Minutes of the 7th Executive Committee meeting

3 February 2014
EXECUTIVE SUMMARY

The Executive Committee (Exec Com) of the International Rare Diseases Research Consortium (IRDiRC) met on 3 February 2014 by teleconference. The seventh meeting of the Exec Com brought together 34 participants including 24 Exec Com members and representatives of the 3 Scientific Committees (Sci Com).

The application of the French Foundation for Rare disease (Fondation maladies rares) to become an IRDiRC member was approved by the Executive Committee.

The procedure to renew or not renew Sci Com members at the end of their first term was discussed and approved by the Exec Com. Following this step, the mandate of two members of the Interdisciplinary Sci Com and three members of the Therapies Sci Com was renewed for an additional 3 years whereas a call for nomination was launched to integrate two new members to the Diagnostics Sci Com.

The chair of the Diagnostics Sci Com presented the 3-year roadmap of this committee. The roadmap summarizes the tools and standards to be delivered by the Working Groups (WG) to help reaching the 2 main goals of the Diagnostics Sci com:

- Understand the mechanism of most RD by 2020.
- Enable the clinical translation of genomic sequencing for patients with RDs.

A communication strategy is also integrated in the roadmap, which was commented by the Exec Com. It was agreed that the three Sci Com will present a common roadmap to the Exec Com in the near future.

Both the Therapies Sci Com and Interdisciplinary Sci Com presented an update on their recent activities and their plan for the next steps.

The organization of the IRDiRC conference to be held in Shenzhen, China, on 7-9 November 2014, hosted by BGI, is underway. Three committees were established (Scientific Committee, International Organizing Committee and Local Organizing Committee). It was decided to couple the next face-to-face meeting of the Exec Com to the IRDiRC conference in Shenzhen in November.

The Exec Com discussed the proposal to implement an annual membership fee based on voluntary participation to establish a funding pot to support travel of patient organization to attend Exec Com face-to-face meetings, outreach activities, etc. and it was agreed to modify the proposal to integrate a mixed model of annual membership and participation in-kind as the annual membership fee is impossible to implement for some member organizations. The proposal will receive further discussion.
A generic letter of intent addressing the issues specific to the private sector when joining the consortium, such as intellectual property, data sharing, etc. was approved by the Exec Com. IRDiRC members are welcomed to amend their original letter of intent if they wish to do so.
New application of membership

The application of the French Foundation for Rare disease (Fondation maladies rares) to become an IRDiRC member was approved by the Executive Committee.

Composition of Scientific Committees

Problems raised by the nomination of potential Sci Com members by new IRDiRC members

The optimal maximum size of Sci Com should be considered when reviewing the nomination of potentials Sci Com members by new IRDiRC members. Optimal maximum size for functional and budgetary reasons is around 15. Moreover, about ten members do not have Sci Com representatives.

Current situation:

- Diagnostics Sci Com: 12 members
- Interdisciplinary Sci Com: 11 members
- Therapies Sci Com: 16 members

It was proposed to review the commitment of Therapies Sci Com members at their next meeting in March to determine if this committee needs more members. In the meantime, any nomination for the Therapies Sci Com will be adjourned or transfer to another Sci Com with the agreement of the member organization nominating the potential member.

Approval of the nominations of members for the Therapies Scientific Committee

The nomination of 2 new members of the Therapies Sci Com was approved by the Exec Com for a 3-year mandate:

- Dr Seng Cheng, nominated by Genzyme.
- Dr Anne Zacijek, nominated by the National Institute of Child Health and Human development, NIH (in replacement of Melissa Parisi).

Procedure to renew or not renew Sci Com members at the end of their term

The following procedure to renew or not renew Sci Com members at the end of their first term was approved by the Exec Com:

- Step 1: consult the chair of the Sci Com to inquire if he/she wishes the renewal of the member
- Step 2: ask the member if he/she wishes to stay on the Sci Com
- Step 3:
For renewal (agreed by the Sci Com chair and the Sci Com member): approval by the Exec Com, if the number of Sci Com members does not exceed the optimal maximum size.

For replacement: a call for nomination is sent to the Exec Com members. The chair of the Sci Com can suggest a profile for the new member.

The composition of the Sci Com should have a geographically balanced representation and should also include the necessary expertise. The chairs of the Sci Com can propose nomination for a new member if they consider that the expertise of this candidate is essential to the Sci Com. The nomination will have to be approved by the Exec Com.

Renewal/replacement for 2014

At the request of the chairs of the Sci Com, the mandate of 5 members was renewed for an additional 3 years by the Exec Com:

- Prof Jamel Chelly, Interdisciplinary Scientific Committee
- Prof Rumen Stefanov, Interdisciplinary Scientific Committee
- Dr Giles Campion, Therapies Scientific Committee
- Dr Elizabeth McNeil, Therapies Scientific Committee
- Dr Glen Nuckolls, Therapies Scientific Committee

The chair of the Diagnostics Sci Com wishes to integrate 2 new members in the committee in replacement of 3 members leaving due to end of mandate or retirement. The following expertise would be useful for this Sci Com:

- Clinical translation of genomic sequencing expertise
- Informatics expertise

Priority will be given to the nominations by IRDiRC members who did not yet nominated a Sci Com member. Nominations should be sent to the Scientific Secretariat.

Recommendations from the Diagnostics Scientific Committee to the Executive Committee

The Diagnostics Sci Com met in Prague on 3 December 2013 to prepare a roadmap for the next 3 years (until the end of 2016), to ensure that the short-term plans are well defined before envisioning the long-term (2017-2020). The two main aims of the Diagnostics Sci Com to help IRDiRC reach its goals are:

- Understand the mechanism of most RD by 2020
- Enable the clinical translation of genomic sequencing for patients with RDs.
For this purpose, it will be necessary in the short-term to facilitate data coordination to resolve unsolved exomes and genomes and to develop tools for variants prioritization for gene discovery. In the longer-term, it will be necessary to develop new technologies to solve non-coding mutations and to discover ways to understand more complicated mechanisms.

The roadmap for the next 3 years (2014-2016) includes standards and tools to be delivered by WGs as well as editorials and other communication. Towards the end of 2016, four of the WGs should collapse into one WG on Genome/Phenome and become active with the Global Alliance for Genomics and Health.

Summary of tools and standard to be provided by the WGs and comments from Exec Com

WG on Ontologies and Rare Diseases prioritization

- Disease prioritization: focus in the short-term should be on the rare diseases that are most tractable for gene discovery.
- Standards: List of human ontologies supported by IRDiRC - 2014.
- Standards: Minimal set of phenotype terminology that are mapped across ontologies preferred by IRDiRC - 2014.
- Standards: Model organism ontologies - 2016.

WG on Genome/Phenome

- Tools: Collaborative platform Matchmaker to communicate between data sets (Matchmaker 1.0 - fall 2014 and Matchmaker Pro - 2015-2016).
- Standards: List of databases to use for data deposition and that can be connected by Matchmaker and to be available on IRDiRC website – mid 2014.
- Matchmaker project will need resources for a sustainable infrastructure (hundreds of thousands – million USD).
- In the long-term, it is important to develop a link between genotype and phenotype.
- WG on Data sharing and bioinformatics (Interdisciplinary Sci Com) should interact with this WG for the Matchmaker project.

WG on Sequencing

- Tools: Clinical NGS -2016 (enable tools for clinical translation).
- The use of data obtained from NGS in pharmacogenomics would help to reach IRDiRC goals. This topic would depend on both the Diagnostics Sci Com and Therapies Sci Com.

WG on Model Systems

- This WG should be shared between the Diagnostics Sci Com and the Therapies Sci Com.
- Tools: Summary of available functional assay resources to provide evidence for causality.
- Mandate of the WG:
  - Educate scientific and model organism communities
  - Catalyse connections between model community and RD researchers
To secure generation of resources and methodologies that facilitate model impact in rare diseases

**WG on Control Population Variant data sets (to be created, 1-year mandate)**

- Tools: Aggregation of variant frequency data from specific populations
- Standards for data collection; from 50 exomes
- Available to international community via IRDiRC

**Dissemination – series of commentaries/statements**

- How many genes are there left to find?
- Clinical interpretation of variants.
- Solving the unsolvable: forward thinking.
- Series of commentaries to introduce IRDiRC and the progress of the Diagnostics Sci Com and its WGs (Diseases ontologies, Phenotype Ontologies, Databases, Matchmaker, etc.).

**Capture of progress (metrics to track progress)**

- No. of new causative genes discovered
- No. of new phenotypes discovered associated with a known disease gene
- No. of diseases with available test

The chair of the Sci Com agreed on the suggestion of adding a member of the International Human Epigenome Consortium (IHEC) as the expertise would be useful.

**Update from the Therapies Scientific Committee**

The chair of the Therapies Sci Com changed in October 2013. Since then, the four WGs met once or twice through teleconference and already provided some input to the Sci Com. The Sci Com also had a teleconference on January 24th to discuss the first WGs’ input and the next steps:

- Synthesis of requests of all WGs to be collected and categorized as (in collaboration with the Scientific Secretariat)
  - Already achieved
  - Feasible
  - Not feasible but needing more review and assessment to recommend funding or not
- A first draft of the recommendations will be written on February 20th by a few members of the Sci Com. The document will be based on previous Therapies Sci Com input, WGs input, Interdisciplinary Sci Com and Diagnostics Sci Com recommendations and the recommendations to come out of the Dublin meeting April 2013.
- The drafted recommendations will be discussed and refined at the next Therapies Sci Com to be held on 19 March 2014 in Paris.
- The recommendations will be presented to the Exec Com at their next meeting.
The Therapies Sci Com approach is to focus on very limited number of recommendations to enable optimal ‘appropriation’ by funding bodies.

Update from the Interdisciplinary Scientific Committee

The Interdisciplinary Sci Com:

- Will meet by teleconference on Feb 13 to discuss the mandate of the WGs.
- Will provide the two other Sci Com with comments on their roadmaps.
- Will interact with the Global Alliance for Genomics and Health through the implication of their Sci Com and WGs members (membership of organization, projects, etc.) in a similar way to Diagnostics Sci Com.

Update on the IRDiRC conference in Shenzhen, November 2014

There is an agreement with BGI to organize a conference on 7-9 November with two days of international conference and one day of satellite events for the local participants. BGI is taking the financial risks and is organizing the event. IRDiRC is responsible for the scientific content and for the invitation and registration of international participants, whereas BGI will register the Chinese participants.

3 Committees were established:

- The Scientific Committee: in charge of establishing the content of the scientific session and proposing the invited speakers.
- The International Organizing Committee: in charge of establishing the format of the Conference, of the poster sessions and of the exhibition, of developing the conference website and the registration system in English.
- The Local Organizing Committee: in charge of organizing the event and managing it.

Organizers expect 800 participants. It will be a good event with numerous Asian participants. The next step is to draft the scientific program. An invitation to all IRDiRC funded projects will be sent but there will be no possibility to support travel for all of them.

It was agreed to schedule a face-to-face meeting of the Exec Com in Shenzhen in November (with possibly an online conference). Members of the Exec Com are encouraged to attend the IRDiRC conference and to participate as speaker or chairperson. However, members of Exec Com should cover their expenses even if invited as speaker.
Proposal for an optional membership fee

The chair of the Exec Com proposed the implementation of an annual membership fee based on voluntary participation to establish a funding pot to support travel of patient organizations to attend Exec Com face-to-face meetings, outreach activities, travel expenses for observers or guests that the Exec Com may decide to invite to one of its meetings, cost of hosting Exec Com meetings, etc. The account will be administered by the Scientific Secretariat, independently of the Support-IRDiRC funding.

It appears from the discussion that the Exec Com members wish a mixed model of annual membership and participation in kind (hosting Exec Com meeting, support for certain meeting, etc.) as the annual membership fee is impossible to implement for some member organizations, in particular as IRDiRC has no legal entity. The proposal will be revised accordingly by the Scientific Secretariat.

Approval of the ‘letter of intent’ for industry

A new ‘letter of intent’ template was drafted to address the concern of organizations from the private sector regarding the intellectual property, data sharing, etc. The Exec Com approved this new version that will become the only official ‘letter of intent’ template to join IRDiRC.

All IRDiRC members are welcomed to amend their original letter of intent if they wish to do so.

Agenda of the Executive Committee face-to-face meeting in Berlin

The discussion of this agenda item was postponed to the next Exec Com teleconference to be scheduled in April.
Annex - List of participants

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<tr>
<th>Members</th>
<th>Representative</th>
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<tr>
<td>Western Australian Department of Health, Australia</td>
<td>Hugh Dawkins</td>
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<td>IRDiRC Chair Executive Committee, Canadian Institutes of Health Research, Canada</td>
<td>Paul Lasko</td>
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<td>Genome Canada, Canada</td>
<td>Pierre Meulien</td>
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<td>E-RARE-2 (E-Rare Group of Funders), Europe</td>
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<td>European Commission, (DG Research and Innovation), EU</td>
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<td>Academy of Finland, Finland</td>
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<td>ANR- French National Research Agency, France</td>
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<td>AFM- French Association against Myopathies, France</td>
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<td>Lysogene, France</td>
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<td><strong>Scientific Committees</strong></td>
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<td>Diagnostic Sci Com</td>
<td>Kym Boycott</td>
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<td>Office of Rare Diseases, USA</td>
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