

The Dr. Donald Gray Scholarship in Canadian Hydrology

1) Background

Created to honour the memory of Donald Maurice Gray BSA, MSA, Ph.D (1929-2005), the Dr. Donald Gray Scholarship in Canadian Hydrology will be awarded annually to a promising doctoral candidate in Don's chosen field of hydrology. The Gray family believes this scholarship is an appropriate tribute to Don's remarkable lifetime achievements and his enthusiasm for academically preparing students to further their studies in the field of Hydrology.

Don made his most significant lifetime achievements in developing Hydrology as a Geophysical Science. Well known as the "Father of Canadian Hydrology" in the scientific community, Don was a dedicated researcher and scientist whose substantial contributions moved the field of hydrology from infancy to its current highly regarded status. During the course of his career Don mentored more than 68 graduate students, brought in millions of dollars in research grants and produced over 132 publications.

Don's substantial contributions to the fields of snow and prairie hydrology meant that he was considered the leader in these scientific fields for much of his career. Seminars on Familiarization with the Principles of Hydrology, much of which Don organized and delivered, trained many of the future Canadian hydrologists and the notes became the basis for the Handbook On The Principles Of Hydrology. Don's international reputation became solidified with the publication of the Handbook Of Snow: Principle, Processes, Management and Use in 1980. This comprehensive book on snow remains the primary world reference on all aspects of snow.

Internationally, Don aided in the establishment of a Water Resources Management Engineering School near the Arctic Circle at the University of Lulea, Sweden and in the creation of the international hydrology journal *Nordic Hydrology*. He was the Canadian delegate to the UNESCO Working Group on Representative and Experimental Basins and served on the editorial boards of several well-known hydrology journals.

Don chaired the Division of Hydrology at the University of Saskatchewan, Saskatoon from 1965-2001. It was from here that he would train many of Canada's hydrologists while creating a critical mass of research and a reputation for excellence in process understanding, instrumentation, and computer simulations with a special emphasis on the Canadian Prairies and the North.

Don played a highly significant role in brokering the arrangement that led the National Hydrology Research Centre to relocate from Ottawa to Saskatoon by chairing a small committee of Deans who made the recommendation that the University of Saskatchewan form a Research Corporation-now Innovation Place, the largest research park on campus in Canada. It was Don's idea and drive that established the Hydrology Section of the CGU in the early 1990s.

Don inspired excellence and loyalty amongst his colleagues and co-workers and created excitement and belief that Canada should and could have a confident scientific assessment of its water resources and would lead the way for the world in doing so.

As an educator and mentor, Don provided each student his time, expertise and energy to ensure that graduates of his program were highly trained scientists ready to contribute to the body of knowledge in hydrology. He opened doors to seek out opportunities for graduates and remained a loyal supporter and mentor throughout their careers. The Gray family is proud to be a part of awarding a scholarship that accurately reflects Don's high expectations and recognition of scholastic achievement.

2) Award

The Don Gray Scholarship in Canadian Hydrology is a \$2500 scholarship awarded at the annual spring meeting of the Canadian Geophysical Union.

3) Eligibility

The Don Gray Scholarship in Canadian Hydrology is open to doctoral candidates studying in the broad field of hydrology. Applicants must be registered in a full-time, thesis-based doctoral program, and be within their first twenty-four months of study at the time of application. The applicant must be undertaking their degree at a Canadian University, but field research (if applicable) may be undertaken anywhere in the world.

4) Application Process

The application comprises an official academic transcript, proposal, current Curriculum Vitae, and two letters of appraisal from academic referees. The application package for the Don Gray Scholarship in Canadian Hydrology is expected to parallel the applications for the Natural Sciences and Engineering Research Council (NSERC) Canada Graduate Scholarship/Post Graduate Scholarship (CGS/PGS) program. Applicants to the NSERC CGS/PGS program may submit the same materials for their application for this award.

i) Official Transcript – An official transcript from the institution at which formal coursework was last completed is required. The university-sealed transcript envelope should accompany the other application materials.

ii) Proposal – The applicant must provide a maximum one page research proposal briefly outlining the background/rationale, approach and outcomes/expected outcomes, and significance of their doctoral research program in hydrology. In addition to the one page proposal, an additional page is permitted for bibliographic references.

iii) Curriculum Vitae – The applicant must provide a current CV in an NSERC PGS format (see Form 200), that includes: Current Address; Citizenship; Academic Background (degree, discipline, institution, start date, (anticipated) completion date); Academic, research and other relevant work experience; List of scholarships

and other awards; Theses completed or in progress and a summary of the most recently completed or in progress thesis. No justification for a location of tenure is required, however the applicant must be registered in a full-time program at a Canadian University.

iv) Letters of Appraisal. Provide letters of appraisal from two academic referees (one from current doctoral supervisor). As per the NSERC Form 200 Appendix 1, the referee is asked to comment on the applicant's research ability/potential and on the applicant's communication, interpersonal and leadership abilities. The letter should be limited to one page, be signed, and delivered with the application package in a sealed envelope with a signature over the backflap.

5) CRITERIA FOR ASSESSMENT

Applicants for the Don Gray Scholarship in Canadian Hydrology are evaluated and selected according to the criteria that parallel those of the NSERC PGS program in the following categories:

i) Academic excellence

- Academic record
- Scholarships and awards held

ii) Research ability or potential

- Quality of contributions to research and development
- Significance, feasibility, and merit of proposed research
- Ability to think critically
- Ability to apply skills and knowledge
- Judgment
- Originality
- Initiative and autonomy
- Enthusiasm for research
- Determination and ability to complete projects within an appropriate period of time

iii) Communication, interpersonal and leadership abilities

- The ability or potential to communicate scientific concepts clearly and logically in written and oral formats. For example, this could include:
 - quality of the application's presentation;
 - participation in preparing publications; and
 - awards for oral presentations or papers.
- Professional and relevant extracurricular interactions and collaborations. For example, this could include:
 - mentoring;
 - teaching;
 - supervisory experience;
 - project management;
 - chairing committees;

- organizing conferences and meetings; and
- elected positions held.

The adjudication committee will assess the above criteria with the following weighting scheme:

30% Academic Excellence

50% Research Ability and Potential

20% Communication, interpersonal and leadership abilities

6) Deadline for Application, Adjudication, and Notification

The deadline for submission is January 31 for the award year 2011. Complete application packages (Sealed transcript, proposal, CV, two sealed letters of reference) should be sent to:

Dr. Sarah Boon, Secretary
Canadian Geophysical Union – Hydrology Section
Department of Geography
University of Lethbridge
4401 University Drive
Lethbridge, AB
T1K 3M4
CANADA

The applications will be adjudicated by the Canadian Geophysical Union – Hydrology Section Awards Committee. The winner of the Don Gray Scholarship in Canadian Hydrology will be notified sufficiently in advance so that they may make arrangements to attend the annual meeting of the Canadian Geophysical Union, normally in May to receive their award in person if they were not already planning to do so.