

PRIZES:

- 6 CASH PRIZES OF \$5000
- 6 CASH PRIZES OF \$3000
- 14 CASH PRIZES OF \$2000
- FIVE WORKING TRIPS IN THE AMERICAS OR TO BELGIUM
- FOUR PAID WORK PLACEMENTS

DEADLINE: FEBRUARY 14, 2003

EXCELLENCE in science

CONTEST 2002-2003

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Québec 





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EXCELLENCE IN SCIENCE

Almost
\$100 000
in prizes!

The **Ministère de l'Éducation (MEQ)** and the **Ministère des Finances, de l'Économie et de la Recherche** will award 10 cash prizes of \$2 000, one cash prize of \$3 000 and four cash prizes of \$5 000 to female science or engineering students.

In addition, there are more prizes to be awarded this year, thanks to greater financial support from contest partners and the involvement of new partners. Partners will be offering two cash prizes of \$5 000, four cash prizes of \$2 000, four paid work placements and five working trips outside Québec.

WE WOULD LIKE TO WELCOME AND THANK OUR NEW PARTNERS:

- Fédération des travailleurs et travailleuses du Québec (FTQ)
- Ministère des Ressources Naturelles

WE WOULD LIKE TO THANK OUR SPONSORS AND OTHER PARTNERS:

- Agence Québec/Wallonie Bruxelles pour la jeunesse (AQWBJ)
- Centrale des syndicats du Québec (CSQ), Confédération des syndicats nationaux in collaboration with the Fédération nationale des enseignantes et enseignants du Québec (CSN) and the Fédération des professionnelles (CSN)
- Chaire CRSNG/Alcan pour les femmes du Québec en sciences et génie au Québec
- Chaire Marianne-Mareschal at the École Polytechnique de Montréal
- GlaxoSmithKline
- Ministère de l'Agriculture, des Pêcheries et de l'Alimentation
- Ministère de l'Environnement
- Office Québec-Amériques pour la jeunesse (OQAJ)
- Société de la faune et des parcs du Québec

The Ministère de l'Éducation, in collaboration with the Ministère des Finances, de l'Économie et de la Recherche, is inviting women enrolled in certain branches of the pure sciences, in the information sciences or in engineering (see list of eligible programs in Section 1) to take part in the *Excellence in Science Contest*.

This contest, held in Québec university-level institutions, is specifically intended for women enrolled in programs leading to a bachelor's degree in a field of science where women account for less than a third of enrollments.

The contest, which is part of the *Hats Off to You!* competition, is organized by the MEQ's Secteur de la formation professionnelle et technique (vocational and technical training division) with the financial support of the MEQ's Secteur de l'enseignement supérieur (higher education division).

Like the *Hats Off to You!* competition for women in vocational and technical education programs, the *Excellence in Science Contest* is aimed at getting women to expand their career options and at encouraging those training for nontraditional occupations to persevere until they earn their diploma.

AWARDS CEREMONY

The winners of the *Excellence in Science Contest* will receive their prizes at the provincial awards ceremony for the *Hats Off to You!* competition to be held in May 2003.

SECTION 1 ELIGIBILITY REQUIREMENTS

- Candidates must have attended a university-level institution in Québec in 2002-2003 and have been enrolled full-time in one of the following programs:

PURES SCIENCES

5215	Biophysics
5233	Applied mathematics
5240	Physical sciences
5299	Multidisciplinary (pure sciences)

APPLIED SCIENCES

5340	Information sciences
5350	Engineering
5352	Aerospatial, aeronautical and astronautical engineering
5354-	Food engineering
5358	Civil, construction and transportation engineering
5359-	Electrical, electronic and communication engineering
5360	Mechanical engineering
5363	Industrial and administrative engineering
5364	Metallurgical and materials engineering
5368-	Mining engineering
5369	Engineering physics
5371	Surveying
5373	Computer and information systems engineering
5375	Forestry engineering, forestry and silviculture

- While there is no age limit to enter the contest, there may be special requirements for certain categories, notably Category 2 (i.e. Working Trips Outside Québec). It is therefore important to carefully read the eligibility requirements described in this brochure.
- Previous winners may not enter this year's contest, unless they have switched fields of study.
- Candidates may not win more than one prize.

SECTION 2 PORTFOLIO

Each candidate must submit the following:

- 1 a duly completed registration form (see page 13)
- 2 a personal introduction of no more than two pages* (see Section 3, Personal Introduction)
- 3 a short essay of no more than one page relating to the category she has entered; in this essay, she outlines the reasons for her choice by answering the relevant questions listed in this brochure; candidates interested in several prizes must write this essay for each category they enter
- 4 a résumé
- 5 a copy of the most recent transcript issued by the university attended

* An application will be rejected if the candidate's personal introduction does not meet the presentation requirements. No other item (object, photograph, special document, etc.) will be accepted for the purposes of evaluating an application.

Presentation Requirements

- The personal introduction must be no more than two pages long, double-spaced and printed on one side of white letter-sized paper (no binding, gluing, spiral binding, cardboard cover, stapling, etc.).
- The short essay must be no more than one page long.
- Besides the items listed under Section 2 - Portfolio, no other item (object, photograph, special document, etc.) will be accepted for the purposes of evaluating the application.

SECTION 3 PERSONAL INTRODUCTION

The personal introduction must provide the following information:

- 1 A general introduction
What are the highlights of your personal, academic or working life?
- 2 Your personal or career objectives
What are your goals for the future in your chosen occupation?
- 3 Your reasons for choosing a nontraditional occupation
What motivated you to choose a nontraditional occupation?
What do you feel you have to gain or lose in making this choice?
What aptitudes or personal qualities do you have that will allow you to achieve personal fulfillment in a nontraditional occupation?
What strategies have you used that help you remain and succeed in a nontraditional occupation?
- 4 Your knowledge of your chosen occupation
What do you know about your chosen occupation, the duties involved and the related working conditions?
Which of your actions or achievements demonstrate your commitment to society, the labour movement, the community or any other area related to your chosen occupation?
- 5 Your reasons for entering the contest
Give your reasons for entering the contest. Why should you be selected as a winner?

Reminder: Candidates who wish to compete for one or more prizes must not only prepare a personal introduction, but also write a short essay of no more than one page for each category they enter, in which they answer the questions listed in the pages that follow.

SECTION 4 SELECTION CRITERIA

Portfolios will be assessed according to the following criteria:

- Submission of a complete portfolio
- Quality of the presentation
- Compliance with instructions
- Clarity of the personal introduction and short essay
- Authenticity and persuasiveness of the personal introduction and short essay
- Academic achievement
- Relevance of the reasons for entering the contest

SECTION 5 APPLICATION PROCESS AND DEADLINE

The candidate must:

- prepare her portfolio (registration form, personal introduction, short essay, résumé and copy of most recent university transcript)
- indicate the prizes she intends to compete for by checking off the appropriate boxes on the registration form
- send her portfolio to the following address by **February 14, 2003**:

Excellence in Science Contest

Ministère de l'Éducation
1035, rue De La Chevrotière, 12^e étage
Québec (Québec) G1R 5A5
Telephone: (418) 646-2846
Fax: (418) 643-1926
E-mail: chapeaulesfilles@meq.gouv.qc.ca

CASH PRIZES

Excellence in Science

The **Ministère de l'Éducation** will be awarding five prizes of \$2 000 and two prizes of \$5 000. Also, the **Ministère des Finances, de l'Économie et de la Recherche** will be awarding five prizes of \$2 000 and two prizes of \$5 000. In addition, **GlaxoSmithKline** will be awarding two prizes of \$5 000. Lastly, the **Ministère de l'Agriculture, des Pêcheries et de l'Alimentation** will be awarding one prize of \$2 000 to a woman enrolled in food engineering (5354).

Conditions

Candidates must be enrolled in one of the programs listed in Section 1. In addition, they must submit a portfolio that meets the requirements outlined in Section 2 and write a personal introduction of no more than two pages in which they answer the questions mentioned in Section 3.

They must also write a short essay of no more than one page in which they answer the following questions about the involvement of women in scientific occupations:

- In your opinion, what factors prevent greater numbers of women from entering the sciences?
- Were you encouraged to fulfill your ambition?
- What do you think about the fact that women are underrepresented in scientific or technological careers?
- What measures could be taken to encourage girls in this regard or to provide them with more opportunities to enter scientific careers?
- What do you think about the image that researchers currently have?

Next Generation

The **Ministère de l'Éducation** and the **Ministère des Finances, de l'Économie et de la Recherche** will be jointly awarding a prize of \$3 000 to a first-year female student enrolled in any of the programs listed in Section 1.

Conditions

Candidates must satisfy the general contest requirements set out in Sections 1 and 2 and write a personal introduction according to the instructions outlined in Section 3.

They must also write a short essay of no more than one page in which they answer the following questions about the new generation of women in the sciences:

- In your opinion, what measures should be taken to ensure that there is a new generation of women in the sciences?
- Were you encouraged to fulfill your ambition?

Equity

The **Fédération des travailleurs et des travailleuses du Québec** (FTQ) will be awarding a prize of \$2 000 to a female student who was once in a precarious job situation (e.g. working part-time, on call, on contract or in a temporary position) and who decided to enter a program leading to a nontraditional occupation.

Conditions

Candidates must satisfy the general contest requirements set out in Sections 1 and 2 and write a personal introduction according to the instructions outlined in Section 3.

They must also write a short essay of no more than one page in which they answer the following questions about precarious job situations and their union involvement:

- **Why did you choose to enter a nontraditional occupation?**
- **How will the knowledge and skills acquired in your university program contribute to:**
 - the promotion of employment equity (i.e. help you enter a nontraditional occupation, integrate into the workplace and remain there)?
 - the creation of better working conditions by helping you to overcome a precarious job situation and become financially independent?
- **How has your personal commitment to the union movement, for example, helped improve working conditions for women?**

Cultural Communities

The **Confédération des syndicats nationaux** (CSN) will be awarding a prize of \$2 000 to a woman who has chosen a nontraditional occupation and who is either a Native person or someone who regards herself as a member of a cultural community.

Conditions

Candidates must satisfy the general contest requirements set out in Sections 1 and 2 and write a personal introduction according to the instructions outlined in Section 3.

They must also write a short essay of no more than one page in which they answer the following questions about the involvement of women from cultural communities in nontraditional occupations:

- **As a member of a cultural community, what obstacles did you face?**
- **Were you encouraged to fulfill your ambition?**
- **What motivated you to choose a nontraditional occupation?**

Perseverance

The **Centrale des syndicats du Québec** (CSQ) will be awarding a prize of \$2 000 to the female student who has shown exceptional perseverance in learning a nontraditional occupation.

This award recognizes perseverance in the achievement of career goals, highlighting the candidate's efforts to enter a nontraditional occupation. It is not designed to reward those who have overcome physical or social handicaps, unless these handicaps are directly related to the chosen occupation.

Conditions

Candidates must satisfy the general contest requirements set out in Sections 1 and 2 and write a personal introduction according to the instructions outlined in Section 3.

They must also write a short essay of no more than one page in which they answer the following questions about the perseverance they showed in learning their occupation:

- **What obstacles did you face and how did you overcome them?**
- **What did you do to persevere and remain focused on your career goals? Explain how you went about achieving your objectives.**

WORKING TRIPS OUTSIDE QUÉBEC

Working Trips to Wallonia or Brussels

Three bursaries will be awarded by the **Agence Québec/Wallonie Bruxelles pour la jeunesse** (AQWBJ) for working trips to Wallonia or Brussels.

These bursaries will allow the best candidates in this category to work with a company connected to their field of study. Each trip will last four weeks, will be supervised by the AQWBJ and will take place between September 2003 and August 2004.

EACH BURSARY INCLUDES:

registration for the program, the identification of a suitable company, an information session, and completion of the administrative formalities for obtaining a work permit and residence permit for Wallonia or Brussels

round-trip air transportation between Montréal and Brussels

a living allowance of \$1 200 paid by the AQWBJ's offices in Montréal and Brussels

Further information on the AQWBJ is available at www.aqwbj.org.

ELIGIBILITY

Candidates must:

- be between 18 and 30 years of age at the time of the work placement
- have Canadian citizenship or permanent resident status and be domiciled in Québec for at least one year

CONDITIONS

Candidates must satisfy the general contest requirements set out in Sections 1 and 2 and write a personal introduction according to the instructions outlined in Section 3.

They must also write a short essay of no more than one page in which they answer the following questions:

- **Why did you decide to apply for a working trip to Wallonia or Brussels?**
- **How will your participation in a working trip to Wallonia or Brussels help improve mutual understanding between two French-speaking communities and cooperation in an increasingly international environment?**
- **How will this experience help you enhance your skills and further your professional development?**

Working Trips in the Americas

Two working trips will be awarded by the **Office Québec-Amériques pour la jeunesse** (OQAJ) to the best candidates in this category. These trips (e.g. work placements, applied research practicums) last from 4 to 12 weeks and must be connected to the selected candidates' field of study.

EACH OQAJ PRIZE INCLUDES:

- round-trip transportation between Montréal and the destination for the working trip in the Americas
- a local transportation allowance for candidates who live at a distance from the point of departure
- a living allowance of \$1 000 paid by the OQAJ
- travel insurance

Further information on the OQAJ is available at www.oqaj.gouv.qc.ca.

RESPONSIBILITIES OF SELECTED CANDIDATES

Selected candidates are responsible for finding a host organization for their working trip. In addition, they must make all the necessary arrangements to undertake a working trip abroad (finding out about the requirements to enter the country in question, obtaining a residence permit or any other formality). The OQAJ is in no way responsible for the procedures involved in obtaining residence permits or for any related costs.

Selected candidates must undertake their working trip within the 12 months after they are awarded this prize (i.e. before May 2004).

ELIGIBILITY

Candidates must:

- be between 18 and 35 years of age at the time of the working trip
- have Canadian citizenship or permanent resident status and be domiciled in Québec for at least one year
- have the necessary language skills to undertake the working trip (specify the languages you know - English, Portuguese, Spanish).

CONDITIONS

Candidates must satisfy the general contest requirements set out in Sections 1 and 2 and write a personal introduction according to the instructions outlined in Section 3.

They must also write a short essay of no more than one page in which they answer the following questions:

- **How will your participation in a working trip in the Americas help to improve mutual understanding and develop a cooperative relationship between Québec and the host country?**
- **How will this experience help you enhance your skills and further your professional development?**

EXCELLENCE
IN SCIENCE

PAID WORK PLACEMENTS

Work Placement in the Environmental Sector

A paid work placement worth approximately \$6 500 will be awarded by the **Ministère de l'Environnement** (ME).

The 12-to-15-week work placement must be a compulsory part of the selected candidate's program or carry credits toward her diploma, further to an agreement between the ME and the educational institution. The selected candidate is responsible for making sure that her educational institution will recognize the work placement as part of her program. The selected candidate may opt for a \$2 000 cash prize instead.

Candidates must be enrolled in one of the following programs:

5215	Biophysics
5350	Engineering
5358	Civil engineering
5360	Mechanical engineering
5363	Industrial and administrative engineering
5364	Metallurgical and materials engineering
5368	Mining engineering
5371	Surveying
5375	Forest engineering, forestry and silviculture

Further information on the Ministère de l'Environnement is available at www.menv.gouv.qc.ca

CONDITIONS

Candidates must satisfy the general contest requirements set out in Sections 1 and 2 and write a personal introduction according to the instructions outlined in Section 3.

They must also write a short essay of no more than one page in which they answer the following questions about environmental protection:

- **How will the skills acquired in your university program help you become professionally involved in environmental protection?**
- **How are you currently involved in environmental protection?**

Work Placement in a University Research Laboratory

A paid work placement worth \$6 000 will be awarded by the **Chaire CRSNG/Alcan** and the **Chaire Marianne-Mareschal**. The work placement will be hosted by a research laboratory at Université Laval, in Québec City, or at the École Polytechnique, in Montréal, during the summer term. The selected candidate will be assigned to a laboratory according to her field of specialization.

Further information on these two research chairs is available at the following Web addresses:

www.chairemm.polymtl.ca

www.fsg.ulaval.ca/chaire-crsng-alcan

CONDITIONS

Candidates must satisfy the general contest requirements set out in Sections 1 and 2 and write a personal introduction according to the instructions outlined in Section 3.

They must also write a short essay of no more than one page in which they answer the following question about applied research:

- **How will this experience help you enhance your skills and further your professional development?**

Work Placement in the Natural Resources Sector

A paid work placement worth approximately \$5 000 will be awarded by the **Ministère des Ressources Naturelles**.

Lasting approximately 15 weeks, this work placement will be awarded to the best candidate in this category and will carry credits toward her diploma, further to an agreement with the educational institution. The selected candidate is responsible for making sure that her educational institution will recognize the work placement as part of her program.

Candidates must be enrolled in one of the following programs:

5358	Civil, construction and transportation engineering
5364	Metallurgical and materials engineering
5368	Mining engineering
5369	Engineering physics
5371	Surveying
5375	Forest engineering, forestry and silviculture

Further information on the Ministère des Ressources Naturelles is available at www.mrn.gouv.qc.ca

CONDITIONS

Candidates must satisfy the general contest requirements set out in Sections 1 and 2 and write a personal introduction according to the instructions outlined in Section 3.

They must also write a short essay of no more than one page in which they answer the following questions about natural resources:

- **How will the skills acquired in your university program help you become professionally involved in areas related to natural resources?**
- **How are you currently involved in these areas?**

Work Placement in the Parks and Wildlife Sector

As part of the development of northern parks and other projects involving protected boreal forest areas, a 12-to-15-week paid work placement worth approximately \$10 000 will be awarded by the **Société de la faune et des parcs du Québec** (FAPAQ) to a Cree female university student from the communities of Mistissini or Oujebougoumou.

The work placement will be designed by the parks and wildlife coordinator at the Direction de la planification des parcs, the FAPAQ's planning department. The student will be based in her home community. The work placement will include field campaigns and surveys involving Cree families who carry on traditional activities within protected areas. If there are no candidates in this category, the Société de la faune et des parcs du Québec will be obliged to withdraw its work placement offer.

Further information on the Société de la faune et des parcs du Québec is available at www.fapaq.gouv.qc.ca

CONDITIONS

Candidates must satisfy the general contest requirements set out in Sections 1 and 2 and write a personal introduction according to the instructions outlined in Section 3.

They must also write a short essay of no more than one page in which they answer the following questions about parks and wildlife:

- **How will this experience help you enhance your job skills, while contributing to the harmonious development of traditional Cree activities and ecotourism in protected areas?**
- **How are you currently involved in this field?**

EXCELLENCE in science

Apply
by
FEBRUARY 14, 2003





EXCELLENCE IN SCIENCE

REGISTRATION FORM TO BE COMPLETED BY THE CANDIDATE

FAMILY NAME

GIVEN NAME

SOCIAL INSURANCE NUMBER
(COMPULSORY)

DATE OF BIRTH

YEAR MONTH DAY

PERMANENT ADDRESS

NUMBER AND STREET

CITY

POSTAL CODE

TELEPHONE NUMBER

AREA CODE

CELL PHONE:

AREA CODE

E-MAIL:

ADDRESS DURING SCHOOL YEAR

(IF DIFFERENT FROM PERMANENT ADDRESS)

NUMBER AND STREET

CITY

POSTAL CODE

TELEPHONE NUMBER

AREA CODE



CANDIDATE'S CONSENT

I hereby authorize the MEQ to release my personal introduction to researchers for the purposes of conducting an analysis of the texts submitted to the *Hats Off to You!* competition. My consent is given on the condition that my anonymity be respected.

I understand that refusal to sign this authorization will in no way affect the assessment of my candidacy.

(VALID UNTIL JULY 2004)

SIGNATURE : _____ DATE : _____

**Further information on the
Excellence in Science Contest
may be obtained from your
educational institution
or by writing to:**

Excellence in Science Contest

Ministère de l'Éducation

1035, rue De La Chevrotière, 12^e étage

Québec (Québec) G1R 5A5

Telephone: (418) 646-2846

Fax: (418) 643-1926

E-mail: chapeaulesfilles@meq.gouv.qc.ca



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