International Agency for Research on Cancer

World Health Organization

Governing Council **GC/59/3**
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Auditorium

REPORT OF THE SCIENTIFIC COUNCIL ON ITS FIFTY-THIRD SESSION

INTRODUCTION

1. The Fifty-third Session of the Scientific Council (SC) of the International Agency for Research on Cancer (IARC) was opened by Dr Ellen Kampman (Chairperson of the Scientific Council), at 09:00 on Wednesday 25 January 2017. She welcomed the participants, including the new members of the Scientific Council, Drs Adèle Green (Australia), Atsushi Ochiai (Japan), Roberto Salgado (Belgium), Pilar Sánchez Gómez (Spain) and Simon Tavaré (UK).

2. She also welcomed Drs Mark Palmer (Chairperson, Governing Council), Béatrice Fervers (Chairperson, IARC Ethics Committee), Andreas Ullrich (WHO Representative) and David Cox (Centre Léon Bérard – Observer).

3. Apologies for absence were received from Drs Lukas Huber (Austria), Mads Melbye (Vice-Chairperson, Governing Council) and the Union for International Cancer Control (UICC).

4. For ease of reference a list of acronyms of Sections and Groups can be found in Annex 1 at the end of this Report.

DECLARATION OF INTERESTS

5. Declarations of interest were summarized by the Secretariat and made available for consultation by all Scientific Council members during the meeting. Please refer to Annex 2 at the end of this Report.

ELECTION OF RAPPORTEUR

6. Dr Elisabete Weiderpass-Vainio was elected Rapporteur.

ADOPTION OF THE AGENDA (Document SC/53/1)

7. The agenda was adopted.

PRESENTATION OF THE DIRECTOR'S REPORT (major scientific highlights; highlights from the 58th Governing Council and update from the 52nd Scientific Council)

8. Last year, in order to rationalize the considerable number of documents produced in the continuous reporting cycle, the Scientific Council recommended, and the Governing Council approved, that the current practice of the Director making an Interim Annual report of the Agency's activities in odd-numbered years be replaced by the production of a list of publications of Agency staff (available from http://www.iarc.fr/en/research-groups/staffpublications.php) and by an oral presentation by the Director of major scientific highlights.

9. The Director presented the major scientific highlights.

10. A summary of discussions held and questions raised by the SC and answers given by the Director are given below:

11. The SC congratulated IARC for its scientific activities, which are impressive. SC asked a question about the Monographs in regard to the choice of topics, and how the Director sees the future of the IARC Monograph programme.

12. The Director answered that the IARC Monographs programme has been intensively scrutinized by the press and others for the last 18 months. This was started mainly due to the evaluation of glyphosate. The evaluation process has been criticized.

13. The Monographs represent syntheses of existing evidence and consensus evaluations performed by Working Groups consisting of independent international experts. Quantitative exposure-response assessments are included when the published scientific data allow. This information is important for causal inference and to put the risk in context. The IARC Monographs programme is leading the science of hazard identification. New scientific techniques such as OMICS techniques are being incorporated in the evaluations where appropriate. Changes in procedures are implemented over time. The selection of agents follows a transparent process with public nominations followed by recommendations by an external Advisory Group with additional flexibility to quickly react to new and emerging hazards.

14. The SC asked about communication to the public in relation to hazard identification and risk assessment. The public has to be educated and communication is a challenge.

15. The Director answered that communication is a challenging issue but that dissemination of findings is important. The terminology around hazard and risk is crucial to this debate, and should be differentiated. There is a specific 'question and answer' section on the website of the Section of IARC Monographs, which is also included in all press releases and covers this point. There is a collaboration with WHO on the communication side to try to inform the public on the difference between "hazard" and "risk". The communication with WHO in relation to each substance to be evaluated is now discussed at earlier stages of the monographs planning, aiming to get the public health message accompanying the scientific evaluations.

16. The reporting across different media is being evaluated by IARC to understand what part of the communication process creates doubts and issues. A more visual communication of the findings of the IARC Monographs will be tried, with a junior multimedia position being contracted for a trial period of one year to see if communication improves with the press and general public.

17. The SC noted that it is important that IARC continues to get the best scientists on board to participate in the IARC Monographs. The future Working Group members may get concerned in accepting to participate in the IARC Monographs programme if they are placed under pressure from vested interests.

18. The Director explained that IARC has been supporting scientists who have contributed to the IARC Monographs and who have had problems with legal teams, being asked to provide copies of all email communications, draft documents, etc. The Director realizes that such problems may decrease the willingness of scientists to participate in the IARC Monographs. He is working with WHO legal team in terms of clarifying the balance between fulfilling freedom of information requests and maintaining an environment where scientists can debate and exchange views freely.

19. The SC commented on cancer registration in low- and middle-income countries (LMIC). Clinicians have a role to play, and should be educated to register cancers. Some cancers such as gallbladder cancer should be further studied. The Director answered that clinicians do have a role in cancer registration, not only in the collection of data but also on advocacy and creating awareness in the healthcare community of the importance of registries.

20. Dr Ullrich (WHO Representative) greeted the Scientific Council and the Director on behalf of the WHO Director-General. The Executive Board meeting of WHO is currently shortlisting the candidates for the new WHO Director-General, and a resolution on cancer control will be discussed at the World Health Assembly in May 2017. WHO Member States will be encouraged to establish cancer plans, cancer registries, and to collaborate with WHO and IARC to develop and implement new strategies in translating the World Health Assembly resolutions. This is a process that will need to be monitored. Collaboration between WHO and IARC is crucial to control cancer worldwide.

21. The Director was asked to comment on whether the Agency has any work on basic biology and therapy for cancer. The Director answered that this has not been the focus of IARC so far because of the prioritization of research on cancer prevention in LMIC and the limited access of patients in these regions to cancer therapies. IARC has also been working to increase pathology capacity in LMIC through its research projects, in particular the *WHO Classification of Tumours* (Blue Books) which are very important in diagnosis standardization and education of pathologists worldwide.

22. In relation to the 58th Governing Council, the Director provided relevant updates and mentioned that the full Minutes of the Governing Council meetings (GC/58/Min.1–3) were available on the IARC Governance website: http://governance.iarc.fr/GC/GC58/index.php.

23. In summary, the Governing Council adopted the recommendations on the production of standard reports contained in paragraph 7 of document GC/58/9 to be effective from 2017, approved the update of the guidelines for Peer Reviews (see document GC/58/11) and discussed the document on guidance for the replacement of SC members (see document GC/58/19). In addition, the Governing Council created a Working Group to develop an evaluation framework for the Medium-Term Strategy (2016–2020) (see document GC/58/10), and approved funds for the purchase of Biobank equipment (see document GC/58/18A), as recommended by the Scientific Council.

24. In relation to the update from the 52nd Scientific Council, the Director mentioned that all items requiring follow-up will be covered elsewhere on the agenda.

25. The Scientific Council thanked the Director for his presentation.

PRESENTATION OF THE BIENNIAL REPORT OF THE IARC ETHICS COMMITTEE (IEC), 2015–2016 (Document SC/53/2)

26. The Director referred to this item in his oral presentation. The Chairperson thanked Dr Béatrice Fervers, Chairperson of the IEC, for her presence and for her willingness to answer questions from the Scientific Council.

27. The Scientific Council noted the Report with satisfaction.

DISCUSSION OF THE PROPOSED FRAMEWORK FOR EVALUATING THE IMPLEMENTATION OF THE IARC MEDIUM-TERM STRATEGY (2016–2017) (Document SC/53/3)

28. The Governing Council, during its discussion on the IARC Medium-Term Strategy for 2016–2020 (MTS) in May 2015, highlighted the need for monitoring its implementation, and requested the Director to develop a framework of indicators for assessing progress in attaining the strategic objectives set out in the document.

29. The indicators are selected to allow assessment of the degree to which the different activities are producing the desired outputs, how in turn these result in a series of short- and medium-term outcomes, and finally how these are translated into long-term impact.

30. A Working Group (WG) composed of members of the Scientific and Governing Councils, a representative of WHO, and three members of the IARC Secretariat was formed to:

- in a first phase, in the latter part of 2016, review and advise on the set of indicators proposed by the Secretariat;
- in a second phase, in the latter part of 2018, to review the Director's report containing the analyses of the data collected during the first half of the MTS implementation period.

31. The WG stressed the purpose of the global evaluation of the MTS implementation must be seen as complementary to and supported by the peer-review evaluation of individual Sections and Groups: while the broader evaluation framework aims to provide an assessment of the implementation of the MTS by the Agency as a whole, the peer-review remains the primary mechanism for assessing the alignment to the MTS and the scientific quality of the programmes of individual Sections and Groups.

32. The Agency has limited resources to dedicate to the collection and analysis of outputs, outcomes and impact. Therefore, where possible the measures incorporated into the framework are ones which can already be captured routinely, supplemented by a number of additional indicators where the value of the information collected was judged to justify the additional investment in staff time dedicated to this process, or which can be outsourced at modest cost. Overall the selected indicators should be prioritized around the unique features of the Agency.

33. The SC made the following comments:

- the SC advised IARC not to collect more indicators but to focus time and resources on research;
- identifying cost efficient indicators is difficult as IARC activities are many and wide reaching. Measurable outcomes are the most suitable way to benchmark the activities. Case studies should be well thought through to represent activities;
- the SC discussed how to measure IARC's impact on junior scientist's role in cancer research leadership worldwide, and media indicators;
- the SC asked the Director if the use of the indicators may help IARC to be more efficient, as funding is limited.

34. The Director answered that another level of review increases demand on resources to collect information, but acknowledged that indicators are useful both in reporting to the Governing Council but also for internal management decisions. A baseline set of indicators is also useful to follow up trends over time, in regard to how investments are reflected in results.

35. The SC approves and recommends that the Governing Council adopts the proposed framework developed by the Working Group.

DIRECTOR'S RESPONSE TO THE REVIEW OF THE SECTION OF GENETICS (GEN), HELD AT IARC IN JANUARY 2016[1]

36. In line with the recommendations regarding the production of standard reports, the written response to Section Reviews is discontinued, although the item remains on the Scientific Council agenda for discussion.

37. The details of action taken following the review of the Section of Genetics (GEN) were discussed.

38. The SC was pleased to see that the changes suggested by the Review Panel are being implemented successfully.

39. The SC wondered how pathology integrates in the research at IARC; the Director reported that a position in molecular pathology has been created within the Genetics Section.

40. The SC commented that the review recommendations had had an impact on the activities in the Section.

41. The SC asked about the balance between technological development and application of the methodology in research.

42. Dr McKay (Head, GCS) commented that balancing the research portfolio and technological development is challenging. He commented that this was the first main review that his Group underwent. Technology development is not per se an aim of the Group, rather its application in practice and evaluation, however, new technologies need to be fine-tuned before implemented in large population studies.

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[1] One SC member (Dr Stephen Chanock) declared a conflict of interest as he collaborates with members of the GEN Section.

43. The SC inquired on studies in in vivo and in vitro models studies and how they fit into the Section of Genetics' research agenda. Dr Brennan replied that there are collaborative studies on these topics with different institutions.

44. The SC inquired about the possibility of collaborating in quality control consortia, and gave examples of consortia focused on quality control on big data and sequencing. The Section and Group Heads assented and confirmed they will explore the possibility of collaborations in this area.

45. The Director noted with satisfaction the high overall evaluation assigned to the Section.

46. The Scientific Council noted with satisfaction the Director's response to the GEN Review.

DISCUSSION WITH THE DIRECTOR, THE DIRECTOR OF ADMINISTRATION AND FINANCE (DAF) AND THE SCIENTIFIC COUNCIL

47. The SC had requested that time be made available earlier in the agenda for discussions with the Director and the Director of Administration and Finance.

48. The operation of the SC given the increasing number of participants and the progress to date on the process of replacement of SC members was discussed.

49. The SC also discussed how to improve the replacement process of its outgoing members. The current process was detailed by the Director and the Chair of the Governing Council, Dr Palmer.

50. As more States will participate in IARC, the SC will grow and ways to better interact are needed between SC and IARC; several options were suggested:

- satellite discussion sessions informed by a future vision statement of the Groups;
- plenary discussions with less people in the room (2/3rd of the members);
- parallel sessions on cross cutting themes could be considered.

51. As requested by the SC the Director reports on main sources of funding for the Agency. Currently, competitive grants from charities, foundations and governments are the main sources of funding. Interaction with non-state actors is being discussed, and the thinking within WHO is evolving. A database has been developed of all approved collaborators of WHO, and it is possible that, in the future, more collaboration with the private or philanthropic sector be accepted. Freedom from conflict of interest is essential for IARC, and remains a major strength. In 2018, this could be a topic of discussion for the SC meeting. New Participating States from LMIC should be encouraged.

PRESENTATION OF POSTERS BY IARC SCIENTISTS AND FEEDBACK FROM THE SCIENTIFIC COUNCIL ON THE SCIENTIFIC ACTIVITIES PRESENTED IN THE POSTERS

52. IARC scientists prepared posters to present to Scientific Council members.

53. The SC actively interacted at the poster session with early-career and senior scientists and reported back in the general meeting. All members of the SC were actively involved in the discussions.

54. The SC considered that the poster session discussion in plenary was not as useful as anticipated and was time consuming; the format should be reviewed and revised for the next SC session.

CROSS-CUTTING SCIENTIFIC THEME AND DISCUSSION – CIRCULATING TUMOUR DNA: APPLICATION TO POPULATION-BASED STUDIES (Document SC/53/4)

55. Dr Zdenko Herceg (Head, Section of Mechanisms of Carcinogenesis (MCA)) presented this topic.

56. The participating Sections/Groups are: GEN/GCS, GEN/GEP, MCA/EGE, MCA/MMB, NME/NEP and INF/ICB.

57. Cancers are characterized by genetic and epigenetic alterations and the analysis of cancer-specific changes in DNA is increasingly used for diagnosis, prognosis and therapeutic decisions. Genetic and epigenetic profiles of cancers are typically obtained from surgical samples or biopsies. However, there are many difficulties in obtaining tissue biopsies stemming from the invasive nature, the inherent clinical risk for the patients and cost considerations.

58. Over the last few years, IARC has placed considerable emphasis on optimizing the molecular techniques to study the potential of circulating-tumour DNA (ctDNA) in the context of early detection.

59. Questions discussed by the SC were as follows:

1. What groups should IARC be collaborating with in these studies?
2. What criteria should IARC apply in selecting cancer types to focus on in the context of ctDNA studies?
3. Does the SC identify significant methodological challenges and issues with compatibility of ctDNA analysis with the current bio-repositories at IARC?
4. Should IARC be initiating new field work studies to overcome the limitations of current bio-repositories?

Key discussion topics included:

- difficulties with the volume of samples required;
- many unresolved technical issues;
- potential background noise of ctDNA observed among controls;
- necessity of prospectively collected samples;
- heterogeneity of tumours.

UPDATE ON THE "NOUVEAU CENTRE" PROJECT (Document SC/53/5)

60. Since 2008, several technical reports revealed the poor state of the tower building infrastructure. In 2012, all local partners and the Governing Council recognized that the state of the tower's infrastructure was such that it would no longer be viable for continued use by the Agency within a period of five to seven years. Presented with various potential options for long-term continuation of IARC's Headquarters in Lyon, the Governing Council agreed with the recommendation made by the local authorities for a move to a newly built structure on a new site, the "Nouveau Centre" project.

61. Since 2012, the City of Lyon has invested in a programme of urgent repair works for the tower building (ventilation, air-conditioning and heating systems) in order to ensure occupancy for five to seven years. Despite these concentrated efforts, the state of the building remains a major concern and continues to cause unanticipated interruptions of the Agency's work.

62. As a result of the consistent and substantial problems faced with the daily running of the building and the significant delays now envisaged, compared to the original timeframe of occupancy of the "Nouveau Centre" by the end of 2019, the Secretariat raised the attention of the local partners to the escalating risk of a need to relocate the Agency to alternative premises before completion of the "Nouveau Centre" project.

63. The SC made the following observations:

- the SC is concerned with the current state of the Tower building that may jeopardize the continuity of the Agency's activities. The Director of Administration and Finance clarified that there is a contingency plan for the worst-case scenario, namely the necessity to move part of the IARC activities to temporary buildings until the Nouveau Centre is functional. The worst-case scenario would have significant negative consequences and all efforts should be made to avoid this situation;
- the SC asked clarifications about the resources needed for the biobank and data storage facilities, which should be updated in the new building;
- the SC supports the proposal of the Director regarding the installation in the Nouveau Centre of a fully automated biobank and state-of-the-art IT and laboratory facilities;
- the SC expressed concern about a projected budget deficit in the project of the Nouveau Centre concerning the costs associated with moving. Fund-raising will be necessary during the next five years.

PURCHASE OF SCIENTIFIC EQUIPMENT (Document SC/53/6)

64. A new plan has been made to support developments in bioinformatics needed to process and analyse the complex datasets generated by IARC studies and this was discussed under Document SC/53/8. Purchase of some new equipment for data acquisition and processing is needed to support these rapidly growing research activities.

65. The SC considered the Director's proposal to request an allocation of €700 000 from the Governing Council Special Fund (GCSF) to purchase the following equipment:

a) an upgrade of the IARC scientific computing capacity;

b) an upgrade of the IARC next-generation sequencing (NGS) platform;

c) the acquisition of an automated system to study cancer chromatin at genome-wide level.

66. The proposed equipment would be operated as a shared resource under the responsibility of either ITS (item a), or GCS (item b) or EGE (item c).

67. The SC noted that the annual maintenance costs of the requested equipment will be covered by the regular budget as well as by collaborative programmes through grant applications.

68. The SC considered this request and clarified technical questions that were raised regarding equipment costs and scientific needs for in-house equipment, the advantages and disadvantages as compared to outsourcing, IARC's capacity of recruiting qualified staff to perform bioinformatics analyses, and middle- and long-term plans to increase and improve infrastructure for data storage and analysis. Investments in platforms by the City of Lyon, such as animal facilities and proteomics, are already successfully shared with IARC, and there is an ongoing dialogue to avoid duplication of investments in parallel (rather than complementary) research infrastructures. IARC's DNA sequencing facilities are not planned to be large-scale facilities, but rather able to validate analysis done elsewhere, as well as resolving technical issues.

69. The SC considers the proposal for the purchase of scientific equipment reasonable, and comments that other institutions normally invest 5–10% of total budget per year in capital equipment.

70. The SC recommends that the GC approves the above-mentioned purchase of scientific equipment.

REPORT ON IARC OPEN ACCESS POLICY (Document SC/53/7)

71. The Agency's Open Access (OA) Policy went into effect on 1 January 2015. The policy applies to peer-reviewed journal articles in which the lead or corresponding author is an Agency author or when the Agency takes a lead role in the project (e.g. funds the research).

72. Comparison data is limited, with 2014 as the sole baseline year and 2016 data incomplete at the time of reporting; however, it suggests that the OA policy has had a positive effect on the proportion of articles in subscription journals being made available immediately through the payment of article processing charges (APCs). The process for requesting financial support for OA publication of journal articles by IARC authors has recently been simplified by integrating this into the new in-house e-workflow for manuscript clearance.

Proportion of immediate open access to total journal output*

	Gold (Fully OA journals)	**Hybrid** (APC payment in subscription journals)	**Standard publication**	**TOTAL**
2014	80 (21%)	25 (7%)	273 (72%)	378 (100%)
2015	77 (20%)	50 (13%)	252 (67%)	379 (100%)
2016	75 (21%)	58 (17%)	216 (62%)	349 (100%)

*data as of 20 January 2017

73. The GCSF allocation for OA funded six articles in 2015 and ten in 2016, along with funding for the publication in 2016 of a series of OA articles on Cancer in Central and South America in a supplement issue of *Cancer Epidemiology.* The total expenditure and commitment to date is €41 616.97, and the remaining balance on this fund is €58 383.03 as of the end of 2016. Agency authors are encouraged to continue sending their OA funding requests to the Director.

74. Given the strategy of the Agency to continue to promote OA publishing, a request to the Governing Council is envisaged for continued provision of additional resources for this purpose from the GCSF (€50 000 p.a.), subject to the availability of funds, with the unspent balance of the allocation permitted to be carried over to the following year.

75. In light of WHO's expansion of OA materials, IARC will also revisit its policy and continue its efforts to ensure the broadest possible barrier-free access to the Agency's research.

76. The SC noted the report and supported the request of the Secretariat for additional financial support from the GC to continue to pursue its OA policy.

PRESENTATION AND DISCUSSION ON IARC'S STRATEGY AND PLANS FOR BIOINFORMATICS (Document SC/53/8)

77. Dr James McKay, GCS Group Head, presented this item.

78. Drs Stephen Chanock and Lukas Huber, both members of the Scientific Council, together with two outside experts (Drs Ivo Gut and Roland Eils) have participated in an Advisory Group created by the Director to review an earlier version of the document now presented for discussion at the Scientific Council.

79. The field of bioinformatics is making an increasingly important contribution to cancer research. Recent technological and analytical advances allow for the unprecedented description of the molecular mechanisms involved in cancer development. Similarly, data sharing across the scientific community is creating a vast array of *in-silico* resources. Both have enormous potential in IARC's multi-disciplinary studies but also rely heavily on bioinformatics to deal with these often complex datasets. As such, bioinformatics has an important role in the inter-disciplinary research approaches outlined in IARC Medium-Term Strategy (MTS) and one that is very complementary to traditional epidemiology, biostatistics and laboratory sciences.

80. An internal review favoured developing Bioinformatics as a devolved, matrix-style model, with bioinformaticians nested within the scientific groups, as opposed to a dedicated bioinformatics service group or stand-alone research group. This allows for the necessary specialization while building upon the existing multidisciplinary staffing structures in place within IARC's scientific groups.

81. As a relatively small institute with a broad remit, IARC must ensure that the resources are used to their fullest capacity, focused on IARC's particular mission and remain complementary to resources which can be accessed through its external collaborative partners.

82. While appropriate resourcing of bioinformatics as a highly dynamic field poses challenges in fully capturing the research potential of the technological advances, making strategic decisions to strengthen the field of bioinformatics is important for the success of IARC's scientific mission and its interdisciplinary activities. The investments, reorganization and developments which have been made by the Director as a result of the in-house deliberations and input from the external Advisory Group will substantially augment the capacity for research in the key areas to be pursued at the Agency over the next three years.

83. Recognizing the constant evolution of opportunities and requirements in this field, the Agency anticipates consulting further with the Scientific Council and external experts on this topic in the future.

84. The SC discussed the importance of bioinformatics and the necessity of adequate continuous training of the scientific and technical staff, as well as the suitability of using open source IT solutions.

85. The SC supports the approach taken by the Agency to enhance capacity in the short- to medium-term.

86. The SC suggests that the Director considers renaming bioinformatics to computational biology, which is broader and more inclusive.

87. The SC suggested that the Director consider developing a webinar series on bioinformatics and other topics that could be made accessible to IARC personnel and other interested partners in the scientific community.

88. The SC suggests that the topic of bioinformatics is added to the SC agenda annually, given the rapid progress in the field and strategic importance for IARC.

PROPOSED PROGRAMME AND BUDGET (2018–2019) (Document SC/53/9 Rev.1)

89. Ms Angkana Santhiprechachit (Administration and Finance Officer) presented this item.

90. A revised version (SC/53/9 Rev.1) was posted to update Figure 4 on page 20 of document SC/53/9.

91. The Proposed Programme and Budget 2018–2019 reflects the priorities set out in the IARC Medium-Term Strategy 2016–2020 (MTS) adopted by the Governing Council (Resolution GC/57/R8). As with the previous Programme and Budget, the present document is structured according to the 'IARC Project Tree' (Information Table C), a framework showing how IARC's activities at project level contribute to achieving the strategic goals defined in the MTS.

92. IARC appreciates the challenges faced by individual Participating States in approving the assessed contributions comprising the regular budget and has therefore prepared the proposed Programme and Budget 2018–2019 with a view to maintaining the same level of programmatic activity as in 2016–2017, with minimal change in the number of staff.

93. As a new feature in the presentation of the Proposed Programme and Budget 2018–2019, the Agency has identified a number of discrete high priority projects for which extrabudgetary resources have not yet been secured. These projects will be the focus of specific resource mobilization efforts. The projects are detailed in Information Tables G and X are presented to permit individual Participating States to consider making additional voluntary or in-kind contributions targeted to these project areas.

94. The Secretariat will continue to use all available resource streams to deliver the Programme and thus to fulfil the MTS. In line with the principles of maintaining the same level of programmatic activity, of minimal change to staffing levels and ceasing the reliance on the GCSF, the overall level of the proposed regular budget from assessed contributions, total **€45.07 million**, is based on the approved budget figures for 2016–2017 supplemented with the full contribution from Morocco plus an increase of just under €0.9 million in assessed contributions from the other 24 Participating States (an increase of 2.09%). This proposed budget represents a 3.82% increase from the approved 2016–2017 biennial budget. A combination of this regular budget and anticipated voluntary contributions will enable the continued successful delivery of the IARC MTS 2016–2020.

95. The SC emphasized the importance to the Medium-Term Strategy of the additional high priority projects identified by the Secretariat and encourages the Participating States to consider making additional voluntary contributions to support these areas.

96. The following observations and discussions were made regarding the budget 2018–2019:

97. There are several unknowns in the budget: the SC sees positively that the IARC proposes less dependence on GCSF, but expressed concerns about resource gaps for the Global Initiative for Cancer Registry Development (GICR) which may have an impact worldwide. It would be difficult to get competitive grant funds for GICR and it would therefore be important to secure funding. The Director responded that he had received support for this project from the UK and Germany and is seeking to attract other donors.

98. The SC requested clarifications from the Director about the placement of the Blue Books under the Monographs Section with single leadership, and how the Blue Books interact with the

WHO's International Classification of Diseases for Oncology (ICD-O). The Director explained the rationale for the decision of placing the Blue Books under the Monographs Section, as in this way most major books produced by IARC would be under one Section which is a more suitable structure, and more cost effective. Recruitment for the position of the new Head of the Blue Books is currently ongoing. The new Head of the Blue Books is expected to collaborate with other IARC Sections creating synergies, but without having the responsibility to run a separate Molecular Pathology Section or Group.

99. The SC requested clarification about the future of molecular pathology in IARC's research agenda. The Director explained that with the retirement of the current Molecular Pathology Section Head the research on brain cancer in that Section would cease. However, this closure does not affect the pathology contribution to any of the other projects across the Agency, which is provided through external collaborations and from the current pathologist in GCS. An additional pathologist will be recruited to be the new Head of the Laboratory Services and Biobank Group and this appointee will oversee the histology service and be able to collaborate with other Sections.

100. The SC recommends that the Governing Council adopts the Proposed Programme and budget (2018–2019).

SCIENTIFIC REPORT OF THE SECTION OF CANCER SURVEILLANCE (CSU) REVIEW AND DISCUSSION (Document SC/53/WP3)

101. The Scientific Report of the CSU Review was presented by Dr Giske Ursin, Chair of the Review Panel.

102. The external advisors and Scientific Council members of the Review Panel were thanked for their valuable contributions.

103. The Review Panel noted the following concerning the CSU Section:

Evaluation of CSU

The **past performance** and **future plans** of the Section were scored for **quality** and **relevance**, as follows:

a. Assessment of CSU's scientific quality (using the six-point scale below)[1]

CSU's past performance: Outstanding

CSU's future plans: Outstanding

[1] **Scoring – scientific quality:**

O (Outstanding)	Outstanding work of the highest international calibre, pioneering and trend-setting. This score will only be applied to exceptional programmes of work, not because a programme was particularly topical or in an under-researched area.
F (Forefront)	Work that is at the forefront internationally and that, it is considered, will have an important and substantial impact.
C (Competitive)	Work that is internationally competitive, of high quality, and will make a significant contribution.
NC (Not competitive)	Work that is not considered competitive or high quality and is unlikely to make a significant contribution.
U (Unsatisfactory)	Unsatisfactory or poor quality work.
P (Preliminary)	Work that is too preliminary to rate, which should be continued and monitored/reassessed by the Director in the short- to medium-term with subsequent update to the Scientific Council.

b. Assessment of the relevance of CSU's work to the mission of IARC[1]

CSU's past performance: Perfect fit

- CSU is well suited to IARC's goals of reducing the burden of cancer globally.
- CSU is key to enabling monitoring and feedback for programme development.
- It is important to continue to emphasize the role of cancer as distinct from other NCDs.

CSU's future plans: Perfect fit

- CSU is accelerating the use of computing technology to reach the widest possible audience.
- Continued work with LMIC through GICR and other collaborative networks is a key to IARC's success.
- The continued development of global cancer indicators will be an important way of engaging HIC registries and establish approaches for benchmarking and ascertaining best practices/differences in practice that drive outcomes.
- The descriptive epidemiology plans fit well into the mission of IARC and remain important to shape cancer control policy around the world.

Overall recommendations for CSU

- The Review Panel is impressed with the scope and quality of the Section's recent work, and gives strong support for the Section to carry out the future plans as presented.
- CSU is recommended to secure additional biostatistical and IT expertise, and ensure web-based platforms are suitably resourced.
- CSU should improve the productivity of the childhood cancer programme.
- CSU should ensure administrative support for review of data agreements is stable and robust.
- CSU is recommended to seek strategic alliances in order to obtain additional competitive grants.
- CSU is encouraged to improve internal communication within the Section, and enhance the sense of cohesiveness within the group.
- The Review Panel recommends that the Section utilize additional appropriate metrics to better evaluate the impact of its initiatives, including GICR.
- CSU should consider developing a thought piece on cancer registration in the 21st century.

104. The overall recommendations for the CSU Section were discussed and approved.

105. The Director, Section and Deputy Heads thanked the Review Panel for their input.

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[1] **Scoring – relevance to the mission:**

Perfect fit	This type of work is ideally suited to the mission of IARC.
Good fit	This type of work is suited to the mission of the Agency.
Questionable fit	Uncertain.
Poor fit	Work which should not continue.

106. The SC noted that a very substantial amount of work is done by the CSU Head, Dr Bray, and Dr Soerjomataram, Deputy Head. The appointment as Deputy Head was made after the documents had been sent to the Review Panel. It is expected that this appointment will improve the workload of the Section Head, and that this will be addressed by the Director in next year's report to the Scientific Council on responses made following the peer-review.

107. The Section of Cancer Surveillance (CSU) Review Panel Report was formally accepted by the Scientific Council.

SCIENTIFIC REPORT OF THE SECTION OF ENVIRONMENT AND RADIATION (ENV) REVIEW AND DISCUSSION (Document SC/53/WP4)

108. The Scientific Report of the ENV Review was presented by Dr Jenny Chang-Claude, Chair of the Review Panel.

109. The external advisors and Scientific Council members of the Review Panel were thanked for their valuable contributions.

110. The Review Panel noted the following concerning the ENV Section:

Evaluation of ENV

The **past performance** and **future plans** of the Section were scored for **quality** and **relevance**, as follows:

a. Assessment of ENV's scientific quality (see scale above)

ENV's past performance: Outstanding

ENV's future plans: Outstanding

b. Assessment of the relevance of ENV's work to the mission of IARC (see scale above)

ENV's past performance: Perfect fit

ENV's future plans: Perfect fit

The Panel notes that the IARC Medium-Term Strategy highlights research into the evaluation of cancer prevention interventions and their implementation. Such work is not a major component of the Section's programme at present but ENV has begun to move in this direction, assuming leadership on the Agency-wide project to develop and evaluate the European Code Against Cancer.

Overall recommendations for ENV

- The panel felt that in order for the Section to be able to continue performing outstanding research work in the area of ionizing radiation it would be extremely important to maintain a critical mass of staff of international calibre.
- The panel supports the plan for a renewable post in occupational epidemiology but is cognizant of the budgetary limitations the Agency faces.
- The panel recognizes the pioneering work in Africa and encourages the Section to develop research in other LMIC.

- The panel recommends that the Section further promotes the integration of molecular epidemiology in its research.
- The panel recognizes that the Section is extending their activities in the area of prevention and implementation and recommends careful review of access to the required and relevant expertise.
- The panel felt that there is need for a structured mentoring programme particularly for researchers and fellows and supports the recent efforts for developing such a programme.

111. The Director, Section and Deputy Heads thanked the Review Panel for their input.

112. The SC noted that the European Code Against Cancer project could be expanded to other world regions. The CO-CHER project on the follow-up of the Chernobyl exposure populations presents an opportunity to understand low dose radiation exposures, and is currently unfunded. As this is an important project further funding should be sought.

113. Furthermore, the SC advises ENV to take a forefront role in research activities prioritizing them over research administration activities such as chairing large international consortia, such as with the Chernobyl collaborations. SC particularly endorses the pursuit of research within ENV.

114. The Section of Environment and Radiation (ENV) Review Panel Report was formally accepted by the SC.

115. The SC suggested that for future meetings, consideration be given to the Section Heads presenting the outcome of the peer-review to the full SC meeting, rather than this presentation being made, as at present, by the SC representative from Peer-Review Panel.

SCIENTIFIC COUNCIL MEMBERSHIP OF SECTION REVIEW PANELS IN 2018

116. The Scientific Council discussed the Sections to be reviewed in 2018: Section of Early Detection and Prevention (EDP), Head: Dr Rolando Herrero and Section of Nutrition and Metabolism (NME), Head: Dr Marc Gunter.

117. Drs Adele Green and Kadir Mutlu Hayran will participate in the EDP Review Panel. It was agreed that Dr Green would chair the Review Panel.

118. Drs Ellen Kampman and Jenny Chang-Claude will participate in the NME Review Panel. It was agreed that Dr Kampman would chair the Review Panel.

119. The external members should be chosen by the Secretariat in consultation with the Chairs of the Review Panels and the Chair of the Scientific Council.

120. The Reviews will take place at IARC on 29–30 January 2018, immediately preceding the 54th Scientific Council session.

ELECTION OF CHAIRPERSON AND VICE-CHAIRPERSON FOR THE 54th SESSION OF THE SCIENTIFIC COUNCIL IN 2018

121. Dr Giske Ursin was elected Chairperson.

122. Dr Jerome Coffey was elected Vice-Chairperson.

DATE OF NEXT SESSION

123. Wednesday 31 January, Thursday 1 February and Friday 2 February 2018. The EDP and NME Review Panels will take place on Monday 29 and Tuesday 30 January 2018.

ADOPTION OF THE SCIENTIFIC COUNCIL REPORT (Document SC/53/10)

124. The report of the Fifty-third Session of the Scientific Council was adopted.

CLOSURE OF SESSION

125. The customary expressions of thanks were exchanged.

126. Dr Wild thanked the outgoing members of the Scientific Council, Drs Al-Hareth M. Al-Khater (Qatar), Françoise Clavel-Chapelon (France), Lukas A. Huber (Austria), Luis Felipe Ribeiro Pinto (Brazil) and John J. Spinelli (Canada).

ANNEX 1

Sections and Groups

Acronym	Full name of Section/Group	Responsible Officers
CSU	**Section of CANCER SURVEILLANCE**	**Dr F. Bray** Deputy: Dr I. Soerjomataram
EDP	**Section of EARLY DETECTION AND PREVENTION**	**Dr R. Herrero**
PRI	Prevention and Implementation Group	Dr R. Herrero
SCR	Screening Group	Dr Sankaranarayanan
ENV	**Section of ENVIRONMENT AND RADIATION**	**Dr J. Schüz** Deputy: Dr A. Kesminiene
GEN	**Section of GENETICS**	**Dr P. Brennan**
GCS	Genetic Cancer Susceptibility Group	Dr J. McKay
GEP	Genetic Epidemiology Group	Dr P. Brennan
IMO	**Section of IARC MONOGRAPHS**	**Dr K. Straif** Deputy: Dr D. Loomis
INF	**Section of INFECTIONS**	**Dr M. Tommasino**
ICB	Infections and Cancer Biology Group	Dr M. Tommasino
ICE	Infections and Cancer Epidemiology Group	Dr S. Franceschi
MCA	**Section of MECHANISMS OF CARCINOGENESIS**	**Dr Z. Herceg**
EGE	Epigenetics Group	Dr Z. Herceg
MMB	Molecular Mechanisms and Biomarkers Group	Dr J. Zavadil
MPA	**Section of MOLECULAR PATHOLOGY**	**Dr H. Ohgaki**
NME	**Section of NUTRITION AND METABOLISM**	**Dr M. Gunter**
BMA	Biomarkers Group	Dr A. Scalbert
NEP	Nutritional Epidemiology Group	Dr M. Gunter
NMB	Nutritional Methodology and Biostatistics Group	Dr P. Ferrari

ANNEX 2

STATEMENT FOR THE DECLARATION OF INTERESTS

Declarations of interest were provided by all Scientific Council members.

Interests were declared by a minority of Council members and include:

- ✓ Research support from pharmaceutical industry; and
- ✓ Consulting for a commercial entity.

The list of declared interests was made available upon request, from the Chair and the Vice-Chair, for consultation during the meeting.

Upon review by the Secretariat none of the declared interests were considered to represent a potential or significant conflict of interest with respect to the content of the meeting.

The individuals reporting interests were asked to check the contents of the table below, which they all subsequently approved.

Scientific Council member	Disclosure statement
Jonas Bergh	Reports that his unit at Karolinska Institute or Karolinska University Hospital benefits from research funding from Amgen, Astra-Zeneca, Merck, Pfizer, Roche, Bayer and Sanofi-Aventis, and honoraria from UptoDate® to Asklepios Medical.
Atsushi Ochiai	Reports having received personal consultancy fees from Daiichi Sankyo and Ventana Medical Systems, and having benefited from research funding from Eli Lilly Japan K.K., Takeda Pharmaceutical, Janssen Pharmaceutical K.K., Eisai Co., Morphotek, Bayer Yakuhin and AstraZeneca UK.
Roberto Salgado	Reports having received support for travel and accommodation from Roche.
Pilar Sánchez Gómez	Reports that her unit at Instituto de Salud Carlos III benefits from research funding from Pfizer, Catalysis and Servier-Vernalis.
Simon Tavaré	Reports having received personal consultancy fees from New York Genome Center.
Giske Ursin	Reports that her employer, Cancer Registry Norway, benefits from research funding from Merck/MSD.
Elisabete Weiderpass-Vainio	Reports that her employer, Cancer Registry Norway, benefits from research funding from Merck/MSD.