



McGill

Department of Biochemistry
McGill University

David Y. Thomas, Ph.D., FRSC
Canada Research Chair in Molecular Genetics
Chair, Biochemistry Department

McIntyre Medical Sciences Building
3655 promenade Sir William Osler, Rm 905D
Montreal, Quebec, Canada H3G 1Y6

Tel.: (514) 398-2973
Fax: (514) 398-7384
Email: david.thomas@mcgill.ca

March 21, 2012

Dr. Alain Beaudet, President, Canadian Institutes of Health Research
Dr. Jane Aubin, Chief Scientific Officer/Vice President Research, CIHR
Mr. H. Arnold Steinberg, Vice-Chair, CIHR Governing Council

Mr. Keith G. Anderson, Dr. James Brien, Dr. Nadine Caron, Dr. Harvey Max Chochinov, Ms. Maura Davies, Dr. Brett Finlay, Mr. Martin LeBlanc, Dr. Nicole Letourneau, Dr. Christopher W. Loomis, Dr. Patrick J. McGrath, Dr. Bernard Prigent (MD, MBA), Dr. Ray Rajotte, Dr. Robert S. Sheldon and Ms. Glenda Yeates, Members, CIHR Governing Council

Dear Dr. Beaudet *et al.*:

We the undersigned, members of the Department of Biochemistry, the Rosalind and Morris Goodman Cancer Centre, the Department of Human Genetics, Department of Physiology, Department of Medicine, Department of Microbiology and Immunology, Department of Psychiatry, Department of Pediatrics, Department of Obstetrics and Gynecology, and the Complex Traits Group at McGill are writing to express our deep concerns regarding the currently proposed changes to the CIHR peer review system. The grant-review system of the MRC and then the CIHR was long considered to be one of the world's best. We of course recognize that some changes to the present system can be beneficial, and we will be happy to take part in their design and implementation. However, we believe that it is unwarranted and will be counterproductive to restructure completely the peer review process as proposed in the January 2012 Design Discussion Document. The most serious problems facing the Open Operating Grants program are in fact its ongoing underfunding, coupled with a lack of data to compare the output and achievements of the Open Operating Grants program to those of research funded through RFAs or other types of Strategic funding initiatives.

Our greatest concerns regarding the current proposals for revision of the Open Operating Grants program, and particularly of the peer review process, are outlined below.

(1) The current low success rate for the CIHR Open Operating Competition fuels dissatisfaction with reviewing, which however does not constitute a clear call for a complete restructuring of the peer-review process. Survey findings that a substantial proportion of respondents express dissatisfaction with the quality and consistency of reviews are being cited as justification for a fundamental realignment of the entire review process. As success rates lie at historic low levels, as members of review panels declare that many grants of very high merit are not funded, and as researchers strain to maintain high-quality research programs in such a difficult funding environment, it is scarcely surprising that when asked, many investigators express unhappiness with the review system. Such understandable expressions of frustration do not however demonstrate that researchers are asking for the current peer-review process to be essentially discarded.

As applicants for CIHR funding and, in many cases, as past or present CIHR review-panel members, we recognize that the present system can be modified to make it work better. To achieve this end, we would entirely support possibilities such as the following:

- Smaller review panels can be consolidated;
- More 'muscular' measures can (and, we believe, should) be employed to ensure that senior investigators contribute fully to the review process;
- Formal reviewer training and more structured reviews (designed in consultation with researchers/reviewers) can be implemented;
- Well-structured external reviews could be solicited to aid panels in their rankings;
- If necessary, guidelines for panel membership and procedures could provide greater flexibility than presently allowed to adapt to the needs of different Pillars.

However, in our opinion none of the limitations of the current review system dictates a need to shift to the proposed alternative system which, as discussed later, we believe will create greater problems in consistency and rigor than does the current process.

(2) While some modifications to the current peer-review process may be beneficial, the most fundamental current problem of the Open Operating Grants program is a shortage of funding.

Investigator-initiated medical research in Canada was described in the 2011 Report of the International Review Panel as "the mainstay of Canadian research, ...[which] has proven itself to be a core reason for the success of Canadian research." There is no question that with CIHR funding success rates running at historically low levels and average grant sizes markedly smaller than those provided by, for example, NIH, the Open Operating Grants program is currently under enormous strain. This threatens the quality and sustainability of Canadian medical research as well as the efforts by CIHR to train and to recruit talented new researchers, who face increasingly difficult prospects to establish viable, internationally competitive research programs in the current funding environment. Compounding this problem, as already noted, is a lack of data to compare the performance of research programs funded through the Open Operating Grants competition to that of research programs funded through RFAs or other types of Strategic funding initiatives. This lack of metrics for CIHR programs is also a significant problem for CIHR internal planning and for demonstrating to Canadian taxpayers and to the government the value and return on investment of its programs. *As others have pointed out, the allocation of CIHR resources between open and strategic programs is a key element in the current severe strain on the Open Operating Grants program, and this issue cannot realistically be omitted from discussions to resolve the current difficulties of the OOG program.*

(3) Both Stage 2 and Stage 3 of the proposed review process raise critical, unanswered concerns.

The operation of the final, and crucial, stage 3 of the proposed review process has not been well defined. How large will each proposed Stage 3 panel be, and how broad a range of research areas will it cover? What is meant by the statement in the Discussion Document that these panels would be 'multidisciplinary' – would the panel members come from such widely disparate scientific backgrounds that most will have to rely mainly on Stage 2 evaluations to judge the quality of the science in each proposal? Would any of the Stage 2 reviewers for each grant also be members of the Stage 3 panel that will determine the final application rankings (- the current proposal gives no indication of this)? Would each grant receive a full expert scientific review by multiple members of the Stage 3 panel, as well as a full discussion of the scientific merit of the proposal by the panel as a whole? – If not, how could the *relative* rankings of different grants before the panel be determined in a fair and consistent manner? – If so, does the proposed Stage 2 then constitute the most efficient use of reviewer effort? These crucial questions should be addressed prior to, not after substantive consultations with the research community.

The proposed Stage 2 review mechanism threatens to decrease, not increase, the consistency and fairness of rankings. Individuals and even panels are more consistent in their *relative* rankings of a common set of applications than in the *absolute* ratings they assign to a given grant. CIHR has recognized this in electing to base funding decisions entirely on panels' relative rankings of applications, not absolute scores. Similarly, the MRC decided some years ago to dispense with external reviews, which were judged to be too variable in their ratings standards, degree of detail and reviewer diligence. A key function of review panels and their discussions, assessing a common set of applications, is to ensure that the final scores awarded to the different applications fall in a rank order that accurately reflects the judgments of the panel members, particularly in the critical top range of applications. (Studies cited in the Discussion Document, like that of O'Brecht et al., in fact bear this out.) *There is no such mechanism in the proposed Stage 2, where different groups of individuals review each grant.* Using 5-8 individuals for each Stage 2 review may modestly reduce overall variations in ratings through statistical averaging, but it will not resolve this root problem, and it will moreover require a great deal of reviewer effort that could otherwise be applied elsewhere in the review process.

There may be a place in the current discussions to revisit the issue of external reviews as part of the overall review process. However, the proposal to use what are in essence groups of external examiners to play a central role in the evaluation and rating process (Stage 2) will simply add a new source of variability, and hence of inconsistency, to a process in which second-decimal-place differences in scores can decide funding outcomes.

March 21, 2012

Page 4

In sum, critical details of the proposed new review process have not been defined, while others raise serious concerns about the ultimate consistency and rigor of the process. The prospect that expert scientific review (Stage 2) would become a phase of the review process separate from that in which panels determine the final rankings of a common set of applications (Stage 3) is particularly troubling. These issues need to be resolved through meaningful, sustained consultation with the research community.

(4) Current proposals for Program grants leave critical questions unanswered and would increase the risk of prolonged research disruptions for investigators seeking such grants.

Shifting to a single OOG Program competition per year would increase the hardships for even highly competitive researchers who, narrowly missing the funding cutoff in one competition, would need to sustain their research programs for a full year from other (dwindling) sources while waiting to reapply for a Program grant. At current low funding success rates, even highly rated researchers often must apply in multiple competitions before they successfully renew their grants or, for new investigators, secure initial CIHR funding. NIH has recognized that in a tight funding environment the grant-application process is frequently an 'iterative' one even for highly talented researchers, and it has accordingly retained its policy of holding multiple competitions per year for RO1 applications.

Under the proposed new system for Program grants, investigators who were unsuccessful in securing or renewing a Program grant would face a painful choice between applying for a typically smaller Discovery grant in the next competition (which apparently would preclude their seeking a Program grant until the Discovery grant ended) or trying to sustain their groups for a full year before they would again have a chance to secure CIHR Program grant support. Either option would create major and unnecessary hardship for both junior and more senior investigators.

Critical uncertainties have yet to be resolved in regard to the proposed Program Grants. It has not been clarified, for example, whether researchers now funded by multiple CIHR grants, with different end dates, will be required to apply for a single Program Grant when the earliest of their current grants is due for renewal (and thereby to face the risk of losing all of their CIHR support, including funds previously committed for a longer time frame, as of their earliest renewal date). *We request that CIHR clarify these and other key details of its proposals for new Program Grants before, not after, a full consultation about these proposals is undertaken with the research community. We also strongly urge that CIHR maintain all facets of its Open Operating Grants competitions at the current frequency of twice per year.*

March 21, 2012

Page 5

(5) While the process of revising the review process is stated to be both incremental in nature and consultative, indications to date have not been reassuring on either count. No time is currently proposed for evaluation of the success and outcomes of the proposed new review process in a small-scale trial before it is taken system-wide. A proposed one-year trial of the new process in one of the Strategic Programs (beginning in 2013) is designed simply to identify implementation-related problems for CIHR administrators; a one-year trial would in any event be too short to allow meaningful evaluation of outcomes before the proposed adoption of the new process for all Operating Grant competitions in 2014.

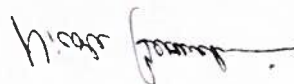
Participants in Town Halls, focus groups and other consultation processes have been distressed to see a lack of concrete responses from CIHR to concerns and suggestions put forward to date. More troublingly, participants in these activities continue to report that the concerns they raise are met with suggestions that these concerns are specific to particular groups of grantees (Pillar 1 researchers, senior investigators, etc.). *It is a concern of all researchers that the CIHR's review procedures provide the greatest possible degree of fairness, rigor and transparency, and that changes to these procedures be undertaken in a truly consultative manner with the research community, which constitutes not only the 'clientele' but also a large portion of the human resource base for the review process.*

We have served (some of us for many years) on MRC and CIHR grant review panels, and we are well aware of the strengths of the system as well as some of the real problems that afflict it. We would reiterate that we, like all Canadian researchers, will be happy to work with CIHR to solve these problems and to ensure that the CIHR remains an effective organization that promotes and delivers world class research.

Yours sincerely,



Dr. David Y. Thomas, Chair
Department of Biochemistry



Dr. Nicole Beauchemin, Professor
Department of Biochemistry
Goodman Cancer Centre

March 21, 2012

Page 6



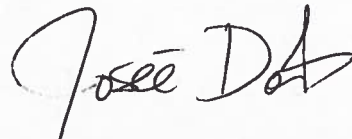
Dr. Albert Berghuis, Professor
Department of Biochemistry



Dr. Maxime Bouchard, Associate Professor
Department of Biochemistry
Goodman Cancer Centre




Dr. Philip Branton, Professor
Department of Biochemistry
Goodman Cancer Centre



Dr. Josée Dostie, Assistant Professor
Department of Biochemistry



Dr. Thomas Duchaine, Assistant Professor
Department of Biochemistry
Goodman Cancer Centre



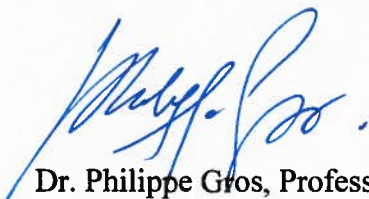
Dr. Imed Gallouzi, Associate Professor
Department of Biochemistry
Goodman Cancer Centre



Dr. Kalle Gehring, Professor
Department of Biochemistry



Dr. Vincent Giguère, Professor
Department of Biochemistry
Goodman Cancer Centre



Dr. Philippe Gros, Professor
Department of Biochemistry
Goodman Cancer Centre
Complex Traits Group



Dr. William Muller, Professor
Department of Biochemistry
Goodman Cancer Centre

March 21, 2012

Page 7



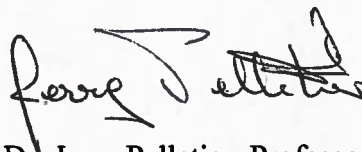
Dr. Bhushan Nagar, Associate Professor
Department of Biochemistry



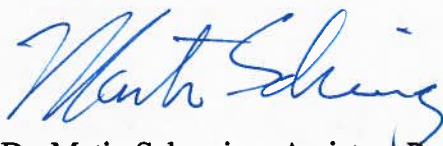
Dr. Alain Nepveu, Professor
Department of Biochemistry
Goodman Cancer Centre



Dr. Arnim Pause, Associate Professor
Department of Biochemistry
Goodman Cancer Centre



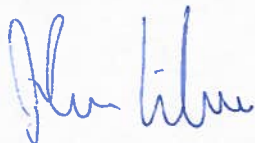
Dr. Jerry Pelletier, Professor
Department of Biochemistry
Goodman Cancer Centre



Dr. Martin Schmeing, Assistant Professor
Department of Biochemistry



Dr. Gordon Shore, Professor
Department of Biochemistry
Goodman Cancer Centre



Dr. John Silvius, Professor
Department of Biochemistry



Dr. Nahum Sonenberg, Professor
Department of Biochemistry
Goodman Cancer Centre




Dr. Julie St-Pierre, Assistant Professor
Department of Biochemistry
Goodman Cancer Centre



Dr. Joe Teodoro, Assistant Professor
Department of Biochemistry
Goodman Cancer Centre

March 21, 2012

Page 8



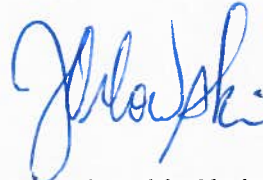
Dr. Michel Tremblay, Professor
Department of Biochemistry
Goodman Cancer Centre



Dr. Jason Young, Associate Professor
Department of Biochemistry



Dr. Maria Zannis-Hadjopoulos, Professor
Department of Biochemistry
Goodman Cancer Centre



John Orłowski, Chair
Department of Physiology



Dr. Peter Siegel, Interim Director
Goodman Cancer Centre and
Associate Professor, Departments of
Medicine, Biochemistry and Anatomy &
Cell Biology



Dr. Jorg Fritz, Assistant Professor,
Complex Traits Group and
Department of Microbiology and
Immunology



Samantha Gruenheid, Assistant Professor
Complex Traits Group and
Department of Microbiology and
Immunology



Danielle Malo, Professor,
Complex Traits Group and
Department of Human Genetics



Luke McCaffrey, Assistant Professor
Goodman Cancer Centre and Department of
Oncology



Maya Saleh, Associate Professor,
Complex Traits Group and Department of
Medicine

March 21, 2012


Page 9



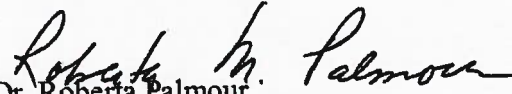
Silvia Vidal, Professor, Complex Traits
Group and Department of Human Genetics

March 21, 2012


Page 10



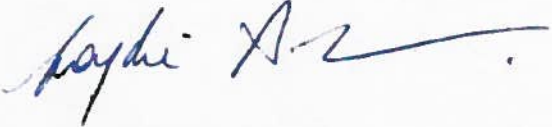
Dr. David Rosenblatt
Chair
Department of Human Genetics




Dr. Roberta Palmour
Department of Human Genetics and
Department of Psychiatry



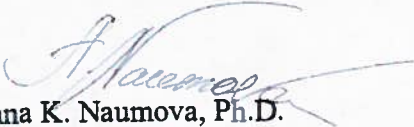
Nada Jabado MD PhD
Associate Professor,
Department of Pediatrics,
Dept of Human Genetics



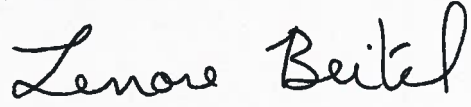
Dr. Loydie Jerome-Majewska
Assistant Professor,
Dept of Pediatrics and Human Genetics



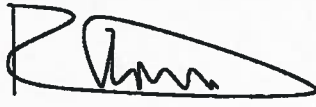
Vural Özdemir
Associate Professor
Dept of Human Genetics




Anna K. Naumova, Ph.D.
Associate Professor
Departments of Obstetrics and Gynecology
and Human Genetics



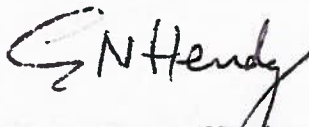
Lenore K. Beitel, Ph.D.
Assistant Professor
Department of Medicine and Human
Genetics



Dr. Rima Slim
Assistant Professor
Human Genetics and Obstetrics and
Gynecology




Yojiro Yamanaka PhD
Assistant Professor
Goodman Cancer Research Centre
Department of Human Genetics



Dr. Geoffrey N. Hendy
Professor of Medicine, Associate in
Department of Human Genetics, Associate in
Department of Physiology

March 21, 2012
Page 11



Dr. Indra Gupta
Associate Professor,
Dept. of Pediatrics



Dr. Emil Skamene
Professor
Department of Medicine



Dr. Aimee K. Ryan, PhD
Associate Professor
Department of Pediatrics,
Department of Human Genetics



Guillaume Bourque
Assoc. Professor
Department of Human Genetics,