

ANNUAL REPORT 2015

SCHOOL OF COMMUNICATION SCIENCES AND DISORDERS FACULTY OF MEDICINE

Submitted by:

Marc D. Pell, PhD Associate Dean and Director

June 2016







Unit Overview

The School of Communication Sciences and Disorders (SCSD) is a research-intensive teaching unit focused on human communication and its disorders, with strong inter-disciplinary ties to units both within and outside the Faculty of Medicine. Our teaching focuses on graduate-level professional training in Speech-Language Pathology (*orthophonie*) and advanced research training in this field. We are conducting clinically-relevant investigations on the nature of communication disorders across the lifespan and both fundamental and applied research that informs issues in child development, the neurocognitive basis of human communication, and multilingualism, among other topics.

Following our relocation to 2001 McGill College in July 2014, the School now has a solid footing to creatively plan for the future. In September 2015, we began a new Strategic planning exercise to guide further improvements to our educational programs and to enhance the quality and visibility of our research. As one facet of this plan, we took the first steps in an ambitious process of transforming our MScA curriculum to focus on *competency-based* (rather than knowledge-based) assessments of learners who are training to become Speech-Language Pathologists. We also pledged to study and reform our PhD program to better prepare graduates in our field as opportunities for academic and non-academic positions evolve. Implementing our 2016-21 Strategic Plan will result in further actions that address recommendations we received during our 2013 McGill Cyclic Unit review.

Research and publications

SCSD faculty members continue to garner competitive national and provincial funding to support their individual research programs, while playing leading roles in international research collaborations and Quebec-funded research networks (e.g., Centre for Research on Brain, Language, & Music, with Dr. Gracco as its Director; Centre for Interdisciplinary Research in Rehabilitation of Greater Montreal, with Dr. Elin Thordardottir serving as Director of Research at the Institut Raymond Dewar site).

Research highlights of 2015:

- SCSD faculty members were awarded operating funds from federal, provincial and international sources, acting as principal or co-investigator on 7 new grants valued at over \$1.6 million (listed below);
- During the reference period, 11 tenure-track SCSD faculty members published 34 refereed articles in leading international journals and 2 book chapters. The list of major scholarly works published in 2015 is posted at: http://www.mcgill.ca/scsd/research/publications;
- Drs. Rvachew and Nadig organized a highly successful International conference of nearly 100 participants on "<u>Digital literacy for preschoolers: Maximizing the benefits of eBooks for emergent literacy</u>", in June 2015;
- Research published in *Cortex* by postdoctoral fellow Dr. Xiaoming Jiang and Dr. Pell was covered in the UK weekly magazine *New Scientist*, among other news outlets
- Research published in *Developmental Science* by PhD student Matthew Masapollo and Dr. Linda Polka, on how babies prefer the sound of other babies, was widely <u>covered in the media</u>, including CBC's <u>The National</u>, Quirks & Quarks, and Homerun

• SCSD faculty members gave **invited keynote addresses/workshops** to scientific and professional audiences on a broad range of topics: for example, Dr. Rvachew addressed 1000 attendees of the American Speech and Hearing Association on "Differential diagnosis of child phonological disorders and apraxia of speech"; Dr. Steinhauer was keynote speaker at an international conference on Psycholinguistics in Nanjing, China; Dr. Li-Jessen presented papers on "Vocal fold biomechanics and repair" at meetings focused on voice disorders and tissue engineering in Italy, Czech Republic, and Portugal; and Dr. Nadig was invited by several UK universities to speak about her research on Autism Spectrum Disorders (among others)

NEW GRANTS AWARDED IN 2015

1. Awardee: N. Li-Jessen (PI)

Source: Canada Foundation for Innovation John R. Evans Leaders Fund Title: Infrastructure for the study of personalized medicine for voice

restoration

Value: \$250,000, 2015-2017

2. Awardee: **Elin Thordardottir** (PI)

Source: The Icelandic Centre for Research (RANNIS) Operating grant
Title: Individual variability in L2 and L3 learning in Iceland: the role of

motivation and ability factors

Value: \$196,755, 2015-2018

3. Awardee: L. Polka (PI)

Source: SSHRC Insight Grants

Title: Speech processing in bilinguals

Value: \$220,810, 2015-2019

4. Awardee: P. Royle (PI) & K. Steinhauer (Co-PI)

Source: SSHRC Insight Grants

Title: Tracking language acquisition and processing in specific language

impairment

Value: \$318,659, 2015-2020

5. Awardee: L. Ménard (PI) & S.R. Baum (Co-app)

Source: SSHRC Insight Grants

Title: Le développement de la parole: une étude de la focalisation prosodique

en français

Value: \$303,395, 2015-2020

6. Awardee: **S. Rvachew** (PI)

Source: Private donor – Ruth Ratner Miller Foundation
Title: Clinical Research in Child Phonology Laboratory

Value: \$17,592 (US\$13,500, 2015-2016)

7. Awardee: L. White (PI), P. Royle, K. Steinhauer (Co-PI), Elin Thordardottir (Co-

app), F. Genesee, Y. Oshima-Takane

Source: FQRSC Operating grant (Soutien aux équipes de recherche)

Title: Perspectives neurocognitives sur l'acquisition, la perte et le traitement

du langage

Value: \$303,651, 2015-2019

Teaching and learning (graduate) - 2015 Highlights

A total of 24 students graduated with the MSc (Applied) degree with specialization in Speech-Language Pathology, 1 student graduated with the MSc (with thesis), and 5 students were granted the Ph.D. degree in Communication Sciences and Disorders.

Our professional training program with specialization in **Speech-Language Pathology remains one of the most selective graduate programs at McGill.** Demand for our Master of Science (Applied) program in Communication Sciences and Disorders remains extremely high; we reviewed 366 applications and welcomed 28 new students from eight provinces in Canada in September 2015, having a mean entering CGPA of 3.81/4.0.

McGill SCSD continues to be recognized as **the leader in advanced research training in our field in Canada**. In 2015, we received 9 applications for the PhD program and admitted three new students (yielding a total of 22 students registered in our PhD program, > 50% international). SCSD researchers also supervised nine Postdoctoral fellows in the School and five PhD students registered in the Integrated Program in Neuroscience (IPN).

The SCSD **co-operates extensively in teaching and research student supervision** with other McGill departments. In addition to the IPN, our researchers helped to supervise undergraduate and graduate students registered in five different Faculties at McGill, in the departments of Linguistics, Psychology, Integrated Studies in Education, Otolaryngology, Biomedical Engineering, Mechanical Engineering, and students in the Cognitive Science (Bachelor of Arts and Science) Program.

Further progress following our Cyclical Unit Review

The School continues to examine recommendations raised by the review committee during our Cyclical Unit Review in 2013. In particular, we are now examining recommendations referring to the structure of our research programs and research student committees and ways to enhance the quality of both professional and research training our students receive in our 2016-21 Strategic Plan.

Involvement in the community - 2015 Highlights

Academic and Professional Leadership:

- For the first time, McGill celebrated World Voice Day in 2015 with SCSD professor, Dr.
 Nicole Li-Jessen, as the World Voice Day coordinator for Canada. In collaboration with
 students, staffs and professors from a range of interdisciplinary fields, three events
 were held at McGill—World Voice Day Screening, Workshop and Seminar—with
 significant media coverage;
- SCSD faculty provided academic leadership in our field both nationally and internationally. Seven faculty members served as journal Editors/Editorial Board members of major journals in our field (e.g., Journal of Communication Disorders, Frontiers in Psychology, Frontiers in Language Sciences). Also, SCSD faculty served on grant review panels for the CIHR (Nadig), SSHRC Connection Grants (Steinhauer), National Science Foundation (Gonnerman), and the Agence nationale de la recherche, France (Elin Thordardottir);
- After a successful pilot project spearheaded by Kelly Root in 2014, the SCSD continued
 to develop relationships with the Cree Health Authority in Chisasibi, Northern Quebec
 and to expand speech-language services offered to these communities. In 2015, two
 MSc(A) students conducted their final internships in this setting and documented their
 educational and cultural experience in an on-line blog;
- SCSD students continue to provide <u>free hearing screenings</u> and information on how to prevent hearing loss to members of the McGill and Montreal communities, led by Sophie Vaillancourt. In 2015, over 500 children were screened by our students in Montreal-area Elementary Schools and 411 individuals were screened on campus during a widely-publicized two-day event (March 2015);
- Under the supervision of K. Root and S. Vaillancourt, the SCSD worked successfully with community partners to provide free communication health services to vulnerable populations in Montreal. This included children at the Child Centre for Development and Mental Health of the Jewish General Hospital and more than 60 adults living with aphasia (an acquired impairment of language often caused by strokes) who received ongoing therapy in conjunction with the Association québecoise des personnes aphasiques. By improving access to services for the minority English-speaking population in Quebec, these initiatives qualified for financial support from the McGill Training and Retention of Health Professionals Project (Health Canada);
- The School disseminated information on the nature of communication disorders, professional services, and clinical training and student research initiatives at the School through its <u>Speaking of Language</u> newsletter. This newsletter is written by SCSD students in consultation with Drs. Li-Jessen and Rvachew and distributed to the wider SCSD and Montreal clinical communities.

Milestones

Honours, awards, and prizes