## International Agency for Research on Cancer



Governing Council Fifty-seventh Session GC/57/11A 19/02/2015

Lyon, 13–14 May 2015 Auditorium

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

1. An inter-disciplinary research approach is embedded within the IARC Medium-Term Strategy, with close integration of laboratory sciences, biostatistics, bioinformatics and epidemiology. This strategy requires high quality laboratories and availability of core items of scientific equipment. In addition, the Medium-Term Strategy foresees cooperation with outside partners for items of equipment where major in-house investment is not required or justified.

2. Most recent acquisitions were robots for automated liquid sample handling that are used to process samples analysed on the centralized platforms (e.g. next generation sequencing (NGS), mass spectrometry, Luminex for the detection of multiple infectious agents). This investment has significantly reduced labour costs when analysing large series of samples in molecular epidemiology projects.

3. Beyond the acquisition of such larger items of equipment, additional instruments are needed for analysing low volume samples and high throughput analyses. These include a DNA extractor for low volume samples, a highly sensitive plate reader for measuring cytokines and inflammatory factors in small volume samples, a vacuum concentrator to process a growing number of samples for metabolomic analyses, three high-throughput PCR thermal cyclers to satisfy the increasing PCR analysis demand, and a medium throughput digital droplet PCR system to enable absolute quantification of nucleic acids.

4. Covering the cost of this equipment on the regular budget has not been feasible in recent years and obtaining funds through competitive grant applications is difficult given the limited number of such opportunities open to the Agency as an international organization. At the same time the Agency has developed a five-year plan to replace smaller items of equipment used across different research groups and will finance this from the regular budget provision.

5. 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 €496 570:

## a) Equipment for the DNA extraction platform

- b) Plate reader
- c) Vacuum concentrator
- d) Thermal cyclers and real-time PCR systems

	Quantity	Approximate price (€)	Total price (€)
a) DNA extraction platform			
Nucleic acid small volume extractor	1	101 470	101 470
96-channel pipetting head	1	59 000	59 000
b) ELISA Plate reader	1	50 000	50 000
c) Vacuum concentrator	1	50 000	50 000
d) PCR platform			
Modular high-throughput thermal cycler	3	28 960	86 880
Real Time detection system	3	22 000	66 000
Digital droplet PCR	1	83 220	83 220
Total equipment			496 570

## **Requested budget**

6. The Scientific Council 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.

7. The Scientific Council observed that this request relates to basic pieces of equipment and unequivocally recommends that the Governing Council approves the above-mentioned purchase of scientific equipment. The mission of IARC means that high numbers of samples from multiple countries require to be analysed and this equipment is core to the work.

8. The Governing Council is requested to approve at its 57<sup>th</sup> Session in May 2015 the use of €496 570 from the Governing Council Special Fund.