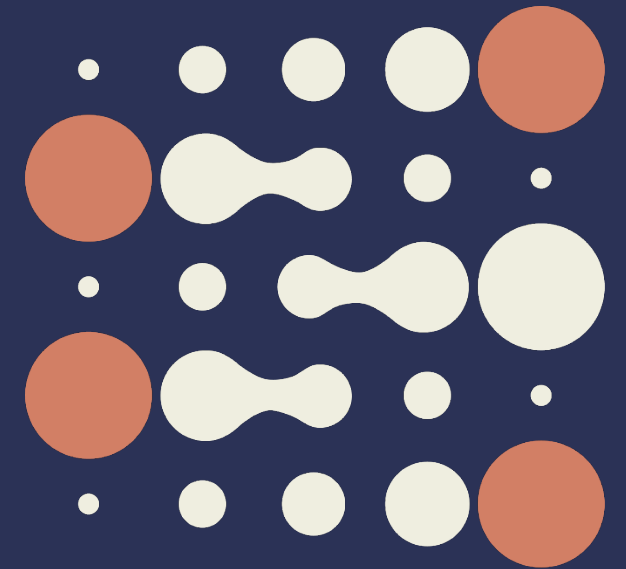


Director's response to the Genomic Epidemiology (GEM) Branch Review

Dr Elisabete Weiderpass

*Scientific Council, Lyon 9–11 February 2022,
by Web conference*

International Agency
for Research on Cancer



Review Panel's comment

The RP recommends continued support of GEM at the highest level over the next five years for their proposed comprehensive research programme, training and capacity building, which is critical to the IARC Medium-Term strategy. GEM research is cutting edge, attracts extensive extramural support, and ranges from molecular approaches to understand cancer incidence and causes of cancer to early detection.

Response:

- Supportive comment. No response required.

Review Panel's comment

The RP fully supports the consolidation of GEP and GCS into GEM, which should further accelerate integration and computational and experimental synergies across research projects and approaches, and further strengthen the competitiveness of GEM.

Response:

- Supportive comment. No response required.

Review Panel's comment

GEM should continue to focus their research strategy on addressing understudied cancers and populations, particularly in LMICs, and expand further as funding opportunities make it feasible, with a high priority for research in African populations. GEM is well positioned to lead on new discoveries engendered by integrating germline genomics with tumour genomics and other omics in the context of epidemiologic and clinical factors and in diverse populations.

Response:

- Expansion of GEM projects to African populations has been initiated in 2021:
 - In particular, new Breast cancer initiatives in Kenya, Ghana, Morocco, Lebanon, Thailand and Mexico (BRiDGE),
 - Head and Neck cancer studies in Pakistan and Latin America,
 - As well as ongoing studies of Nasopharyngeal cancer in South East Asia.

Review Panel's comment

It will be important to carefully manage the impact of grant funding in relation to professional, technical and administrative staffing and infrastructure needed to support the projects. Project management for large and complex projects should be developed.

Response:

- Project management is a critical issue for GEM, the Branch model has allowed us to consolidate project management across two groups, as well as re-orientation / training of some staff members towards these duties.
- We also work with our collaborators to ensure that project management spreads within the large consortia in which GEM operates.

Review Panel's comment

For GEM (and other IARC Branches) to stay competitive, it will be critical to bring in new staff (as slots become available) with expertise in high dimensional analysis (e.g. biostatistics, bioinformatics, and data science) as well as develop other approaches to engage this expertise (e.g. visiting programmes, workshops, conferences, university affiliations).

Response:

- This is appreciated.
- Bring in new staff with expertise in high dimensional analysis will be considered for the next biennium 2024–2025.

Review Panel's comment

Maintaining infrastructure critical to GEM and many other IARC Branches, including HPC/IT, biorepositories, pathology, and novel omics technologies is needed, while outsourcing other laboratory work as appropriate (e.g. large scale sequencing).

Response:

- Assessment of IARC's needs (including GEM) across these areas is ongoing, particularly as IARC adapts to the Nouveau Centre and the Pillar/Branch management models.
- IARC has committed to additional scientific IT infrastructure and staff in the immediate future and is planning how best to consolidate the Nouveau Centre laboratories structures (including pathology, 'omics, and sequencing).
- Moving forward, we will continue to leverage our strengths in international collaboration, the unique biorepository, and increase our capacity in bioinformatics.
- Collaboration with large national laboratories will remain key for high throughput large scale omics.

Thank you

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