

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

1. In line with the IARC Medium-Term Strategy and Implementation Plan for 2010–2014 (see document GC/52/6), which highlighted the paramount importance of performing interdisciplinary research, efforts have been made in the last two to three years to reinforce the interaction between laboratory-based and epidemiology research.
2. The establishment of the next-generation sequencing and HPLC/MS/MS platforms were completed in 2011. These platforms will considerably contribute to the centralized laboratory facilities. In 2011 the Agency was able to invest further in essential core laboratory items as follows: liquid/DNA aliquoting robotic apparatus, robotics to automatically perform solid phase extraction, real-time PCR detection system, DNA-quantification system, a high performance sonicator and an automated ELISA plate reader and washer.
3. This investment thus allowed establishment of several laboratory facilities, housed in different Sections but available to all Agency scientists. This equipment has contributed to the development of a large number of novel IARC research programmes on biomarkers, genetics, mechanisms of carcinogenesis and infections.
4. To complement these investments, additional support is required to improve and upgrade the nucleic acid extraction facilities and to acquire a digital slide scanner. DNA extractors are required to face an increasing demand for high-quality DNA and RNA from validated tumour material in large-scale studies, including samples shipped to collaborators, and to replace existing equipment that will become obsolete at the end of 2012. The digital scanner is required for pathology confirmation of tumour material and to follow standard protocols in large-scale international projects. The requirement to strengthen the pathology components of IARC research projects was highlighted by the peer-review of the Section of Genetics in 2010.
5. Consistent with the strategy pursued over the last two to three years, the items included in this request are intended to be used primarily as shared resources, rather than specific to the activities of one or two research Groups. The request for the purchase of the scientific equipment listed below was supported by the Scientific Council in February 2012 (see document SC/48/12 for more information about each equipment item and its purpose):
  - a) DNA extractor (QIAGEN) and equipment for DNA QC (electrophoresis and gel documentation system and volume inspection system);
  - b) EZ1 Advanced XL (QIAGEN);

- c) Digital slide scanner (several types from at least three different companies will be tested before a decision is taken).

6. As stated in paragraph 67 of the Scientific Council Report on its 48<sup>th</sup> Session (see document GC/54/4): "In preparing the request to the Governing Council the Director should also assess the adequacy of current computer storage capacity for the digital slide scanner, and include additional requirements accordingly". It has been evaluated that a capacity of 36 Tb would be needed for storage of the data that will be generated during the first three years of operation. The approximate price for this storage capacity is €30 000. The Governing Council is therefore requested to approve the use of an additional €30 000 from the Governing Council Special Fund.

7. Since preparation of the Scientific Council document (SC/48/12) the Agency has updated the quotes from potential suppliers of this equipment. As a result the original estimate to the Scientific Council, for €494 000 has been reduced to €451 000, which with the additional €30 000 for computing requirements, results in a total request of €481 000. Therefore the Governing Council is requested to approve the use of €481 000 from the Governing Council Special Fund.

#### Requested budget

	<b>Approximate price (€)</b>
Autopure DNA extractor	194 000
Electrophoresis and gel documentation system & DNA volume inspection system	35 000
EZ1 Advanced XL DNA/RNA extractor	50 000
Digital slide scanner	172 000
Computing capacity	30 000
<b>Total</b>	<b>481 000</b>