Memo to: Student Participants in the Mach-Gaensslen Foundation summer student research program

Dear Student;

The Mach-Gaensslen Foundation is pleased that you are considering participating in the Foundation's summer student research program. The Mach-Gaensslen Foundation was first incorporated in Canada in 1998 and honours the lives of Vaclav F. Mach and Dr. Hanni Mach-Gaensslen. Mr. Mach was born in the Czech Republic in 1917 where his family owned a textile fabrication business. Following the second world war, Mr. Mach emigrated to Switzerland and later lived in Canada and the United States as well as keeping a home base in Switzerland. He was highly regarded in his field of expertise, working primarily as a consultant to the global textile business. Dr. Hanni Gaensslen was born in Switzerland in 1926 and, after extensive specialty training, practiced internal medicine, neurology and psychiatry. Vaclav and Hanni were married in Canada in 1981 and were active in their respective professions as well as a number of international non-governmental charitable organizations. Dr. Gaensslen died in the year 2000, and Mr. Mach in 2001. Prior to their deaths, the Machs had set up twin Foundations, in Canada and Switzerland, to manage the assets of their estates. The Foundations are tasked with encouraging research and education in cardiology, oncology, and psychiatry.

This year, the Mach-Gaensslen Foundation of Canada will provide a grant of approximately $5,500 per medical student recipient at Canadian medical schools. Since 2005, these grants have enabled participating students to conduct summer medical research in the three areas of medicine that the Foundation is able to fund, based on the Machs' requests.

The summer student research grants are made on certain terms. The short term objective is to encourage student research in medicine, specifically in the focused disciplines of cardiology, oncology and psychiatry. As a long term objective, the Mach-Gaensslen Foundation of Canada is interested in knowing whether involvement in summer research, while a medical student, will influence career choice or lead to research later in a student's professional life. To receive funding for a summer's research the summer student researcher is asked to participate in a prospective study focused on individual research opportunities, for the balance of their careers. This study is certainly not arduous for the student/professional and will contribute significantly to our overall knowledge base. It simply requires completion of a pair of initial questionnaires (at the start and end of the summer research program), an initial evaluation questionnaire, and a follow-up short questionnaire in the form of an on-line survey every five years.
The Mach-Gaensslen Foundation requires that research carried out as a result of the funding meets the ethical requirements of the University's ethical policies/guidelines.

Included with this letter are:

- Student Agreement to be completed and submitted to the Foundation via your university faculty prior to receiving the grant;
- Pre-research questionnaire to be completed and submitted with the student agreement, prior to receiving the grant;
- Post-research questionnaire to be completed and submitted with your research abstract/report at the end of the summer research period (by October 30);
- Research Report - a form to describe the study findings; to be completed at the end of your summer research program; along with a one-page Abstract (by October 30);
- Program Evaluation Questionnaire (by October 30);
- Consent for Online Posting of Grant Recipient's name and title of research, name of the faculty advisor, name of university and year of research on the Mach Gaensslen website - also to be completed and returned at the end of the research period (by October 30); Abstracts and grant recipient contact information will not be posted.
- Also attached is the questionnaire, for your information only, that is to be completed approximately every five years. Please do not fill in and submit this form at this time. The first questionnaire will be sent to you in the form of an on-line survey five years after completion of the summer research.

All grant forms are also available on the Foundation's website: http://mach-gaensslen.ca/our-granting-process/application-forms/

October 30 is the deadline for the submission of reports (research report form, post-research questionnaire, abstract, program evaluation questionnaire, and consent for online posting) to the Foundation via your University Faculty.

We look forward to your participation in the Mach-Gaensslen Foundation's Summer Student Research Program.

Should you wish, I would be pleased to discuss the Mach-Gaensslen Foundation's work with you and to address any questions that you may have. My contact information is set out above.

Yours truly,

Chris Carruthers, M.D.,
Chair, Mach Gaensslen Foundation of Canada

On behalf of the Board of Directors:
Dr. Ian Arnold, Ms. Johanne Charbonneau, Dr. Katharine Gillis, Mr. Richard Hofer, Dr. Branavan Manoranjan and Mr. Anthony Tattersfield
The Mach-Gaensslen Foundation of Canada

Encouraging Research in Cardiology, Oncology, and Psychiatry

This is an agreement is between the Mach-Gaensslen Foundation of Canada
(Foundation)
And
_____________________________________________________________________
(Grant Recipient)

that sets out reciprocal obligations between ourselves. The Foundation will provide the Grant Recipient

$ ______________ to perform research in some aspect of oncology, cardiology, or psychiatry in the
summer of ___________________. In return, the Grant Recipient will assist the Foundation to study

(i) the effects of student participation in a summer research program on a student’s medical career
choice and
(ii) participation in medical research throughout the student’s career.

This summer student research grant assistance will be provided to those selected students who agree with
completion of:
- a questionnaire before and after completion of the research project,
- a one-time program evaluation questionnaire,
- a consent to publish the student’s name and research title on the Foundation’s website,
- a research report and a Research Abstract (one-page) by October 30 in the year the research is carried out
- a follow-up questionnaire in the form of an on-line survey five years after completion of the summer student
research until cessation of practice.

Copies of the forms and questionnaires are appended to this agreement. The Grant Recipient allows and instructs
the University to provide future contact information (including e-mail address) to the Foundation for the purpose
of obtaining information about ongoing professional research activities.

Any information the Grant Recipient provides will be treated as confidential. No personally identifiable data will
ever be reported by the Foundation without the Grant Recipient’s explicit consent.

The Grant Recipient also warrants that the research to be carried out as a result of this funding meets the ethical
requirements of the Grant Recipient’s University’s ethical policies/guidelines.

Dated at: _____________________ this ______ day of __________________ 2______

________________________________            ______________________________
Grant Recipient     Witness

Current e-mail address: ______________________________________________
The Mach-Gaensslen Foundation of Canada
Encouraging Research in Cardiology, Oncology, and Psychiatry

Summer Student Research Program
PRE-Research Questionnaire – Date: ____________
(to be submitted with Agreement between Foundation and Student)

This questionnaire is designed to assist the Foundation with its ongoing evaluation of the Summer Student Research Program. The questionnaire is being used to measure the immediate impact of the program on your ideas and attitudes about research. You will be asked to complete this questionnaire at the beginning (return with your signed agreement) of your Summer Student Research Program experience.

1. Name: _______________________________________________________________________
2. Project Title: _________________________________________________________________
3. University: ___________________________________________________________________
4. Faculty advisor:  _______________________________________________________________
5. Field of Research _____________________________ (cardiology, oncology, psychiatry)

Instructions: Please answer all of the following questions. Where ranking is requested, use the suggested scale: 1 = lowest ranking descriptor to 5 = highest ranking descriptor.

<table>
<thead>
<tr>
<th>#</th>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Have you ever done a defined research project (i.e. one that includes hypothesis generation, hypothesis testing, evidence gathering, analysis, and conclusions)?</td>
<td>Yes _____; No _____</td>
</tr>
<tr>
<td>2</td>
<td>If &quot;Yes&quot;, was this a study in a medically related discipline?</td>
<td>Yes _____; No _____</td>
</tr>
<tr>
<td>3</td>
<td>To what extent do you feel that the topic chosen for this Summer Student Research Program would be of particular interest to you, on an ongoing basis?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>4</td>
<td>To what degree do you believe that carrying out medical research is an important part of a medical student’s overall training?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>5</td>
<td>To what extent do you believe that a summer student research project can lead to significant findings relevant to the field of study</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>6</td>
<td>To what extent are you interested in medical research as a full time career choice?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>7</td>
<td>If you do not become a full time medical researcher, to what extent do you believe that medical research (formal or informal/action research) will be an ongoing part of your practice of medicine?</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

Thank you very much for your participation!
The Mach-Gaensslen Foundation of Canada
Encouraging Research in Cardiology, Oncology, and Psychiatry

Summer Student Research Program
POST-Research Questionnaire - Date: ____________
(to be submitted by October 30)

This questionnaire is designed to assist the Foundation with its ongoing evaluation of the Summer Student Research Program. The questionnaire is being used to measure the immediate impact of the program on your ideas and attitudes about research. You will be asked to complete this questionnaire at the end (return by October 30th) of your Summer Student Research Program experience.

1. Name: _______________________________________________________________________
2. Project Title: _________________________________________________________________
3. University: ___________________________________________________________________
4. Faculty advisor:  _______________________________________________________________
5. Field of Research _____________________________ (cardiology, oncology, psychiatry)

Instructions: Please answer all of the following questions. Where ranking is requested, use the suggested scale: 1 = lowest ranking descriptor to 5 = highest ranking descriptor.

<table>
<thead>
<tr>
<th>#</th>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Have you ever done a defined research project (i.e. one that includes hypothesis generation, hypothesis testing, evidence gathering, analysis, and conclusions)?</td>
<td>Yes _____; No _____</td>
</tr>
<tr>
<td>2</td>
<td>If “Yes”, was this a study in a medically related discipline?</td>
<td>Yes _____; No _____</td>
</tr>
<tr>
<td>3</td>
<td>To what extent do you feel that the topic chosen for this Summer Student Research Program would be of particular interest to you, on an ongoing basis?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>4</td>
<td>To what degree do you believe that carrying out medical research is an important part of a medical student’s overall training?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>5</td>
<td>To what extent do you believe that a summer student research project can lead to significant findings relevant to the field of study?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>6</td>
<td>To what extent are you interested in medical research as a full time career choice?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>7</td>
<td>If you do not become a full time medical researcher, to what extent do you believe that medical research (formal or informal/action research) will be an ongoing part of your practice of medicine?</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

Thank you very much for your participation!
# The Mach-Gaensslen Foundation of Canada

*Encouraging Research in Cardiology, Oncology, and Psychiatry*

## Summer Student Research Program - Research Report

*(to be submitted by October 30)*

This report form is designed to assist the Foundation with its ongoing evaluation of the summer student research program. The Foundation is interested in your research project, carried out as a Grant Recipient. Please complete the following questionnaire and return it, along with a copy of the abstract (1 page) of your research project. These documents must be received by October 30, of the year of the grant.

1. Name: ______________________________________________________________________
2. University: ____________________________________________________________________
3. Faculty advisor: __________________________________________________________________

**Instructions:** with respect to your project, please complete the following fields to provide us with some basic information on your research activities.

<table>
<thead>
<tr>
<th>#</th>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Project title</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Type of research study - qualitative or quantitative</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Hypothesis - basis of research</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Brief overview of your methodology</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Key findings/outcomes from your study</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Will this study generate further research?</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Will the results be published in a peer reviewed journal?</td>
<td></td>
</tr>
</tbody>
</table>

*Please attach a copy of your Research Project Abstract*
The Mach-Gaensslen Foundation of Canada  
Encouraging Research in Cardiology, Oncology, and Psychiatry

Summer Student Research Program  
Evaluation Questionnaire  
(to be submitted by October 30)

Name: ________________________________             Date: ____________

We are very interested in your evaluation of the Summer Student Research Program for which you have received a grant from the Mach-Gaensslen Foundation. We would greatly appreciate you taking the time to carefully considering the following questionnaire. We have designed the questionnaire to take a minimum amount of your time. The Evaluation Questionnaire is being used to measure the immediate impact of the program on your ideas and attitudes about research. This questionnaire is anonymous and the results will be considered in aggregate form only.

Please indicate your responses clearly. Where a scale of 1 to 5 is indicated, number 1 represents the lowest rating or "strongly disagree", and number 5 represents the highest rating or "strongly agree":

<table>
<thead>
<tr>
<th>#</th>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>What was the discipline of your research study? (1) Cardiology (2) Oncology (3) Psychiatry</td>
<td>1 2 3</td>
</tr>
<tr>
<td>2</td>
<td>The Mach-Gaensslen Foundation provided appropriate information on the foundation, its goals and objectives for this Summer Student Research Program.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>3</td>
<td>The Student Research Program agreement was clear in the description of the granting criteria and student requirements.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>4</td>
<td>The summer timeframe was sufficient to enable me to complete my research project.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>5</td>
<td>The Mach-Gaensslen Foundation grant was critical to my personal learning objectives in medicine and in research.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>6</td>
<td>The amount (i.e. dollar value) of the Mach-Gaensslen Foundation grant was appropriate.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>7</td>
<td>I consider this Summer Student Research Program to be of great value to me, as a medical student.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>8</td>
<td>Without the Mach-Gaensslen Foundation research grant, I would not have been able to participate in a summer medical research project.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>9</td>
<td>I would highly recommend the Mach-Gaensslen Foundation Summer Student Research Program to other medical students.</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

Thank you very much for your participation!
The Mach-Gaensslen Foundation of Canada  
Encouraging Research in Cardiology, Oncology, and Psychiatry

Summer Student Research Program  
Consent for On-line Posting  
(to be submitted by October 30)

We, __________________________________________________ (name of Grant Recipient) and  
____________________________________________ (name of Faculty Advisor) by signing below,  
hereby consent to the posting on the Mach-Gaensslen Foundation of Canada website of the following  
information only:

- The name of the Grant Recipient  
- The name of the Faculty Advisor  
- The name of the University where the Faculty Advisor is employed  
- The title and year of the Grant Recipient’s research

that was completed on the ______ day of __________________ 2____ as part of the Summer Student  
Research Program participation agreement with the Mach-Gaensslen Foundation.

If the student is not at the same University as the Faculty Advisor, then the student’s university will also  
have to provide an appropriate authorization on the line entitled “Additional authorization when required”.

Dated at: _____________________ this ______ day of __________________ 2______

________________________________            ________________________________
Grant Recipient                Witness

________________________________            ________________________________
Faculty Advisor/University     Witness

Additional authorization when required:

________________________________            ________________________________
Authorized Faculty member/University    Witness

Dated this ______ day of __________________ 2______
This questionnaire is designed to assist the Mach-Gaensslen Foundation with its ongoing evaluation of the Summer Student Research Program. The questionnaire is being used to measure the longer term impact of the program on your ideas, and opinions about research.

1. Name: _________________________________________________________________________________
2. Project Title: ___________________________________________________________________________
3. University: _____________________________________________________________________________
4. Year of your project: __________
5. Current Medical Specialty: _______________________________________________________________

Instructions: Please answer the following questions. Where ranking is requested, use the suggested scale: 1 = lowest ranking descriptor to 5 = highest ranking descriptor.

<table>
<thead>
<tr>
<th>#</th>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Please indicate your current status (only one response please): 1 = Resident or still in medical training; 2 = Full time researcher with no medical practice component; 3 = Full time researcher with a medical practice component; 4 = Full time medical practitioner with no research component; 5 = Full time medical practitioner with a research component;</td>
<td>1 _____; 2 _____; 3 _____; 4 _____; 5 _____.</td>
</tr>
<tr>
<td>2</td>
<td>If you are doing research, do you receive funding from external granting agencies? (NSERC; NGOs; Pharmaceutical firms; etc..)</td>
<td>Yes _____; No _____</td>
</tr>
<tr>
<td>3</td>
<td>Do you have a faculty appointment at a university medical school?</td>
<td>Yes _____; No _____</td>
</tr>
<tr>
<td>4</td>
<td>How many peer-reviewed papers have you published since your Summer Student Research Program experience?</td>
<td>0; 1-10; 11-20; 21-50; &gt;51</td>
</tr>
<tr>
<td>5</td>
<td>Do you believe, at this point in time, that carrying out medical research is an important part of a medical student’s overall training?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>6</td>
<td>To what extent do you believe that your Summer Student Research Program experience, as a Foundation grant recipient, was an important factor in encouraging you to enter the type of work you are now doing?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>7</td>
<td>To what extent do you believe that your Summer Student Research Program experience, as a Foundation grant recipient, is an important factor in how you carry out your current day to day activities?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>8</td>
<td>To what degree was your Summer Student Research Program participation a valuable learning experience in your current practice?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>9</td>
<td>Are you interested in assisting the Mach-Gaensslen Foundation with future activities?</td>
<td>Yes _____; No _____</td>
</tr>
</tbody>
</table>

Thank you very much for your participation