



Annual Reporting for Faculty Supported Research Centres and Networks

All Centres (provisional Centres; McGill Centres), Research groups and Networks that receive funding from the Faculty of Medicine are required to provide two components of reporting:

- Annual Report of Activities, Outcomes
- End-of-Year Financial Report/Proposed Budget

The Annual and End of Year Reports covering the period from the 1st May until the 30th April **are due by 4pm on May 27th 2016.** Future funding will be dependent on the prompt receipt of all documents as well as the evaluations made by the committee *and* the Faculty funds available.

The completed Annual Report and the Financial Statement should be forwarded by email to:

Lynda Bray (riac.med@mcgill.ca)
Faculty of Medicine Research Office
Phone: 514-398-5815

Annual Report for Faculty of Medicine Funded Centres and Networks

The Annual Report should be set in the context of the Centre's, Core facility's and Network's overall goals and objectives, programs and research priorities, performance indicators outlined in the application (or subsequently developed), activities and strategies.

Please provide the following:

1. Name of Centre, Unit or Institute:

GRIP-McGill

(Groupe de recherche sur l'inadaptation psychosociale chez l'enfant/Research Unit on Children's Psychosocial Maladjustment)

2. Name and contact information of the Director and/or Administrative Assistant:

Gustavo Turecki, MD, PhD

Douglas Mental Health University Institute

6875 boul. LaSalle

Verdun, QC H4H 1R3

Tel: 514-761-6131

gustavo.turecki@mcgill.ca

3. Is the centre recognized as an official Senate approved McGill Research Centre?

Yes No

4. The date the centre received Senate approval as an official McGill Research Centre

N/A

5. Please provide the **URL of the Research Centre's or Network's web site.**

Note: The Research Centre's or Network's website should contain the following information:

- all sources of funding support,
- the List of Members and their institutional affiliation,
- the activities supported by the Research Centre, Core Facility or Network, and
- Annual Reports.

URL: www.gripinfo.ca

www.mgss.ca/GRIP-McGill

6. A summary of the past year's goals and objectives, programs and research priorities and any changes to these that may have occurred during the past year. Please indicate the extent to which the objectives have been met. **(limit 200 words)**

Goals and objectives

The *Groupe de recherche sur l'inadaptation psychosociale chez l'enfant (GRIP)* is a multi-institutional and multidisciplinary group co-funded by the Universities of Montreal and Laval, McGill University, and the FRQ-SC. Its mission is to address the underlying causes of child maladjustment, which can result in conflict, violence, school dropout, vandalism, gambling, unemployment, and suicide. GRIP aims to translate its findings to public policy makers, to professionals who work with troubled youth, and to the general public.

Research programs and priorities

GRIP has three core research themes:

- (1) Learn how to predict child maladjustment by delineating the geographic prevalence of maladjustment, describing problems that are specific to these areas, and identifying biopsychosocial factors that can act as protective/risk factors.
- (2) Understand the contributing familial and environmental factors, for example through the study of peers and school settings.
- (3) Study interventions that could prevent childhood maladjustment.

Attainment of goals

Through its activities, GRIP has developed close relationships with families, school personnel and school boards. We use large cohorts of subjects to establish longitudinal trajectories of childhood maladjustment (see <http://www.gripinfo.ca/grip/consultation/Etudes/default.asp>), which help us to reach these goals. This work has resulted in the publication of 19 peer-reviewed articles in 2016.

7. Please document **the major achievements** resulting from the use of the Funds from the Faculty, including any advances in knowledge, relevant publications, or international collaboration. You may select from the menu of reporting items/performance indicators in Appendix 1 that may be relevant, noting that the menu list is not exhaustive. (Please limit your response to a maximum of **1 page of prose**. **Please include lists of publications, grants, activities as appendices.**)

Ongoing representation of McGill in the GRIP Network

The funding supplied by the VPRIR ensures the ongoing representation of McGill University in the GRIP network. Due to its unique collaborative premise, GRIP provides a unique opportunity for McGill to be involved in high-impact multi-institutional endeavours.

Promotion of new research directions in developmental behaviour studies

The McGill antenna of GRIP is a technical contributor to the team, providing expertise in genetics and molecular biology. GRIP's significant contributions to the fields of human development and the biology of disruptive behaviour have fuelled research linking anxiety, aggression and suicide.

Cross-disciplinary research training

GRIP unites researchers from different fields, including anthropology, biology, criminology, demography, education, genetics, neurosciences, nutrition, pediatrics, psychiatry, psychology, and sociology. These various aspects of behaviour and development are studied in an integrated model of longitudinal-experimental studies on GRIP cohorts. The GRIP-McGill team includes many graduate and post-doctoral trainees, and involves them in GRIP's cross-disciplinary projects. Trainees benefit from working in this uniquely diversified research environment and carry the legacy of their McGill training with them as they pursue their careers around the world.

Specific expenditures of the last year

In 2015, GRIP members began a collaborative project under the leadership of Michel Boivin. This project aims to examine gene-environment interactions through analysis of samples from GRIP's cohorts. Several other researchers, including Guy Rouleau, Jean-Philippe Gouin and Jean Séguin have become involved in this multi-centre undertaking. The expertise of GRIP-McGill members was essential for the project's design and planning. One aspect of the project is genotyping DNA collected from 3500 subjects from GRIP's cohort. The 2015–2016 funds were used to partially support a senior research technician (\$7,550) to process 3500 DNA samples for genotyping as well as to conduct preliminary data analysis. The remaining amount (\$2,450) was used to cover the costs of storage of the DNA samples at -80C and the reagents and other consumables necessary for preparing samples for genotyping.

Publications directly resulting from McGill funding

This funding has resulted in the publication of high-impact, peer-reviewed articles, which promotes McGill's reputation of producing quality research and of maintaining academic productivity.

1. Geoffroy MC, Boivin M, Arseneault L, et al. *J Am Acad Child Adolesc Psychiatry* **2016** Feb;55(2):99-105.
 2. Ouellet-Morin I, Côté SM, Vitaro F, et al. *Br J Psychiatry* **2016** Jan;208(1):42-8.
 3. Checknita D, Maussion G, Labonté B, et al. *Br J Psychiatry* **2015** Mar;206(3):216-22.
 4. Pingault JB, Côté SM, Boij L, et al. *Molecular Psychiatry* **2013**;18(11):1151-1152.
 5. Wanner B, Vitaro F, Tremblay RE, Turecki G. *Psychol Med* **2012** Nov;42(11):2373-82.
 6. Ernst C, Wanner B, Brezo J, et al. *Biological Psychiatry* **2011**;69(6): 604-607.
 7. Boij L, Tremblay RE, Leyton M, et al. *PLoS ONE* **2010**;5(6):e11255-e11263.
 8. Brezo J, Bureau A, Mérette C, et al. *Molecular Psychiatry* **2010**;15(8):831-843.
 9. Fiori LM, Wanner B, Jomphe V, et al. *PLoS ONE* **2010**; 5(11):1-9(e15146).
 10. Brezo J, Barker ED, Paris J, et al. *Arch Pediatr Adolesc Med* **2008**;162(11):1015-1021.
 11. Brezo J, Paris J, Hébert M, et al. *BMC Psychiatry* **2008**;8(15):1-11.
 12. Brezo J, Paris J, Tremblay R, et al. *Journal of Personality Disorders* **2008**;22(5):538-545.
 13. Brezo J, Paris J, Vitaro F, et al. *British Journal of Psychiatry* **2008**;193(2):134-139.
 14. Gourion D, Arseneault L, Vitaro F, et al. *Psychiatry Research* **2008**;161(2):170-176.
 15. Brezo J, Paris J, Barker ED, et al. *Psychological Medicine* **2007**;37(11):1563-1574.
 16. Brezo J, Paris J, Tremblay R, et al. *Psychological Medicine* **2007**;37(11), 1551-1562.
 17. Brezo J, Paris J, Tremblay R, et al. *Psychological Medicine* **2006**;36(2):191-202.
 18. Forget-Dubois N, Pérusse D, Turecki G, et al. *Twin Research* **2003**;6(6):479-485.
8. Please provide a **List of New Members** who joined in the past year (Full, Associate, Trainee noting whether graduate student or post-doctoral fellow) and **institutional affiliations**. Please also indicate any members who have left the Centre or Network. Add rows as necessary.

Please indicate total number of members: 23

Please indicate total number of McGill Faculty of Medicine members: 11 (see table below)

List of Current Members:

| Last, First Name | Member Type | Institutional Affiliation(s) |
|------------------------|-------------|------------------------------|
| Chachamovich, Eduardo | Researcher | McGill University |
| Geoffroy, Marie-Claude | Researcher | McGill University |
| Jollant, Fabrice | Researcher | McGill University |
| Lloyd, Stephanie | Researcher | McGill University |

| | | |
|----------------------------|------------|-------------------|
| Meaney, Michael | Researcher | McGill University |
| Renaud, Johanne | Researcher | McGill University |
| Richard-Devantoy, Stephane | Researcher | McGill University |
| Rouleau, Guy | Researcher | McGill University |
| Séguin, Monique | Researcher | McGill University |
| Szyf, Moshe | Researcher | McGill University |
| Turecki, Gustavo | Researcher | McGill University |

The specific list of GRIP-McGill members is located at: <http://mgss.ca/grip-mcgill-members>.

The complete list of professional, technical and assistant personnel is available on the GRIP website (<http://www.gripinfo.ca/grip/public/www/quoineuf/en/accueilpersonnel.asp>), as is the list of all affiliated researchers, investigators and co-investigators and post-doctoral fellows (<http://www.gripinfo.ca/grip/public/www/quoineuf/en/accueilpostdoc.asp>), as well as all trainees (<http://www.gripinfo.ca/grip/public/www/quoineuf/en/accueiletudiants.asp>).

9. Please describe how your activities align with the Academic or Research mission of the Faculty of Medicine and/or other Faculties at McGill focusing on the activities for the current year and strategic plans for the subsequent year (**limit 200 words**)

GRIP's activities are aligned with the three tenets of the Faculty of Medicine, which are to provide excellence in education, research, and service.

A large number of GRIP members are trainees (graduate students or postdoctoral fellows; see <http://www.gripinfo.ca/grip/public/www/quoineuf/en/accueiletudiants.asp>), and their involvement in GRIP exposes them not only to exciting research opportunities, but also to the model of a functional collaboration between leading researchers from different fields of expertise and in different institutions. GRIP brings together clinicians and basic scientists, as well as bringing together experts in the medical and in the social aspects of behavioural development.

GRIP's mission includes the aim to translate its findings to the general public to affect public health policy. Through the funding of rigorous research to support the intervention programs proposed by GRIP, McGill contributes to promoting evidence-based medical decision-making.

In the coming year, GRIP-McGill intends to continue its support of the multi-group project initiated by Michel Boivin, and to contribute to data analysis and manuscript preparation. There is every expectation that such work will generate high impact publications and will raise the profile of GRIP; support from McGill will ensure continued participation of McGill groups in such inter-establishment initiatives.

10. Other information:

Please indicate how the Research Centre, Core Facility or Network has:

- Tackled or plans to tackle issues in a manner that may not otherwise have been achievable without the financial support of the Faculty of Medicine

- Increased or is planning to increase the scale and focus of research activities
- Facilitated multidisciplinary, multi-institutional or international collaborations
(Please limit response to **200 words**)

GRIP-McGill is not a stand-alone centre, but rather a sub-unit of the recently renewed FRQ-SC- GRIP centre. The relatively modest funds committed by the VPRIR ensure continued operations and allow GRIP-McGill to support its essential functions within GRIP. GRIP-McGill plays a major role in communications, contributions to technical decisions, grant preparation and strategic planning of future projects. The McGill GRIP team requires the continued support of the VPRIR to maintain its involvement in GRIP initiatives, *as it does not receive funding from any other source.*

Facilitation of multidisciplinary, multi-institutional collaborations

GRIP is designed as a multidisciplinary, multi-institutional collaborative: its research on human behavioural development unites core researchers from different fields and from five different universities (Universities of McGill, Laval, Montréal, Sherbrooke and UQAM). In addition, associate researchers are affiliated with Concordia University, University of Quebec in Outaouais, and University of Ottawa.

The Year End Financial Report reports on:

- Expenditure of funding provided by the Faculty of Medicine and other sources, towards meeting the objectives of the Research Centre or Network; and
- Details of any in-kind contributions provided to the Centre or Network.
- Please include a projected budget (including request from Faculty of Medicine) for the coming year
- See **Appendix 2** for the “Year End Financial Report” form to complete

Appendix 1

Menu of Performance Indicators

The following (non-exclusive) list contains possible activities on which Research Centres, Core Facilities or Networks might report.

Quantitative: Include, as appropriate

- Number of graduate and post-graduate students funded to do various activities;
- Number of proposals from participants to the Centre, Core Facility or Network and the number of activities funded;
- Governance: provide details of management meetings. For example, membership, frequency, attendance, the nature of the meetings and the outcomes.
- Number of workshops, conferences or seminars conducted and the number of attendees (include the number of early career researchers, graduate and/or post-graduate students attending);
- Number of visits, both by members to National or International destinations, events, and short and long term visits by visiting scientists to McGill;
- Number of outreach activities including public lectures (or other forms of engagement with people outside the research community including schools, industry and government agencies);
- Number of publications produced, and their impact factors (only identify those publications that are directly related to the research centre, core facility or network activity);
- Number of targeted activities:
 - involving research interaction for graduate and postgraduate students
 - Industry stakeholder interactions.
- Number of web hits and articles downloaded;
- Survey of Centre, Core Facility or Network participants to ascertain usefulness and user-friendliness of web site;
- Number of Federal and Provincial grant proposals and number of successful proposals as a result of membership in the Centre, Core Facility or Network;
- What/how much additional funding was generated that was directly attributable to activities of the Centre, Core Facility or Network;
- Prizes, special awards to member(s) as a result of Centre, Core Facility or Network activities.

Qualitative: Describe, as appropriate, aspects of:

- Identify those activities/outcomes which may not have occurred without the formation of the Centre, Core Facility or Network.
- What sort of different sharing /collaboration (research ideas, facilities, etc) arose because of the Centre, Core Facility or Network;
- Effectiveness of governance processes in place;
- Different kinds of research generated – research building capacity, or removing impediments to research;
- Breadth of Centre, Core Facility or Network - qualitative aspects;
- Multi-disciplinary collaboration
- Increased or new collaboration and partnerships as a result of Centre, Core Facility or Network activities, and with different types of end users (e.g. industry, government and community groups);

- What workshops and similar meetings the Centre, Core Facility or Network provided financial support to – number, the level of engagement, the purpose and the outcomes (including the number of opportunities for inter-disciplinary research);
- What mechanisms are in place for communication within the Centre, Core Facility or Network membership (e.g. email, newsletters, website, etc);
- National, International activities and/or visitor programs - information about the level of engagement at seminars and workshops (e.g. number of participants) and how these events have contributed or are likely to contribute to the strategic goals of the Centre, Core Facility or Network;
- What exceptional successes, if any, have occurred during the reporting period;
- What disappointments, if any, occurred during the reporting period;
- How new skills have been acquired as a result of research technology;
- Any surveys carried out of members to ascertain any benefits gained from membership of the Centre, Core Facility or Network;
- Outreach activities and how these may have been reported by the media;
- Collaborations between other Centre, Core Facility or Networks at McGill;
- Linkages with international Research Networks;
- Development of tools, software, databases; and
- How the networks between researchers are being strengthened as a result of using web-based and other technologies.