

IMPC Governance and Coordination

The IMPC is a confederation of international mouse phenotyping projects working towards the agreed goals of the consortium: To undertake the phenotyping of 20,000 mouse mutants over a ten year period, providing the first functional annotation of a mammalian genome.

The IMPC Steering Committee provides the governance for the overall consortium. Participants are tasked with making key strategic decisions including selection of participating organizations, approving and coordinating key operational decisions such as phenotyping platforms and pipeline used, quality assurance and operating standards, and IT organization. Membership provides stakeholders with an opportunity to influence key activities as they develop.

Definitions

In this governance document, the following words or phrases shall have the meanings given to them:

"Institutions"	Research centers involved in mouse production and phenotyping and archiving and distribution.
"Funders"	Organizations funding research centers
"Members"	The "Institutions" and "Funders" that are IMPC members; fulfill the membership criteria and have paid the set membership fee. Where entities have joined together to pay the membership fee, they will be considered as one member.
"Steering Committee"	The representatives of the members with responsibility for developing and implementing the goals of the IMPC and reviewing progress against the agreed deliverables and milestones. Members of the Steering Committee as of March 2012 are listed in Appendix A.
"Steering Group Meetings"	Meetings held in person or by teleconference

Objectives

The purpose of the IMPC is to enhance the cooperation between the Parties to promote the goals of the IMPC, which are to:

- Establish a world-wide consortium of institutions with capacity and expertise for large-scale primary phenotyping for 20,000 known and predicted mouse genes;
- Establish a world-wide consortium of institutions with capacity and expertise to produce germ line transmission of targeted knockout mutations in embryonic stem cells for 20,000 known and predicted mouse genes;
- Test each mutant mouse line through a broad based primary phenotyping pipeline in all the major adult organ systems and most areas of major human disease;
- Through this activity and employing data annotation tools, systematically aim to discover and ascribe biological function to each gene, driving new ideas and underpinning future research into biological systems;
- Establish collaborative "networks" with specialist phenotyping consortia or laboratories, providing standardized secondary level phenotyping that enriches the primary dataset, and end-user, project specific tertiary level phenotyping that adds value to the mammalian gene functional annotation and fosters hypothesis driven research; and
- Provide a centralized data centre and portal for free, unrestricted access to primary and secondary data by the scientific community, promoting sharing of data, genotype-phenotype annotation, standard operating protocols, and the development of open source data analysis tools.
- Members of the IMPC may include research centers, funding organizations and corporations.

CRITERIA FOR MEMBERSHIP

1 Institutional Membership

- 1.1 A track record of experience in high throughput phenotyping and/or large-scale knockout mouse production, allied to the physical resources to undertake such activities, or expertise in specialized ("Secondary level") phenotyping that would add value to the resource and database.
- 1.2 For phenotyping centres, a commitment to phenotype not less than 50 lines per year, preferably rising to 100 lines per year within the lifetime of Phase I of the IMPC programme.
- 1.3 For production centres, a commitment to generate not less than 50 lines per year, with the ability to distribute live mice, embryos, and sperm, preferably rising to 100 lines per year within the lifetime of Phase I of the IMPC programme.
- 1.4 For Secondary level phenotyping groups, a commitment to share data with the IMPC as a whole, and deposit the data into the IMPC Database in a timely fashion.
- 1.5 Agreement to work within the framework of the consortium, including commonly agreed phenotyping pipelines and IT structures.
- 1.6 Demonstrable ability to provide the IT infrastructure for the local capture of production and/or phenotyping data and its upload to the IMPC data coordination centre(s).
- 1.7 Agreement to the full release of data to data coordination centres according to IMPC agreed procedures and timelines.
- 1.8 Agreement of production centers to provide the community access to live mice, embryos and sperm as soon as possible without intended hold backs, subject to legal or MTA restrictions.
- 1.9 Payment of the membership fee.

2 Funders' Membership

- 2.1 To commit to ensure their best endeavours to provide funding support to the IMPC programme commensurate with their institutions providing the requisite commitments to participation in the programme.
- 2.2 To work to facilitate smooth and harmonious integration of the research networks recommendations and guidelines.
- 2.3 To work to help communicate the goals and milestones of the IMPC to the wider scientific community.
- 2.4 Payment of the membership fee.

3 Membership Fee

- 3.1 The membership fee is currently 50,000 GBP.
- 3.2 The fee may be paid, in full or in part, with in-kind contributions, or adjusted in the future subject to approval of 75% of the Steering Committee.
- 3.3 The membership fee shall be collected by the IMPC Administering Member and will require a separate letter of agreement to facilitate the process.
- 3.4 The membership fee is non-refundable.

4 Non-Voting Members and Observers

- 4.1 The Steering Committee may request individuals or institutional representatives with special skills or information to join the Steering Committee meetings on an as needed basis, or for extended periods, subject to approval of the voting membership.
- 4.2 Such participants will not have voting rights and may be asked to not participate in all aspects of the IMPC management and meeting discussions.

MANAGEMENT OF THE IMPC

5 IMPC Steering Committee (“Steering Committee”)

- 5.1 Each member will appoint a representative to sit on the Steering Committee.
- 5.2 The Steering Committee will report formally to the Panel of Scientific Consultants (“PSC”) once a year, providing a comprehensive report on achievements set against deliverables and milestones of the programme. The Steering Committee will be chaired by a Scientist, elected by a majority vote of the Steering Committee.
- 5.3 All permanent members of the Steering Committee (see Appendix A-to be updated upon new approvals) will vote on new members; according to criteria for membership.
- 5.4 The Steering Committee will establish agreed milestones and deliverables for the project with input and advice from the PSC and the Executive Director.
- 5.5 The Steering Committee shall set the membership fee and approve the annual and long term budget.
- 5.6 Entities that have joined together and contributed funds to meet the membership fee shall be considered one IMPC member with a single vote.
- 5.7 Meetings will be held regularly and additional meetings may be called by the Secretariat and the Steering Committee Chair, or at the request of the member representatives. Meeting dates/times will be decided by polling and take place at times convenient to the most of the member representatives.
- 5.8 A minimum of 50% of the membership shall qualify as a quorum (therefore a minimum of 50% of the members must be present on a meeting if a vote is being made).
- 5.9 Member representatives may designate another person to attend any calls or meetings that they may not be able to attend, and the Secretariat should be informed in advance if the designee has been granted voting authority.
- 5.10 It is highly desirable that motions, issues and recommendations are decided by consensus of the group present at meetings. Typically votes on Membership, budget and all major decisions will be taken by electronic voting, to be completed within one week of the notice of a vote. Motions to approve require 75% majority of the members voting; non-votes will count as abstentions, and a quorum will be 50% of the total membership. It is recognized that some decisions may not be applicable or enforceable to all groups, due to different operations of the various groups, financial restrictions, and legal issues of the funding organizations and/or research groups. In such instances, where compliance or acceptance of an IMPC policy or decision is not possible, it must be brought to the immediate attention of the IMPC Steering Committee and those members should abstain from voting on issues to which they could not comply. In such cases, decisions shall not be binding on the non-voting member.
- 5.11 In the event that a 75% majority of the Steering Committee deems that a research group is not meeting their deliverables for the IMPC in the manner in keeping with the high expectations of the IMPC for collaborative efforts, throughput of lines, and data quality, the Steering Committee may put the group on notice that their membership in the IMPC is in jeopardy. Once a group is put on notice it will have one year to bring its programs into compliance with the deliverables, goals and objectives of the IMPC. After the period of one year and at the sole discretion of the Steering Committee, with input from the Panel of Scientific Consultants, an extension of the timeline for the member to come into compliance may be granted, or its IMPC membership may be terminated. Any financial support provided to the IMPC by the member is not refundable, but the member group may re-apply for membership annually if they feel they can provide compelling evidence that they have corrected any past issues and that they can now meet the goals of the IMPC. In the event of reinstatement, the original membership payment shall remain in effect, and the group will not be required to pay this fee again.
- 5.12 Any rules, procedures or management issues not addressed by this document shall be addressed by the “Robert’s Rules of Order”, until such time they can be addressed or modified by the Steering Committee.

- 5.13 The Steering Committee may change, amend, delete or add articles to this document at any time so long as there is a quorum and 75% of members present are in agreement..

6 Chair of the Steering Committee

- 6.1 The Steering Committee will elect a Chairperson from the member representatives by a majority vote of at least 75%.
- 6.2 The position shall serve a two year term, which if mutually agreed may be extended. It is desirable that the rotation of the chair position will provide fair geographic representation of IMPC membership.
- 6.3 The Chair will be responsible for monitoring the performance of the Executive Director, reporting this quarterly to the Steering Committee and approving any expenses incurred by the Executive Director.
- 6.4 The Chair of the Steering Committee shall engage with the Secretariat and members of the Steering Committee to accomplish the scientific goals of the IMPC, engage the broader scientific community, serve as a public champion for the IMPC, and execute the directions of the Steering Committee.

7 Executive Director

- 7.1 The Steering Committee will appoint an Executive Director who will report to the Steering Committee through the Chair of the Steering Committee. The Executive Director will be responsible for coordinating the activities of the IMPC necessary for delivery of the IMPC production pipeline and related products such as mice and biological materials, datasets and functionality of the IMPC Database.
- 7.2 The Executive Director will ensure that members are in compliance with the IMPC goals, quality requirements, and community needs. In the event that a research group or groups are falling behind their goals or experiencing difficulties, it is the responsibility of the Executive Director to inform the group or groups of these concerns. If the concerns are genuine or cannot be discounted, and if after a short period of time or upon the confirmation of these concerns or issues, the Executive Director will then formally convey this information to the full Steering Committee for full consideration and review.
- 7.3 The Executive Director will help facilitate cooperation between research groups and work with these groups and the Panel of Scientific Consultants (PSC) to continually monitor the quality and value of the IMPC datasets, and to explore new technologies and methodologies to improve the product. The Executive Director will also serve to mediate any disputes between member groups of the IMPC. The Executive Director will serve as spokesperson for the IMPC and will assist members and potential members in their fundraising efforts by providing data, reports, and making presentations where necessary.
- 7.4 The Executive Director shall provide a yearly report setting out achievements and reviewing projected deliverables and milestones for the coming year, as well as monthly update reports via teleconference to the Steering Committee.
- 7.5 The Executive Director is responsible for securing funding or formulating a funding strategy to meet the expenses of the IMPC management, including the salary and expenses of the Executive Director and staff, travel expenses for the management staff, and other business related expenses.
- 7.6 Other responsibilities of the Executive Director will be developed in consultation with the Chair of the Steering Committee, agreed by the Steering Committee, and will be amended annually via a scope of work description as part of a consulting contract.
- 7.7 The Steering Committee has the authority to put the Executive Director on notice if they determine that the individual is not executing the requirements of the position in keeping with the Executive Director IMPC Contract. The Contract and terms of dismissal are specified in separate documents.
- 7.8 This position should not be held by an individual with a direct role in the operations of any IMPC production or research center in order to maintain a high degree of

impartiality, except in cases of emergency and for a temporary time period as set by the Steering Committee.

8 IMPC Secretariat

- 8.1 A Secretariat will be established under the leadership of the Chair of the Steering Committee to project manage the consortium activities. The secretariat will amongst other duties:
- 8.2 Coordinate the activities of the IMPC and the Steering Committee, organizing, convening and managing meetings and teleconferences on a monthly schedule.
- 8.3 Coordinate the activities of the workgroups established by the Steering Committee.
- 8.4 Organize regular IMPC meetings including:
 - An annual IMPC conference, including a formal report to the Panel of Scientific Consultants;
 - Additional special focus meetings as agreed by the Steering Committee; and
 - With various interest groups from the wider community.
- 8.5 Maintain the IMPC website.

9 IMPC Finance Committee ("FC")

- 9.1 A FC will be established to assist the Steering Committee in overseeing those financial management, policy and treasury matters delegated to it by the Steering Committee.
 - 9.2 The Terms of Reference of the FC are:
- ### **9.3 Scope**
- 9.4 The purpose of the FC is to assist the Steering Committee in their oversight of the IMPC, specifically to provide assurance on:
 - i. The integrity and transparency of financial accounting, reporting, and budgeting; and
 - ii. Policies and procedures relating to fraud, and bribery
 - iii. Any other matters as delegated to it by the IMPC Steering Committee

9.5 Membership and Attendance

- 9.6 The FC is a subcommittee of the Steering Committee.
- 9.7 The Steering Committee shall appoint an FC Chair to serve a term of three years (renewable once). The FC Chair must be an employee of an institutional or funding agency Member of the Steering Committee.
- 9.8 The FC shall consist of a Chair and at least four other members (representatives), each of whom must be an employee of an institutional or funding agency Member of the Steering Committee. These members (representatives) are appointed by the Steering Committee in consultation with the FC Chair. Members of the FC shall serve a term of three years (renewable once), subject to 2.4.
- 9.9 Membership of the FC will always include a representative from the institution that administers IMPC funds. The Executive Director will always be requested to attend meetings but will not serve as a member of the FC.

9.10 Secretary

- 9.11 The Secretary of the FC will be appointed by the Chair of the FC.
- 9.12 The Secretary will organise the activities of the FC and convene and manage meetings and teleconferences.
- 9.13 The Secretary shall record minutes of the proceedings and resolutions of all FC meetings.

9.14 Quorum

- 9.15 The quorum necessary for the transaction of business shall be the Chair plus three other members.

9.16 Frequency of Meetings

- 9.17 The FC shall, at a minimum, meet Quarterly either by teleconference or in person. For matters of urgency, additional FC meetings may be convened.

9.18 Meetings can be requested by the FC Chair or any member of the FC if they consider one necessary.

9.19 Notice of Meetings

9.20 Notice of the meetings of the FC shall be given by the Secretary.

9.21 For each meeting a notice of the meeting confirming the venue, time, and date together with an agenda of the items to be discussed shall be forwarded to each member of the FC no fewer than five business days before the meeting date, unless as agreed by all members.

9.22 Reporting Responsibilities

9.23 The FC shall make recommendations and report to the Steering Committee on a regular basis and in any event, when such reports or recommendations are requested by the Steering Committee.

9.24 The FC Chair will report to the Steering Committee on the proceedings and resolutions of the FC meetings.

9.25 Authority

9.26 The FC has the responsibility to ensure the reliability of the information placed before it and is authorised by the Steering Committee to:

i. Seek information required from members of the IMPC in order to perform its duties; and

ii. Exercise all the powers of the Steering Committee delegated to it.

9.27 The FC is a non-voting committee that works by consensus to develop and present recommendations for approval to the Steering Committee. If consensus cannot be achieved on any item of business, the FC Chair will report the opinions of the FC to the Steering Committee and present the Chair's recommendation.

9.28 Recommendations arising from the FC require approval by the Steering Committee.

9.29 The FC shall periodically review its own performance, constitution, and terms of reference and recommend any changes it considers necessary to the Steering Committee for approval.

10 IMPC Working Groups

10.1 The Chair of the Steering Committee and Executive Director may form and convene various working groups with membership drawn from the IMPC and the wider scientific community, to provide advice and expertise in order to progress areas such as IT, phenotyping pipelines, technology development, and outreach amongst others

10.2 The IMPC shall form a Phase II Planning Committee in year three of the program to facilitate funding, expansion, and completion of the IMPC Goals.

10.3 The composition and mandates of working groups or subcommittees are subject to oversight and final approval by the IMPC Steering Committee.

10.4 Working groups may be transient in nature, formed and disbanded as needed.

10.5 Active working groups will provide regular reports to the Steering Committee.

11 Panel of Scientific Consultants (PSC)

11.1 The PSC will be appointed by the Steering Committee to provide scientific oversight and guidance to the IMPC and the funders. Such advice is non-binding.

11.2 The PSC will comprise a group of internationally recognized scientists covering disparate areas such as mouse genetics, clinical sciences, informatics, and industry amongst others. The PSC shall be comprised of at least 10 members and up to 15, and it is highly desirable to have geographic representation, with at least one member representing each continent of IMPC membership.

11.3 The PSC will regularly assess progress and achievements of the IMPC programme, meeting at least once a year.

11.4 Members of the PSC shall be reimbursed for all travel expenses associated with attendance at meetings by the IMPC Secretariat or by other Members of the IMPC able to provide such funds. An attendance Honorarium for in-person meetings attended by PSC members shall be paid to members of the PSC subject to the finances of the IMPC.

- 11.5 Term of appointment for PSC members shall be two years and renewable upon mutual agreement.
- 11.6 PSC members must be free of financial and scientific conflicts of interest with the members of the IMPC. Specifically, PSC members should not be involved in or receive funding for any IMPC related projects. Membership on other boards or advising other programs involved in the IMPC is potentially acceptable but must be disclosed. The Steering Committee in appointing the PSC will require each PSC member to declare conflicts of interest that may affect their independent oversight of the IMPC programme. The Steering Committee will take into account declared conflicts in finalizing appointments.
- 11.7 The IMPC Steering Committee, through the Chair, will report formally to the PSC once a year, providing a comprehensive report on achievements set against deliverables and milestones of the programme.
- 11.8 The IMPC Steering Committee and the PSC will meet in person at least once per year:
 - i. At a formal reporting meeting with a review of all programmes including scientific updates, data presentations, special topics where appropriate. This review would be linked to one of the major annual IMPC working meetings.
 - ii. By teleconference on an as needed basis or subject to the finances of the IMPC at one of the special focus meetings of the IMPC research groups. Invited members of the PSC and external experts would be invited to participate, comment and make recommendations in discussions on relevant scientific and operational issues, phenotyping platforms, technology development and results, amongst others. Each of these meetings will likely have special focus topics, such as Informatics or Metabolic Disease, to allow in-depth discussions, problem solving and enabling the PSC to make non-binding recommendations to the entire IMPC.

12 Administration of funds

- 12.1 The Steering Committee will establish the expenditure policy of the IMPC.
- 12.2 The administration of IMPC funds, tracking of expenditure and general accounting will be outsourced to an appropriate member organization, the "Administering Member".
- 12.3 The Administering Member is a member of the Finance Committee
- 12.4 The funds will be administered in accordance with the policies and procedures of the administering member and in line with IMPC's Expenditure & Travel Expenses policy.
- 12.5 The Administering Member will provide regular financial reports in a form specified by the Steering Committee and will manage the disbursement of expenses.
- 12.6 The Administering Member is subject to independent annual audit as part of its fiscal management. That audit is acceptable to the IMPC SC and presented to the SC on an annual basis.
- 12.7 Except in cases of gross negligence or fraud, the Administering Member will have no liability or responsibility, financial or otherwise, for losses resulting directly or indirectly from its administration of IMPC funds.

APPENDIX A: STEERING COMMITTEE MEMBERS – JUNE 2013**IMPC Institutional Members - Voting**

Medical Research Council Harwell
The Jackson Laboratory (JAX)
Wellcome Trust Sanger Institute
Helmholtz Zentrum Munich (GMC) / Infrafrontier
Toronto Centre for Phenogenomics (TCP)
Institut Clinique de la Souris (ICS) /phenomin
Australian Phenomics Network (AP)
RIKEN BioResource Center (JMC)
CNR Monterotondo (IMC)
MARC Nanjing University
The Davis, Toronto, Charles River and Chori Consortium (DTCC)
Korea Mouse Phenotype Consortium (KMPC)
National Laboratory Animal Center-National Applied Research Laboratories (NLAC-NARLabs)
Czech Centre for Phenogenomics

IMPC Funders Members - Voting

Medical Research Council
National Institutes of Health (NIH)
Wellcome Trust
Genome Canada
Canadian Institutes of Health Research (CIHR)

IMPC Funders Members – Non-Voting

European Commission