

REPORT OF THE SCIENTIFIC COUNCIL ON ITS FORTY-SIXTH SESSION

INTRODUCTION

1. The Forty-sixth Session of the Scientific Council of the International Agency for Research on Cancer (IARC) was opened by Dr Harry Comber (Chairperson of the Scientific Council), at 13:45 on Wednesday 27 January 2010. He welcomed the participants, including one new member of the Scientific Council, Professor R. Gallagher (Canada).
2. He also welcomed Drs A. Ullrich and C. Sepulveda (WHO Representatives), Mrs J. McKeough (Office of the Legal Counsel, WHO), Dr R. Zanetti (UICC Representative – Observer) and Dr S. Négrier (Director of the Centre Léon Bérard – Observer, *unable to attend*).
3. Apologies for absence were received from Professor Y.-J. Bang (Republic of Korea), Dr F. Demenais (France), Professor B. Kiemeneij (The Netherlands), Dr H. Nakagama (Japan), Dr M. Pollán Santamaria (Spain), Dr V. Shanta (India), Professor G. Superti-Furga (Austria), Professor L.E. Hanssen (Chairperson of the Governing Council, Norway) and Professor P. Puska (Vice-Chairperson of the Governing Council, Finland).

ELECTION OF RAPPORTEUR

4. Professor Henrik Grönberg was elected Rapporteur.

ADOPTION OF THE AGENDA (Document SC/46/1)

5. The agenda was adopted.

PRESENTATION OF THE IARC BIENNIAL REPORT 2008–2009 (Document SC/46/2)

6. The Director presented the IARC Biennial Report 2008–2009.
7. The Scientific Council viewed the IARC Biennial Report as a very strong document and congratulated the Director and his staff on it.

REPORT OF THE MEETING OF THE 51ST SESSION OF THE GOVERNING COUNCIL
(Document SC/46/3)

8. The Director presented the Report of the 51st Governing Council (May 2009).
9. The Scientific Council made the following observations and comments:
 - Asked for clarification in the role of social sciences at IARC, in particular in the implementation of cancer prevention. The Director indicated that this was an area of interest but not currently an area of major investments for the Agency.
 - Asked how the Director and the Governing Council viewed the possibility to include new Participating States in IARC. The Scientific Council noted together with the Director that there are no Participating States from Africa or Latin America. The Scientific Council encourages the joining of new Participating States from these under-represented regions. The Scientific Council hopes that the Governing Council will invite China and Brazil as observers to its 52nd session in May 2010.
 - Asked for clarification on how the role of the Staff Association had changed. The Director responded that it had been reconstituted, had a full complement of members, and was now functioning to the satisfaction of the staff.
 - The Scientific Council noted with satisfaction that the collaboration between IARC and the WHO has improved; this was also confirmed by the WHO Representative.
10. The Scientific Council congratulated the Director on an excellent Report of the 51st Governing Council.

DIRECTOR'S REPORT AND UPDATE FROM THE 45TH SESSION OF THE SCIENTIFIC COUNCIL AND DISCUSSION (Document SC/46/4)

11. The Director presented the update from the last Scientific Council. He was pleased to note the increasing involvement of Scientific Council members through the regular teleconferences with the Chairs and Vice-Chairs of both Councils and through participation in some Advisory Groups.
12. The Director presented an update on departures and recruitments of professional staff during 2009–2010.
13. The Scientific Council Chair had asked for the drafting of the Scientific Council Report to be left until after the Session, due to time constraints for the production of the Scientific Council Report, which needs to be adopted at the end of the Session. This year, however, IARC has provided the Rapporteur with a template for the production of a complete Report by the end of the Session. This should make it easier for the Governing Council to have an overview of the Scientific Council's work. Conclusions on the usefulness/appropriateness of the template will be drawn following the experience from the current Session.

14. The Scientific Council made the following observations and comments:

- Asked how the departure of senior scientific staff has affected the ongoing research and other activities at the Agency. The Director noted in particular that the departure of several senior staff members could affect a number of ongoing multicentre studies headed by IARC. All studies are now being reviewed to ensure continuity and to clarify the role of IARC with respect to other collaborators and funding agencies.
- Asked about the recommendations made by the ad hoc Advisory Group for Cancer Registration. The Director responded that these recommendations were very valuable and were reflected in the Medium-Term Strategy.

15. Overall the Scientific Council viewed the Director's Report and update from the 45th Scientific Council as very positive, and was pleased by the responses of the Director to the advice given by the 45th Scientific Council.

DIRECTOR'S RESPONSE TO MOLECULAR CARCINOGENESIS CLUSTER (MCC) REVIEW, HELD AT IARC IN NOVEMBER 2008 (Document SC/46/5)

16. The details of action taken following the review of the Molecular Carcinogenesis Cluster were discussed.

17. The Director noted with satisfaction the high overall evaluation assigned to the former Molecular Carcinogenesis Cluster. The two former Groups now comprise the Section of Mechanisms of Carcinogenesis (MCA, Head of Section, Dr Hainaut), namely Molecular Carcinogenesis (MOC) headed by Dr Hainaut and Epigenetics (EGE) headed by Dr Herceg. CIE is now a separate Section of IARC Monographs (IMO).

18. With respect to MOC, the Council noted that "addition of another senior investigator and staff scientist would add more depth". This was responded to within the budgetary constraints and competing priorities by assignment of a new P2 scientist post to work under Dr Hainaut.

19. The Scientific Council recommended that the Agency should extend externally funded fellowships for "up to 4 (2+2) years". The Senior Leadership Team reviewed this issue in May 2009 and agreed to permit externally funded post-doctoral scientist fellowships to be extended for up to three years without the need for the exceptional agreement of the Director for the third year.

20. The Council recommended that the investment in proteomics be considered by the new Director. The Agency does not have a proteomics facility, and neither does it have scientific staff with long-term experience and track-record in proteomics. There is no plan to invest in this area at present, emphasis being placed rather on the opportunities for metabolomics in collaboration with the Centre Européen de Résonance Magnétique Nucléaire à Très Hauts Champs (CRMN Lyon), University of Lyon. Where required for specific research projects, proteomics research will occur through external collaborations.

21. The Laboratory Working Group was replaced by a permanent Laboratory Steering Committee (LSC) which will continue to advise the Director on the requirements and priorities for investment in equipment and services for the Agency. A significant investment of

€300 000 in new equipment and in funding for the core laboratory services was made to ensure that the Agency remains competitive.

22. The Council recommended a stronger governance of the IARC Biobank to reduce day-to-day demands on the senior scientists: *"In order that the Biobank be of maximum value, the Review Group recommends that consideration be given to the optimal governance of the Biobank in order to best meet the needs of both the IARC and the scientific community."* A new Laboratory Manager (P2 grade) was created and will take responsibility for the day-to-day management of the Biobank and its staff. The newly created Biobank Steering Committee will provide the strategic academic leadership to this area.

23. With respect to EGE, the emphasis of the Group is now oriented to understanding the role of epigenetic changes in response to putative environmental and lifestyle exposures. The Group is seeking to exploit opportunities in adult cohort studies, such as EPIC, but also new opportunities in mother:child birth cohorts that have associated biobanks. Dr Herceg has been invited to join the Steering Committee of the International Childhood Cancer Cohort Consortium (I4C) subsequent to the Agency hosting an I4C meeting in November 2009. This creates new international networks for the Group and more widely for Agency scientists in a priority area for the Medium-Term Strategy 2010–2014.

24. The IARC Monographs was assigned the status of Section in order to provide a higher profile to this core activity both within and outside the Agency. This also ensures the direct reporting to the Director, as supported by the Scientific Council review of MCC. In order to tackle the backlog in publication of the Monographs series, a strict timeline has been developed with regular review of progress and a completion date for volumes 92–99 by the end of 2010.

25. The Scientific Council made the following observations and noted the Director's response to the MCC Cluster Review:

- The Scientific Council appreciated the changes made by the Director in response to the MCC review in 2008.
- The Scientific Council was impressed by translational research between epidemiology and basic sciences within these research Groups.
- The Scientific Council strongly supported the ongoing restructuring of the Biobank, and asked for feedback on the operation of the Biobank activities at its 47th session in 2011.
- The Scientific Council strongly supported the creation of a separate Section of the IARC Monographs.

SCIENTIFIC REPORT OF THE SECTION OF INFECTIONS (INF) REVIEW AND DISCUSSION (Document SC/46/WP4)

26. In the absence of the Review Panel Chair, Professor Bart Kiemeneij, the Scientific Report of the INF Review was presented by another member of the Review Panel, Professor Ian Frazer.
27. The overall recommendations for the Section (INF) and the Infections and Cancer Biology (ICB) and Infections and Cancer Epidemiology (ICE) Groups were discussed. Both the ICB and ICE Groups received an *Outstanding* rating on the scientific quality and a *Perfect fit* of the relevance of the work to the mission of IARC from the Review Panel.
28. The Scientific Council strongly supported the conclusions in the Report from the Review Panel that the Section be adequately supported for their ongoing work, and the Director confirmed that this was his intention.
29. The Scientific Council discussed the review procedures following the positive experience of the INF Review Panel and decided to use the same procedure for the next review in 2010.
30. The Scientific Council noted that although it was felt at the last meeting that there was a need to plan a repeat BEC Cluster Review in late 2010, since then the scientific structure of the Agency had changed. The Section of Cancer Information (CIN) will be headed by Dr David Forman, who will take office as from 6 April 2010, and there was therefore not such an urgent need for a re-review of the Section.

SCIENTIFIC COUNCIL MEMBERSHIP OF SECTION REVIEW PANEL IN 2010

31. The Scientific Council discussed the Sections to be reviewed in 2010.
32. In view of the fact that the Nutrition and Metabolism (NME) Section is in transition, with the recruitment of a new Head and with the creation of a Biomarkers Group within this Section, it was suggested to review only the Section of Genetics (GEN; Head: Dr Paul Brennan) in 2010, including its two Groups (Genetic Cancer Susceptibility [GCS] and Genetic Epidemiology [GEP]). The Director was advised to set up an Advisory Group for the Biostatistics Group, which will report to the Scientific Council at its next session in January 2011 (SC/47).
33. Drs Frazer, Grönberg, Markham and Pollán Santamaria will participate in the GEN Review Panel. It was agreed that Professor Frazer would Chair the Review Panel and that the external members should be chosen by the Secretariat in consultation with the Chair of the Review Panel and the Chair of the Scientific Council.
34. The Review will take place at IARC, provisionally October/November 2010. This will be confirmed as soon as possible by the Review Panel.

PRESENTATION AND DISCUSSION OF THE DRAFT IARC MEDIUM-TERM STRATEGY AND IMPLEMENTATION PLAN FOR 2010–2014 (Document SC/46/7)

35. A Working Group composed of six members of the Governing Council, four members of the Scientific Council and a representative of WHO met on 1–2 October 2009 to consider and finalize a draft IARC Medium-Term Strategy and Implementation Plan for 2010–2014. Technical and administrative support to the Working Group was provided by the Secretariat (the Director and two senior IARC scientists).

36. Following this Working Group and its comments and recommendations, a new draft IARC Medium-Term Strategy and Implementation Plan for 2010–2014 (document SC/46/7 – MTS) was presented to the Scientific Council for discussion.

37. The Director introduced this item and gave an integrated presentation of the overall MTS, rather than having the Section Heads present plans individually. The following priority areas with respective specific aims were presented:

- *Describing the global cancer burden.* Preliminary data from GLOBOCAN 2008 were presented.
- *IARC Monographs.*
- *Cancer etiology.*
- *Mechanisms of carcinogenesis.*
- *Cancer prevention.*
- *Education and training.*

38. The Scientific Council had a long discussion of this important document. The Scientific Council supported the creation of new Groups and Sections to support the aims of the MTS. Overall there was strong support for the MTS for 2010–2014. The Scientific Council made some suggestions to the Director regarding the following topics:

- To place more emphasis on the interdisciplinary work at the Agency and recognize this as one of the major strengths.
- To contact and elicit feedback from larger external funding bodies such as NIH, EU, the Bill and Melinda Gates Foundation and other potential funders that are essential for the external funding of the Agency.
- To balance the resources between projects and activities in high-resource countries and low- and middle-resource countries in accordance with IARC Statute.
- The need to focus on areas where the Agency is uniquely placed to carry out research was noted.
- To clearly state the areas within the Statute that the Agency is not going to emphasize.

39. 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 in May 2010.

PRESENTATION AND DISCUSSION OF KEY PERFORMANCE INDICATORS (KPIs) FOR THE AGENCY (Document SC/46/9)

40. The Director presented the suggested KPIs for the Agency.

41. He mentioned that one of the challenges of identifying appropriate KPIs is selecting what to measure. The KPIs should provide data that allow us to evaluate progress towards a strategic goal. The priority for IARC is to focus on measures that are linked to its overall mission, core activities and/or the Medium-Term Strategy. KPIs can then be used to set targets and indicate trends along the way.

42. KPIs should be able to provide useful feedback for all interested parties showing progress towards achieving institutional goals. Relevant and specific KPIs may come from a variety of sources. For the Agency, they are ideally based upon the Medium-Term Strategy. The progress towards the achievement of KPIs should be measured at regular intervals. Their introduction to the Agency must therefore be considered as a process over time.

43. In summary, appropriate KPIs should provide sufficient information to assess: the extent to which the Agency has achieved predetermined key or strategic targets, goals or objectives; the trend in performance over time; and the performance relative to predetermined benchmarks. The implementation of KPIs and the subsequent assessment exercises can be effective management tools that present the opportunity to correct or adjust the institutional performance for the better when necessary.

44. A number of potential KPIs have been identified (see Annex 1 of Document SC/46/9):

- Research funding;
- Publication;
- Describing the cancer burden;
- Education & training – Courses and students; and
- Information dissemination.

45. The selected potential KPIs will then be further refined through in-house discussion and consultation with Agency staff prior to presentation of a proposal for consideration by the Governing Council in May 2010.

46. It is envisaged that this would be followed by a trial implementation, followed by discussion at the Scientific Council in 2011.

47. The Scientific Council, deeming the current Review process an excellent method of performance review, was not fully convinced of the use of KPIs for the Agency as they do not reflect the complexity of the Agency, particularly its mission to carry out research on cancer in low- and middle-resource countries. The Scientific Council recommended that the Director include in his report to the Governing Council some of the elements covered in document SC/46/9 to reflect the breadth of the Agency.

IARC EDUCATION AND TRAINING PROGRAMME (Document SC/46/8)

48. The Director presented the IARC Education and Training programme.

49. The Agency is reviewing its objectives and approach to education and training. The Director requested that the Scientific Council consider the proposals in this document and advise him on the future priorities and opportunities in this key area within the context of the IARC Medium-Term Strategy (2010–2014).

50. The Agency will establish an Education and Training (ETR) Group incorporating both the Courses and Fellowship programmes, to be led by a senior professional scientist in order to strengthen this area of activity. The priorities set for the development and delivery of the IARC Education and Training programme should continue to be driven by the research priorities of the Agency.

51. In order to prioritize training needs and engage Agency scientists, an internal Advisory Group will be established. This will also help ensure that the programme continues to focus on training of benefit to low- and medium-resource countries, and adapts to the latest developments in cancer research.

52. There are other options on which the Director would appreciate the advice of the Council, recognizing these initiatives would require the Agency to identify additional resources if supported:

- Developing the Return Grant to Fellows to include a post-fellowship contribution over a biennium (for example, salary complementation or research resources) to help Fellows from low- and medium-resource countries establish their research activity in their own country. An international and national “mentor” could be assigned to the Fellow as an additional way to help anchor and support the Fellow on return.
- The possibility of Fellows spending alternate years at IARC and another suitable institution of the Fellow's choice. This would link IARC to key institutions around the world and create a global network of experts who could also contribute as IARC faculty.
- The possibility of extending the Fellowship Programme to include short-term stays at IARC (1–3 months) in order to transfer basic skills for cancer research to promising candidates from low- and medium-resource countries.

53. The Scientific Council acknowledged the importance of the Education and Training programme at the Agency. This is an area in which the Agency can make a unique contribution. The Scientific Council made some suggestions and comments in the following areas:

- Acknowledged the value of the post-fellowship support;
- Agreed that in some circumstances fees could be charged for participating in IARC courses, based on ability to pay;
- Adding soft skills such as grant writing and project management to the fellowship training;
- Encouraged the creation of an IARC Alumni Association;

- Supported the idea of short-term fellowships; and
- Supported seeking partnerships for IARC educational and training activities.

54. The Scientific Council recommended that the Governing Council approve the proposed directions for the IARC Education and Training programme.

PURCHASE OF SCIENTIFIC EQUIPMENT (Document SC/46/10)

55. As described in IARC Medium-Term Strategy 2010–2014, one of the priorities of the Agency is to perform interdisciplinary research, pioneering the integration of laboratory sciences and epidemiological research.

56. Obtaining funding for major items of equipment through competitive grant applications is difficult. The request for purchase of equipment is first submitted to the Scientific Council for its consideration and is then submitted to the Governing Council to consider investment from the Governing Council Special Fund at its 52nd session in May 2010.

57. The following items were proposed for purchase:

- (i) Next-generation DNA sequencing instrument;
- (ii) Gas chromatograph; and
- (iii) High-performance liquid chromatography/mass spectrometry/mass spectrometry system (HPLC/MS/MS).

58. The Scientific Council considered these items and recognized the urgent need for updating the laboratory equipment at the Agency. The Scientific Council also discussed the need for recruitment of key staff, in particular in the area of bioinformatics, and the possible need for updating the infrastructure (data storage and network).

59. Based on the full cost of the implementation of these changes, the budget should be recalculated. Before proceeding, the Director was advised to establish the full cost and the annual running costs.

60. With the above reservations, the Scientific Council recommends that the Governing Council approve the above-mentioned purchase of this scientific equipment.

BIENNIAL REPORT OF THE OCCUPATIONAL HEALTH AND SAFETY COMMITTEE (OHSC), 2008–2009 (Document SC/46/6)

61. The OHSC Biennial Report (2008–2009) was presented by the Chair of the Committee, Dr Pierre Hainaut, who also introduced his successor as Chair, Dr Robert Baan, as from 1 January 2010.

62. The Scientific Council complimented Dr Hainaut and the OHSC and noted the Report with satisfaction.

ELECTION OF CHAIRPERSON AND VICE-CHAIRPERSON FOR THE 47TH SESSION OF THE SCIENTIFIC COUNCIL IN 2011

63. Dr Edgar Rivedal (Norway) was elected Chairperson.
64. Professor Ian Frazer (Australia) was elected Vice-Chairperson.

DATE OF NEXT SESSION

65. Wednesday 26, Thursday 27 and Friday 28 January 2011.

ADOPTION OF THE SCIENTIFIC COUNCIL REPORT (Document SC/46/11)

66. **The report of the Forty-sixth Session of the Scientific Council was adopted.**

CLOSURE OF SESSION

67. The customary expressions of thanks were exchanged.
68. The Director thanked the outgoing members of the Scientific Council, Drs Herrmann (Switzerland), Husgafvel-Pursiainen (Finland), Kiemeneij (The Netherlands), Ørntoft (Denmark) and Ron (USA).