



**ANNUAL REPORT
2016**

**SCHOOL OF COMMUNICATION SCIENCES AND DISORDERS
FACULTY OF MEDICINE**



Submitted by:

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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, multilingualism, literacy development, personalized medicine in voice care, among others.

In 2015-2016, the School undertook a Strategic planning exercise to define and guide further improvements to our educational programs and to enhance the quality and visibility of our research. Our five-year plan has four main objectives: 1) to transform our MSc (Applied) curriculum by adopting a *competency-* (rather than knowledge-) based learning environment, to better prepare student Speech-Language Pathologists for entry-to-practice and future leadership roles; 2) to create more diverse, enriched educational opportunities for professional students in their internships; 3) to enhance opportunities for research students in the School that better prepare them for a diverse array of academic and non-academic careers; and 4) to strengthen professional and research ties with Canada's Indigenous and cultural communities, in the areas of communication sciences and communication health. Implementing our 2016-21 Strategic Plan charts an ambitious new course for the School; by modernizing our educational programs and optimizing the quality of the learning environment, our actions are in synch with strategic initiatives in the Faculty of Medicine and the University more broadly, while building upon recommendations obtained during our 2013 Cyclic Review.

Research and publications

SCSD faculty members continue to compete successfully for 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; 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 2016:

- SCSD faculty members were awarded operating funds from federal, provincial, international and private sources, acting as principal or co-investigator on **9 new awards valuing over \$1.42 million** (listed below);
- During 2016, 11 tenure-track SCSD faculty members **published 33 refereed articles** in leading international journals, 5 book chapters, and Dr. Susan Rvachew released the 2nd Edition of her textbook, *Developmental Phonological Disorders: Foundations of Clinical Practice* (with F. Brosseau-Lapr ). All major scholarly works published in 2016 are posted at: <http://www.mcgill.ca/scsd/research/publications>;
- Research on how emotions are processed from speech and non-linguistic sounds, published in *Biological Psychology* by Dr. Marc Pell, was widely covered by news and radio outlets, with an Attention score in the 99th percentile of all research outputs of similar age;
- In April 2016, the scientific TV show 'D couverte' reported on the bilingual brain and related research being conducted in Dr. Steinhauer's lab.

NEW GRANTS AWARDED IN 2016

1. Awardee: **Nicole Li-Jessen (PI)**
Award: Canada Research Chair Award (Tier 2 – CIHR), \$500,000, 2016-2021
Title: *Personalized medicine in voice disorders*
2. Awardee: **Marc D. Pell (PI)**
Award: NSERC Discovery Grant, \$175,000, 2016-2021
Title: *Neuro-cognitive studies of vocal emotion processing in speech*
3. Awardee: **Nicole Li-Jessen (Co-Applicant)**
Award: NSERC – Research Tools and Instruments grant, \$147,707, 2016-2017
Title: *A unique bioplotter for the printing of cellular dense collagen and other biopolymer gels*
4. Awardee: **Meghan Clayards (PI)**
Award: SSHRC Insight Grant, \$140,000, 2016-2020
Title: *What makes a good listener: Individual differences in speech perception and their implications*
5. Awardee: **Susan Rvachew (PI) & Aparna Nadig (Co-Investigator)**
Award: SSHRC Insight Grant, \$196,556, 2016-2021
Title: *Emergent Literacy with Digital Technologies*
6. Awardee: **Shari Baum (Co-PI, with A. Gilbert)**
Award: SSHRC Insight Development Grant, \$74,970, 2016-2018
Title: *The role of phrase final lengthening in speech parsing and its interaction with stress-timed, syllable-timed, and mora-timed language structure*
7. Awardee: **Aparna Nadig (Co-Investigator, with A. Evans, M. Sharda and K. Hyde (PI))**
Award: Réseau de bio-imagerie du Québec, \$10,000, 2016-2017
Title: *Identifying the neural correlates of a music intervention in autism*
8. Awardee: **Nicole Li-Jessen (Co-Applicant)**
Award: Hong Kong Research Grants Council, \$174,707, 2016-2020
Title: *Enhancing the maintenance effect of acupuncture for phonotraumatic voice disorders using a home-based skin-surface stimulation of voice-related acupoint (Home AcuStim) Protocol*
9. Awardee: **S. Rvachew (PI)**
Award: Private donor – Ruth Ratner Miller Foundation, \$6,493, 2016-2017
Title: *Clinical Research in Child Phonology Laboratory*

Teaching and learning (graduate) – 2016 Highlights

A total of 23 students graduated with the MSc (Applied) degree with specialization in Speech-Language Pathology, one student graduated with the MSc (with thesis), and six students were granted a 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 354 applications and welcomed 31 new students from across Canada in September 2016, having a mean entering CGPA of 3.86/4.0.

McGill SCSD continues to be recognized as a **leader in advanced research training in our field in Canada**. In 2016, we received 17 applications for the PhD program and admitted three new students (yielding a total of 20 students registered in our PhD program, > 50% international). SCSD researchers also supervised five Postdoctoral fellows in the SCSD and five graduate students registered in the Integrated Program in Neuroscience (one who received a prestigious Vanier CGS doctoral fellowship in 2016).

For the first time, as part of our Admissions process, we held a “Prospective Students Day” in March 2016. This gave admitted students the opportunity to visit the School, to meet professors and current students, and to examine our facilities prior to accepting our offer.

Note that the SCSD **co-operates extensively in teaching and research student supervision** with other McGill departments. In addition to the Integrated Program in Neuroscience, 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.

Involvement in the community – 2016 Highlights

Academic and Professional Leadership:

- SCSD faculty members continue to provide academic leadership in our field both nationally and internationally. For example, seven faculty members served as journal Editors/ Editorial Board members of major journals in our field (e.g., *Journal of Communication Disorders*, *Attention, Perception and Psychophysics*, *Frontiers in Psychology*, *Frontiers in Language Sciences*);
- In January 2016, Dr. Aparna Nadig organized a series of outreach events related to her Transition Support Program for Adults with Autism. A Stakeholder Conference was held, a website and action letter for new services were created, and video and testimonials from this event were subsequently developed. With her co-director, Tara Flanagan, results of their program were shared at the *Prémier Forum Québécois sur le trouble du spectre de l'autisme* in February 2016, an event organized by the Quebec government to inform policy on autism spending for the next 4 years.

- SCSD students continue to provide free hearing screenings and information on how to prevent hearing loss to members of the McGill and Montreal communities, led by Sophie Vaillancourt. In 2016, nearly 500 children were screened by our students in Montreal-area Elementary Schools. Another 369 individuals, ranging from 3-77 years old, were screened on campus during a widely-publicized two-day event in March 2016;
- In April 2016, McGill celebrated its second annual World Voice Day with SCSD professor, Dr. Nicole Li-Jessen, as the World Voice Day coordinator for Canada. In collaboration with SCSD students, a variety of events were held (voice screenings, a seminar focusing on the “Aging Voice”) and Dr. Li-Jessen appeared on CITY TV’s “Breakfast Television Montreal”: <http://www.btmontreal.ca/videos/4832305716001/>
- For the first time, the SCSD collaborated with the Jewish General Hospital in organizing a “Swallowing Awareness” day, to promote knowledge and awareness of swallowing disorders and the role of speech-language pathologists;
- For the third year, the SCSD continued to develop relationships with the Cree Nation in Chisasibi, Northern Quebec and to expand speech-language services in surrounding communities. In 2016, four MSc(A) students conducted their spring internships in this setting as documented in an on-line [blog](#);
- 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 québécoise 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 [Speaking of Language](#) newsletter. This newsletter is written by SCSD students in consultation with Dr. Li-Jessen and Rvachew and distributed to the wider SCSD and Montreal clinical communities.

Milestones

- Dr. Karsten Steinhauer was promoted from Associate to Full Professor
- Ms. Kelly Root and Ms. Sophie Vaillancourt were each promoted from Faculty Lecturer to Assistant Professor (Professional)
- Dr. Marc Pell was re-appointed as Associate Dean and Director of the School
- Dr. Vincent Gracco took his retirement from McGill in September 1, 2016, receiving a three-year appointment as part-time Full Professor (Post-Retirement)

Honours, awards, and prizes

- Dr. Nicole Li-Jessen’s innovative research on *Personalized medicine in voice care* was recognized in the form of a new Canada Research Chair (Tier 2) award;
- Dr. Elin Thordardottir received a certificate for Highly Published Research from the *Journal of Communication Disorders*, to recognize the high impact of a 2013 article she published in the journal with SCSD PhD student, Myrto Brandeker.