

REPORT OF THE SCIENTIFIC COUNCIL ON ITS FIFTY-SEVENTH SESSION

INTRODUCTION

1. The Fifty-seventh Session of the Scientific Council (SC) of the International Agency for Research on Cancer (IARC), the first ever to be held remotely, was opened by Dr Christine Friedenreich (SC Chairperson), at 09:00 on Wednesday 10 February 2021. She welcomed the participants, including the new SC members, Drs Marc Arbyn (Belgium), Ferrán Catalá-López (Spain), Kalipso Chalkidou (UK) [unable to attend], Louisa Gordon (Australia) and Manami Inoue (Japan).
2. She also welcomed Drs Stephen Robbins (Chairperson of the Governing Council (GC), Canada), Pål Romunstad (GC Vice-Chairperson, Norway), Dr Bente Mikkelsen (WHO Representative), Dr Sonali Johnson, Union for International Cancer Control (UICC, Observer) and Professor Béatrice Fervers (Centre Léon Bérard, Observer).
3. Apologies for absence were received from Dr Kalipso Chalkidou (UK), Dr Jacqueline Clavel (France), Dr Péter Nagy (Hungary) and Dr Soumya Swaminathan (Chief Scientist, WHO).
4. For ease of reference a list of acronyms of Sections, Groups, Pillars and Branches can be found in [Annex 1](#) at the end of this Report.
5. Due to the remote nature of the session, presentations were made available in advance of the meeting to devote web conference time to discussion and finalization of the SC Report only.

DECLARATION OF INTERESTS

6. Declarations were summarized by the Secretariat and available for consultation by all SC members during the meeting. Please refer to [Annex 2](#) at the end of this Report.

ELECTION OF RAPPORTEUR

7. Dr William Gallagher was elected Rapporteur.

ADOPTION OF THE AGENDA ([Document SC/57/1](#))

8. The agenda was **adopted**.

PRESENTATION OF THE DIRECTOR'S REPORT, INCLUDING:

- ***MAJOR SCIENTIFIC HIGHLIGHTS***

9. The complete annotated presentation of the Report by Dr Elisabete Weiderpass (Director) is available from the event management platform ([here](#)) and a list of publications of Agency staff is available from https://www.iarc.fr/cards_page/iarc-publications/.

10. A video summarizing 2020 was projected and followed by the Director's opening remarks.

11. The Director, together with other IARC personnel, delivered a short presentation which focused on comments and questions received prior to the meeting with respect to the complete annotated presentation of the Director's report. Some of these comments/questions were covered in future aspects of the agenda.

12. A summary of discussions and questions raised by the SC at the meeting and answers given by the Director and IARC staff is given below:

13. Plans for additional professional development of personnel and scientists was queried. Additional detail was provided in terms of the IARC Learning and Development Plan for 2021. This plan will cover both core and job-specific competencies, as well as management and leadership. Most of the offered courses and resources will be online in nature in the coming year. A question arose in respect of how equity, diversity and inclusion (EDI) is embedded within IARC and how this best practice may be disseminated, for the benefit of other agencies.

14. An update was provided on General Data Protection Regulations (GDPR) and associated impacts on IARC's activities. IARC is continuing dialogue with the European Commission to find a lasting solution for data sharing with EU institutes for scientific purposes. IARC also intends to find immediate solutions to currently stalled projects. Additional support is being provided to IARC by external data protection consultants.

15. The impact of COVID-19 on IARC activities and operations was also queried. In response to the pandemic, a COVID-19-tailored Business Continuity Plan was activated. Activities were aligned with recommendations from the host country (i.e. France). There was a movement to remote working during March–May 2020, with IARC operations continuing. There has been a gradual move back to on-site operations over the subsequent months, however, most staff are still working remotely (~70% are off-site). Travel bans also had specific impacts, with videoconferencing and virtual Town Hall meetings put in place. The COVID-19 pandemic also has had significant impacts on IARC fundraising activities and the conduct of specific research projects that required in-person contact for data collection, etc.

16. The Director also covered IARC's research at the intersection of COVID-19 and cancer. As an example, IARC scientists have examined the impact of the COVID-19 outbreak on cancer screening programmes belonging to different human development index (HDI) categories. Further elaboration was provided by Dr Freddie Bray in terms of the activities of the COVID-19 Cancer Taskforce. Particular focus has been on examining the impact of COVID-19 on cancer services, both in the short- and long-term. Significant adverse impacts have been observed on cancer registry activities. Discussion was also had in terms of measuring the impact of this important work on policy changes.

17. There was also a more general discussion on how cancer surveillance and screening activities may be affected by the COVID-19 pandemic, and how IARC's work in these areas may respond. The Director also highlighted inherent GDPR challenges which need to be overcome to facilitate more responsive/detailed analyses in terms of examining the impact of COVID-19 on cancer care. In addition to cancer registry data, it was suggested to also consider examining large real-world healthcare datasets which are available. Studies are also ongoing in terms of measuring potential impact of COVID-19 on cancer prevention programmes.

18. The SC suggested to include Qatar in this area of research relating the impact of COVID-19 on cancer services.

19. A suggestion was raised about use of CT scans for SARS-CoV-2 infection for opportunistic detection of lung cancer, with a pilot study underway in Belarus.

20. The SC recommended to further study the impact of COVID-19 on mortality from cancer, the challenge being to record cancer deaths in the background of the pandemic. IARC is expanding this area of research in cooperation with the WHO, further emphasized by Dr Bente Mikkelsen, Director, Noncommunicable Diseases (NCD), WHO HQ, who described WHO strategic plans to respond to the pandemic at the national level. Key learnings from the COVID-19 pandemic in terms of changed way of working (including rapid technology development and data sharing) are feeding into this strategy.

21. More broadly, the SC encourages IARC to pursue research activities in relation to examining the impact of COVID-19 on cancer services, including mapping of optimal data required.

- ***HIGHLIGHTS FROM THE 62ND GC SESSION***

22. The full Minutes of the 62nd GC session (GC/62/Min.1–2) are available on the IARC Governance website: <https://governance.iarc.fr/GC/GC62/index.php>

23. In summary, GC/62:

- was held remotely due to the COVID-19 pandemic and travel restrictions, with success;
- the admission of the People's Republic of China was deferred to the next GC session;
- the withdrawal of Turkey was confirmed, with regret; and
- GC appreciated the strengthening coordination between IARC and WHO.

- ***DIRECTOR'S UPDATE FROM THE 56TH SC SESSION***

24. The Director mentioned that all items requiring follow-up will be covered in the next three days.

25. The SC noted the Director's update from the 56th session given in her annotated presentation mentioned in paragraph 9 above.

- ***BIENNIAL REPORT OF THE IARC ETHICS COMMITTEE (IEC), 2019–2020***
([Document SC/57/2](#))

26. The SC noted the Report with satisfaction and thanked the Director for her report.

DISCUSSION WITH THE DIRECTOR, THE DIRECTOR OF ADMINISTRATION AND FINANCE AND THE SCIENTIFIC COUNCIL ONLY

27. The SC thanked the Director for this opportunity to discuss and made the following observations:
28. Slides summarizing different issues raised by SC members to be discussed in closed session were projected and presented by the Director and by Dr Tamás Landesz (Director of Administration and Finance).
29. An update was provided in terms of the admission of the People's Republic of China to IARC. An update was also provided in terms of participation of USA in WHO and IARC.
30. There was also a clarification in terms of IARC's rules on voting, with each Participating State within the Governing Council having one vote. It was noted that members of the SC do not represent their home country and their interests, but rather the scientific community as a whole.
31. A brief update of the financial issues and challenges faced by IARC was provided by the Director. Possible mitigation measures being explored would be to increase external grant income.
32. The SC asked about IARC challenges and plans to be adopted due to the impact of lack of budget on the implementation of the Medium-Term Strategy (MTS).
33. There was a general discussion about how participation and attraction of additional Participating States may assist in alleviating some of the budgetary pressure.
34. IARC Director underlined the fact that help from Participating States to raise funds is critical. The Director explained that Official development assistance (ODA) can be utilized as an attractive option for contribution.
35. The SC encourages Participating States and other stakeholders to contribute via the Core Voluntary Contribution Account (CVCA) mechanism to support IARC's mission, as well as the Nouveau Centre project.
36. Greater emphasis on describing the return on investment of the work that IARC is performing is suggested as a key means of influencing stakeholders to see value, e.g. describing specific impacts of their research work on cancer policy.

DIRECTOR'S RESPONSE TO THE REVIEWS OF THE SECTIONS OF INFECTIONS (INF) AND MECHANISMS OF CARCINOGENESIS (MCA) HELD AT IARC IN FEBRUARY 2020

37. The [details of action taken following the review of the Section of Infections \(INF\)](#) were discussed.
38. The Director noted with satisfaction the outstanding evaluations assigned to both Sections and thanked both Review Panels for their work.
39. The SC made the following observations and noted the Director's response to the INF Review:
40. Dr Sibilia (who was on the INF Review Panel) enquired as to whether research on infections and cancer will be a scientific priority for IARC going forward. The Director confirmed that this continued focus would be the case.
41. Dr Tommasino indicated that his long-standing experience of IARC has been extremely positive. Merging of laboratory science and epidemiology was considered to be very successful.

42. A new Branch structure (Early Detection, Prevention, and Infections – EPR) was formed to enable the implementation of the new MTS 2021–2025, as well as to provide additional career development and leadership opportunities for mid-career scientists. Dr Tommasino is the Branch Head, Drs Gary Clifford, Maribel Almonte and Partha Basu are the Deputy Branch Heads. Funding limitations may provide an ongoing challenge to keep this Branch at the forefront.
43. The SC queried whether there were sufficient resources put into the areas of transmission, infection prevention, *H. pylori* eradication and treatment. The Director indicated that a scientist in this Branch (Dr Jin Young Park) is now coordinating work in this specific area.
44. The [details of action taken following the review of the Section of Mechanisms of Carcinogenesis \(MCA\)](#) were discussed.
45. The SC made the following observations and noted the Director's response to the MCA Review:
46. Dr Viola (who was on the MCA Review Panel) commented on the outstanding outcome of the review and excellent work being performed.
47. The Director provided a brief update of the new Branch structure (Epigenomics and Mechanisms – EGM), as per the new organizational structure. Dr Herceg and Dr Zavadil indicated that the Section was pleased with the review and support the new structure which emphasizes implementation of research findings into practice.
48. Dr Zavadil also briefly updated the SC on the migration of the IARC p53 database to an external entity (US NCI), which should be completed within the next two months.
49. A query was raised in terms of focus on childhood cancer and associated rationale. Dr Herceg referred to the rare nature of certain childhood cancer types and need for international collaboration to appropriately study same. This aspect of the work has received significant support from external grant sources.
50. The SC supported the added value of mechanistic studies being performed at IARC within the same institution as epidemiological studies.

UPDATE ON THE “NOUVEAU CENTRE” AND THE “NOUVEAU CENTRE” FUND-RAISING CAMPAIGN ([Document SC/57/3](#))

51. Elisabeth Françon, Administrative Services Officer and Clément Chauvet, Strategic Engagement and External Relations Officer made their presentations ([part 1](#)) and ([part 2](#)) available on the event management platform.
52. The SC wishes to make the following comments for GC:
53. There was a discussion in terms of contingency plans in terms of a funding shortfall. The Director indicated that IARC needs the help of the SC in identifying local high-net worth individuals in their home countries who may be interested in providing philanthropic support. There was also discussion in relation to a crowd funding campaign to help in the effort. The lack of suitable premises to appropriately carry out IARC activities will severely hamper implementation of current research activities, as well as those planned under the MTS 2021–2025.

DISCUSSION ON THE DRAFT IARC MEDIUM-TERM STRATEGY (MTS) FOR 2021–2025
(Documents [SC/57/4A](#) and [SC/57/4B](#))

54. Following Resolutions [GC/60/R11](#) and [GC/61/R7](#), the Agency implemented the following activities in preparation of the development of its MTS 2021–2025:

- 2019: An evaluation of IARC activities¹ in 2019;
- 2020: A wide external consultation² with IARC stakeholders, including cancer experts, professional groups, and societies, WHO staff and others; and
- 2019/2020: a broad internal consultation with IARC personnel as well as discussions among the Senior Leadership Team.

55. The draft MTS 2021–2025 presented to the SC for discussion (see [Document SC/57/4B](#)) represents the result of productive discussions, exchange of views and a forward-looking collaboration between IARC's governing bodies and the Secretariat.

56. The SC made the following observations regarding the DRAFT MTS 2021–2025:

57. The SC provided highly positive comments in terms of the content and layout of the MTS 2021–2025. The SC fully endorsed the MTS 2021–2025 as presented. The SC recognized the efforts made by the Director and her staff to respond to the GC's request for external evaluation of IARC's activities and the last MTS, as well as the approach that was taken in developing the new MTS. The SC congratulated the Director for creating this outstanding strategic plan that provides clear goals and objectives for the next five years.

58. The SC queried how the MTS 2021–2025 will be implemented. The Director indicated that IARC will continue strategic fundamental activities (e.g. describing the cancer burden), as well as gradually strengthening IARC's engagement in three emerging priorities, namely evolving cancer risk factors and populations in transition, implementation research, and economic and societal impacts of cancer. IARC will also strengthen its cooperation with WHO by building a more formal engagement structure with WHO HQ. In more detail, two committees (one high-level and another executive) will be formed to facilitate development and implementation of shared plans.

59. The Director indicated that IARC will strengthen its strategic positioning by enhancing outreach and visibility. It will also actively pursue strategic cooperation agreements.

60. The Director indicated that IARC is being restructured into four pillars (Pillar I – Data for Action; Pillar II – Understanding the Causes; Pillar III – From Understanding to Prevention; and Pillar IV – Knowledge Mobilization) to facilitate integration and also to better deliver on its mission. Each Branch has a Head with one or more Deputy Heads. Teams, which are informal organizational units, will exist within and across Branches to facilitate integration and reduce silos. These organizational changes should allow flexibility, new emphasis on implementation research and increased collaboration.

61. The SC queried how some of the existing priorities (e.g. cancer surveillance) will be balanced with the new themes (e.g. cancer inequities and health economics). The Director indicated that emerging priorities will be increasingly emphasized and integrated into the work of each Branch, including cancer surveillance.

¹ See the Advisory Group Report on the evaluation (document [GC/62/9](#))

² See Executive Summary of the Stakeholders' Survey Report (annexed to Document [SC/57/4A](#))

62. The Director discussed three new initiatives, namely in relation to childhood, cervical and breast cancer, in collaboration with WHO and partners. These topic areas were chosen because of their high incidence and potential for implementation research and programmes.

63. The SC also queried the feasibility of joint actions to strengthen scientific collaboration with Participating States. The Director indicated that there is ongoing discussion with relevant stakeholders in terms of increasing collaboration.

64. The SC also queried the importance of Open Science to IARC activities. The Director indicated that IARC is committed to ensuring Open Science, which includes also Open Samples and Open Data (which has a context in terms of its biobanking activities).

65. The SC queried whether IARC will strive to operate according to the FAIR (findable, accessible, interoperable and reusable) data principles. The Director indicated that this is considered important, albeit these principles are first and foremost an issue for the scientists, with associated data protection issues also being relevant here.

66. The Director also discussed plans to increase IARC's public health impact worldwide.

67. The SC queried how new collaboration opportunities would be prioritized. The Director indicated that a major initial priority would be increased collaboration with WHO. The second main focus would be increased strategic engagement with the Participating States. The Director also indicated interest in increasing engagement with potential Participating States.

68. The SC queried how issues of data protection will be managed in the context of Open Science. The Director indicated that IARC will endeavour to share all data, where permissions allow.

69. The SC queried if IARC would focus future research on cancer therapeutics. The Director indicated that this aspect was discussed during the development of the MTS 2021–2025. It was indicated that IARC's activities were somewhat niche and its current scale required maintained focus on cancer prevention. Notwithstanding this, some of IARC's activities in the area of implementation will overlap with other areas in the cancer journey.

70. The SC queried how Participating States can participate in the new breast cancer initiative. The Director indicated that there is a joint initiative with WHO in relation to breast cancer and there will be an active engagement across multiple countries and regions. The SC queried whether there would be an increased focus on breast cancer in younger individuals. The Director indicated that this was of interest and planned.

71. The SC queried whether IARC could play a role as a neutral arbiter in terms of advocacy for evidence-based approaches. The Director indicated that a key role of IARC's activities is to provide leadership at an international level, as best exemplified by its participation in the EU Cancer Mission. The Director also indicated that science communication has also become increasingly important in terms of combatting misinformation and that the Agency currently wishes to put more emphasis on this area, however, is limited in its ability to do so given the small staff (n=3) working in Communications at IARC.

72. The SC commented that it would be helpful for specific outcomes from projects to be available on the IARC website, as a centralized repository. The Director indicated that it was not possible to publish International Atomic Energy Agency (IAEA) imPACT reports at present, but she will discuss this suggestion with relevant parties.

73. The SC asked about other specific topics that could be mentioned in the MTS as areas for research focus for IARC (e.g. tobacco-related research, precision prevention, etc). The Director indicated that not all specific aspects of research were described in the document, as it was broad in nature. She did recognize the value of precision prevention and stated it will be addressed in the MTS 2021–2025.

74. The SC welcomed the increased emphasis on implementation research, indicating that impact will often depend on the local context. It is suggested that IARC should focus on areas of potential high impact, such as cervical and breast cancer. The Director agreed that specific regional/local contexts are considered when determining opportunities for implementation research. Some examples in relation to ongoing projects in the cervical and breast cancer areas were described.

75. The SC queried whether there are any plans for a Code against Cancer in Asia. It was responded that there has been an interest to expand the concept worldwide, with early work taking place in this context.

SCIENTIFIC COUNCIL RECOMMENDATIONS FOLLOWING POSTER REVIEW

76. Due to the remote format of this Session, short video presentations of the IARC scientists' posters were made available on the event management platform. Interaction was encouraged through organization of Zoom meetings and/or provision of recommendations.

77. The Chair acknowledged the significant effort of the IARC staff and trainees in terms of the work made before the meeting to prepare both the posters and video presentations. Sixty-five posters were prepared and pre-recorded. All posters received positive comments and these comments were distributed back to the IARC staff and to the SC members.

78. No pre-organized Zoom meetings were requested in advance of the meeting.

79. The Chair invited the SC to make general comments on the presentations, as well as on the format of this first ever virtual-format poster session.

80. The Director emphasized the importance for the SC to engage with IARC scientists, as a means of providing feedback. There was some discussion on how this interaction could be organized in future meetings. The SC indicated that it would be helpful if there was a dedicated session where the posters could be viewed and interaction organized. Multiple parallel breakout sessions in which poster discussions take place with 8–10 presenters and subset of SC members participating would provide an opportunity for more interaction and live feedback.

81. The IARC Branch Heads judged the exercise of virtual posters/videos prepared by scientists useful and interesting.

SCIENTIFIC COUNCIL MEMBERSHIP OF BRANCH REVIEW PANELS IN 2022

82. The SC discussed the Scientific Branches to be reviewed in 2022: Cancer Surveillance (CSU) Branch, Head: Dr Freddie Bray and Environment and Lifestyle Epidemiology (ENV) Branch, Head: Dr Joachim Schüz.

83. Drs Louisa Gordon, Manami Inoue and Janne Pitkäniemi will participate in the CSU Review Panel. It was agreed that Dr Louisa Gordon would Chair the Review Panel.

84. Drs Hendriek Boshuizen and Sabine Rohrmann will participate in the ENV Review Panel. It was agreed that they will co-Chair the Review Panel.
85. The external members will be chosen by the Secretariat in consultation with the Chairs of the Review Panels and the SC Chair.
86. Given the likelihood of holding the Reviews by web conference, they will take place remotely on 24–28 January 2022.

PROPOSED PROGRAMME AND BUDGET (2022–2023) ([Document SC/57/6](#))

87. A video presentation of this item was prepared by Ms Angkana Santhiprechachit (Administration and Finance Officer) and is available [here](#).
88. The SC observed that there has been a *de facto* decrease (zero nominal growth) in assessed contributions from Participating States for more than a decade.
89. The SC found the proposed Programme and Budget for 2022–2023 reflects the priorities set out in the [IARC Medium-Term Strategy 2021–2025](#). The SC commends IARC for the presentation of the budget document structured according to the revised 'IARC Project Tree' (Information Table 2), a framework showing how IARC's activities at project level contribute to achieving the strategic goals defined in the new MTS.
90. The Secretariat is proposing a total of €48.69 million for the regular budget 2022–2023, €4.54 million increase from the approved regular budget of the current biennium, to be financed from assessed contributions from Participating States. The budget increase is intended to be financed from contributions from Hungary and the People's Republic of China (a new Participating State anticipated to join in 2020). Due to the delayed admission of the People's Republic of China as an IARC Participating State, the proposed budget has a financing gap of €3.3 million.
91. Ms Santhiprechachit presented additional information ([Document SC/57/6 Add.1](#)) that included a request from Participating States during the Financing Dialogue (held on 2 and 3 February 2021) to prepare an alternative Programme and Budget with no financing gap, in reference to the zero nominal growth policy in most Participating States; as a result, the Agency proposed areas for scaling down.
92. The Secretariat will continue to use all available resource streams to deliver the Programme. Notwithstanding the success of the Agency in resource mobilization for scientific activities to-date, significant medium- to long-term risks are entailed by an increasing reliance on extrabudgetary resources, given their uncertain nature, especially within the context of the COVID-19 pandemic where resources have been reprioritized and redirected.
93. The SC understands that the requested budget reduction will impact the ability of IARC to deliver on its mandate in the next two years. This reduction poses significant risk to the future output of the Agency and the well-being of its personnel.
94. The SC emphasized the importance to the MTS of all projects identified by the Secretariat as part of the proposed programme and budget document, as they support fundamental and emerging priority areas. The SC encourages Participating States to consider making additional voluntary contributions to support projects which will form part of the €3.3 million reduction, inter alia through the CVCA mechanism.

95. The SC recommends that GC adopts the Proposed Programme and budget (2022–2023) and supports the areas for scaling down selected by the Secretariat, should the €3.3 million reduction need to be made, as essential to the continuing success of IARC.

96. The SC made the following observations and wishes to stress that the overall proposed Regular Budget and extrabudgetary resources are essential to the success of the proposed Programme:

97. The Chair congratulated the IARC staff for preparing the detailed budgetary plan, which was a considerable achievement and provided an unprecedented level of clarity and accountability.

98. The SC queried whether the proposed budget challenges would lead to staff losses. The Director indicated that there a variety of strategies to deal with this impasse, with the chosen approach being a generalised cut across the board. It was indicated that several positions vacated over the past two years, due to natural attrition (i.e. retirement or resignation) have been unfortunately frozen or abolished. Mitigation measures include attraction of additional external grant income and support from current Participating States, along with attraction of new Participating States.

99. The SC queried whether the budgetary issues would lead to challenges in terms of keeping up with advances in new areas. The Director indicated that there is a focus on certain new areas (e.g. health economics) and support for early and mid-career researchers to remain competitive. However, there is a concern regarding the long-term ability of IARC to sustain its position as a leader internationally in cancer research without additional resources.

100. The SC suggested whether there are opportunities to explore different ways of utilizing volunteers and supporting secondments via external funding routes. It was indicated that volunteerism has been utilized in other aspects of IARC activities (e.g. administration), but not specifically so far in the context of its scientific mission. IARC is open to opportunities for secondments with external parties and is actively looking to expand this area.

101. The SC suggested to explore even further the opportunities provided by engagement with WHO to increase IARC membership. WHO has 194 Member States, with IARC having 26 Participating States. The Director indicated that there are several criteria that need to be met for potential Participating States to join IARC³ that include a need to have a baseline scientific community in their country, as well as willingness to engage with IARC. IARC is continuously seeking to add new Participating States and has a systematic approach in place that is being led by the Director and the Strategic Engagement and External Relations Officer. Their efforts have been somewhat hampered recently by the COVID-19 pandemic.

102. The SC queried whether a community of countries could participate as IARC Participating States. This type of collective was indicated as not being possible. Any country which is a WHO Member State is eligible to apply as a Participating State of IARC.

103. The SC suggested to explore the possibility of IARC having academic appointments with external entities, as another way of supporting the Agency's activities. These appointments may provide additional opportunities for extramural funding and expanding the scientific base.

104. The SC queried whether a foundation-based mechanism could be used to attract additional funding. The Director indicated that WHO recently established such a foundation and IARC will be

³ As described in [Resolution GC/54/R17](#) from May 2012.

working with the WHO Foundation to attract funding. The Director indicated that there is also an urgent need to grow the communications and public engagement activities in IARC.

105. The SC encourages IARC Participating States to consider making additional voluntary contributions to support the Nouveau Centre and to fill the budget gap to allow the Agency to implement its proposed Programme.

**REQUEST FOR SUPPORT FROM THE GOVERNING COUNCIL SPECIAL FUND.
A. SCIENTIFIC EQUIPMENT AND B. CORE IT INFRASTRUCTURE AND SERVICES**
([Document SC/57/7](#))

106. The SC considered the Director's proposal to request an allocation of €420 000 from the GC Special Fund (GCSF) to:

- a) Purchase three pieces of equipment for the Histopathology laboratory (Digital imaging upgrade; histostainer and cryostat, for a total of €70 000; and
- b) Fund core IT infrastructure and services, for a total of €350 000 for a period of four years.

107. The SC noted that the annual maintenance costs of the requested equipment will be covered through the histopathology cost recovery scheme.

108. The SC notes that IT is a fundamental resource enabling IARC to deliver its strategic goals. This proposal aims to outline the technological investments needed to foster a modern IT organizational culture and practices, in line with the new MTS and the Information Technology Roadmap 2021–2025.

109. The SC recommended that GC approve the allocation of €420 000 from the GCSF in support of the Director's requests.

110. The SC queried whether the slide scanning resources requested would be sufficient. Dr Ian Cree indicated that this would be sufficient for several years based on current requirements.

**SCIENTIFIC REPORT OF THE SECTION OF GENETICS (GEN)/GENOMIC
EPIDEMIOLOGY BRANCH (GEM) REVIEW AND DISCUSSION** (Document SC/57/WP5)

111. The Scientific Report of the GEN/GEM Review was presented by Dr James Cerhan, Chair of the Review Panel.

112. The external advisors and SC members of the Review Panel were thanked for their valuable contributions.

113. The Review Panel noted the following concerning the GEN Section/Genomic Epidemiology (GEM) Branch:

- ***Assessment of GEM's scientific quality***

GEP's past performance: Outstanding

GCS's past performance: Outstanding

GEM's future plans: Outstanding

- ***Assessment of the relevance of GEM's work to the mission of IARC***

GEP's past performance: Perfect fit

- GEP projects are highly appropriate for IARC's mission to conduct cancer research in low- to middle-income countries, and include projects in Eastern Europe, Asia and South America.
- GEP projects are critical to IARC's mission to better understand causes of cancer in populations across the world and to devise strategies for cancer prevention and early detection.

GCS's past performance: Perfect fit

GEM's future plans: Perfect fit

- ***Overview of GEM's future plans and strategic vision***

- After its overview of GEM's future plans and strategic vision, the GEM Review Panel expects the following outcomes:
 - Greater understanding of the causes of cancer;
 - Identification and validation of genetic and other biomarkers for early detection of cancer and how these may be incorporated into existing screening models or target individuals for increases clinical surveillance;
 - Understanding of genetic and other biomarkers that impact survival after diagnosis of cancer;
 - Reinforcement of the activities of genetic and genomic research led by GEM scientist in international consortia.

- ***Overall recommendations for GEM***

- The RP recommends continued support of GEM at the highest level over the next five years for their proposed comprehensive research programme, training and capacity building, which is critical to the IARC Medium-Term strategy. GEM research is cutting edge, attracts extensive extramural support, and ranges from molecular approaches to understand cancer incidence and causes of cancer to early detection.
- The RP fully supports the consolidation of GEP and GCS into GEM, which should further accelerate integration and computational and experimental synergies across research projects and approaches, and further strengthen the competitiveness of GEM.
- GEM should continue to focus their research strategy on addressing understudied cancers and populations, particularly in LMICs, and expand further as funding opportunities make it feasible, with a high priority for research in African populations. GEM is well positioned to lead on new discoveries engendered by integrating germline genomics with tumour genomics and other omics in the context of epidemiologic and clinical factors and in diverse populations.
- It will be important to carefully manage the impact of grant funding in relation to professional, technical and administrative staffing and infrastructure needed to support the projects. Project management for large and complex projects should be developed.
- For GEM (and other IARC Branches) to stay competitive, it will be critical to bring in new staff (as slots become available) with expertise in high dimensional analysis (e.g. biostatistics, bioinformatics, and data science) as well as develop other

approaches to engage this expertise (e.g. visiting programmes, workshops, conferences, university affiliations).

- Maintaining infrastructure critical to GEM and many other IARC Branches, including HPC/IT, biorepositories, pathology, and novel omics technologies is needed, while outsourcing other laboratory work as appropriate (e.g. large-scale sequencing).
- Leveraging GEM expertise as part of IARC's education/training missions, both internal and external, should be enhanced, which will have the added benefit of bringing visibility to IARC more globally.
- ***Additional observations outside of GEM review***
 - All levels of staff expressed pride at working at IARC and found it meaningful and scientifically invigorating. Major challenges identified were career paths and advancement (all levels); equity of positions (stable vs soft money); lack of opportunities for promotions ("glass ceiling"); and understaffing, which impacts work-life balance.
 - The post-doctoral fellows feel their experience at IARC provides them a strong foundation to launch their careers. They also noted a major change in the culture at IARC such that they felt more valued. Major challenges identified were affordability of health care, day care, etc.; and a feeling by some that post-docs should be treated more as independent scientists than as trainees. It would be helpful to the RP in the future reviews to provide long-term outcomes and career trajectories of post-docs after leaving IARC.
 - There was some confusion around change management with Branch reorganization and the planned move to new space.
 - Staff were appreciative of IARC initiatives around mentoring and leadership. There appears room for continued efforts in mentoring, including addressing training of supervisors and leaders in effective mentoring. More systematic assessment of the periodic evaluation process would be helpful in responding to comments about their somewhat uneven implementation.

114. The overall recommendations for the GEM Branch were discussed and approved.

115. In response, the Director:

- Thanked the SC members who participated in this Review Panel, particularly Dr Cerhan who chaired the Panel.
- Congratulated Dr Paul Brennan and Dr James McKay, as well as associated teams, for this outstanding review.

116. The Branch and Deputy Branch Heads thanked the Review Panel for their input.

117. Dr Brennan appreciated the recommendation in terms of continued focus of work in LMICs. He discussed the specific recommendation to consider more work in the African region. Dr Brennan indicated that this would be challenging but it would be a recommendation that would be carefully considered by the GEM Branch.

118. Dr Brennan also covered the recommendation in relation to project management, which he agreed was important to further develop.

119. Dr Brennan also discussed the balance between in-house work and outsourcing of activities.

120. Dr Brennan also covered the issue of mentoring and the importance of this aspect to the development of future careers of the scientists within their teams.

121. Dr Brennan commented on some of the challenges particularly in the area of bioinformatics and data analysis, with potential for missed opportunities due to current budgetary challenges.

122. Dr McKay reiterated that the recommendation in terms of focus on LMICs is appreciated and in keeping with the GEM Branch's plan.

123. Dr McKay indicated that there are two staff members working in computational biology who are actively contributing to the GEM Branch activities.

124. Dr McKay also referred to the key requirements of ensuring appropriate groundwork is in place before embarking on complex downstream molecular analyses.

125. The SC commented that there is a key opportunity to focus on the Middle East region, due to unique characteristics. Dr Brennan responded that this is an area that IARC is hoping to expand upon.

126. The SC suggested that there may be opportunities for IARC to lead on a global breast cancer initiative, which may provide another opportunity for external funding. The Director indicated that targeting of regions of the world which are traditionally underserved is a priority. The WHO initiative on breast cancer also opens the door in this context.

127. The SC suggested research in relation to molecular characteristics of gastric cancer in certain regions. Dr Brennan indicated that this was of interest and would be explored.

128. The SC queried whether the GEM Branch has considered working with other branches. Dr Brennan and Dr McKay indicated that there is good engagement with other areas of IARC, including with the CSU Branch, which often inform the work that the Branch covers.

129. The GC Chair, Dr Robbins, queried whether there was an opportunity to explore the microbiota and host immune system in specific populations which the GEM Branch focuses on. Dr Brennan indicated that the GEM Branch has been involved in parallel studies investigating microbiota in cancer. Dr McKay commented that the interaction between germline genetics and the host microenvironment is an aspect of interest.

130. The Genomic Epidemiology Branch (GEM) Review Panel Report was formally endorsed by SC.

ELECTION OF CHAIRPERSON AND VICE-CHAIRPERSON FOR THE 58th SESSION OF THE SCIENTIFIC COUNCIL IN 2022

131. Dr Janne Pitkaniemi was elected Chairperson.

132. Dr Manami Inoue was elected Vice-Chairperson.

DATE OF NEXT SESSION

133. The 58th SC will take place (remotely) on Wednesday 9, Thursday 10 and Friday 11 February 2022.

134. The CSU and ENV Review Panels will take place (remotely) from Monday 24 to Friday 28 January 2022.

ADOPTION OF THE SCIENTIFIC COUNCIL REPORT (Document SC/57/8)

135. The report of the Fifty-seventh Session of the Scientific Council **was adopted**.

CLOSURE OF SESSION

136. The customary expressions of thanks were exchanged.

137. Dr Weiderpass thanked the outgoing SC members, Drs Salha M. Bujassoum Al Bader (Qatar); Jacqueline Clavel (France); Christine Friedenreich (Canada); Maria Sibilia (Austria) and João P.B. Viola (Brazil).

ANNEX 1 – ACRONYMS (Sections and Groups followed by Pillars and Branches)

ACRONYM	SECTION / GROUP	SECTION / GROUP HEAD
CSU	Section of CANCER SURVEILLANCE	Dr F. Bray Deputy: Dr I. Soerjomataram
EDP	Section of EARLY DETECTION AND PREVENTION	Dr J. Schüz (Acting)
PRI	Prevention and Implementation Group	Dr M. Almonte
SCR	Screening Group	Dr P. Basu
ENV	Section of ENVIRONMENT AND RADIATION	Dr J. Schüz Deputy: Dr V. McCormack
ESC	Section of EVIDENCE SYNTHESIS AND CLASSIFICATION	Dr I. Cree
IHB	IARC Handbooks Group	Dr B. Lauby-Secretan
IMO	IARC Monographs Group	Dr M. Schubauer-Berigan
WCT	WHO/IARC Classification of Tumours Group	Dr I. Cree
GEN	Section of GENETICS	Dr P. Brennan
GCS	Genetic Cancer Susceptibility Group	Dr J. McKay
GEP	Genetic Epidemiology Group	Dr P. Brennan
INF	Section of INFECTIONS	Dr M. Tommasino
ICB	Infections and Cancer Biology Group	Dr M. Tommasino
ICE	Infections and Cancer Epidemiology Group	Dr G. Clifford
MCA	Section of MECHANISMS OF CARCINOGENESIS	Dr Z. Herceg
EGE	Epigenetics Group	Dr Z. Herceg
MMB	Molecular Mechanisms and Biomarkers Group	Dr J. Zavadil
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	Dr P. Ferrari
DIR	Office of the Director	Dr E. Weiderpass (Director)
ETR	Education and Training Group	Ms A. Berger
LSB	Laboratory Services and Biobank Group	Dr Z. Kozlakidis
SSR	Section of Support to Research	Dr T. Landeszl (DAF)
ASO	Administrative Services Office	Ms E. Françon
BFO	Budget and Finance Office	Ms A. Santhiprechachit
HRO	Human Resources Office	Mr D. Kavanagh
ITS	Information Technology Services	Mr F. Lozano

ACRONYM	PILLAR / BRANCH
	Pillar I: DATA FOR ACTION
CSU	Cancer Surveillance Branch
	Pillar II: UNDERSTANDING THE CAUSES
GEM	Genomic Epidemiology Branch
NME	Nutrition and Metabolism Branch
	Pillar III: FROM UNDERSTANDING TO PREVENTION
ENV	Environment and Lifestyle Epidemiology Branch
EGM	Epigenomics and Mechanisms Branch
EPR	Early Detection, Prevention, and Infections Branch
	Pillar IV: KNOWLEDGE MOBILIZATION
ESC	Evidence Synthesis and Classification Branch
LCA	Learning and Capacity-Building Branch
	DIRECTOR'S OFFICE
SSR	SERVICES TO SCIENCE AND RESEARCH

ANNEX 2 – STATEMENT FOR THE DECLARATION OF INTERESTS

Declarations of interest were provided by all Scientific Council (SC) members.

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

- ✓ Research support from the private sector;
- ✓ Personal consultancy fees from the private sector;
- ✓ Investment interests in the private sector;
- ✓ Intellectual property rights (holding patents applications).

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
James Robert Cerhan	Reports that his unit at Mayo Clinic received research funding from NanoString Technologies (previous) and from Celgene and Genentech (ongoing)
Gunilla Enblad	Reports having received honoraria from Gilead in her previous capacity of advisory group member
William Gallagher	Reports holding stocks in OncoMark Ltd in his capacity of chief scientific officer, receiving personal consultancy fees from Carrick Therapeutics, and holding patent applications US8116551B2 and EP2227774B1, GB0504302D0, FR2784383B1 US7220732B2 and EP1492799B1