International Agency for Research on Cancer

World Health Organization

Lyon, 16–17 May 2013
Auditorium

REQUEST FOR USE OF FUNDS FROM THE GOVERNING COUNCIL SPECIAL FUND: F. SUPPORT FOR HIGH PERFORMANCE COMPUTING CAPACITY

1.   The Secretariat has taken note of advice received regarding IARC's computing capacity during the 48th and 49th sessions of the Scientific Council and the Section Reviews that took place in January 2012 and 2013. These forums highlighted that informatics and bioinformatics have become key components of modern scientific research techniques and to remain relevant IARC needs to maintain appropriate levels of investment as it has been doing in relation to the laboratory technology. Accordingly, the Secretariat has sought to consolidate the scientific information technology (IT) requirements across the Agency and put in place a coordination structure to facilitate continuous follow-up of on-going projects and to determine upcoming requirements and related opportunities.

2.   As a first step, the Secretariat recently used its Programme Support Costs, regular budget and other funds to make considerable investments in IT infrastructure related to scientific activities, laying the foundation for modular upgrade in storage space and processing speed, including:

- €60 000 towards complete replacement of the LAN Network;
- €140 000 for complete replacement of Storage Area Network by modular, expandable system, to host both administrative and scientific data;
- €87 000 for a small High Performance Computing cluster (HPC), principally used for next generation sequencing;
- €15 000 for on-demand private cloud computing named Snow White, used for high performance computing workstations.

3.   As a second step the HPC working group was put in place in order to determine the optimum IT environment to facilitate cutting edge research at IARC. In reviewing current needs and projected short-term needs of IARC scientific groups, the following immediate requirements were identified:

- Addition of 150 TB of data storage to the recently purchased data storage facility:
  - Estimated cost: €75 000

- Expansion of the processing power of the HPC cluster (an approximate doubling of the processing power):
  - o   Estimated cost: €45 000
- Expansion of IARC's on-demand high performance computing (Snow White):
  - o   Estimated cost: €30 000

4.   Accordingly, the Governing Council is requested to approve the use of up to €150 000 from the Governing Council Special Fund for the provision of increased storage and processing speed for the benefit of the Agency's scientific activities.

5.   The requested funds will be used for the modular upgrade of existing IT systems rather than purchase of new systems. In each case the systems remain modular, with further expansions of the IT scientific infrastructure envisaged through project specific extra-budgetary support.

6.   The informatics support needed for the operation of this expanded infrastructure will be provided by existing IARC staff from the concerned scientific and administrative groups, particularly Information Technology Services (ITS) and Genetic Cancer Susceptibility (GCS). The HPC working group will monitor progress on this project reporting to the Director and the Director of Administration and Finance.