its GLOBOCAN 2008 web site. Cancer prevalence helps provide information on resource needs for patients by measuring the absolute number and the relative proportion in populations of individuals living with the disease and potentially requiring some form of clinical or support service.

39. Many cancer organizations use information from the Agency to inform their own activities. The Agency is offering to work more closely in partnership with these national and international partners to ensure best use of the data and to widely disseminate the work of IARC. Examples have included collaboration with Cancer Research UK to produce a new detailed report on the rise of cancer in the developing world in advance of the UN high-level Meeting on NCD and a worldwide cancer map, also with Cancer Research UK, which was further used by the Dutch Cancer Society. In addition, there have been some high-profile joint publications with the American Cancer Society on global cancer burden.

## Publications

40. In 2011, Agency scientists published a total of 341 articles in 155 journals. This is an increase of 56 publications compared to 2010 and higher than in any of the previous three years (see Table 1). Of the total publications, 242 (71%) were in the form of peer-reviewed articles, a number similar to previous years, with a slightly greater proportion in 2011 therefore being in the form of letters to the editor, commentaries, invited reviews, and editorials, news or other contributions. As of 28 February 2012, a further 52 articles had been published in 35 different journals.

**Table 1: Publications – Articles**

Year	Peer-reviewed articles	Letters to Editor or comments	Invited reviews	Editorials, news, other	Total
2008	229 (78%)	21	44		294
2009	239 (75%)	18	34	28	319
2010	231 (81%)	6	32	16	285
2011	242 (71%)	18	48	33	341

41. The publications were assessed in relation to the percentage appearing in the top 20% of journals in their subject category, using categories from *Thomson Reuters* databases: *Web of Science* and *Journal Citation Reports* (Annex 2). It should be noted that a given journal can appear in more than one subject category and hence the total number of articles in Annex 2 is higher than 341.

42. The six most common subject categories where Agency staff published are: Oncology; Public, Environmental and Occupational Health; Biochemistry and Molecular Biology; Nutrition and Dietetics; Biology; and Genetics and Heredity, with the first two categories being by far the dominant ones.

43. Overall, 57% of articles were published in the top 20% of journals in their subject categories. In comparison to 2009 and 2010 the overall percentage is slightly higher.

44. In Oncology, the main category where Agency publications appear, the percentage of papers in the top 20% of journals continues to rise, increasing from 30% in 2009 to 39% in 2010 and 57% over the last year. In Public, Environmental and Occupational Health the figure is lower in 2011 (59% compared to 73% and 89% in 2009 and 2010 respectively). Nevertheless, the overall indication is that research conducted at the Agency continues to be published in the most competitive journals in the relevant topic areas.

45. As in previous years it is important to note the value of publishing with colleagues from low- and middle-income countries, even if these papers are submitted to lower impact journals. In addition, the cut-off for the impact factor which places a journal in the top 20% is sometimes based on small differences but can have a major effect on the figures presented in Annex 2.

46. The total number of IARC books sold in 2011 was 13 582 copies (Table 2). As in recent years, over 90% of sales were of the WHO Classification of Tumours Series (referred to as the "Blue Books"). In total, book sales were just over 10% lower than in 2010.

**Table 2: Publications – Volume of sales**

Year	Total sales	Sales of 'Blue Books'
2008	21 310	19 365 (91%)
2009	30 943	28 869 (93%)
2010	15 544	14 872 (95%)
2011	13 582	12 641 (93%)

47. Total revenue from the sales of IARC books amounted to around 641 000 Swiss Francs in 2011 (Table 3), which is also down on the previous three years. This fall in sales and associated revenues, despite better terms negotiated with WHO Press, primarily reflects the situation with the WHO Classification of Tumours Series. Superficially this is related to the timing of new volumes and the delay in publication of the volume on "Pathology and Genetics of Tumours of the Breast and Female Genital Organs" until 2012. However, the Fourth Edition has been running at less than one new volume per year revealing an underlying problem, which was somewhat masked by the exceptional sales of the 2<sup>nd</sup> volume on "Haematopoietic and Lymphoid Tissues" published in 2008.

48. The limited resource for the "Blue Books", within the Section of Molecular Pathology, is a limitation to achieving a more rapid publication of subsequent volumes and hence increasing revenues. In response, the Agency has been using the revenues going into the Governing Council Special Fund from the sales of IARC publications to increase the staffing. As from February 2012 two teams have been established, each comprised of two people (one professional staff member and one general service staff member) to work in parallel on different volumes of the series. However, additional resources and new approaches have to be found if the current and future Editions are to be produced in a timely manner.

**Table 3: Publications – Revenue from sales (Swiss Francs)**

Year	Revenue from sales of all publications	Revenue and percent from 'Blue Books'	Revenue from sales paid to IARC <sup>(a)</sup>
2008	877 604	839 388 (95%)	737 362
2009	1 300 050	1 258 925 (97%)	1 030 054
2010	848 448	824 448 (97%)	796 896
2011	710 348	690 416 (97%)	640 938 (90% of figure col. A)

<sup>(a)</sup> After charges were deducted from overall figure



49. An exciting recent development has been the transfer of PubCan to the Agency from the Charles Rodolphe Brupbacher Foundation. PubCan has been developed as a freely accessible public database of information on human cancers. This tool will initially provide an excellent vehicle for the Agency to disseminate online access to and updates of the International Classification for Diseases of Oncology (ICD-O-3) that derive from the WHO Classification of Tumours Series ("Blue Books"). It also provides a platform for further developments in the Agency's aim to achieve a wider dissemination of information on cancer including electronic publication of both the Monograph and the Blue Book series.

50. The latest Handbook of Cancer Prevention (volume 14) was published in December 2011 entitled: "Effectiveness of Tax and Price Policies for Tobacco Control". The volume contained eighteen concluding statements on the impact of interventions to assist policy makers, government officials, evaluators and researchers working in tobacco control and disease prevention, to base their decisions on the latest scientific evidence.

51. "Molecular Epidemiology: Principles and Practices" was published in March 2012 and "Improving Public Health through Mycotoxin Control", a practical book for decision-makers on minimizing exposure to these common dietary contaminants in low-income countries, will be completed later this year.

52. Volumes 101, 102 and 103 of the Monographs are expected to be available both online and in print during 2012. The six-part volume 100 of the Monographs will also be available in print during 2012.

53. A part of the Medium-Term Strategy is to provide as many publications as possible in electronic format through the IARC web site. The process of creating this resource is ongoing and a full list of the publications made available in this way in 2011 is presented to the Governing Council in document GC/54/13.

54. An additional KPI proposed by the Secretariat and supported by the Scientific and Governing Councils was that of measuring access to the Agency's materials through its web site. Over the last year the Urchin 7 software has been installed to monitor web activity for the first time in a systematic manner. The first phase has been to collect baseline data and to gain experience with developing a standardized approach to the analysis. It is proposed to provide two types of information to the Governing Council: a measure of the total number of visitors to the most popular web sites: IARC, Monographs and GLOBOCAN and a measure of downloads of the most popular publications.

55. Table 4 provides a measure over the last seven months of 2011 (first period for which full data are available) for the total number of visitors. On the order of 800 individual visitors on average access the IARC web site each day and the two other most popular sites, the Monographs and GLOBOCAN, have around 400 different visitors per day. It should be noted that these data distinguish between individual visitors and visits.

**Table 4: Visitors to IARC web site (June to December 2011)**

Web site	Total visitors	Average visitors per day	Total visits	Average visits per day
IARC Home page	180 769	844	263 095	1229
Monographs	91 328	451	137 981	594
GLOBOCAN	80 248	374	146 965	686

*Visitor: A user that visits a given site. The initial session by an individual user during any given date range is considered to be an additional visit and an additional visitor. Any future sessions from the same user during the selected time period are counted as additional visits, but not as additional visitors.*

*Visit: The number of times a visitor has been to the site (number of individual sessions initiated by all visitors). If a user is inactive on the site for 30 minutes or more, any future activity will be attributed to a new session.*

56. The Agency can also examine the most popular downloads from its web site and these are presented in Table 5. The remarkable interest in the Monograph on radiofrequency electromagnetic fields is evident from this analysis. While the most popular Monograph downloaded was volume 82, the total downloads of IARC Monographs for the seven-month period in 2011 was over one million (1 174 732 downloads).

**Table 5: Most popular downloads from IARC web site from June to December 2011**

Item	Downloads
News Release: radiofrequency electromagnetic fields (after Volume 102 meeting)	203 565
IARC Monographs Classification List	105 793
Publication: World Cancer Report 2008	16 372
Monograph: Some Traditional Herbal Medicines, Some Mycotoxins, Naphthalene and Styrene, Volume 82: 2002	27 628
"Blue Book" Pathology and Genetics of Tumours of the Lung, Pleura, Thymus and Heart, Series 3	12 091

57. Overall the development of the Urchin 7 software is useful for demonstrating the access to the Agency's outputs, but also in refining internal processes to improve dissemination to the broadest possible audience. Both these aspects will be developed as more experience is gained with the tools.

### Voluntary contributions to IARC in 2010–2011 (grants and contracts)

58. Success in obtaining voluntary contributions is a prerequisite for the Agency to be able to fulfil its Medium-Term Strategy. The majority of this funding is designated contributions in the form of research grants from national and international funding agencies. This funding indicates the competitiveness of the Agency's research programmes and the reputation of its scientific staff.

59. In 2011 the Agency signed extra-budgetary contracts to a total value of €43 659 499 (equivalent to US\$ 53 525 000) (Table 6). This is the second consecutive year in which the Agency has signed contracts to a value in excess of €40 million; for comparison in 2008 and 2009 the amounts were the equivalent of between €6 and €9 million. This is one indicator of the extent of collaborative research projects in which the Agency is either a partner in or is providing leadership.

60. The value of the contracts attributed to the Agency (€7 858 454 (18%)) from the above-mentioned signed contracts also remained high in 2011, well over double the values in 2008 and 2009 (Table 6). The constraints on the Agency budget for 2012–2013 demanded that additional resources be attracted through voluntary contributions for the full Medium-Term Strategy to be maintained.

**Table 6: Extra-budgetary funding**

Year	Total value of signed contracts <sup>(a)</sup>	Value attributed to IARC	Voluntary contribution expenditure
<b>US\$</b>			
2008	13 054 000	4 789 000	11 605 100
2009	9 327 000	4 350 000	11 494 300
2010	71 626 000	13 118 000	8 847 000
<b>€<sup>(b)</sup></b>			
(2010)	(53 525 000)	(10 034 000)	(6 130 958)
2011	43 659 499	7 858 454	8 199 585

<sup>(a)</sup> The figures show total budgets of all grants signed irrespective of whether IARC is coordinating the studies or not.

<sup>(b)</sup> For comparison between 2010 and 2011 the 2010 figures have been converted from US\$ to € using an exchange rate of €0.693 to the US\$. The contracts not signed in Euros in 2011 have been converted to Euros using the exchange rate in use at time of signature of the contract.

61. As the signed contracts typically have durations of three to four years, the extent of the voluntary contribution expenditure at the Agency is expected to rise in the coming years. Indeed, the fact that the last two years have seen marked increases in the total of voluntary contributions is already translating to a greater proportion of overall expenditure coming from this source (Table 7) as anticipated in the Director's Report to the 53<sup>rd</sup> session of the Governing Council.

**Table 7: Expenditure against voluntary contributions (VC), regular budget (RB) and percentage comparison (US\$)**

Year	Regular budget (RB)	VC/ RB+VC <sup>(a)</sup>	Regular budget Appropriation Section 2	VC/ RB2+VC
<b>US\$</b>				
2008	20 849 900	35.8%	15 531 800	42.8%
2009	23 230 700	33.1%	16 703 300	40.8%
2010	23 690 574	27.2%	17 410 433	33.7%
<b>€<sup>(b)</sup></b>				
2011	19 151 000	30.0%	14 468 100	36.2%

<sup>(a)</sup> VC, Voluntary contribution expenditure taken from Table on extra-budgetary funding.

<sup>(b)</sup> For 2011 onwards the figures will be presented in Euros to reflect the fact that the Agency regular budget is now in that currency.

62. Considering only the budget assigned to the scientific programme (Appropriation Section 2), 36.2% of total expenditure was from voluntary contributions in 2011 compared to 30.0% if considered as a proportion of total expenditure. These percentages show encouraging increases on the corresponding figures for 2010.

63. The number of grant submissions remained high, with a total of 110 new applications in 2011. The numbers in the previous five years were: 119 (2010), 96 (2009), 88 (2008), 97 (2007) and 67 (2006). Awareness among senior scientists of the need to obtain voluntary contributions is high, especially given the reduction in non-pay budgets in 2012–2013. The relative paucity of mid-career professional staff scientists means that a balance must be sought for senior staff between writing grants and conducting research. All professional scientist posts at the Agency now include writing grant applications as a core component of the post description.

64. As in previous years the major extra-budgetary contributions to the Agency were from the European Union (44%), the National Institutes of Health, USA (39%), various sources in France (11%) and other funders in Europe and elsewhere (6%). This distribution is similar to the pattern in 2010.

65. Notable among the major grant awards were the EU award for the HPV-AHEAD grant to study head and neck cancers across Europe and in India (total value €2 999 000) as well as two major awards from the NCI, USA to study cancers of the kidney (€2 940 000) and lung (€3 673 000) in the context of large international collaborative networks. The Agency also participated in successful EU collaborative applications to study children and adolescent cancers (ENCCA €11 997 000); a project to investigate possible biological mechanisms related to exposure to low frequency electromagnetic fields (ARIMMORA €3 490 000) and one on applying cutting-edge technologies to study diet and health (NutriTech €5 986 000) which is one of the first successes linked to the investment in metabolomics in this area. A new direct contract was signed with the Directorate-General for Health and Consumers (DG Sanco €800 000) to revise the

European Code against Cancer, which will provide clear advice on primary and secondary cancer prevention strategies.

## **Staff**

66. A number of key scientific appointments were made over the last year:

67. Dr Kurt Straif was appointed as Head of the IARC Monographs (IMO) having previously been in the programme as a senior epidemiologist. Dr Robert Baan provides support to Dr Straif in his new role as Deputy Section Head of IMO as from July.

68. Dr Zdenko Herceg was nominated as the new Head of the Section of Molecular Carcinogenesis (MOC) as from 16 December 2011. Recruitment of a Group Head for the newly named Molecular Mechanisms and Biomarkers Group within MOC is proceeding.

69. In the Education and Training (ETR) Group a new Head, Ms Anouk Berger, has been recruited.

70. A number of important senior leadership appointments in the Administration have occurred over the last year, representing a key development towards establishing a modern administrative support structure at the Agency. Specifically Mr David Allen took up his functions as the Director of Administration and Finance (DAF) in November while Ms Elisabeth Françon had earlier been appointed as the new Head of Administrative Services Office (ASO) as from June 2011. Mr Philippe Damięcki moved to a higher level of responsibility, becoming the Head of the Information Technology Services (ITS) in October. More recently the Agency recruited Ms Angkana Santhiprechachit from the United Nations Development Programme in New York as the new Administration and Finance Officer to oversee all the financial services of the Agency.

71. As of 1 April 2012 there were 279 people working at the Agency. Of these, 183 are fixed-term staff of which 74 professional staff (40 men; 34 women) and 109 general service staff (26 men; 83 women). Of the 74 professional staff there are 61 in the scientific sections and 13 in the support services. The number of temporary/short-term staff working at the Agency is 15.

72. The Agency staff originate from 48 different countries. Of the staff on fixed-term contracts, 90.7% are from Participating States (166 out of 183).

73. There are 35 students at the Agency, 31 post-doctoral scientists, of whom 14 are fellows, supported by IARC awards, and 15 visiting scientists (three of whom are Senior Visiting Scientist awardees) from a total of 34 different countries.

74. In summary, since May 2011, 14 new professional staff and five general service staff have arrived at the Agency as follows:

Professional Staff				
D. Allen	Mr	Director of Administration and Finance	D1	SSR
I. Baussano	Dr	Scientist	P3	INF/ICE
I. Deltour	Dr	Scientist	P2	ENV
H. De Vuyst	Dr	Scientist	P3	INF/ICE
V. Fedirko	Dr	Scientist	P2	NME/NEP
E. Françon	Ms	Administrative Services Officer	P4	SSR/ASO
H. Freisling	Dr	Scientist	P2	NME/DEX
K. Grosse Frie	Dr	Social Scientist	P2	EDP/SCR
R. Herrero Acosta	Dr	Medical Officer	P4	EDP/PRI
K. Muller	Dr	Editor (English Language)	P3	DIR/COM
R. Njie	Dr	Medical Officer (Hepatologist)	P3	DIR/GHIS
E. Odame	Ms	Budget Officer	P2	SSR/BFO
I. Soerjomataram	Dr	Scientist	P2	CIN
A. Santhiprechachit	Ms	Administration and Finance Officer	P5	SSR/BFO
General Service Staff				
L. Bouvard	Ms	Technical Assistant	LY5	CIN
P. Chopard	Ms	Laboratory	LY2	GEN/GEP
M. Colombet	Ms	Clerk (Statistics)	LY4	CIN
M. Fernan	Ms	Programme Assistant	LY5	EDP/QAS
V. Neveu	Ms	Clerk (Informatics)	LY3	NME/BMA

75. Since May 2011, 14 staff members have left the Agency: seven professional staff members and seven general service staff. Nine of the 14 departures were due to retirement and one a reassignment.

Professional Staff					
J. Daniel	Mr	Editor	P3	DIR/COM	Resignation
L. Galichet	Mr	Editor (English language)	P2	IMO	Resignation
G. Guillerminet	Mr	Administrative Services Officer	P4	DAF/ASO	Retirement
P. Hainaut	Dr	Scientist	P5	MCA/MOC	Resignation
H. Lafif	Dr	Director, Administration and Finance	D1	DAF	Retirement
P. Knoche	Mr	Administration and Finance Officer	P5	DAF/BFO	Reassignment to AFRO
D. Pantua	Ms	Finance Officer	P3	DAF/BFO	Pre-retirement
General Service Staff					
C. Augros	Mr	Budget Assistant	LY7	DAF/BFO	Retirement
O. Bouvy	Ms	Secretary	LY3	EDP/SCR	Retirement
J. Fournera	Ms	Secretary	LY4	NME/NEP	Resignation
A. Hautefeuille	Ms	Laboratory Research Assistant	LY5	MCA/MOC	Pre-retirement
D. Hornez	Mr	Clerk (Treasury)	LY4	DAF/BFO	Pre-retirement
G. Martel-Planche	Ms	Laboratory Research Assistant	LY6	MCA/MOC	Retirement
M. Wrisez	Ms	Secretary	LY5	MCA/MOC	Pre-retirement

76. Most recently the Agency welcomed Ms Sara Allkaemper in the Human Resources Office as a Junior Professional Officer, supported by the German government through the WHO JPO scheme. One of her roles is to help formulate approaches to career development and a programme of reward and recognition for staff.

## Education and Training

77. Dr Eduardo Seleiro has been Acting Head of Education and Training (ETR) over the last year pending the recruitment of a new Head. The overall direction of ETR is shaped by the Agency-wide Advisory Committee on Education and Training (ACET) which held two meetings in May and October. It was agreed to continue to promote and develop generic training at the Agency, building on the courses already available. In addition the scope was extended to cover areas that were either underrepresented (e.g. Biomedical Research Ethics) or where there was greater demand (e.g. biostatistics: Introduction to STATA, Not so basic STATA). A new initiative has been a Journal Club aimed at early career scientists focusing on specific methodological issues in relation to epidemiological studies.

### *IARC Fellowships Programme*

78. The Agency awarded 13 fellowships in 2011 comprising eight new post-doctoral awards and five extensions for a second year (see Table 8). Twelve of these awards were jointly funded by the EU Marie Curie Action FP7-PEOPLE-2012-COFUND and the IARC regular budget. The thirteenth was funded by Cancer Council Australia within the framework of the new IARC-Australia Postdoctoral Fellowship Programme. In addition, two extensions for PhD studentships were awarded. These awards were made to people from 11 different countries.

79. In January 2012 the Fellowship Programme was successfully reviewed by the programme's main sponsor: the EU Marie Curie Actions FP7-PEOPLE-2012-COFUND. In February 2012 a new application was submitted to COFUND for a further five years' funding of the programme.

**Table 8: Education and Training – IARC Fellowships**

Year	No. of IARC Fellowships awarded <sup>(a)</sup>	No. of fellows from low- and middle-income countries
2008	11 (6 + 5)	11
2009	8 (4 + 4)	8
2010	10 (6 + 4)	6
2011	13 (8 + 5)	5

<sup>(a)</sup> *Post-doctoral fellowships (new and second year renewals)*

80. The IARC Postdoctoral Fellowship Charter was launched on 1 September 2011. This initiative emerged from feedback from fellows and the Scientific Council and is designed to provide a more rounded training for all working at post-doctoral level at the Agency, irrespective of funding source. It has been well received by all parties and to date has been distributed to 21 scientists. The Charter sets out the postdoctoral fellow's research, personal and training objectives, as discussed and agreed with the supervisor. Generic training objectives are recorded with a view to ensuring delivery of the most popular courses on a sufficiently regular basis. As an off-shoot of the Charter, entrance and exit interviews with all postdocs and IARC Fellows are now conducted.



81. Thanks to additional funding made available by the Governing Council at its last meeting, it was possible to award four Senior Visiting Scientist Awards, as follows: Dr Anssi Auvinen (Tampere University School of Public Health, Tampere, Finland – 6 months), Dr Joachim Dillner (Karolinksa Institute, Stockholm, Sweden – 10 months), Dr Anna Giuliano (Cancer Epidemiology Program, H. Lee Moffitt Cancer Center & Research Institute, Tampa, FL, USA – 6 months) and Dr Nanny Wermuth (Chalmers University of Technology & University of Gothenburg, Gothenburg, Sweden – 12 months). The Expertise Transfer Fellowship was awarded to Dr Jean-Michel Lutz of the National Institute for Cancer Epidemiology and Registration (NICER), University of Zürich, Zürich, Switzerland, to spend 12 months at the National Cancer Institute, National Cancer Registry in Montevideo, Uruguay.

82. For 2012 the high number and quality of applications for postdoctoral fellowships and Senior Visiting Scientist Awards has continued, which is an extremely positive sign, although no Expertise Transfer Fellowship applications have been received.

83. Following the successful launch of the IARC-Australia Postdoctoral Fellowship Programme in 2010, an agreement was signed in 2011 with the Irish Cancer Society for an IARC-Ireland Postdoctoral Fellowship Programme to be set up along similar lines. The Agency welcomes these initiatives with organizations in Participating States and hopes this trend will continue.

### ***Courses***

84. The IARC Summer School took place from 20 June to 8 July 2011 with 70 participants from 50 countries. The course comprises two Modules: cancer registration (week one) and cancer epidemiology (weeks two and three). As in previous years the demand for places was very high with 46 and 44 participants attending each Module.

85. Some of the sessions of Module 1 of the Summer School were video recorded and edited using Camtasia software. This pilot was to explore the feasibility of extending this to the whole course, so that the lectures can either be made available online or used as modules to supplement some of the courses run in different locations by individual Sections such as Cancer Information.

86. In 2011 the Nordic Cancer Union (NCU) awarded five scholarships for participants from low- and middle-income countries to attend the Summer School, and the "Fondation Léa et Napoléon Bullukian" awarded two scholarships for participants from francophone African countries. The NCU's financial support for the course is managed in collaboration with UICC.

87. The Agency also organized or co-organized a number of other courses during 2011 (see below).

<i>Course Title</i>	<i>Location</i>	<i>No. of participants</i>
Cancer registration and epidemiology (in collaboration with UICC and Tata Memorial Centre)	Mumbai, India	29
Basic Epidemiology (in collaboration with the EC)	Brussels and Luxembourg	26
Course on VIA, colposcopy and treatment of cervical neoplasia (in collaboration with the MOH of Bangladesh, amongst others)	Barshi, India	30
Statistical Practice in Epidemiology with R	IARC, Lyon	38
'EPICsoft' Training Workshop	IARC, Lyon	12
Workshop on cold-coagulation treatment of cervical pre-cancers (in collaboration with the African Organization for Research and Training in Cancer)	Cairo, Egypt	10
Cours francophone sur l'enregistrement des cancers et l'analyse des données (in collaboration with the Italian Association of Cancer Registries (AIRTUM))	Cairo, Egypt	20

88. The course in Cairo on cancer registration was part of a plan to extend training to the Francophone countries in Africa and was made possible through a collaboration with AIRTUM.

89. IARC and the London School of Hygiene and Tropical Medicine (LSHTM) signed a Memorandum of Understanding providing a collaborative framework in the area of education and training. In practice the two organizations coordinate the timing of their respective flagship courses in Cancer Registration and Cancer Survival; IARC sent one faculty member to the LSHTM course and received two faculty members from LSHTM, one for each Summer School Module.

90. IARC is developing collaborations with the Institut Catala d'Oncologia (ICO) in Spain and with IAEA-PACT on the Virtual University for Cancer Control network (VUCCnet). The development of distance learning will be a priority for ETR in 2012–2013.

91. Table 9 provides a summary of courses organized by IARC from 2008 to 2011. The number of courses in 2011 was similar to previous years although the total number of participants across all the courses was lower. This reflects the fact that there were no courses with exceptionally high numbers of participants. For example in 2010 a single course on cervical cancer prevention was attended by 200 people in Trivandrum, India.

**Table 9: Education and Training – IARC Courses**

Year	No. courses organized	No. different countries where courses held	No. courses in low- and middle-income countries	No. participants
2008	7	6	4	340
2009	13	13	12	405
2010	8	8	5	402
2011	9	6	4	235

### **Administration**

92. As noted in the section on Staff, there were major changes in the administration leadership over the past year. Since February 2012 the different administrative groups have come under one Section entitled 'Section of Support to Research' (SSR). The SSR leadership meets on a weekly basis and information flow between the SSR and the Senior Leadership Team (SLT) is ensured by a standing item on the latter's agenda presented by the DAF. The SSR leadership team has thus replaced the IARC Operational Team.

93. Initiatives to ensure good communication across the organization are continuing. The Senior Leadership Team meets on a monthly basis and the minutes of the meetings are made available on the IARC intranet. The Director makes a monthly 'Director's News' presentation to all staff in the auditorium and the slides are also available on the intranet. The Director's Open Door became less well frequented over time and has not been continued over the last year.

94. The Director met with the Staff Association Committee (SAC) twice in 2011, where discussions on a range of topics were held. The SAC met separately with the DAF and HRO on three occasions since the 53<sup>rd</sup> session of the Governing Council, covering various administrative and organizational matters. These meetings bring forward important staff issues for clear resolution and are of great use to IARC management.

95. In early 2012 SSR presented a two year workplan to the SLT which aims to refine the efficiency and effectiveness of services, improve communications and access to information, optimize use of resources, facilitate business continuity, and support new IARC initiatives. The workplan envisions several participatory meetings to design streamlined business processes across all areas of service, replacing the formerly announced "Town Hall" meetings. The new approach has been welcomed across the Agency and we are already experiencing benefits from the enhanced flow of communications.

96. The external board of auditors issued an unqualified certificate of IARC accounts for the 2010–2011 biennium. This was a very strong recognition of the efforts made by all staff in IARC, and especially in BFO, in ensuring transparency and accountability of the Agency's financial management. The auditors further noted the effective progress made towards adoption of the IPSAS standards by the target date of end of 2012.

97. The classification exercises for Professional and General Service staff were held in 2011, during which nine of the 18 positions reviewed were reclassified upward in view of the requirements of the Groups within the context of the changing structures. Clear standards for submissions and guidelines to Group Heads were designed to ensure that submissions reflect the requirements of service. As the structures settle following the recent organization-wide transition, fewer adjustments at the group level can be expected.

98. With the recruitment of the JPO in the Human Resources Offices, IARC will be dedicating time to putting in place a reward and recognition programme through a fully participatory process with staff from across the Agency. Along with revitalized learning and career management plans, the programme aims to motivate staff by providing a space for exchange and appreciation of individual achievements across the Agency separate from the regular hierarchical performance management.

99. The Agency IT facilities were greatly improved during the reporting year. Specifically, new firewalls have been replaced to improve internet bandwidth usage, improved remote access has been achieved by new SSL and VPN servers and a new cluster of virtual servers (VMware) has been installed to provide more resources for administrative and scientific activities. A high performance computing cluster has also been installed to improve the computing facilities of scientific groups.

100. The SSR is investing considerable effort in modernizing the IT systems in the Agency towards meeting the forward looking objectives of IARC and I look forward to reporting on the continuing progress regularly in future Governing Councils.

101. The 2011 closure of accounts was the first time IARC closed a financial biennium in the SAP system. With this successful experience we begin to appreciate the benefits of the Enterprise Resource Planning (ERP), including an ever improving stability and function.

### **Building work and renovation**

102. Significant progress has occurred over the last year in relation to infrastructure. Constant dialogue and regular meetings with the City of Lyon and the Grand Lyon has resulted both in a plan for short-term repairs to the IARC Tower and in developing a medium- to long-term plan for adequate accommodation. The Director, DAF and ASO have met with the Mayor of Lyon, the "Préfet" of the Rhône and senior administrative officials of the Grand Lyon. Progress is detailed in document GC/54/6.

103. A series of building and renovation works have been carried out in the Agency buildings since May 2011 in order that the facilities remain fit for purpose and of an acceptable standard for Agency staff and visitors in the coming years. There has been no clear, systematic plan of maintenance of the Agency buildings over recent years such that the state of many facilities was

adversely affecting core business. A balance is sought between the work conducted and the medium- to long-term perspective covered in document GC/54/6.

104. A list of the main pieces of work is given below:

- Partial refitting of offices on the ground floor of the Tower building (floors, wall, ceilings, partitions); this work permitted the majority of members of the ASO to be co-located as a team;
- Partial refitting of offices on the 2<sup>nd</sup> floor to accommodate DAF's group (floors, walls, ceilings, partitions) with other parts of the SSR, as opposed to the former location with the Director on the 11<sup>th</sup> floor;
- Reinforced soundproofing of the videoconference room on the 11<sup>th</sup> floor (installation of acoustic partition);
- Renovation of Sasakawa meeting rooms A and B (floors, walls, ceilings, acoustic partitions): these rooms in the basement of the Princess Takamatsu hall are heavily used by visitors and Agency staff but were in a poor state of repair, having not been updated since the opening of the building in 1988;
- Creation of a new tissue cell culture room on the 9<sup>th</sup> floor (floors, walls, ceilings, partitions, electricity network, CO<sup>2</sup> circuit, workbenches, ventilation system to pressurize the airlock) to reduce the problems of cell culture contamination due to the outdated condition of this core facility;
- An evaluation of the possibility of making the Biological Resource Centre (BRC) and the Latarjet building autonomous from the Tower in terms of energy, fluids and internet access, in case technical equipment in the Tower fails; in the meantime, the City of Lyon adopted a €2.4 million budget to repair major systems in the Tower such that only power access and internet access works will be carried out;
- Plans have been drawn up for the ground floor of the Tower building to create a staff room, next to the current vending machine services, and to also provide accommodation for other staff in the ASO that are currently in the basement.

## **IARC Ethics Committee**

105. The IARC Ethics Committee (IEC) is composed of the following members:

### *External members*

Professor Clement Adebamowo (Nigeria), surgeon and bioethicist; Professor Jean-Pierre Boissel (France) (Chair), retired professor of pharmacology; Dr Béatrice Fervers (France), oncologist; Dr Marc Guerrier (France), ethicist; Mr Yazid Ikdoumi (France), lay member; Dr Pierre-Jean Souquet (France), surgeon; Professor Paolo Vineis (UK) (Vice-Chair), epidemiologist.

### *IARC and WHO staff*

Ms Evelyn Bayle (Screening Group, IARC); Dr Martyn Plummer (Infections and Cancer Epidemiology Group, IARC); Dr Abha Saxena, Geneva (Secretariat of The WHO Ethics Review Committee); Dr Eduardo Seleiro (Scientific Officer, Director's Office, IARC); Dr Bakary Sylla (Infections and Cancer Biology Group, IARC).

106. The IEC met five times during 2011 (February, April, June, September and November) and evaluated 31 projects: 29 projects were cleared after ethical review; two projects were rejected and the Principal Investigators were asked to prepare a revision for resubmission.

107. The IARC Ethics Advisory Group (EAV), comprising Professor Sheila McLean, Professor Michael Parker and Dr Rodolfo Saracci, is a group of international experts which has been constituted to be available to provide guidance on areas where specialist expertise might not be available within the IEC. The EAV was consulted for the first time by the IEC in December 2011.

108. A special IEC Session on public engagement in science was held at the Agency on 7 December 2011 with the participation of the IARC Director.

## **External relations**

### ***Meetings***

109. A list of the major meetings held at the Agency since May 2011 is provided below:

- Monograph meeting 102: Non-ionizing radiation, part II: radiofrequency, electromagnetic fields (includes mobile telephones) (25–31 May 2011)
- European Code Against Cancer Planning Meeting (8 June 2011)
- European rubber cohorts, kick-off meeting (21–22 June 2011)
- Evaluation of the use of cancer registries for prospective collection of enhanced clinical data (29 June 2011)
- Global initiative for cancer registry development in low- and middle-income countries (6–7 July 2011)
- Consensus and editorial meeting, WHO Classification of Tumours of the Breast (1–3 September 2011)
- 5<sup>th</sup> p63/p73 workshop (12–14 September 2011)
- Annual meeting on the IARC case-control studies in Central/Eastern Europe (22 September 2011)
- Kidney cancer GWAS meeting (23 September 2011)
- Kick-off meeting of the HPV-AHEAD project (role of human papillomavirus infection and other co-factors in the aetiology of head and neck cancer in Europe and India) (26–27 September 2011)
- Monograph meeting 103: Bitumen and bitumen fumes, and some heterocyclic polycyclic aromatic hydrocarbons (11–18 October 2011)
- DKFZ-IARC meeting (17–18 October 2011)
- PILOT PANEU (10–11 November 2011)
- COSMOS France meeting (6 December 2011)

- Nuclear Workers meeting (19–20 January 2012)
- Scientific review of 2- vs 3-dose HPV vaccination clinical trial (30 January 2012)
- Monograph meeting 104: Polyomaviruses (SV40, BK, JC and Merkel cell viruses) and malaria (7–14 February 2012)
- Bioelectromagnetics Society – European Bioelectromagnetics Association meeting (15–18 February 2012)

### ***Key External Collaborations***

110. The Agency has a wide range of collaborations which cannot be fully reflected in this Report, but many of which are included in the Biennial Report. There are however a number of strategic partners with which IARC has specific areas of cooperation. These are summarized briefly below:

#### ***Cancer registry associations***

111. The Agency continues to provide the Secretariat for the International Association of Cancer Registries (IACR). The Agency played a major role in organizing the 33<sup>rd</sup> Annual Meeting in Balaclava, Mauritius on 11–13 October 2011. The call for data for Cancer Incidence in Five Continents Volume X was issued through the auspices of the IACR. By the deadline for submission, data from approximately 350 registries and 80 countries have been received. The Agency also continued to provide the Secretariat to the European Network of Cancer Registries (ENCR) throughout 2011, although the future provision is under discussion with the ENCR Steering Committee, the Joint Research Centre of ISPRA and the DG SANCO in the EU.

#### ***Union for International Cancer Control***

112. IARC and UICC have representation on each others Governing Council and Board respectively. Over the last year a major joint project has been the launch of the Global Initiative for Cancer Registries in Low- and Middle-Income Countries (GICR), which UICC has made a priority topic for fund-raising, matching as it does one of the key areas in the World Cancer Declaration. The GICR was launched at the UICC World Cancer Leaders Summit in Dublin in November 2011. The two organizations have held many discussions concerning the political agenda for NCD, prior to and following the UN General Assembly in September 2011. The Director will speak at the next World Cancer Leaders Summit at the World Cancer Congress in Montreal in August 2012.

#### ***International Atomic Energy Agency- Programme of Action for Cancer Therapy***

113. The Agency cooperates closely with IAEA-PACT in a number of areas including cervical cancer, cancer registration and in training and education, notably through the Virtual University for Cancer Control (VUCC) supported by a Regional African Cancer Training network (RACT network) collectively called VUCCnet.

#### ***World Health Organization***

114. The Agency works closely with WHO in a number of areas. These comprise broader strategic developments as well as specific areas of operational activity. The collaboration on the UN NCD agenda has been mentioned in the introduction to this report. Current efforts are aimed at preparing the targets and indicators to be considered by Member States during 2012.

115. In order to develop a more integrated and coordinated programme of work between IARC and WHO, the Director IARC proposed to the Director-General WHO that one staff member of the WHO Noncommunicable Disease and Mental Health Cluster should be named as a WHO-IARC Liaison Officer. Terms of reference are being defined, with the staff member having a role to identify opportunities for cooperation and optimize ongoing collaborations.

116. A recent WHO collaboration in cooperation with the Institut Català d'Oncologia aims to assist in providing national and regional statistics relevant to planning, monitoring and evaluating HPV immunization programmes, using funds made available from the Global Alliance for Vaccines and Immunisation (GAVI). A key objective is to supplement information on the HPV-related cancer burden (available in GLOBOCAN) with documentation of the primary sources of data and their quality. A technical report will provide guidance to planners wishing to establish or strengthen population-based cancer registry systems. A further deliverable is a collaborative research paper that describes the patterns and trends in cervical cancer in GAVI-eligible versus higher-resource countries, highlighting the necessity of population-based data to monitor the burden of HPV-related cancers, and inform on the expected impact of vaccination programmes.

117. A specific project area developed over the last year is in the revisions of ICD-11. The Agency is providing leadership of the Topical Advisory Group for Neoplasms and hosted a meeting in March 2012 to develop this project. Other areas of cooperation include: cervical cancer prevention guidelines, cancer registration and global burden of disease estimates among others.



**Annex 1 – SCImago normalized impact report**  
(Source: SIR World Report 2011; <http://www.scimagoir.com>)

**Top 50 research organizations by Normalized Impact<sup>1</sup>**

WR	CR	Organization	Sector	Country	Output	IC(%)	Q1(%)	NI
1	1	George Institute for International Health	GO	AUS	362	58.0	82.9	6.17
2	1	American Cancer Society	HL	USA	600	23.0	83.3	5.94
3	2	Whitehead Institute for Biomedical Research	GO	USA	759	33.5	95.3	5.72
4	3	Broad Institute of MIT and Harvard	GO	USA	1 377	49.2	94.1	5.71
5	1	Wellcome Trust Sanger Institute	HL	GBR	1 581	66.5	90.7	3.98
6	4	Novartis Pharma SA, East Hanover	CO	USA	932	53.0	74.9	3.46
7	1	Hamilton Health Sciences	HL	CAN	1 293	36.9	63.7	3.26
8	1	Institut d'Estudis Espacials de Catalunya	GO	ESP	753	71.1	60.6	3.21
9	5	Dana Farber Cancer Institute	HL	USA	5 966	30.3	85.9	3.14
10	6	J. Craig Venter Institute	HL	USA	754	49.6	90.1	3.13
11	7	Centocor, Incorporated	CO	USA	555	36.4	80.9	3.12
12	8	Howard Hughes Medical Institute	HL	USA	10 807	30.7	94.9	3.10
13	2	Microsoft Research Cambridge	CO	GBR	748	58.0	34.2	3.10
14	9	Kaiser Permanente	HL	USA	1 008	12.5	87.2	3.08
15	10	F. Hoffmann-La Roche, Ltd.	CO	USA	2 476	31.9	83.1	3.07
16	11	Institute for Systems Biology	HL	USA	591	56.9	88.3	3.07
17	2	Institute for Clinical Evaluative Sciences	HL	CAN	786	23.2	71.1	3.01
18	12	Cold Spring Harbor Laboratory	HL	USA	1 018	42.0	93.0	3.00
19	1	World Health Organization Switzerland	HL	CHE	2 885	76.6	74.6	2.94
20	13	Harvard-MIT Division of Health Sciences and Tecnology	HE	USA	607	29.7	72.8	2.91
21	1	Steno Diabetes Center	HL	DNK	560	51.3	82.5	2.91
22	3	Institut Universitaire de Cardiologie et de Pneumologie de Quebec	HL	CAN	854	30.7	71.0	2.89
23	14	New England Research Institutes	GO	USA	454	24.5	90.3	2.89
24	2	IBM Zurich Research Laboratory	CO	CHE	786	60.4	49.2	2.80
25	4	University of Alberta Hospital	HL	CAN	549	27.3	63.0	2.80
26	15	AstraZeneca Pharmaceuticals, LP	CO	USA	667	39.3	79.9	2.79
27	16	Harvard Pilgrim Health Care	GO	USA	514	14.4	86.6	2.79
28	1	Auckland City Hospital	HL	NZL	1 067	37.8	67.6	2.77
29	2	Herlev Hospital	HL	DNK	1 028	34.2	65.1	2.77
30	17	Centers for Disease Control and Prevention	HL	USA	13 098	25.3	78.2	2.76
31	18	Group Health Cooperative	HL	USA	923	13.2	84.8	2.76
32	1	International Agency for Research on Cancer	HL	FRA	1 512	87.0	86.6	2.74
33	2	Institut Catala d'Oncologia, Hospitalet de Llobregat	HL	ESP	953	56.8	72.3	2.72
34	3	AstraZeneca	CO	GBR	598	47.3	75.8	2.69
35	19	Northshore University HealthSystem	HL	USA	805	18.5	76.2	2.69
36	20	California Pacific Medical Center	HL	USA	726	21.9	81.3	2.66
37	1	European Molecular Biology Laboratory Heidelberg	GO	DEU	1 447	63.4	92.2	2.62
38	1	Jules Bordet Institute	HL	BEL	607	45.3	65.1	2.62
39	21	Partners HealthCare System	HL	USA	38 096	28.5	80.7	2.62
40	1	Landspítali National University Hospital	HL	ISL	744	62.6	68.0	2.61
41	5	Perimeter Institute for Theoretical Physics	OT	CAN	810	68.8	56.4	2.60
42	22	Armed Forces Institute of Pathology	GO	USA	709	31.6	77.9	2.58
43	1	Fondazione IRCCS Istituto Nazionale Tumori di Milano	HL	ITA	1 844	42.5	79.8	2.58
44	4	Institute of Cancer Research	HL	GBR	2 100	42.0	83.4	2.58
45	23	Bristol-Myers Squibb Company	CO	USA	1 581	25.1	76.6	2.57
46	24	Institute for Advanced Study	HE	USA	1 282	45.9	60.9	2.57
47	25	Microsoft Corporation	CO	USA	3 004	32.2	38.7	2.57
48	26	Pennington Biomedical Research Center	HL	USA	886	28.3	80.7	2.57
49	27	Salk Institute for Biological Studies	HL	USA	1 332	43.8	92.9	2.57
50	5	London School of Hygiene and Tropical Medicine	HE	GBR	5 831	63.7	82.7	2.56

SCImago disclaimer notice: "This ranking IS NOT A LEAGUE TABLE. The ranking parameter – the scientific output of institutions – should be understood as a default rank, not our ranking proposal. The only goal of this report is to characterize research outcomes of organizations so as to provide useful scientometric information to institutions, policymakers and research managers so they are able to analyze, evaluate and improve their research results. If someone uses this report to rank institutions or to build a league table with any purpose, he/she will do it under his/her own responsibility."

<sup>1</sup> See end of this Annex for a description of these indicators.

## Cancer research organizations ranked in the top 1000 by Normalized Impact

WR	CR	Organization	Sector	Country	Output	IC(%)	Q1(%)	NI
9	5	Dana Farber Cancer Institute	HL	USA	5 966	30.3	85.9	3.14
32	1	International Agency for Research on Cancer	HL	FRA	1 512	87.0	86.6	2.74
33	2	Institut Catala d'Oncologia, Hospitalet de Llobregat	HL	ESP	953	56.8	72.3	2.72
43	1	Fondazione IRCCS Istituto Nazionale Tumori di Milano	HL	ITA	1 844	42.5	79.8	2.58
44	4	Institute of Cancer Research	HL	GBR	2 100	42.0	83.4	2.58
52	28	Fred Hutchinson Cancer Research Center	HL	USA	4 776	28.6	88.9	2.53
56	30	Ohio State University Comprehensive Cancer Center	HL	USA	1 070	30.3	87.3	2.52
67	36	Memorial Sloan-Kettering Cancer Center	HL	USA	8 378	23.9	79.6	2.45
76	3	Istituto Europeo di Oncologia	HL	ITA	1 482	39.9	78.5	2.40
99	3	Centre Leon-Berard	HL	FRA	905	29.8	57.0	2.29
103	1	Netherlands Cancer Institute - Antoni van Leeuwenhoek Hospital	HL	NLD	2 474	40.5	81.6	2.28
113	6	Centro Nacional de Investigaciones Oncologicas	HL	ESP	1 054	51.4	88.8	2.26
120	5	Institut Gustave Roussy	HL	FRA	2 527	38.5	67.3	2.24
131	64	H. Lee Moffitt Cancer Center and Research Institute	HL	USA	1 402	22.6	77.8	2.21
141	69	SAIC-Frederick, Inc.	CO	USA	840	36.7	88.9	2.18
179	88	UCSF Helen Diller Family Comprehensive Cancer Center	HL	USA	501	21.6	72.7	2.08
191	95	University of Texas M.D. Anderson Cancer Center	HL	USA	13 800	24.9	80.0	2.06
197	96	Fox Chase Cancer Center	HL	USA	1 868	22.9	81.9	2.04
235	12	Peter MacCallum Cancer Centre	HL	AUS	1 250	38.2	73.4	1.99
326	17	Istituto Nazionale per la Ricerca sul Cancro IRCCS	HL	ITA	1 096	34.7	77.9	1.84
375	10	German Cancer Research Center	GO	DEU	5 050	49.7	79.4	1.78
377	4	National Cancer Centre Singapore	HL	SGP	634	37.1	79.0	1.78
509	206	Roswell Park Cancer Institute	HL	USA	2 473	25.0	79.0	1.64
557	28	Institut Curie	HL	FRA	2 020	39.3	70.8	1.60
850	36	Centro di Riferimento Oncologico Aviano IRCCS	HL	ITA	733	43.7	79.1	1.42

SCImago disclaimer notice: "This ranking IS NOT A LEAGUE TABLE. The ranking parameter – the scientific output of institutions – should be understood as a default rank, not our ranking proposal. The only goal of this report is to characterize research outcomes of organizations so as to provide useful scientometric information to institutions, policymakers and research managers so they are able to analyze, evaluate and improve their research results. If someone uses this report to rank institutions or to build a league table with any purpose, he/she will do it under his/her own responsibility."

**WR** – World Rank

**CR** – Country Rank

**Sector:**

**CO** – Private Company; **GO** – Government; **HE** – Higher Education; **HL** – Health; **OT** – Others

**Output:** Publications in scholarly journals

**IC %** – International Collaboration

**Q1** – High Quality Publications

**NI** – Normalized Impact (see below for a description of these indicators).

### **SCImago Indicators**

Selected indicators seek to reveal main aspects of research size, performance, impact and internationalization at Worldwide Research Institutions.

#### **O: Output**

An institution's publication output reveals its scientific outcomes in terms of published documents in scholarly journals.

#### **IC: International Collaboration**

IC shows an institution's output ratio that has been produced in collaboration with foreign institutions. The values are computed by analyzing the institution's output whose affiliation includes more than one country address over the whole period.

#### **NI: Normalized Impact**

The values, expressed in percentages, show the relationship of an institution's average scientific impact and the world average, which is 1, – i.e. a score of 0.8 means the institution is cited 20% below average and 1.3 means the institution is cited 30% above average.

#### **Q1: High Quality Publications**

Ratio of publications that an institution publishes in the most influential scholarly journals of the world; those ranked in the first quartile (25%) in their categories as ordered by SCImago Journal Rank SJR indicator.

**Annex 2: Publications within top 20% of journals in their subject category in 2011<sup>a</sup>**

<b>JOURNAL SUBJECT CATEGORY</b>	<b>No. Journals in SC</b>	<b>Highest IF in SC</b>	<b>20% IF of SC<sup>b</sup></b>	<b>No. publ. in SC</b>	<b>No. publ. in top 20%</b>	<b>% in top 20%</b>
AGRICULTURE, MULTIDISCIPLINARY	55	2.907	1.248	1	1	100
ALLERGY	22	9.273	3.672	2	2	100
BIOCHEMICAL RESEARCH METHODS	71	20.721	4.527	2	2	100
BIOCHEMISTRY & MOLEC. BIOLOGY	286	32.406	4.986	23	12	52
BIOLOGY	86	12.472	3.207	21	16	76
BIOPHYSICS	73	17.524	4.647	6	0	0
BIOTECH. & APPLIED MICROBIOL.	160	31.090	3.778	5	1	20
CARDIAC & CARDIOVASC. SYSTEMS	114	14.432	4.246	1	1	100
CELL BIOLOGY	178	38.650	6.354	8	4	50
CHEMISTRY, ANALYTICAL	73	10.404	3.250	1	0	0
CHEMISTRY, APPLIED	70	5.250	2.463	1	1	100
CLINICAL NEUROLOGY	185	21.659	3.772	3	1	33
COMPUTER SCIENCE, INTER APPS.	97	4.364	2.097	2	2	100
CRITICAL CARE MEDICINE	23	10.191	4.177	2	1	50
DENTIST., ORAL SURGERY & MED.	77	3.933	2.195	2	2	100
DERMATOLOGY	55	6.270	2.780	1	1	100
EMERGENCY MEDICINE	23	4.177	2.197	1	1	100
ENDOCRINOLOGY & METABOLISM	116	22.469	4.859	7	5	71
ENG., ELECTRICAL & ELECTRONIC	247	6.000	1.933	1	0	0
ENVIRONMENTAL SCIENCES	193	9.488	2.870	10	7	70
FOOD SCIENCE & TECHNOLOGY	128	4.713	2.178	4	4	100
GASTROENTEROL. & HEPATOLOGY	72	12.032	4.107	12	6	50
GENETICS & HEREDITY	156	36.377	4.367	18	11	61
HEALTH CARE SCIENCES & SERVICES	72	4.766	2.514	1	0	0
HEMATOLOGY	66	14.432	4.701	3	2	67
IMMUNOLOGY	134	49.271	4.262	9	8	89
INFECTIOUS DISEASES	58	16.144	3.812	6	5	83
MEDICAL ETHICS	15	3.986	1.642	1	1	100
MEDICAL INFORMATICS	22	4.663	2.328	1	0	0
MEDICINE, GENERAL & INTERNAL	153	53.486	2.515	9	7	78
MEDICINE, RESEARCH & EXP.	106	25.430	4.405	4	1	25
MICROBIOLOGY	107	20.686	3.913	6	5	83
MULTIDISCIPLINARY SCIENCES	59	36.104	1.672	2	2	100
NEUROSCIENCES	239	29.510	4.657	2	1	50
NUTRITION & DIETETICS	70	9.510	3.438	23	4	17
OBSTETRICS & GYNAECOLOGY	77	8.755	2.368	1	0	0
ONCOLOGY	185	94.333	4.771	138	78	57
ORTHOPAEDICS	61	3.953	2.314	1	0	0
PARASITOLOGY	32	9.079	2.875	1	1	100
PATHOLOGY	76	18.778	3.569	8	1	13
PERIPHERAL VASCULAR DISEASE	68	14.432	3.881	1	1	100
PUBLIC, ENVIRON. & OCC. HEALTH	142	8.609	2.886	69	41	59

<b>JOURNAL SUBJECT CATEGORY</b>	<b>No. Journals in SC</b>	<b>Highest IF in SC</b>	<b>20% IF of SC<sup>b</sup></b>	<b>No. publ. in SC</b>	<b>No. publ. in top 20%</b>	<b>% in top 20%</b>
RADIOL., NUC. MED & MED. IMAG.	113	7.022	3.188	2	0	0
RESPIRATORY SYSTEM	46	10.191	3.608	4	4	100
STATISTICS & PROBABILITY	110	3.500	1.645	2	2	100
SURGERY	188	7.474	3.211	3	1	33
TELECOMMUNICATIONS	80	4.232	1.509	1	1	100
TOXICOLOGY	83	19.238	3.581	6	3	50
VIROLOGY	33	9.079	4.439	8	4	50

*Legend: IF = Impact Factor; SC = Subject Category*

<sup>a</sup> *A given journal can appear in more than one subject category and hence the total in Table 2 is higher than 341 articles.*

<sup>b</sup> *This figure represents the impact factor of the journal at the limit of the 20% top journals.*