

## **REPORT OF THE SCIENTIFIC COUNCIL ON ITS FIFTY-FOURTH SESSION**

### **INTRODUCTION**

1. The Fifty-fourth Session of the Scientific Council (SC) of the International Agency for Research on Cancer (IARC) was opened by Professor Giske Ursin (Chairperson of the Scientific Council), at 09:00 on Wednesday 31 January 2018. She welcomed the participants, including the five new members of the Scientific Council: Drs Salha Bujassoum (Qatar), Jacqueline Clavel, (France), Christine Friedenreich (Canada), Maria Sibilía (Austria) and João Viola (Brazil).
2. She also welcomed Drs Mads Melbye (Chairperson of the Governing Council, Denmark), Stephen Robbins (Vice-Chairperson, Governing Council, Canada), Soumya Swaminathan (WHO Deputy Director-General, WHO Representative), Julie Torode (UICC Observer) and Béatrice Fervers (Observer nominated by the Centre Léon Bérard)<sup>1</sup>.
3. Apologies for absence were received from Drs Simon Tavaré and Ole Raaschou-Nielsen.
4. For ease of reference a list of acronyms of Section and Groups can be found in Annex 1 at the end of this Report.

### **DECLARATION OF INTERESTS**

5. Declarations of interests 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 Martin Rösli was elected Rapporteur.

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<sup>1</sup> Photographs: participants were not asked to sign a consent form. The Secretariat read a statement, at the opening of the session, informing participants that their presence on the steps for the Group photograph was taken as equivalent to their consent to have their picture displayed on the Governance website, and kept in the IARC archives for future use. This also covers consent for pictures taken during the meeting. Participants were asked to let the Secretariat know formally if they wished not to have their picture published by IARC, at the time of the meeting or in future.

## **ADOPTION OF THE AGENDA (Document SC/54/1)**

### **7. The agenda was adopted.**

#### **DIRECTOR'S REPORT INCLUDING:**

- ***THE IARC BIENNIAL REPORT 2016–2017 (Document SC/54/2)***

8. The Director presented the IARC Biennial Report 2016–2017 and its scientific highlights.

9. A summary of discussions held and questions raised by the SC and answers given by the Director and IARC staff is given below:

10. The SC recognized that translational research encompasses basic science through to policy implementation and that this is reflected in the Biennial Report.

11. The SC emphasized the importance of IARC's GLOBOCAN and cancer surveillance programme and inquired about future developments. The Director stated that IARC has introduced the presentation of data in different ways, e.g. DALYs or economic consequences of cancer. Such data are informative for policy makers. Global estimates will be presented in July 2018.

12. The SC stated that prevention of cancer by vaccination is extremely important. A major concern is the scepticism in parts of the population against vaccination which is not based on scientific evidence. This may undermine the effectiveness of such programmes. IARC should ensure that the evidence basis for the safety of these vaccines is communicated to the WHO and other stakeholders. IARC may consider other measures to address this issue.

13. The SC discussed the potential and relevance of various preliminary findings in the Report in relation to HPV and cancer. It was also discussed whether epigenetic markers can be used to predict risk as well as providing an exposure surrogate.

14. The SC recognized and emphasized the importance of laboratory research and the maintenance of key in-house expertise for the success of IARC's mission.

15. The SC would like to commend the Agency on their use of a rigorous external review process of each Section. The reviews provided by experts in the field have been of excellent quality and reinforce the strength and breath of research that the Agency undertakes.

16. The SC congratulated the Director and his staff on the IARC Biennial Report 2016–2017.

- ***HIGHLIGHTS FROM THE 59<sup>TH</sup> SESSION OF THE GOVERNING COUNCIL***

17. The Director mentioned that the full Minutes of the Governing Council meeting (GC/59/Min.1–3) were available on the IARC Governance website (<http://governance.iarc.fr/GC/GC59/index.php>).

18. The Governing Council approved the 2018–2019 budget at a level of €44 149 793; IARC therefore needs to reduce activities to meet the €900 000 reduction in the requested budget for 2018–2019.

19. The request for €700 000 for the purchase of scientific equipment was approved.

20. The vacancy announcement for the post of Director, IARC, was published on the IARC website on 31 October 2017; more information on the process can be found under [Resolution GC/59/R7](#).

21. The SC made the following observations: The SC asked which activities have been affected by the budget constraints. The Director explained several measures that were taken. The IARC Post-doctoral Fellowship Programme had to be suspended. However, many post-doctoral fellows also come for training, funded by grants. Nevertheless, the suspension of the Programme limits the training opportunities for Early Career Scientists from low- and middle-income countries (LMICs). The Summer School is now offered biennially instead of annually. Foreseen increase of support to biobanking capacity building in LMICs could not be implemented. The reclassification exercise for professional staff was also postponed.

22. The SC was very concerned about reduced funding opportunities for young scientists in particular from LMICs, due to budgetary constraints. Training and education is a core function of IARC and is highly relevant for the future.

23. The SC emphasized the importance and global impact of the Monograph and Handbook Programmes. It provides highly relevant and fundamental information according to a predefined protocol, based on transparent and stringent criteria. The members of the Monograph and Handbook expert panels are selected for their outstanding merits, independent of vested interests, to give the best and most current scientific evaluation. The SC emphasized that the selection of agents and timing of their evaluations should continue to be solely science driven and decided by the Director of IARC.

24. The SC thanked the Director for these highlights from the 59<sup>th</sup> Governing Council.

- ***DIRECTOR'S UPDATE FROM THE 53<sup>RD</sup> SESSION OF THE SCIENTIFIC COUNCIL***

25. The Director presented a brief update from the last Scientific Council.

26. The SC noted the Director's update from the 53<sup>rd</sup> Session.

#### **UPDATE ON THE "NOUVEAU CENTRE" (Document SC/54/3)**

27. Elisabeth Françon, Administrative Services Officer, presented the update on the "Nouveau Centre" project.

28. On 15 December 2017, Metropole de Lyon officially announced the results of the selection of the design-build team that will carry out the Nouveau Centre project: *Demathieu Bard (general contractor) / Art&Build (architects) / Unanime (architects) / WSP (engineering company) / Indiggo (sustainable development engineering company)*.

29. This team proposed the most innovative building and the one most compliant with IARC's needs. For more details and for pictures, please visit: <http://www.iarc.fr/en/media-centre/iarcnews/pdf/Nouveau%20Centre%20read%20more.pdf>; <http://www.iarc.fr/en/media-centre/iarcnews/pdf/Nouveau%20Centre%20illustrations.pdf>

30. The SC made the following observations: The SC identified the timing and the budget constraints related to the move as major risks. The Director confirmed that timing is crucial as delays may involve costs for maintaining the current building. The City of Lyon is very responsive, however, in addressing the need for repairs as these arise. There is also a contingency plan in case the current building cannot be used anymore. Resource mobilization will now be intensified as the decision has been made on the project and the building plans can be shared.

31. The SC sought assurance that contingency plans are in place for extraordinary circumstances that could threaten the scientific resources such as biological samples and IT infrastructure.

32. The Director confirmed that no animal facilities are planned in the building but collaborations are available for these activities.

33. The SC recommended maximizing flexibility for the laboratory scientists, by making internal layout decisions as late in the building process as possible. Beside laboratory, IT infrastructure will be critical for the future.

34. The SC discussed the possibility to approach non-Participating States and non-state actors for raising funds for funding gap. The Director confirmed that IARC is open to considering these and other options.

35. The SC thanked the Secretariat for the update.

#### **DIRECTOR'S RESPONSE TO THE REVIEWS OF THE SECTIONS OF CANCER SURVEILLANCE (CSU) AND ENVIRONMENT AND RADIATION (ENV), HELD AT IARC IN JANUARY 2017**

36. The details of action taken following the reviews of the Sections of Cancer Surveillance (CSU) and Environment and Radiation (ENV) were discussed.

37. The Director noted with satisfaction the positive overall evaluation of both Sections.

38. The SC made the following observations in relation to the Director's response to CSU Reviews:

- Cancer registration is the backbone of cancer research all over the world and data sharing is increasingly complex from a legal point of view. The SC noted the successful actions of IARC to address these challenges. IARC is encouraged to continue working on pragmatic solutions for data sharing in this essential area to ensure the participation of all countries in future Cancer Incidence in Five Continents, etc.
- The CSU Section achieved an outstanding score for its work from the Review Panel. The SC noted that review based on scientific criteria alone does not adequately reflect the high relevance of cancer registration for public health and society.
- The SC inquired about the resource needs of this Section, which is unique in the world. Currently 40% of the Section is on extrabudgetary funding. The SC encouraged additional resources be allocated to this Section.

39. In relation to the Director's response to ENV Reviews the SC noted the changes in the radiation work to maintain their worldwide leading role in this specific field of research.

40. The SC was pleased with the Director's response to CSU and ENV Reviews.

### **IARC CURRENT STATUS AND FUTURE CHALLENGES**

41. To mark the last year of his tenure, the Director was invited to present his views on the current status and future challenges for IARC.

42. The SC made the following observations:

- Gender diversity should be addressed at the leadership level. IARC is aware of the challenge and is considering various measures in response.
- Digital health has a large potential for future research.
- IARC aims for primary preventive strategies and interventions in different areas of research in the future.
- The SC encouraged IARC to continue the dialogue with WHO on the issues of hazard identification and risk assessment.

43. The SC noted the presentation and thanked the Director for his leadership and the extraordinary achievements of the Agency in the last 10 years.

### **PRESENTATION OF POSTERS BY IARC SCIENTISTS AND SCIENTIFIC COUNCIL'S RECOMMENDATIONS FOLLOWING POSTER REVIEW**

44. Scientists presented posters with their research to Scientific Council members.

45. The SC was very pleased about the quality and the relevance of the research presented in the poster session.

### **REPORT OF THE ACTIVITIES OF THE EDUCATION AND TRAINING GROUP (ETR)** (Document SC/54/4)

46. Ms Anouk Berger, Head, Education and Training Group (ETR), presented the Report covering the period 2015–2017.

47. The ETR activities and new initiatives have followed the strategy presented and discussed during the 49<sup>th</sup> Session of the Scientific Council in January 2013 (available on the IARC Governance website, see [Document SC/49/7](#)). Driven by the research priorities and training mandate of the Agency, the strategy has guided the evolution of IARC Education and Training activities, towards the use of innovative e-Learning tools, close liaison of ETR with IARC research Groups for advice and coordination, as well as developing partnerships with external organizations sharing the same dedication to capacity building in order to leverage additional support to training initiatives.

48. During the reporting period, IARC continued to organize and successfully run initiatives that both stimulated research on cancer globally and contributed to developing local expertise in cancer epidemiology and prevention, particularly in LMICs.

49. In response, the SC noted that IARC courses receive very good feedback. This could be highlighted on the IARC website. IARC has also placed short videos on their website with testimonials from course participants. The SC emphasized the long-term impact of training, which eventually results in better cancer prevention and treatment.

50. The SC inquired whether IARC has investigated the possibility to collaborate with other universities to provide degrees. IARC noted that they host many PhD and Masters students from other institutes during their theses. Summer courses could be a formal component of an MSc degree but this has not been implemented yet.

51. The SC inquired whether ETR plans to establish two-way platforms to improve direct interaction with learners, in particular from LMICs.

52. The SC acknowledged that e-learning and webinars are important learning tools and that substantial achievements have been made in this area of activity. The SC encouraged the IARC to further develop such activities, and consider Continuous Professional Development certificates where feasible.

53. The SC congratulated ETR for their impressive activities.

#### **REPORT ON IARC OPEN ACCESS POLICY** (Document SC/54/5)

54. Ms Teresa Lee, Knowledge Manager, Communications Group, presented the Report.

55. 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 the Agency takes a lead role in the project (e.g. funds the research).

56. At its 57<sup>th</sup> Session, the Governing Council through its Resolution [GC/57/R11](#) approved funding support from the Governing Council Special Fund (GCSF) to cover article processing charges for open access publishing in journals up to a maximum of €50 000 per annum for three years from 2015–2017.

57. While the balance of funds approved under Resolution [GC/57/R11](#) are considered sufficient to cover 2018, additional funds will be required for 2019 onwards.

58. Efforts to keep the Agency's policy and workflows in line with WHO's policy and best practices are ongoing, with the objective of ensuring the broadest possible barrier-free access to IARC's research output.

59. The SC supported the request for funding from the GCSF to be presented to the Governing Council at its next session in May 2018 for the release of additional funds for 2019 onwards (€100 000 for two years).

## **PARALLEL SESSIONS (Document SC/54/6) AND PLENARY FEEDBACK BY RAPPORTEURS**

60. In order to engage as many Scientific Council members as possible in the discussions on cross-cutting research topics, the Director decided to replace the plenary sessions by three parallel sessions, followed by a short plenary session capturing the significant points, which are presented below:

**Topic #1: Large-scale cohort studies, including the European Prospective Investigation into Cancer and Nutrition (EPIC)** *Lead, Paul Brennan (GEP) and Support, Marc Gunter (NEP)*

61. The Rapporteur for Topic #1, Dr Christine Friedenreich, presented a summary of the topic discussed.

62. There are opportunities to enhance the central EPIC database and biobank at IARC with data and biospecimens from the 23 collaborating centres. The priority research questions, the future investment in this infrastructure, and IARC's role in leveraging collaboration across other cohorts (adult, adolescent and child) or possibly in supporting new cohorts in LMICs were discussed.

63. There were five questions/areas of advice addressed to the Scientific Council:

1. What investments would most enhance the future value of EPIC, e.g. collection of more clinical data (recurrence, treatment) or new biospecimens (perhaps in a targeted fashion) in addition to the proposal to replenish the existing biobank (see Document [SC/54/7](#))?

The Governing Council Special Fund (GCSF) would be needed to replenish the existing biobank since no other funding possibilities exist to cover the expenses for the cost. About €250 000 are needed to do this replenishment. There is strong support for this replenishment from the SC members. Other investments that are also of importance will be the collection of more clinical data (recurrence, treatment) from the EPIC cohort participants that need to be considered for the future. Presently, the cost for this clinical data collection has not yet been made, hence, this area will be needed to consider for the future. Future considerations for EPIC that are also priorities for collection will be large scale 'omics or other measurements across the whole cohort. Future funding opportunities will need to be considered for this latter work.

2. IARC has undertaken an important role in the coordination of cohort consortia, either within Europe (through the EC funded BBMRI-LPC programme) or globally (primarily through the NCI Cohort Consortium and the participation in consortia of birth cohorts). Is this an area where IARC senior scientists should continue to play a leading role, given that it will inevitably lead to a reduction in other areas of activity? What would be the priorities?

IARC has a mandate to do this type of coordination of cohort consortia because of its unique position internationally hence, the SC members are supportive of continuing this type of coordination particularly for existing cohorts.

3. To what extent should IARC focus on the coordination and development of infant and mother-child cohorts, with a particular focus on childhood cancers? Should IARC consider developing a new cohort of teenagers/young adults with a long-term perspective of following them into later adulthood for cancer outcomes?

There are numerous pragmatic concerns in developing and conducting cohort studies in children/teenagers/young adults given the long follow-up required, the small sample sizes that occur within specific exposure-disease groups, the challenges of securing long-term funding for such a cohort that make it difficult to support establishing such a cohort at this time. Existing child cohort studies should be used to answer specific research questions of interest to IARC investigators.

4. Are there particular 'omics' techniques or other tools (e.g. imaging) that are emerging and that are likely to have a major impact in exposure measurement or early detection within the next five years?

There is support to continue with the metabolomics/proteomics work that have already been initiated in EPIC. Further investments in new techniques will have to wait until the costs of these techniques will be more affordable. Machine learning/AI could be considered to improve the analysis of existing data for risk prediction analyses.

5. Are there particular cancers that IARC should focus on with respect to early detection studies? Should they be coordinated with large scale screening studies in order to identify high risk groups for screening?

Pancreatic cancers are a priority and IARC has been approached to participate in a study based at MD Anderson with the EPIC cohort (however, no collaboration was possible because the pancreatic samples held at IARC had been previously used). Other priorities are GI cancers (specifically would include gastric cancer, liver cancer, and gallbladder cancer).

Another consideration for IARC is to retain a focus on primary prevention for lifestyle and anthropometric factors (e.g. obesity) in the cohort studies. Multiple biomarkers could be considered (e.g. a focus on molecular epidemiology should be maintained).

The unique position of IARC needs to be considered in setting priorities for investment for future research. IARC is able to coordinate cohorts and has a strong history of doing so and is well respected internationally for its role in doing so.

IARC can continue to conduct collaborative research with large consortia, cohorts and screening studies. An interest and capacity exists for lung cancer screening studies at IARC that should be sustained in the future given the excellent track record of research that has already been done at IARC (e.g. LC3 consortium).

**Topic #2: Public cancer databases** *Lead, Jiri Zavadil (MMB) and Support, James McKay (GCS) and Ian Cree (WCT)*

64. The Rapporteur for Topic #2, Dr Stephen Chanock, presented a summary of the topic discussed.

65. An increasing wealth of scientific data, divided between many different databases and organizations, is transforming our understanding of cancer. There are increasing opportunities to access and conduct analyses on public cancer databases. IARC wishes to stimulate a discussion that may guide its future role in this area, and further promote its principal mission as a coordinator of international collaborative cancer research. An additional discussion is sought on the associated research opportunities and priorities for IARC drawing on such publicly available information.

66. There were four questions/areas of advice addressed to the Scientific Council:

1. Would IC3R (an IARC-coordinated effort aiming to bring together cancer research institutions from the Participating States and the Agency's broader network of partners, to create a collaboration framework termed "International Collaboration for Cancer Classification and Research" (IC3R)) fulfil an unmet need in the wider cancer research community; if so what might be the scope and which partner organizations should IARC seek out for further discussion?

The new revolution in digital capture technologies has created a remarkable opportunity to improve classification of common and rare cancers. It should be a high priority for IARC to remain central in the Blue Book programme, designed to generate consensus on classification of cancers, for both research and potential clinical and translational use. IARC should play a major role in convening experts to develop the synoptic standards based on the next set of Blue Book studies planned. The experience of how to optimally populate electronic fields will be critical to establish successful examples for future Blue Books but more importantly, future use of integrated analyses of digital material with biomarker/genomic and translational data (e.g. clinical and risk factor data).

2. Are there specific, novel research opportunities for IARC, with its unique mission, in relation to the ever growing number of public cancer databases?

The individual investigators as well as groups appear to utilize publicly available data resources effectively to generate hypotheses, investigate their validity and publish high impact research papers. In light of the international discussion on reproducibility in biomedical research, a structured approach to documentation of work conducted especially with high-density data resources should be considered in order to ensure the reproducibility of findings, both at the time of publication and at a later date when questions or additional results mandate examination of the findings. It is critical to consider internal standards for documentation that capture the quality control metrics, versions and analytical programmes used to conduct preliminary and published studies.

3. Should IARC continue to invest in its current public databases and if so what would be the most effective approach?

The SC endorses the continued support of the high-quality, closely annotated resources that are synonymous with excellence at IARC, such as the TP53 Data base and Exposome Explorer. These are highly cited by the community and advance the research mission of IARC. Future resources could be developed based on strong scientific initiative of the research community within IARC.

The SC recommends that the leadership of IARC develop a plan for a more user friendly portal that features key resources for the external community. This should include a balance between making research findings available with resources used globally – and locally – for public health purposes. Redesign of the current portal could facilitate access to outputs of IARC programmes, such as the Monographs, Blue Books, and Screening Books as well as research resources and data sharing of published summary results. The process should prioritize the resources that have important implications for dissemination of information based on strong scientific findings.

4. Recognizing that any of these initiatives would require additional resources, does the Scientific Council have suggestions as to possible donors to approach for investment?

Once the vision and plan outlined in response to #3 above are developed, it is recommended that IARC leadership approach Google, Apple, Microsoft and other large organizations that manage information, and have extensive expertise in translation of information, which could lead to wide dissemination of content with public health importance.

67. IARC could consider further how to facilitate the distribution of evidence based public health message to a wider audience potentially together with WHO. Collaborations with companies like Google may help to effectively distribute such information in different languages and forms on a global scale.

**Topic #3: World Health Assembly Resolution on Cancer (May 2017)** *Lead, Freddie Bray (CSU) and Support, Ed Seleiro (DIR Office)*

68. The Rapporteur for Topic #3, Elisabete Weiderpass Vainio, presented a summary of the topic discussed.

69. Cancer ranks as the first or second cause of premature death in almost 100 countries worldwide, and, with ongoing transitions, is set to become the single most important cause of death and the leading barrier to increasing life expectancy in most countries in this century. Such statistics have led to a global recognition of the need for high-level investment in the control of cancer alongside other major noncommunicable diseases (NCDs).

70. In May 2017, governments from around the world adopted the World Health Assembly Resolution, *Cancer prevention and control in the context of an integrated approach* ([WHA70.12](#)<sup>2</sup>). The resolution builds on the *WHO Global Action Plan for the Prevention and Control of NCDs 2013–2020* ([GAP](#)<sup>3</sup>) and the UN Sustainable Development Goals 2030 ([SDG](#)<sup>4</sup>), including SDG 3.4 that targets a reduction of premature mortality from NCDs by one-third by 2030.

71. There were three questions/areas of advice addressed to the Scientific Council:

1. What should be the main priorities for the Agency's research programme in support of the WHO cancer resolution? Are there priority areas missing from the current IARC *Medium-Term Strategy 2016–2020* ([IARC MTS](#)<sup>5</sup>)?

Since the UN high-level summit in 2011, there has been slow and uneven progress in the implementation of NCD policies and the attainment of the voluntary targets of the global action plan (GAP) and Sustainable Development Goals for NCDs.

Within the Resolution there is a recognition of the need for developing and implementing NCD plans that embed national cancer plans – this has not been done globally – this is a responsibility of WHO function that IARC can support through the provision of evidence-based research for action on cancer control.

**Four areas in the cancer resolution were identified that link to the work of IARC:**

**Surveillance**

- Ensuring that cancer registries are included in cancer control planning. Included in the Resolution and recommended to all Member States: to develop population-based cancer registries to inform cancer control planning with respect to monitoring and evaluation.
- Developing robust indicators or outcomes such as cancer survival in particular in LMICs.

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<sup>2</sup> [http://apps.who.int/gb/ebwha/pdf\\_files/WHA70/A70\\_R12-en.pdf](http://apps.who.int/gb/ebwha/pdf_files/WHA70/A70_R12-en.pdf)

<sup>3</sup> [http://apps.who.int/iris/bitstream/10665/94384/1/9789241506236\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/94384/1/9789241506236_eng.pdf?ua=1)

<sup>4</sup> <https://sustainabledevelopment.un.org>

<sup>5</sup> <http://governance.iarc.fr/MTS/index.php>

## Primary & Secondary Prevention

- Scale up IARC efforts on Primary prevention research, including behavioural research, and research on behaviour modification.
- Continue important work on vaccinations, including monitoring implementation and impact of vaccination programmes.
- Improve the monitoring of implementation-specific programmes, such as screening programmes.

## Research

- Focus on preventive interventions and monitoring of results, especially adapted to LMICs.
  - Increasing focus on costs and cost effectiveness at country level.
  - Interactive policy platforms and costing tools for the prioritization of cancer control action, costing, and budgeting at country level, including adapting them to LMICs.
  - In addition, action in regard to cancer control, determine cost of inaction at country level.
2. Given opportunities arising from the WHO cancer resolution, how should IARC liaise most effectively with WHO, other UN agencies and nongovernmental organizations?

A lot of work is already going on in response to specific requests from the cancer resolution, and IARC is working with WHO HQ on two joint projects:

- *WHO Global Report on Cancer* with focus on policy and the *IARC World Cancer Report* with focus on research/evidence base.
- Costing tool being developed with WHO, complementing the WHO ONE HEALTH tool for NCDs which is already implemented.

UICC has been instrumental in supporting in particular the *Global Report on Cancer*.

3. How should IARC seek to support countries in implementing the resolution, e.g. IARC Participating States and WHO Member States?

Engage with policy makers. IARC has little access to policy makers and to understand their 'tipping point', meaning what makes them take action. IARC could reflect on how to present the case for cancer control in a format that resonates with the priorities of policy makers.

Again, the economic and opportunity costs of taking no action in cancer control should be considered.

The interaction of all forms of disease control and broader policy action such as built environments, asbestos, pollutants including air pollution, among others, is important.

IARC may need to strengthen its capacity on implementation research, including but not limited to behaviour, and economic evaluation.

72. IARC will publish the *World Cancer Report* and WHO will publish the *Global Report on Cancer* in 2019. The IARC report is aimed primarily at academics and health professionals while the WHO report is aimed primarily at health care policy makers.

73. The Director notes that some of the cancer control opportunities are not fully reflected in the wider NCD agenda of many countries. There is an opportunity to align this in a better way for the future.

74. IARC is developing a costing tool with WHO as a means to help countries prioritize the most cost-efficient cancer control measures.

75. The SC found the parallel sessions very useful and informative. It strongly recommended that the parallel sessions be maintained in future SC sessions.

76. One suggestion for a future parallel session would be to cover IARC's research in LMICs.

### **SCIENTIFIC COUNCIL MEMBERSHIP OF THE SECTION REVIEW PANEL IN 2019**

77. The SC discussed the Section to be reviewed in 2019: Section of Evidence Synthesis and Classification (ESC), Head: Dr Kurt Straif.

78. Drs Christine Friedenreich and Eugenia Dogliotti will participate in the ESC Review Panel. It was agreed that Dr Christine Friedenreich will Chair the Review Panel.

79. The external members should be chosen by the Secretariat in consultation with the Chair of the Review Panel and the Chair of the Scientific Council.

80. The Review will take place at IARC in the days immediately preceding the 55<sup>th</sup> Scientific Council session, i.e. will take place at IARC on 28–29 January 2019.

### **REQUESTS FOR SUPPORT FROM THE GOVERNING COUNCIL SPECIAL FUND** (Document SC/54/7)

81. The Chair of the IARC Laboratory Steering Committee, Dr Augustin Scalbert, presented the request for support from the Governing Council Special Fund (GCSF).

82. A first part of the request concerns three pieces of equipment to support: a) the development of histological activities; b) the quality of genomic DNA and RNA isolated in IARC laboratories, and c) the expansion of analytical work in relation to the role of nutrition in cancer etiology.

83. A second part of the request concerns replenishment of the EPIC biobank, critical for future research activities in this major cohort.

84. The Director would like to request the Governing Council, at its 60<sup>th</sup> session in May 2018, to provide an allocation of €500 000 from the GCSF for the replenishment of the EPIC Biobank and the purchase of the following equipment:

- a) *An automated immunostainer*
- b) *An automated device for nucleic acid quality control*
- c) *An automated system for plasma phospholipid fatty acid profiling*

85. The SC sees the advantage of IARC's effort in storing and managing a subset of EPIC's samples. The SC realized that there is considerable uncertainty in the budgeting of the costs for the replenishment of the EPIC biobank. Costs for transferring the samples varied by centre depending on various factors. Thus, the SC recommended taking this uncertainty into account in the budget and actually increasing the request to the Governing Council for this budget item to €250 000, with the understanding that unspent funds will remain in the GCSF.

86. 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.

87. The SC recognized the importance of this equipment and the samples for IARC to conduct vital translational research in line with its mission. The SC strongly recommended that the Governing Council approves the allocation of €535 000 from the GCSF for the replenishment of the EPIC Biobank and for the purchase of the above-mentioned equipment.

## **SCIENTIFIC REPORT OF THE SECTION OF EARLY DETECTION AND PREVENTION (EDP) REVIEW AND DISCUSSION (Document SC/54/WP8)**

88. The Scientific Report of the EDP Review was presented by Dr Adele Green, Chair of the Review Panel.

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

90. The Review Panel noted the following concerning the EDP Section:

### **Assessment of EDP's scientific quality**

EDP's past performance: Outstanding

EDP's future plans: Outstanding to Forefront

### **Assessment of the relevance of EDP's work to the mission of IARC**

EDP's past performance: Perfect fit

EDP's future plans: Perfect fit

91. The Review Panel made the following recommendations for EDP:

- The Panel highly commends the scientific leadership and vision of Dr Herrero and the world-leading importance of EDP's work in HPV prevention and cervical cancer screening in LMICs. This is reflected in the Panel's 'Outstanding' rating for EDP's past achievements.
- The Panel also commends EDP's future plans which have high potential to deliver outstanding research outcomes in the next five years. Some risks were identified in terms of the stated broad remit of the Section across all areas of prevention. Recent efforts to diversify into very new research areas will require development of new expertise and collaborations, and should be balanced against the benefits of focusing on areas of current strength.

- Arbitrary division of EDP Section activities into SCR and PRI Groups based on history of Group Heads' independent but similar research portfolios has resulted in loss of distinction between Groups and some fragmentation of research effort and communication, potentially bringing loss of brand value. The recent change in leadership presents an opportunity to reconsider the structure of EDP. Future enhanced opportunities are expected to result from better synergies across the Section which could be achieved via structural adjustment to bring the work of the two groups together.
- The Panel therefore recommends review of the EDP Section's structure, its component Groups and their focus areas, such that there is rationalization, consolidation and strategic focus. This will help unify similar projects and capitalize on research efforts, increase efficiency, and meaningfully communicate areas of work, internally and externally.
  - An option would be to convert the Groups into subsections of EDP with Deputy Section Heads. Existing collaborations would be preserved.
  - Within the newly integrated EDP, internal exchange and collaboration would be facilitated.
- A clear process for internal Section communication and exchange should be formalized including the set-up of regular meetings, annual planning sessions or retreats to synergize resources and expertise. This should also be considered between IARC Sections working on similar topics to EDP.
- Besides the current investigator-dependent approach to scientific collaborations, gaps in research and collaborations in LMICs should be strategically identified in order to guide new collaborative links.
- There have been some missed opportunities for cost assessment and the Panel recommends adding more focus on health costings in ongoing and planned studies.
- EDP's role in the prevention of other cancers that dominate cancer-related mortality worldwide, i.e. lung and hepatocellular cancer that need educational and interventional studies (e.g. on smoking, alcohol, viral hepatitis) should be explicitly considered and stated, recognizing that finite staff and resources will limit the extent of future diversification.
- With respect to behavioural science, implementation research and health economics, EDP should extend its engagement with external experts for more efficient use of resources and for gain of skills and capacity. It is recommended that EDP strengthen its collaborations in this area, since data from many of its key studies are readily amenable to being used directly in cost-effectiveness assessment.
- Future work in cervical cancer control could more explicitly consider the combined delivery of vaccination and HPV-based screening in LMICs.

92. The Section and Group Heads thanked the Review Panel for their input.

93. In response, the Director thanked the Review Panel for their valuable work:
- The data are highly relevant for public health practice and there is strong commitment for capacity building in this Section.
  - The Director acknowledged the comments regarding the structure of the Section. It needs to be evaluated which organization maximizes the research output of the Section.
  - The Director proposed to reflect on potential important gaps in the intervention research portfolio.
  - The Director will consider establishing tumour specific discussion groups within IARC as cross-cutting theme across all Sections to further enhance transdisciplinary research within the institution.
94. The overall recommendations for the EDP Section were discussed.
95. The Section of Early Detection and Prevention (EDP) Review Panel Report was formally endorsed by the Scientific Council.

### **SCIENTIFIC REPORT OF THE SECTION OF NUTRITION AND METABOLISM (NME) REVIEW AND DISCUSSION** (Document SC/54/WP9)

96. The Scientific Report of the NME Review was presented by Dr Ellen Kampman, Chair of the Review Panel.
97. The external advisors and Scientific Council members of the Review Panel were thanked for their valuable contributions.
98. The Review Panel noted the following concerning the NME Section:

#### **Assessment of NME's scientific quality**

NME past performance: Outstanding

NME future plans: Outstanding

#### **Assessment of the relevance of NME's work to the mission of IARC**

NME Past performance: Perfect fit

NME Future plans: Perfect fit

99. The Review Panel made the following recommendations for NME:
- The Review Panel is impressed by the new organizational structure and outstanding leadership of the Section and supports the overall aims and future plans;
  - IARC should take a leadership role in directing the future of EPIC in collaboration with the EPIC Steering Committee. The Panel supports plans to centralize and harmonize follow-up data and replenish biospecimens at IARC to enhance future research opportunities. The Panel recognizes that this work will require additional IARC resources. The Panel further supports stringent criteria for access to the limited and precious bio-specimens;

- The Section is encouraged to expand leadership in coordination of international epidemiological studies;
- The Section should continue and expand their involvement in research and training projects in LMICs;
- The Panel recommends that, to the extent possible, the NME Section should be consolidated into a single location;
- As a decision was made to discontinue the responsibility for management of GLOBOdiet the Panel recommends a transparent communication on the status of transfer to another organization;
- The Panel strongly supports the continued growth of the young NMB Group and recommends the new core-funded P2/P3 level biostatistician position to be assigned to NMB.

100. The Section and Group Heads thanked the Review Panel for their input.

101. In response, the Director thanked the Review Panel for this valuable review. The degree of detail and specificity in the recommendations in both review reports are very useful.

- The Director fully agrees with the recommendation to continue work on new methodological developments and to expand leadership in coordination of international epidemiological studies.
- There are constraints with the current building, which makes it difficult to overcome the separation of the Groups.
- Recruitment of a biostatistician will be initiated.

102. The overall recommendations for the NME Section were discussed.

103. The Section of Nutrition and Metabolism (NME) Review Panel Report was formally endorsed by the Scientific Council.

## **ELECTION OF CHAIRPERSON AND VICE-CHAIRPERSON FOR THE 55<sup>TH</sup> SESSION OF THE SCIENTIFIC COUNCIL IN 2019**

104. Dr Giske Ursin was elected Chairperson.

105. Dr Jerome Coffey was elected Vice-Chairperson.

## **DATE OF NEXT SESSION**

106. Wednesday 30, Thursday 31 January and Friday 1 February 2019. The ESC Review Panel will take place on Monday 28 and Tuesday 29 January 2019.

**ADOPTION OF THE SCIENTIFIC COUNCIL REPORT** (Document SC/54/8)

107. **The report of the Fifty-fourth Session of the Scientific Council was adopted.**

**CLOSURE OF THE SESSION**

108. The customary expressions of thanks were exchanged.

109. Dr Wild thanked the outgoing members of the Scientific Council, Drs Stephen J. Chanock (USA), Ellen Kampman (The Netherlands), Ole Raaschou-Nielsen (Denmark), Martin Rösli (Switzerland) and Elisabete Weiderpass-Vainio (Finland).

**ANNEX 1**

<b>ACRONYM</b>	<b>SECTION / GROUP</b>	<b>SECTION / GROUP HEAD</b>
<b>CSU</b>	<b>Section of CANCER SURVEILLANCE</b>	Dr F. Bray Deputy: Dr I. Soerjomataram
<b>EDP</b>	<b>Section of EARLY DETECTION AND PREVENTION</b>	<b>Dr R. Herrero</b>
<b>PRI</b>	Prevention and Implementation Group	Dr M. Almonte
<b>SCR</b>	Screening Group	Dr P. Basu
<b>ENV</b>	<b>Section of ENVIRONMENT AND RADIATION</b>	<b>Dr J. Schüz</b>
<b>ESC</b>	<b>Section of EVIDENCE SYNTHESIS AND CLASSIFICATION</b>	<b>Dr K. Straif</b>
<b>IHB</b>	IARC Handbooks Group	Dr B. Lauby-Secretan
<b>IMO</b>	IARC Monographs Group	TBA
<b>WCT</b>	WHO/IARC Classification of Tumours Group	Dr I. Cree
<b>GEN</b>	<b>Section of GENETICS</b>	<b>Dr P. Brennan</b>
<b>GCS</b>	Genetic Cancer Susceptibility Group	Dr J. McKay
<b>GEP</b>	Genetic Epidemiology Group	Dr P. Brennan
<b>INF</b>	<b>Section of INFECTIONS</b>	<b>Dr M. Tommasino</b>
<b>ICB</b>	Infections and Cancer Biology Group	Dr M. Tommasino
<b>ICE</b>	Infections and Cancer Epidemiology Group	Dr G. Clifford, Acting
<b>MCA</b>	<b>Section of MECHANISMS OF CARCINOGENESIS</b>	<b>Dr Z. Herceg</b>
<b>EGE</b>	Epigenetics Group	Dr Z. Herceg
<b>MMB</b>	Molecular Mechanisms and Biomarkers Group	Dr J. Zavadil
<b>NME</b>	<b>Section of NUTRITION AND METABOLISM</b>	<b>Dr M. Gunter</b>
<b>BMA</b>	Biomarkers Group	Dr A. Scalbert
<b>NEP</b>	Nutritional Epidemiology Group	Dr M. Gunter
<b>NMB</b>	Nutritional Methodology and Biostatistics	Dr P. Ferrari
<b>DIR</b>	<b>Office of the Director</b>	<b>Dr C.P. Wild (Director)</b>
<b>COM</b>	Communications Group	Dr N. Gaudin
<b>ETR</b>	Education and Training Group	Ms A. Berger
<b>GHIS</b>	The Gambia Hepatitis Intervention Study	Dr R. Njie (Banjul)
<b>LSB</b>	Laboratory Services and Biobank Group	Dr J. Zavadil, Acting
<b>SSR</b>	<b>Section of Support to Research</b>	<b>Mr T. Landesz (DAF)</b>
<b>ASO</b>	Administrative Services Office	Ms E. Françon
<b>BFO</b>	Budget and Finance Office	Ms A. Santhiprechachit
<b>HRO</b>	Human Resources Office	Ms D. D'Amico
<b>ITS</b>	Information Technology Services	Mr F. Lozano

## 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 Scientific Council members and include:

- Research support from pharmaceutical or private 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.

<b>Scientific Council member</b>	<b>Disclosure statement</b>
Jonas Bergh	Reports that his unit at Karolinska Institute or Karolinska University Hospital, benefits from research funding from Amgen, Astra-Zeneca, Bayer, Merck, Pfizer, Roche, and Sanofi-Aventis, and receiving honoraria from UptoDate® to Asklepios Medical.
Pilar Sánchez Gómez	Reports that her unit at Instituto de Salud Carlos III benefits from research funding from Catalysis, IDP Pharma, Pfizer and Servier-Vernalis.
Giske Ursin	Reports that her Institution, Cancer Registry of Norway, benefits from research funding from Merck/MSD.
Elisabete Weiderpass Vainio	Reports that her Institution, Cancer Registry of Norway, benefits from research funding from Merck/MSD.