# SCHOOL OF COMMUNICATION SCIENCES AND DISORDERS

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# 1 Administration

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# 1.1 Administrative Officers

ABRAHAM FUKS, B.Sc., M.D., C.M. (McG.), F.R.C.P.(C)

Dean, Faculty of Medicine

RACHEL MAYBERRY, B.A.(Drake), M.S.(Wash.), Ph.D.(McG.)

Director

# 2 Staff

#### **Emeritus Professor:**

Donald Doehring; B.A.(Buff.), M.A.(N.M.), Ph.D.(Ind.)

Professor:

Athanasios Katsarkas; M.D., C.M., F.R.C.S.(C)

# **Associate Professors:**

Shari Baum; B.A.(C'nell), M.S.(Vt.), M.A., Ph.D.(Brown)
Martha Crago; B.A., M.Sc.(A), Ph.D.(McG.)
Rachel Mayberry; B.A.(Drake), M.S.(Wash.), Ph.D.(McG.)
James McNutt; B.S.(Edin.). M.Ed.(Penn. St.), Ph.D.(Kent St.)
Linda Polka; B.A.(Slippery Rock), M.A.(Minn.), Ph.D.(S. Florida)

# **Assistant Professors:**

Marc Pell; B.A.(Ott.), M.Sc., Ph.D.(McG.) Elin Thordardotir; B.A., M.Sc., Ph.D.(Wis.)

#### Assistant Professors (Part-time):

Gabriel Leonard; B.A.(Dublin), D.Á.P., M.Sc., Ph.D.(McG.) Sybil Schwartz; B.Sc.(McG.), M.Sc.(A)(Iowa St.), Ph.D.(McG.) Rosalee Shenker; B.Sc.(Syr.), M.A.(Calif. St.), Ph.D.(McG.)

#### Faculty Lecturer:

Jeanne Claessen; M.A. (Reading), Dip. Clinical Communication Studies (City University, London)

#### Faculty Lecturers (Part-time):

Pamela Bager; B.A.(Manit.), M.Sc.(A)(McG.)

Ruth Gesser; B.A.(C'dia), M.Sc.(A)(McG.)
Andrea Gingras; B.A.(McG.), M.Sc.(Alta.)
Jeanne Gordon; B.A.(Bishop's), M.Sc.(McG.)
Cathy Mhun; B.A., M.Sc.(A)(McG.)
Jeri Miller; B.Sc.(Wis.-Mil.), M.Sc.(Purdue)
Johanne Paradis; B.A.(Ott.), M.Sc., Ph.D.(McG.)
Laura Polomeno; B.A., B.Ed. (McG.), M.Sc. (Syracuse)
Judith Robillard-Shultz; B.A., M.Sc.(A) (McG.)
Navid Shahnaz; B.Sc.(Iran), M.Sc.(McG.)
Megha Sundara; B.Sc., M.Sc.(All India Inst. of Speech & Hearing)

#### Adjunct/Associate Members:

David Caplan; B.Sc., Ph.D.(M.I.T.), M.D.,C.M.(McG.)
Howard Chertkow; M.D.(W. Ont.), F.R.C.P., (Neurology)
David McFarland; B.A., M.A.(Calif. St.), Ph.D.(Purdue)
Yuriko Oshima-Takane; B.A.(Tokyo Women's Christian),
M.A.(Tokyo), Ph.D.(McG.)
Gloria Waters; B.A.(McG.), Ph.D.(C'dia)

# 3 General Information

#### 3.1 Professional Profiles

The School offers professional degrees in Communication Sciences and Disorders at the M.Sc., Applied level with specialization in either Speech-Language Pathology or Audiology, and two research degrees, an M.Sc.(Research) and a Ph.D. in Communication Sciences and Disorders.

# SPEECH-LANGUAGE PATHOLOGY

The profession of Speech-Language Pathology concerns assessment and intervention in speech and language disorders. In particular, the Speech-Language Pathologist is concerned with two major parameters of communication sciences and disorders: language and speech. At present, most speech-language pathologists in Canada work in hospitals, public school systems, rehabilitation centres, and in special education facilities.

# **AUDIOLOGY**

The profession of Audiology is concerned with the non-medical assessment of hearing disorders. The audiologist is also trained to undertake aural rehabilitation, which includes the selection of appropriate hearing aids, the use of residual hearing, and the development of speech reading. Most audiologists work as clinicians and are employed in hospitals, but some work in schools for the hearing-impaired. An emerging area involves consultation with industry and government on damage to hearing due to noise pollution.

#### 3.2 Historical Notes

The School of Communication Sciences and Disorders, which is a part of the Faculty of Medicine, began its operation in September 1963 within the Division of Audiology and Speech Pathology of the Institute of Otolaryngology at the Royal Victoria Hospital. It was one of the first university departments in Canada to offer graduate training in Speech-Language Pathology and Audiology.

Originally the School offered a two-year professional program which led to the M.Sc., Applied. For the first few years, this provided joint qualification in Audiology and Speech Pathology, however, it was soon decided that specialization within one or the other area was necessary. Over the years, the student population has grown from 4 to more than 50 students and the full-time faculty from two to eight.

In keeping with the McGill tradition of excellence in research, the School was the first in Canada to offer a doctoral degree in Communication Sciences and Disorders. In the past few years increased emphasis has been placed on research programs and in 1989, the M.Sc. program was modified so that students could receive both professional and research training at that stage. This modification provides the necessary background for students wishing to continue their studies at the doctoral level.

#### 3.3 Requirements for Licensure

The majority of provinces in Canada and certain states in the U.S.A. require that those intending to practice as Speech-Language Pathologists or Audiologists within their borders comply with special provincial or state licensing regulations. Graduates wishing to practice in the province of Quebec must be members of l'Ordre des Orthophonistes et Audiologistes du Quebec (OOAQ) in order to call themselves Speech-Language Pathologists and Audiologists. Further information is available from the OOAQ, 1265 rue Berri, Bureau 730, Montreal, Quebec, H2L 4X4. Telephone: (514) 282-9123.

Quebec law requires that candidates seeking licensure in provincially recognized professions demonstrate a verbal and written working knowledge of the French language. See the Language Requirements for Professions on page 4 in the General Information and Regulations Section.

# 3.4 Academic Regulations and Calendar of Dates

The general rules concerning higher degrees apply. These regulations and the Calendar of Dates relevant to graduate programs can be found in the General Information, Faculty Regulations and Research Guidelines section of the Graduate Studies and Research Calendar.

#### 3.5 Vaccination Requirements

Students in the School must comply with the Vaccination Requirements as outlined in the General Information Section, page 5.

# 3.6 Fellowships

The IODE Provincial Chapter of Quebec funds two \$1,000 "Silence to Sound" awards for studies in hearing impairment. These in-course awards based on academic merit, financial need, and potential for excellence, are awarded by the School.

Montreal League for the Hard of Hearing Award. Value – up to \$1,000. Established by a gift from the Montreal League for the Hard of Hearing Inc. for students in training. Candidates must be enrolled at the graduate level in the School of Communication Sciences and Disorders doing work in the area of hearing impairment. Awarded by the School.

# 4 Degrees Offered

# 4.1 M.Sc.A. Degree in Communication Sciences and Disorders

**Note:** Applications to the Audiology specialization are not being accepted for 1999-2000.

The professional degree program leads to a Master of Science, Applied degree in Communication Sciences and Disorders with a specialization in either Speech-Language Pathology or Audiology. The program involves two academic years of full-time study and related practical work followed by a summer internship. To prepare students as creative professionals, the program emphasizes the understanding of principles and theories, and their present or potential clinical applications, in addition to the teaching of specific techniques for assessment and intervention. Active participation in the learning process is encouraged.

Applicants must indicate whether they wish to specialize in Audiology or in Speech and Language Pathology. An applicant must hold an undergraduate degree with a minimum B average (3.0 on a 4.0 point scale) or better in areas relevant to the selected field of specialization. Specific prerequisites are six credits in statistics, 12 credits in psychology, and six credits in linguistics. Knowledge of physiology is also desirable. For those wishing to specialize in Audiology, some psychology credits may be replaced by credits in mathematics, physics and electronics.

The completed applications for the M.Sc., Applied programs, including transcripts and letters of reference should be submitted directly to the School and must be received by February 1, or they may not be considered for the following academic year. Each application must be accompanied by a non-refundable fee of \$60 (Canadian or U.S.) in the form of a certified cheque or money order payable to McGill University.

#### 4.2 Research Degrees – M.Sc. and Ph.D.

Selected candidates may be accepted for the M.Sc. and Ph.D. research degrees. Each student's Thesis supervisor and Thesis Committee design an individualized program of study in collaboration with the student. The program can include graduate courses offered by the School and by other departments at McGill.

The completed applications for M.Sc.(Research) or Ph.D. programs, including transcripts and letters of reference, should be submitted directly to the School. Applications are processed as they are received; however, students must apply no later than February 22 for fall admission, October 25 for winter admission, and January 25 for summer admission). Each application must be accompanied by a non-refundable fee of \$60 (Canadian or U.S.) in the form of a certified cheque or money order payable to McGill University.

# M.Sc. in Communication Sciences and Disorders (45 credits)

The M.Sc. provides research training for:

- students who are also taking courses for professional qualification;
- students who have a non-thesis professional degree in Communication Sciences and Disorders; and
- students with degrees in related fields who wish to do research but not obtain professional qualification in Communication Sciences and Disorders.

M.Sc. candidates must complete at least 45 credits, including a minimum of 24 and a maximum of 39 credits for thesis research and a minimum of 6 credits in courses.

# Ph.D. in Communication Sciences and Disorders

Applicants should normally have a Master's degree with thesis or its equivalent in Communication Sciences and Disorders or a related field (e.g. psychology, linguistics). Students who possess an appropriate Bachelor's degree or Master's degree without thesis will also be considered for the Ph.D. program, but, if admit-

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ted, must first complete a qualifying year of coursework and a research project in the School ("fast-track" option).

All Ph.D. students must complete the course requirements in their individual program of study and pass a comprehensive examination. An examination in a foreign language is not required. Applicants should indicate their area of research interest.

#### 5 **Programs and Courses**

#### M.Sc.A. Degree in Communication Sciences and Disorders (68 credits)

#### M.Sc., APPLIED - AUDIOLOGY SPECIALIZATION

Note: Applications to the Audiology specialization are not being accepted for 1999-2000.

#### Year 1 Required Courses (31 credits)

401-616A	(3)	Audiology
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401-617A Anatomy & Physiology of Speech & Hearing

401-618A Research and Measurement Methodologies (3)

401-619A (3)Phonological Development

401-631B Speech Science (3)

401-634B Research & Measurement Methodologies II (2)

Hearing Science I 401-654A (3)

401-646C Clinical Practicum (2)

401-654A Hearing Science I (3)401-655B (3) Advanced Clinical Audiology

401-656B Hearing Science II (3)

401-681A (1) Practicum and Seminar I

Practicum and Seminar II 401-682B (1)

# Year 1 Complementary Course (3 credits)

One three-credit seminar option must be taken.

#### Year 2 Required Courses (31 credits)

401-633B Language Development

Aural Rehabilitation 401-642B (3)

401-657A (3)Instrumentation 401-658A (3) Amplification

401-659A Pediatric Audiology (3)

401-661A Rehabilitation of Adult Onset Hearing Impair-

401-662B **Auditory Evoked Potentials** 

401-663B Peripheral & Central Auditory Disorders (3)

401-668A Communicatively Disordered Person: Practice (3)

401-679C Advanced Clinical Practicum (2)

401-683A Practicum and Seminar III (1)

401-684B (1) Practicum and Seminar IV

# Year 2 Complementary Course (3 credits)

One three-credit seminar option must be taken.

#### M.Sc., APPLIED - SPEECH-LANGUAGE PATHOLOGY **SPECIALIZATION**

#### Year 1 Required Courses (31 credits)

401-616A Audiology (3)

Anatomy & Physiology of Speech & Hearing 401-617A (3)

401-619A Phonological Development (3)

401-624A Language Processes (3)401-633A (3) Language Development

401-631B

(3)Speech Science

401-632B (3)Phonological Disorders in Children

401-637B Developmental Language Disorders I (3)

401-638B (3)Neurolinguistics

401-646C (2)Clinical Practicum

401-681A Practicum and Seminar I

401-682B Practicum and Seminar II

# Year 1 Complementary Course (3 credits)

One three-credit seminar option must be taken.

#### Year 2 Required Courses (31 credits)

401-618A Research & Measurement Methodologies

401-636A Fluency Disorders

401-639A (3)Voice Disorders

401-643A Developmental Language Disorders II (3)

401-644A (3)**Applied Neurolinguistics** 

401-609B Neuromotor Disorders (3)

401-642B (3)Aural Rehabilitation

401-668B Communicatively Disordered Person: Practice (3)

Special Developmental Speech/Language 401-669B (3)Problems

401-679C Advanced Clinical Practicum

Practicum and Seminar III 401-683A

401-684B Practicum and Seminar IV (1)

#### Year 2 Complementary Course (3 credits)

One three-credit seminar option must be taken.

# **COMPLEMENTARY COURSE LIST**

401-634B Research & Measurement Methodologies II

401-649B Psycholinguistics of Gesture & Sign Language (3)

401-664B Topics in Comm. Sciences & Disorders I (3)

401-666B

(3)Topics in Comm. Sciences & Disorders III

401-667B Topics in Comm. Sciences & Disorders IV (3)

401-670B (3)Topics in Comm. Sciences & Disorders II

A seminar may also be taken outside of the School upon approval of a faculty advisor.

#### **COURSES FOR M.Sc. APPLIED PROGRAMS**

The letters which form part of the course numbers have the following significance:

A - fall term

B - winter term

C - summer session courses starting in May

D - fall and winter term

The course credit weight appears in parenthesis (#) after the

401-609B NEUROMOTOR DISORDERS. (3) The focus of this course will be on the assessment and management of motor speech disorders, associated with both acquired and developmental neuromotor disorders, and swallowing disorders (of both neuromotor and structural origin).

401-616A AUDIOLOGY AND AURAL REHABILITATION. (3) Basic diagnostic and rehabilitative procedures, goals and procedures used in clinical audiology, and the psychoacoustic theories on which they are based will be presented.

# 401-617A ANATOMY AND PHYSIOLOGY OF SPEECH AND HEARING.

(3) The anatomy and physiology of speech and hearing mechanisms will be covered. Topics will include neuroanatomy, the anatomy and physiology of the head, neck and upper torso, and the external, middle, and inner ear.

401-618A RESEARCH AND MEASUREMENT METHODOLOGIES I. (3) Methodologies used in research and measurement in the field of communication sciences and disorders will be introduced. Topics covered include: the nature and interpretation of test norms; validity; interpretation of test score differences; and questionnaire development (scaling). Tests currently used in speech-language pathology and audiology are examined.

401-619A PHONOLOGICAL DEVELOPMENT. (3) Theories and research related to normal and abnormal phonological development in children will be studied.

401-624A LANGUAGE PROCESSES. (3) The structure and nature of on-line processing of the language code, and the interaction of structure and function of language will be studied. Theories about the nature of representation and research concerning its processing, and the role of sociocultural factors in linguistic performance also will be covered.

401-631B SPEECH SCIENCE. (3) The acoustic analysis and perception of speech and related pathologies will be presented. The-

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- ories and models of speech production, speech motor control, and speech perception will be considered.
- **401-632B PHONOLOGICAL DISORDERS IN CHILDREN.** (3) The nature of phonological disorders and clinical approaches for their remediation in children will be presented.
- **401-633B Language Development.** (3) Theories of language acquisition, prerequisites to language development, and current issues in research will be studied. Topics include the role of input, individual differences in acquisition, and language socialization.
- **401-634B** RESEARCH AND MEASUREMENT METHODOLOGIES II. (3) This course addresses the strengths and weaknesses of various research designs. Issues concerning the analysis and interpretation of research results also will be discussed.
- **401-636A FLUENCY DISORDERS.** (3) The nature of stuttering, various causal theories, and techniques for evaluation and treatment of children and adults will be presented.
- **401-637A DEVELOPMENTAL LANGUAGE DISORDERS I.** (3) The nature of developmental language disorders and the assessment of language competence and performance in both speaking and non-speaking children will be studied.
- **401-638A NEUROLINGUISTICS.** (3) Current theories of language-brain relationships and speech and language deficits subsequent to brain damage will be studied. A review of current research on phonetic, lexical, and syntactic processing in brain-damaged individuals is included.
- **401-639A VOICE DISORDERS.** (3) Information about the vocal mechanism, its pathologies, and methods of evaluation and treatment will be studied.
- **401-642B AURAL REHABILITATION.** (3) This course addresses the effects of hearing impairment in adults as well as in the developing child with attention to problems in speech, language, and cognitive function as well as social-emotional adjustment. Various intervention approaches are examined.
- **401-643B DEVELOPMENTAL LANGUAGE DISORDERS II.** (3) Major theories of language disorders are translated into intervention principles used in language treatment programs. Adaptations of intervention techniques to suit specific disorders (including augmentative communication) will be explored.
- **401-644A APPLIED NEUROLINGUISTICS.** (3) Various classificatory systems and appropriate assessment and remediation principles for brain-damaged individuals will be covered. Theoretical and clinical issues relevant to treatment of aphasic, neuromotor, and memory disorders will be considered.
- **401-646C CLINICAL PRACTICUM.** (2) This course provides an introduction to professional practice through intensive exposure to a variety of clinical populations.
- **401-649B PSYCHOLINGUISTICS OF GESTURE AND SIGN LANGUAGE.**(3) Gestured under two naturally occurring conditions is examined: (1) spontaneous speech where gesture serves as an adjunct to communication, and (2) sign language where gesture is the primary means of communication. The development of these gestural phenomena in the absence and presence of various communication disorders is also examined.
- **401-652A,B ADVANCED RESEARCH SEMINAR I.** (3) Pro seminar in which current research topics in communication disorders will be discussed. (This course may be taken as an advanced course for M.Sc. students.)
- **401-653A,B ADVANCED RESEARCH SEMINAR II.** (3) Pro seminar in which current research topics in communication disorders will be discussed. (This course may be taken as an advanced course for M.Sc. students.)
- **401-654A HEARING SCIENCE I.** (3) Basic information regarding the acoustics and psychoacoustics of sound is provided.
- **401-655B ADVANCED CLINICAL AUDIOLOGY.** (3) Specialized diagnostic tests and procedures for assessment of auditory function are analyzed. The effects of noise on auditory function and issues related to hearing conservation also will be addressed.

- **401-656B HEARING SCIENCE II.** (3) A basic understanding of normal and impaired auditory function from both a physiological and psychological perspective is presented. Auditory function will be evaluated with respect to both simple and complex sounds.
- **401-657A INSTRUMENTATION.** (3) Instrument use in diagnostic and rehabilitative Audiology, including calibration and maintenance, will be addressed.
- **401-658A AMPLIFICATION.** (3) Hearing aids and amplification systems currently available for the hearing impaired individual will be studied
- **401-659A PEDIATRIC AUDIOLOGY.** (3) Current practices and research in the auditory assessment of infants and children will be addressed.
- **401-661A REHABILITATION OF ADULT ONSET HEARING IMPAIRMENT.**(3) Theoretical and practical aspects of the aural rehabilitation of impaired individuals with adult onset of the impairment will be studied.
- **401-662B AUDITORY EVOKED POTENTIALS.** (3) Presentation of auditory evoked potentials focusing on the auditory brainstem response (ABR) including clinical applications of ABR in site-of-lesion testing with infants and difficult-to-test populations.
- **401-663B PERIPHERAL AND CENTRAL AUDITORY DISORDERS.** (3) Audiological evaluation including case history and descriptive techniques, various tests for detecting and differentiating auditory disorders, and clinical decision making and protocol development in assessment of site of lesion and auditory disorders will be addressed.
- **401-664B TOPICS IN COMMUNICATION SCIENCES AND DISORDERS I.**(3) Current research and professional issues in communication sciences and disorders will be discussed. Specific topics to be selected yearly.
- **401-666B TOPICS IN COMMUNICATION SCIENCES AND DISORDERS III.** (3) Current research and professional issues in communication sciences and disorders will be discussed. Specific topics to be selected yearly.
- **401-667B TOPICS IN COMMUNICATION SCIENCES AND DISORDERS IV.** (3) Current research and professional issues in communication sciences and disorders will be discussed. Specific topics to be selected yearly.
- **401-668A COMMUNICATIVELY DISORDERED PERSON: PRACTICE.** (3) This course addresses clinical and supervisory processes, the social and emotional impact of communicative disabilities, and professional issues related to the practice of speech-language pathology and audiology.
- **401-669B SPECIAL DEVELOPMENTAL SPEECH/LANGUAGE PROB- LEMS.** (3) Information pertinent to cerebral palsy, cleft palate, autism, mental retardation, multiple handicaps and syndromes involving speech and language disorders will be presented. General descriptions of the disorders and specific assessment and remedial procedures will be addressed.
- **401-670B TOPICS IN COMMUNICATION SCIENCES AND DISORDERS II.**(3) Current research and professional issues in communication sciences and disorders will be discussed. Specific topics to be selected yearly.
- **401-679C ADVANCED CLINICAL PRACTICUM.** (2) This course enhances professional practice independence through intensive exposure to a variety of clinical populations.
- **401-681A PRACTICUM AND SEMINAR I.** (1) Course provides initial practicum experiences including a combination of the following: speech/language and hearing screenings, facility tours, short term placements and laboratory assignments.
- **401-682B PRACTICUM AND SEMINAR II.** (1) This course provides clinical experience through short-term placements and screenings, as well as discussions of current practicum issues.
- **401-683A PRACTICUM AND SEMINAR III.** (1) Professional practice experiences focusing on a variety of clinical populations are provided. Discussion of advanced issues in clinical practice is included.

**401-684B PRACTICUM AND SEMINAR IV.** (1) This course provides clinical practicum experiences in a range of settings. Professional practice issues are considered.

#### 5.2 M.Sc. in Communication Sciences and Disorders

M.Sc. candidates must complete at least 45 credits, including a minimum of 24 and a maximum of 39 credits for thesis research (courses 401-671, 672, 673 and 674), and a minimum of 6 credits in other courses. The non-thesis credits can be special topic courses in the School (401-675, 401-676, 401-677, 401-678) and/or courses in other departments, as arranged with the student's thesis supervisor.

401-671 M.Sc. THESIS I. (12 credits)

401-672 M.Sc. THESIS II. (12 credits)

401-673 M.Sc. THESIS III. (12 credits)

401-674 M.Sc. THESIS IV. (3 credits)

401-675D,A,B,C SPECIAL TOPICS I. (12 credits)

401-676D,A,B,C SPECIAL TOPICS II. (9 credits)

401-677D,A,B,C SPECIAL TOPICS III. (6 credits)

401-678A,B SPECIAL TOPICS IV. (3 credits)

#### 5.3 Ph.D. in Communication Sciences and Disorders

Ph.D. students must complete a full graduate course in statistics and both advanced research seminars as well as the other course requirements in their individual program of study, and pass a comprehensive examination. Students entering the Ph.D. program thorough the fast-track option must additionally demonstrate the ability to complete a research project and related coursework during the initial year. An examination in a foreign language is not required.

**401-652A,B ADVANCED RESEARCH SEMINAR I.** (3) Pro seminar in which current research topics in communication disorders will be discussed. (This course may be taken as an advanced course for M.Sc. students.)

**401-653A,B ADVANCED RESEARCH SEMINAR II.** (3) Pro seminar in which current research topics in communication disorders will be discussed. (This course may be taken as an advanced course for M.Sc. students.)

**401-685A,B,C,T RESEARCH PROJECT I.** (3) Supervised research project.

**401-686A,B,C,T RESEARCH PROJECT II.** (3) Supervised research project.

401-701A,B,D DOCTORAL COMPREHENSIVES.