International Agency for Research on Cancer



Governing Council Fifty-sixth Session

GC/56/16A 19/02/2014

Lyon, 15–16 May 2014 Auditorium

REQUEST FOR USE OF FUNDS FROM THE GOVERNING COUNCIL SPECIAL FUND: A. SCIENTIFIC EQUIPMENT

- 1. The Agency takes an inter-disciplinary approach to its research, permitting knowledge and tools from studies on carcinogenic mechanisms to be innovatively applied to epidemiological investigations of the causes and prevention of cancer, as described in the IARC Medium-Term Strategy (2010–2015). The IARC Laboratory Steering Committee monitors the key items of scientific equipment for renewal and new investment and provides recommendations to the Director based on priorities across the Agency's research groups.
- 2. Using the regular budget to fund major equipment items would detract from financing the on-going research projects of the Agency, whilst obtaining funds for major equipment through competitive grant applications is difficult given the restricted sources of extra-budgetary channels open to Agency scientists.
- 3. The items included in this request, a bench-top next-generation sequencer and a tandem mass spectrometer, are to support the development of the recently established metabolomic activities and to build on the success following the recent investment in DNA sequencing.
- 4. It is notable that the Scientific Council previously advised the Director and the Governing Council of the need to plan additional investment in sequencing equipment to maintain the ability of the organization to take advantage of its many research opportunities (see previous Scientific Council reports documents SC/46/11 (2010) and SC/48/10 (2012)). A new mass spectrometer is also needed to analyse the increasing number of samples obtained from large cohorts.
- 5. These new equipment items will provide shared resources for use in collaborative and interdisciplinary projects involving several research groups across the Agency. It is notable that the recent investment by the Governing Council in metabolomics and sequencing capacity has resulted in some major research awards. Specifically, for the Biomarkers Group (BMA) three large European Framework Programme 7 projects have been awarded to study associations between the exposome and cancer risk (EU-FP7 NutriTech, EU-FP7 EXPOSOMICS, EU-FP7 TRANSCAN CRC-Metabolome) in addition to grants from the World Cancer Research Fund and the French National Cancer Institute with a total value of €2 500 000. In the area of genetics and DNA sequencing the Genetic Cancer Susceptibility Group (GCS) attracted funding from the US National Cancer Institute (three grants) and the French National Cancer Institute (INCa), for a total value of around US\$ 1 340 000. In the case of metabolomics the above grant awards have provided around 25% of the funding needed for the proposed new mass spectrometer.

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Governing Council GCSF Request: A. Scientific equipment

- 6. The annual maintenance costs of the requested equipment will be covered by the regular budget as well as by collaborative programmes through grant applications.
- 7. The Scientific Council was requested to advise the Director and the Governing Council on the proposed request to use funds from the Governing Council Special Fund to purchase the scientific equipment listed below, for a total amount of 353 000€:
 - a) Bench-top next-generation sequencer of medium capacity; and
 - b) Tandem mass spectrometer coupled to Ultra Performance Liquid Chromatography.

Requested budget

	Quantity	Cost (€)	Annual maintenance cost (€)
Bench-top next-generation sequencer	1	110 000 ¹	16 000
of medium capacity			
Tandem mass spectrometer	1	243 000 ²	39 000
coupled to UPLC			
Total		353 000	

¹ This estimate includes installation costs.

- 8. The Scientific Council noted that maintenance costs can be considerable, often exceeding the purchase costs over the lifetime of the equipment, and asked how maintenance costs would be financed. Dr Scalbert confirmed that maintenance costs are, indeed, considerable and are usually covered through research grants.
- 9. The Scientific Council commended the plan for sharing equipment between many Sections, acknowledged the importance of obtaining the equipment in a timely manner and expressed the importance of investing in new cutting-edge equipment to maintain IARC's leading scientific role.
- 10. The Scientific Council considered these items and recommended that the Governing Council approves the above-mentioned purchase of scientific equipment.
- 11. The Governing Council is requested to approve the use of €353 000 from the Governing Council Special Fund.

² Seventy thousand euros of the full cost (313 000€) will be covered by the Biomarkers Group (BMA) resources.