

MAX WOLPERT

max.a.wolpert@mail.mcgill.ca

EDUCATION

2016 – 2023 (defense December 2022) | **PhD**, Neuroscience
McGill University | Université McGill, Canada
Thesis: Brain signatures of native and non-native Mandarin processing
Supervisors: Karsten Steinhauer & Shari Baum

2018 – 2019 | **Fulbright US Student Researcher**
Nanjing Normal University | 南京师范大学, China
conducted 10-month exchange for PhD thesis research
Supervisor: Hui Zhang 张辉

2015 – 2016 | **Master's**, Cognitive Neuroscience of Language
University of the Basque Country | Euskal Herriako Unibertsitatea, Spain
Basque Center on Cognition, Brain and Language
Thesis: Experimental investigation of speaker identity processing in Basque
Supervisors: Sandy Caffarra & Simona Mancini

2010 – 2014 | **BSc with Distinction**, Chemistry, second major Hispanic Linguistics
University of North Carolina at Chapel Hill, USA

2012 – 2013 | **Study Abroad**
Complutense University | Universidad Complutense, Spain
completed two semesters of upper-level chemistry classes in Spanish

HONORS AND AWARDS

2023 – 2024 | **Blakemore Freeman Fellowship for Chinese**, 28,500 USD + 19,000 USD tuition
2019 – 2021 | **FRQNT doctoral research bursary, first-ranked application**: 56,000 CAD
2019 | Healthy Brains for Healthy Lives Student Fellowship – *declined*: 15,000 CAD
2019 | Mitacs Globalink Research Award: 6,000 CAD
2018 | McGill Faculty of Medicine Studentship – *declined*: 12,000 CAD
2018 | Chinese Government Scholarship: 5,000 USD
2018 | **Fulbright US Student Researcher Award**: 23,000 USD
2018 | Center for Research on Brain, Language and Music Internship Award: 1,500 CAD
2017 | Center for Research on Brain, Language and Music Stipend Award: 6,000 CAD
2017 | Graduate Research Enhancement and Travel Award: 500 CAD
2017 | McGill Faculty of Medicine Shuk-Tak Liang Fellowship: 12,000 CAD
2016 | McGill Integrated Program in Neuroscience Recruitment Award: 5,000 CAD
2015 | University of the Basque Country Master's Scholarship: 4,500 EUR
2014 | Phi Beta Kappa Members, honors fraternity for academic performance
2012 | **Gilman International Scholarship** from US Department of State: 5,000 USD
2012 | Leonard and Rose Herring Study Abroad Scholarship: 3,000 USD
2012 | Carolina Research Scholar designation for undergraduate research excellence
2011 – 2014 | Honor's Program Student at University of North Carolina at Chapel Hill
2010 – 2014 | Dean's list, all semesters at University of North Carolina at Chapel Hill
2010 | US National Merit Scholarship: 10,000 USD

TEACHING EXPERIENCE

Teaching

2021 | **Guest Lecturer**

McGill University, PSYC 433 Cognitive Science, Canada

- Delivered 80-minute introduction to syntax lecture for undergraduate course

2017 | **Instructor**

[Duke Talent Identification Program](#), Psychology of Decision Making, China

- Designed, developed, taught three-week intensive course with >100 hours of instruction time for 18 high school students, including 15 English second language learners
- Brought neuroscience perspective to course, introducing MRI, EEG, and eye tracking
- Engaged students with primary literature for proposing experiments for final project

2014 – 2015 | **Foreign Teacher**

Best Learning English, China

- Instructed English immersion classes to children ages two to ten
- Collaborated in intercultural situations to model American educational environment
- Worked and coordinated with sales staff to procure new students

2014 | **Instructional Counselor**

[Duke Talent Identification Program](#), Human Genetics, USA

- Supported instruction of academically gifted high school students in three-week human genetics course and introduced students to molecular biology laboratory techniques
- Led residential activities for participants with team of counselors

Student Supervision

2019 – 2022 | Jiarui Ao

McGill University, Canada

- Supervised research assistant Jiarui
- Guided training in R, MATLAB, regression and mixed effects models, data visualization, and EEG preprocessing
- Supported Jiarui in delivering two first-author conference presentations, contributing to four second-author conference presentations and second-author thesis manuscript

Mentorship

2021 | **Mentor** for [Mitacs Globalink Research Internship](#), Canada

- Mentored 10 international interns during their virtual internship at McGill
- Created and led online workshops on planning for graduate school, dealing with imposter syndrome, and science communication

2019, 2020, 2021 | **Graduate Funding Panelist**, Canada

- Invited by McGill Graduate and Postdoctoral Studies to advise STEM graduate students on applying to provincial funding

2019 | **Fulbright Alumni Facilitator**, USA

- Led discussions and briefed incoming Fulbright grantees for East-Asia and Pacific for Fulbright pre-departure orientation

2019 | **Fulbright Student Researcher Moderator**, Taipei

- Led group discussion on professional life in a second language for Fulbright East-Asia Pacific workshop

ADDITIONAL RESEARCH EXPERIENCE

Work Experience

2013 – 2014 | **Lab Assistant**, Qing Zhang Lab

University of North Carolina at Chapel Hill, USA

- Prepared buffers, gels, and reagents for cancer and hypoxia research
- Organized lab supplies and workspaces

2011 – 2012 | **HHMI Future Scientists and Clinicians Fellow**, Vytas Bankaitis Lab

University of North Carolina at Chapel Hill, USA

- Created binding mutant of yeast protein which contributed to high-profile publication
- Conducted full-time research for two summers, part-time during academic year
- Responsibilities: PCR, cloning, protein purification, media and buffer preparation, homology modeling

Professional Memberships

2016 – 2022, Society for the Neurobiology of Language

2021, Society for Human Sentence Processing (formerly known as CUNY)

Ad Hoc Reviewing – *Frontiers in Psychology, Second Language Research*

PUBLICATIONS

Peer-Reviewed Journal Articles

The child the apple eats – processing of argument structure in Mandarin verb-final sentences

Wolpert M, Ao J, Zhang H, Baum S, Steinhauer K

in preparation for submission to Scientific Reports

Native and non-native parsing of adjective placement – an ERP study of Mandarin and English sentence processing

Wolpert M, Zhang H, Baum S, Steinhauer K

in preparation for submission to Brain and Language

Phrase parsing in a second language as indexed by the Closure Positive Shift: The impact of language experience and acoustic cue salience

Gilbert A, Lee J, Wolpert M, Baum S

Psychophysiology (submitted)

[Spoken word segmentation in first and second language: When ERP and behavioral measures diverge](#)

Gilbert A, Lee J, Coulter K, Wolpert M, Kousaie S, Gracco V, Klein D, Titone D, Phillips N, Baum S

Frontiers in Psychology (2021), 12(September), 1-20

[Who are you talking to? The role of addressee identity in utterance comprehension](#)

Caffarra S, Wolpert M, Scarinci D, Mancini S

Psychophysiology (2020), 57(April), 1-15

[Adaptive and selective use of syllable duration and fundamental frequency as word segmentation cues in the production of French-English bilinguals](#)

Gilbert A, Wolpert M, Saito H, Kousaie S, Itzhak I, Baum S

Journal of the Acoustical Society of America (2019), 146(6)

[Addressee Identity and Morphosyntactic Processing in Basque Allocutive Agreement](#)

Wolpert M, Mancini S, & Caffarra S

Frontiers in Psychology (2017), 8(September), 1–11

[A sterol-binding protein integrates endosomal lipid metabolism with TOR signaling and nitrogen sensing](#)
Mousley C, Yuan P, Gaur N, Trettin K, Nile A, Deminoff S, Dewar B, Wolpert M, Macdonald J, Herman P, Hinnebusch A, Bankaitis V
Cell (2012), 148(4), 702-715

Conference Proceedings

[Producing appropriate prosodic cues in a non-dominant language: preliminary results from French-English bilinguals](#)
Gilbert A, Wolpert M, Kousaie S, Baum S
Proceedings of 8th Tutorial and Research Workshop on Experimental Linguistics (2017), 37-40.

Book Reviews

[Nan Jiang: SECOND LANGUAGE PROCESSING: AN INTRODUCTION.](#)
Sun P, Wolpert M
Applied Linguistics (2020), 1-5

INVITED TALKS

Argument Structure Processing in Native and Non-Native Mandarin Speakers
Wolpert M, Ao J, Zhang H, Baum S, Steinhauer K.
Invited talk for [Neurolinguistics and Aphasia Group](#) meeting, Basque Center on Cognition, Brain and Language (*online*, March 2021)

L2 impact on L1 grammatical processing in Mandarin-English bilinguals—preliminary analysis of Mandarin monolingual data
Wolpert M, Zhang H, Baum S, Steinhauer K.
Invited talk for [Language and Multilingualism Lab](#), McGill University (Montreal, July 2019)

Preliminary ERP Results from Mandarin Monolinguals and Hypotheses for Attriters and Second Language Learners
Wolpert M, Zhang H, Baum S, Steinhauer K.
[Fulbright East Asia-Pacific Regional Workshop](#) (Taipei, March 2019)

Second Language Impact on First Language Grammatical Processing
Wolpert M, Zhang H, Baum S, Steinhauer K.
Workshop on ERP and Other Techniques in Psycholinguistic Research (Nanjing, November 2018)

CONFERENCE PRESENTATIONS

Oral Presentations

Les mécanismes d'interprétation de la phrase chez les locuteurs natifs et non-natifs du mandarin
Wolpert M, Ao J, Zhang H, Baum S, Steinhauer K.
[88e Congrès de l'Acfas](#) (Sherbrooke, May 2021)

Argument Structure Processing in Native and Non-Native Mandarin Speakers
Wolpert M, Zhang H, Baum S, Steinhauer K.
[12th Nordic Conference on Bilingualism \(Stockholm, June 2020\)](#) –Cancelled due to Covid-19

Prosody and Ambiguous Word Segmentation in L1 and L2: Preliminary Analysis of Production Data
Wolpert M, Gilbert A, Baum S
Montreal Bilingual Brains Initiative Datablitz (Montreal, February 2018)

Sterol Binding in ORPs
Wolpert M, Mousley C, Bankaitis V
UNC HHMI Future Scientists and Clinicians Summer Closing (Chapel Hill, July 2011)

Poster Presentations

ERP profiles of L1 and L2 processing of adjective-noun word order violations in Mandarin and English

Wolpert M, Ao J, Zhang H, Baum S, Steinhauer K

[Society for the Neurobiology of Language](#) (SNL) (Online, October 2021)

Native and non-native processing of Mandarin sentences

Ao J, Wolpert M, Zhang H, Baum S, Steinhauer K

Brenda Milner Neuropsychology Day (Online, May 2021)

Native and non-native processing of Mandarin sentences

Ao J, Wolpert M, Zhang H, Baum S, Steinhauer K

Scientific Day of Centre for Research on Brain, Language and Music (Online, May 2021)

Mandarin argument structure processing: ERP reading data from reversible and irreversible NNV sentences with and without BA and BEI

Wolpert M, Ao J, Zhang H, Baum S, Steinhauer K.

[34th Annual CUNY Conference on Human Sentence Processing](#) (Online, March 2021)

Argument Structure Processing in Native and Non-Native Mandarin Speakers

Wolpert M, Ao J, Zhang H, Baum S, Steinhauer K

[Society for the Neurobiology of Language](#) (SNL) (Online, October 2020)

Addressing the discrepancy between online and offline measures of word segmentation in L2: ERP and accuracy measures

Gilbert A, Lee J, Coulter K, Wolpert M, Kousaie S, Gracco V, Klein D, Titone D, Phillips N, Baum S

[Society for the Neurobiology of Language](#) (SNL) (Online, October 2020)

Analyzing the frequency spectrum of neurophysiological responses to complex linguistic stimuli: a methodological investigation

Glushko A, Wolpert M, Steinhauer K

[Live MEEG 2020](#) (Online, October 2020)

Language dominance and entropy as predictors of word segmentation cue production in bilinguals

Gilbert A, Gullifer J, Wolpert M, Saito H, Kousaie S, Itzhak I, Gracco V, Klein D, Phillips N, Titone D, Baum S

[60th Annual Meeting of the Psychonomic Society](#) (Montréal, November 2019)

ERP profiles for Chinese sentence processing: Relevant factors in noun-noun-verb structures with BA and BEI, and effects of adjective placement violations

Wolpert M, Zhang H, Baum S, Steinhauer K

[Society for the Neurobiology of Language](#) (SNL) (Helsinki, August 2019)

Phrase-Final Lengthening as a Word Segmentation Cue in French: A Bilingual ERP Investigation

Gilbert A, Itzhak I, Wolpert M, Lee J, Baum S

[Society for the Neurobiology of Language](#) (SNL) (Helsinki, August 2019)

Addressee identity and grammatical processing: the case of Basque allocutive agreement

Mancini S, Wolpert M, Scarinci D, Caffarra S

[Architectures and Mechanisms for Language Processing Conference](#) (AMLaP) (Berlin, September 2018)

Relative language dominance influences the use of fundamental frequency and duration to signal word boundaries in English and French

Gilbert A, Wolpert M, Saito H, Kousaie S, Baum S

[37th Second Language Research Forum](#) (Montreal, October 2018)

Perceptual processing of pre-boundary lengthening during phrase segmentation in English: Preliminary ERP evidence

Gilbert A, Lee J, Wolpert M, Baum S

[Society for the Neurobiology of Language](#) (SNL) (Quebec City, August 2018)

Cortical tracking of linguistic phrases: bottom-up and top-down effects of prosodic processing

Glushko A, Wolpert M, Tavano A, Poeppel D, Steinhauer K

[Cognitive Neuroscience Society](#) (CNS) (Boston, March 2018)

Impact of interlocutor identity on grammatical processing: the case of Basque allocutive

Mancini S, Wolpert M, Scarinci D, Caffarra S

[CUNY Conference on Human Sentence Processing](#) (Davis, March 2018)

Exploration du lien entre la production d'indices prosodiques chez les bilingues français-anglais et la connectivité fonctionnelle cérébrale : résultats préliminaires

Gilbert A, Kousaie S, Wolpert M, Klein D, Baum S

[VocUM](#) (Montreal, November 2017)

How experience with different prosodies shapes the bilingual brain: preliminary connectivity analyses from English-French bilinguals

Gilbert A, Kousaie S, Wolpert M, Klein D, Baum S

[Society for the Neurobiology of Language](#) (SNL) (Baltimore, November 2017)

Cortical tracking of linguistic structures: the role of covert prosody

Glushko A, Poeppel D, Wolpert M, Glatz T, Steinhauer K

[Society for the Neurobiology of Language](#) (SNL) (Baltimore, November 2017)

Producing appropriate prosodic cues in a non-dominant language: preliminary results from French-English bilinguals

Gilbert A, Wolpert M, Kousaie S, Baum S

[Tutorial and Research Workshop on Experimental Linguistics](#) (Greece, June 2017)

Linking Intrinsic Anatomical Connectivity and Second-Language Learning Success Using Improved DTI Reconstruction of Language Pathways

Sander K, Barbeau E, Wolpert M, Baum S, Petrides M, Klein D

Montreal Neurological Institute Neuropsychology Day (Montreal, May 2017)

Analysis of Tractography Methods for Language Pathways

Wolpert M, Sander K, Barbeau E, Petrides M, Klein D

Montreal Neurological Institute Neuropsychology Day (Montreal, May 2017)

Addressee Identity and Basque Allocutivity

Wolpert M, Caffarra S, Mancini S

[Architectures and Mechanisms for Language Processing Conference](#) (AMLaP) (Spain, September 2016)

Binding Predictions in ORPs

Wolpert M, Nile A, Mousley C, Bankaitis V

UNC HHMI Future Scientists and Clinicians Summer Closing (Chapel Hill, July 2012)

Sterol Binding in ORPs

Wolpert M, Zhang H, Baum S, Steinhauer K

UNC Undergraduate Research Symposium (Chapel Hill, April 2012)

SERVICE

Institution

2016, 2017, 2019 | **New and International Student Officer**, [GSA for Neuroscience](#)

- Elected 3 years to McGill's largest graduate student association, serving >300 students
- Initiated and led monthly activities, including creating workshops on securing funding for international students and troubleshooting the PhD experience
- Extended buddy program to all students starting in 2020 during pandemic

2016, 2017, 2019 | **Journal Club Coordinator**, [CRBLM](#)

- Created and organized language sciences journal club connecting four universities
- Topics: modularity of language, language disorders considered crosslinguistically, experimental syntax, rhythm in language and music, hot off the press, the classics

2018 | **Organizing Committee Member**, [Future of Cognitive Neuroscience Competition](#)

- Helped organize video competition for Brenda Milner Centennial Symposium
- Reached high school, Cégep, and university students

2016-2018 | **Activities Committee Member**, [CRBLM](#)

- Assisted with planning and logistics for CRBLM-sponsored activities
- Presented two years with Quebec's 24 heures de science in local elementary schools

2017, 2018 | **Local Student Volunteer**, [International Brain Research Organization](#)

- Facilitated activities for neuroscience research trainees from Africa and Latin America

Community

2023 | **Volunteer English Teacher**, [Maison de l'amitié](#)

- Taught six-week, three-hour weekly English class for adults at beginning levels
- Oversaw diverse classroom including refugees and new immigrants

2020 | **Science Outreach Committee Member**, [BrainReach North](#)

- Reviewed neuroscience educational resources
- Led video interview project on the importance of indigenous languages for research

2017, 2018, 2020 | **Beautiful Minds Co-Organizer**, [Pint of Science](#)

- Recruited presenters and organized science outreach event reaching >150 people

2016-2018 | **Volunteer Teacher**, [BrainReach](#)

- Taught monthly neuroscience lessons in local elementary and high schools

LANGUAGES

English – native

Mandarin – advanced speaking and writing

Spanish – advanced speaking and writing

French – working proficiency

Portuguese – working proficiency