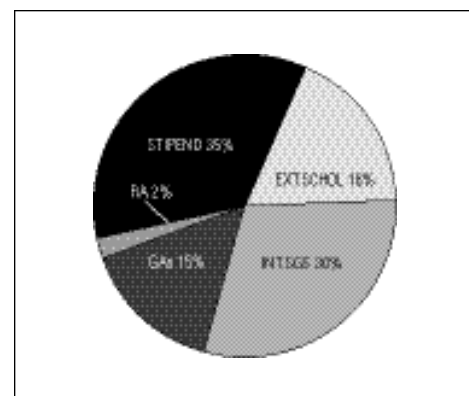


Ryerson aims to provide a level of financial support for **full-time graduate students**, except those in full-cost-recovery programs (currently Computer Networks and Photographic Preservation and Collections Management). In the 2003/4 academic year, almost \$4 million was received by about 350 eligible students—averaging about \$11,500 per student. The important point with respect to graduate student financial support is that there are many different sources of funding, and a student may receive support from a variety of external and internal sources (i.e., a “financial package”). In general, external sources of funding are more readily available for students in engineering and the sciences than other academic sectors.

In the 2004/5 academic year, stipends largely, but not exclusively, from individual NSERC ‘Discovery Grants’ held by individual faculty members in engineering and science, provided 35% of the total funding. Internal Ryerson graduate scholarships (RGSs), graduate awards (RGAs) and other funds, such as Rogers Scholarships, provided the second largest source (30%). Graduate Assistantships (such as laboratory demonstrators and tutorial leaders), which contribute to the undergraduate instructional enterprise, provided 15%, and research assistant funds provided almost 2%. External scholarships (particularly Ontario and SSHRC/NSERC Canada Graduate Scholarships) provided 18%.

**Figure 3: Ryerson Graduate Student Funding**

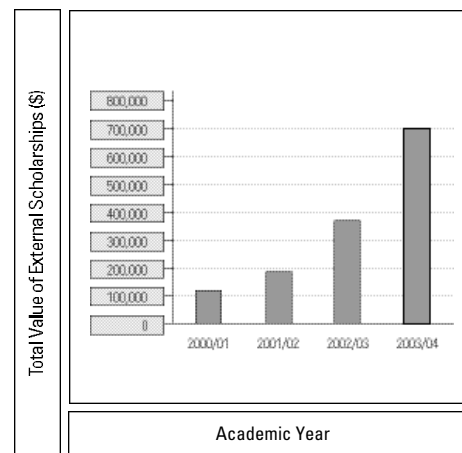
\$4 million in 2003/4



### Toward Achieving Our Graduate Student Funding Objectives

In a mid-sized university (Ryerson’s size) with an established suite of at least 20 science and non-science graduate programs, one would expect to find the GA wedge contributing about 30%, stipends 30%, external scholarships 20%, and internal scholarships and awards 20%. Research

**Figure 4: Value of External Scholarships, 2000/1 to 2003/4**



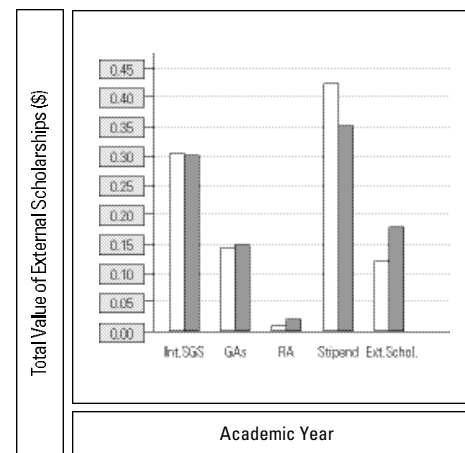
assistantship money, primarily from external research contracts, may also add to the size of the pie, and offset the need for research stipend expenditures from faculty research grants. So, our objectives are clear—increase the size of the pie and the average support per student by, primarily, increasing the volume of external scholarship money and internal graduate assistantship funds. External scholarship funds also serve as an indicator of aggregate graduate student (and program) quality.

The good news is that the size of the pie is increasing—in 2003/4 it was almost \$4 million compared to \$3 million in 2002/3. The average level of support per eligible student increased from \$10,000 to \$11,500. This increase was related primarily to the growth in external scholarships (Figure 4), due to the new Canada Graduate Scholarship (\$17,250 per year) program implemented by the federal government. The external scene is, however, becoming extremely challenging because the minimum academic standard for such awards is high (an A- first degree average is a prerequisite), and universities are in competition for a limited number of such students.

The not-so-good news is that the funding picture remains far too dependent on stipendiary support from faculty “Discovery” grants, and insufficiently dependent on GA funds and internal scholarship and award funds. Although the changes are in the right direction (Figure 5), reflecting Ryerson’s transition from an institution solely involved with undergraduate instruction to one more involved with research and graduate studies, the pace of change could be better.

**The Ontario Graduate Scholarship Program: A 2-for-1 Benevolent Naming Opportunity**  
Of special concern is the Ontario Graduate

**Figure 5: Sources of Financial Support**



Scholarship program—in 2004/5, 25 students won OGSs compared with 21 in 2003/4. This sounds good, so why is it a concern? Unfortunately, each OGS ‘costs’ the University \$5,000 because each requires 2:1 matching from private sources—for each scholarship, the OGS program provides \$10,000, which must be matched by a minimum of \$5,000 from the University’s non-operating funds. Thus, in 2004/5, Ryerson has to “raise” \$100,000 from non-operating funds in support of these external awards. Even the wealthier universities in the province are beginning to find this program a bit rich for their private fundraising capability.

Fortunately, the generous and visionary \$10.5-million gift in June 2000, from Ted and Loretta Rogers provides, among other bequests to enhance Advanced Communications at Ryerson, matching support for at least four OGS winners in the **Communication and Culture** (the Edward S. Rogers Sr. Fellowships) program. These funds provide matching support for two OGS winners undertaking research in areas associated with mining.

However, there remain numerous, and ever increasing, opportunities for named leveraged support of OGSs from individuals, foundations, and businesses. As Fielding’s Tom Jones asks<sup>1</sup>, in a novel relating a young life of tangled coincidental comedy and romance, what are worldly goods ‘... compared to the warm, solid Content, the swelling Satisfaction, the thrilling Transports, which a good Mind enjoys, in the Contemplation of a generous, virtuous, noble, and benevolent Action?’ The University needs more generous and noble actions to maintain growth in its graduate enterprise.

<sup>1</sup> Henry Fielding (1749) *The History of Tom Jones, A Foundling*, 583.

# GGSN

## SCHOOL OF GRADUATE STUDIES

### NEWSLETTER > FALL 04



### GRADUATE ENROLMENT GROWTH: A MORE SIGNIFICANT PRESENCE

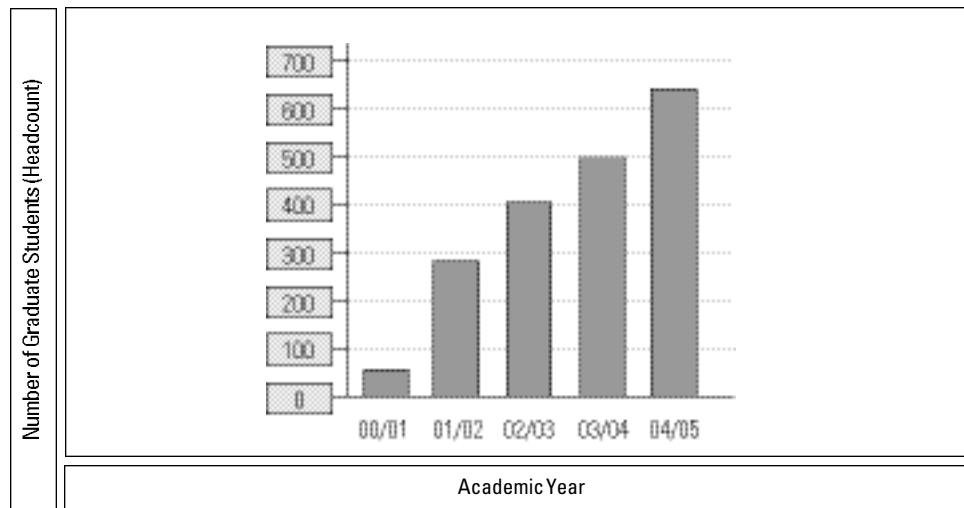
Graduate students are now a more significant presence on the Ryerson campus. Graduate studies commenced at the University in the year 2000 when there were 50 graduate students in three programs. In Fall 2004, 635 students are enrolled in 10 programs. There is no point in calculating the rate of growth – it is phenomenal. (See Figure 1 on page 2.)

#### What are the reasons for this phenomenal growth?

- Challenging career-oriented programs (Table 1) offered on both a full- and part-time basis.
- Committed graduate faculty.
- Attention to the provision of new and renovated research facilities.
- Expansion of financial support for full-time graduate students.
- Focus on the educational needs and aspirations of the rapidly growing multicultural population of the Greater Toronto Area (GTA). ▶

- Continuing dynamism and attractiveness of existing graduate programs as evidenced in strong applications – in general, five qualified applicants for each place in graduate school.
- Successful introduction of relevant, professionally oriented, new graduate programs.

**Figure 1 / Ryerson: Graduate Enrolment, 2000-2005**



**Table 1: Masters and Doctoral Programs, 2004/5**

|   |
|---|
| MASc/MEng Chemical Engineering                          |
| PhD/MASc/MEng Civil Engineering                         |
| PhD/MA Communication and Culture                        |
| MASc/MEng Computer Networks                             |
| PhD/MASc/MEng Electrical and Computer Engineering       |
| MASc Environmental Applied Science and Management       |
| MA Immigration and Settlement Studies                   |
| PhD/MASc/MEng Mechanical Engineering                    |
| MA Photographic Preservation and Collections Management |
| MSA Spatial Analysis                                    |

## NATIONAL AND INTERNATIONAL RECOGNITION

Since its inception in 2000, the School of Graduate Studies has been a member of the **Canadian Association for Graduate Studies**, headquartered in Ottawa. This is an association that brings together 52 Canadian universities with graduate programs, three national graduate student associations, the three federal research-granting agencies, and organizations which have an interest in graduate studies. Its mandate is to promote graduate education and research in Canada.

In 2004, the School of Graduate Studies at Ryerson was accepted as a member of the **Council of Graduate Schools**, located in Washington, D.C. This is an association of virtually all accredited universities that offer graduate studies in the United States of America, and other major institutions around the world. Its mission is to improve and advance graduate education through advocacy, innovative research, and the development and dissemination of best practices. The university is pleased to be included among this distinguished group of graduate institutions. □

## NEW GRADUATE PROGRAMS LAUNCHED IN 2004

**RYERSON IS PROCEEDING WITH DELIBERATION IN IMPLEMENTING NEW GRADUATE PROGRAMS, GUIDED BY SEVERAL CLEAR CRITERIA AS IT MOVES TO EXPAND ITS RANGE OF OFFERINGS.**

New programs must reflect Ryerson's distinctive "brand," which calls for combining responsiveness to societal need, career/professional relevance, and innovative programming. They must support the University's research objectives, strengthen its ability to attract and retain outstanding faculty, and enhance teaching excellence.

### New Doctoral Programs

In September 2004, 20 students in three new doctoral programs in Engineering joined the 12 students in the doctoral program in Communication and Culture (which commenced in 2003). The three new PhD programs in Engineering, which are offered in conjunction with their master's degree counterparts are in:

- **PhD in Electrical and Computer Engineering:** in the fields of Power Engineering, Signal Processing and Communications, and Computer Systems Engineering.
- **PhD in Civil Engineering:** in the fields of Environmental Engineering, Structural Engineering, and Transport Engineering.
- **PhD in Mechanical Engineering:** in the fields of Aerodynamics and Thermo-Fluids; Manufacturing, Materials and Solid Mechanics; and Industrial Engineering.

### New Masters Programs

In September 2004, 50 students in two new master's programs joined the Ryerson graduate student family. The new graduate programs are:

- **MA in Photographic Preservation and Collections Management.** This program, developed in response to the dramatic changes taking place in the world of photography, is offered by the School of Image Arts at Ryerson in conjunction with the George Eastman House (GEH) in Rochester, N.Y. Students spend the first year of the two-year program at Ryerson, the second at the world-renowned GEH. It is the only graduate

program of its type and focus in the world—in consequence, it has attracted wide interest.

- **MA in Immigration and Settlement Studies.** Ryerson, located in the heart of the most multinational large metropolis in the world, is a "natural" home for this program which explores immigration trends, policies and programs in Canada from multidisciplinary perspectives. It is offered on a full- and part-time basis, includes an internship, and is "doable" in one full academic year (12 months). □

## NEW GRADUATE PROGRAMS PLANNED FOR 2005 AND BEYOND

The University is bubbling with concrete proposals for new graduate programs at both the master's and doctoral levels. Unfortunately, there are severe financial and regulative constraints that influence how fast we can move.

The biggest constraint, of course, is the funding environment. In the financial years between 2002-2005, the University did receive small capacity-building increments to its base (through the Ontario Ministry of Training, Colleges and Universities, MCTU, *Graduate Accessibility Fund*) sufficient to warrant the programs that have been implemented. The issue of expansion of opportunities for students to pursue graduate-level studies in Ontario universities is at the forefront of matters being considered by the Rae Taskforce and his Advisory Panel, which is due to report to the provincial government in January 2005.

The second biggest constraint is that all new graduate programs have to go through an extensive internal (Ryerson) and external (Ontario Council on Graduate Studies, OCGS) quality assurance exercise, which can easily take two years before they are presented to the Ryerson Board of Governors for approval. In consequence, the University has to look a number of years ahead and have graduate programs well along the quality

assurance path to take advantage of new funding opportunities.

### In the Pipeline for 2005

Four programs are well along the approval path for possible implementation in 2005, pending the availability of sufficient additional base funding.

- **MA in International Economics and Finance**
- **MA in Public Policy and Administration**
- **MN in Nursing**
- **PhD in Chemical Engineering.**

### In the Pipeline for 2006

The following proposals could well be implemented in September 2006 as much of the necessary

documentation is in hand and has been reviewed by the appropriate internal committees. Again, implementation depends on the availability of funding, and successful review in the quality assurance processes.

- **MA in Early Childhood Studies**
- **MSc in Molecular Science**
- **MBA in Global Business**
- **MBA/MSc in Management of Technology and Innovation**
- **MSc Biomedical Physics** □

## NEW FACILITIES FOR RESEARCH

Graduate students have access to an impressive array of research laboratories. These laboratories have been developed by Ryerson with support from major Canadian funding bodies (such as the Canada Foundation for Innovation, the Ontario Research and Development Fund, the Ontario Innovation Trust, and the Canada Research Chairs program), and private sector companies. They include facilities for R&D in: communication and signal processing, internetworking, computer systems design, multimedia indexing and retrieval, power electronics, biophysics, geomatics and geovisualization, advanced microscopy, aerospace materials and engineered structures, biochemical analysis, robotics, and transportation and safety.

To this impressive array of facilities has recently been added those associated with the new 225,000-sq.-ft. Centre for Computing and Engineering. This \$65-million building (\$41 million from the Province of Ontario) includes: three laboratories and some study space for graduate students in Electrical and Computer Engineering; three Computer Science graduate labs; two Aerospace Engineering research labs; and four Civil Engineering research labs. This amazing building, with its impressive graduate research facilities, will be a venue for vibrant research activities for years to come. □



**Figure 2: Centre for Computing and Engineering – open in September 2004**