M.S. Program in Cognitive Neuroscience

2022-2023

The Graduate Center
365 Fifth Avenue, New York, NY 10016-4309
cogneuro@gc.cuny.edu
www.gc.cuny.edu/cognitiveneuroscience

Disclaimer: The M.S. Program in Cognitive Neuroscience reserves the right to make changes to this Student Handbook, as necessary, depending on changes made by The Graduate Center or the program. Please check our website regularly to ensure that you have the most recent copy. Parts of this handbook provide a brief overview of The Graduate Center Student Handbook and The Graduate Center Bulletin; please refer to them for further information and/or clarification of The Graduate Center policies.
# Table of Contents

- **Introduction** ................................................................................................................................. 6
- **Letter from the Director** .................................................................................................................. 6
- **About the M.S. Program in Cognitive Neuroscience** ...................................................................... 7
- **Program Goals** ................................................................................................................................. 7
- **Program Officers** .............................................................................................................................. 7
- **College Assistant(s)** ....................................................................................................................... 7
- **Program and The Graduate Center Representatives** ................................................................. 8
- **Executive Committee** ...................................................................................................................... 8
  - Faculty Representatives | 2022-2025 ................................................................................................. 8
  - Student Representatives | 2022-2023 ................................................................................................. 8
- **Diversity, Equity, and Inclusion Committee** .................................................................................. 8
  - Faculty Representatives | 2022-2025 ................................................................................................. 8
  - Student Representatives | 2022-2023 ................................................................................................. 8
- **Admissions Committee** .................................................................................................................. 9
  - Faculty Representatives | 2022-2025 ................................................................................................. 9
  - Student Representatives | 2022-2023 ................................................................................................. 9
- **Curriculum and Examinations Committee** .................................................................................... 9
  - Faculty Representatives | 2022-2025 ................................................................................................. 9
  - Student Representatives | 2022-2023 ................................................................................................. 9
- **Elections Committee** ...................................................................................................................... 9
  - Faculty Representatives | 2022-2025 ................................................................................................. 9
  - Student Representatives | 2022-2023 ................................................................................................. 10
- **Awards Committee** ....................................................................................................................... 10
  - Faculty Representatives | 2022-2025 ................................................................................................. 10
- **Faculty Membership Committee** .................................................................................................. 10
  - Faculty Representatives | 2022-2025 ................................................................................................. 10
- **Program Ombuds** ............................................................................................................................ 10
  - Faculty Representative | 2022-2025 ................................................................................................. 10
- **Degree Requirements** ................................................................................................................... 10
- **Time To Degree** .............................................................................................................................. 10
- **Course Requirements** ..................................................................................................................... 11
  - Core Requirements .......................................................................................................................... 11
The Office for Student Affairs ................................................................. 24
The Office of Financial Aid ................................................................. 24
   Fellowships | Scholarships ................................................................. 24
   Loans ................................................................................................. 24
Information Technology ........................................................................ 24
Student Disabilities Services ............................................................. 26
The Wellness Center ........................................................................... 26
The Lactation Room or the Mother’s Room ........................................ 26
The Child Development And Learning Center .................................... 27
The Office of International Students .................................................. 27
The Office of Security and Public Safety .............................................. 28
The Office of Ombuds ......................................................................... 28
The Office of Research and Sponsored Programs ............................... 28
M.S. in Cognitive Neuroscience Faculty .............................................. 29
   Tony Ro ............................................................................................. 29
   Sebastián Alvarado ........................................................................ 29
   Asohan Amarasingham ..................................................................... 30
   Jeff Beeler ....................................................................................... 30
   Marom Bikson ................................................................................ 30
   Richard Bodnar ............................................................................. 31
   Richard Brown ............................................................................... 31
   Joshua Brumberg .......................................................................... 32
   Elizabeth Chua ................................................................................ 32
   Andrew Delamater ........................................................................ 33
   Tracy Dennis .................................................................................. 33
   Robert Duncan ............................................................................... 34
   Jay Edelman ................................................................................... 34
   Timothy M. Ellmore ........................................................................ 35
   Tatiana Aloi Emmanouil ................................................................. 35
   Jin Fan .............................................................................................. 36
   Yu Gao ........................................................................................... 36
   Jon C. Horvitz ............................................................................... 36
   David Johnson ............................................................................... 37
Junghoon Kim ............................................................... 37
Andreas H. Kottmann ...................................................... 37
Jonathan Levitt ................................................................. 38
Dina Lipkind ................................................................. 38
Jennifer Mangels ............................................................ 38
Klara Marton ................................................................. 39
Susana Mingote ............................................................. 39
Yoko Nomura ................................................................. 40
Loraine K. Obler ............................................................. 40
Lucas Parra ................................................................. 40
Thomas Preuss .............................................................. 41
David Rosenthal ............................................................ 41
Peter Serrano ................................................................. 42
Orie Shafer ................................................................. 42
Valerie Shafer ............................................................. 42
Ying-Li Tian ................................................................. 43
Kerstin Unger ............................................................... 43
Deborah Walder ............................................................ 44
Wei Wang ................................................................. 45
Douglas H. Whalen ...................................................... 45
Osceola Whitney .......................................................... 46
Zhigang Zhu ............................................................... 46
Appendix 1. Summary of Requirements.................................................. 48
Appendix 2. Sample Schedule – Full Time ........................................ 49
Appendix 3. Sample Schedule – Part Time ........................................ 50
Appendix 4. Plagiarism ......................................................... 51
Appendix 5. Academic Calendar ..................................................... 52
Appendix 6. Beyond the Lab: Workshop Series ................................ 53
Appendix 7. ePermit for Students ............................................... 54
Appendix 8. Other types of “holds” ............................................... 57
Acknowledgements ................................................................ 58
LETTER FROM THE DIRECTOR

Dear Students,

We are delighted that you are a part of the M.S. Program in Cognitive Neuroscience at The Graduate Center, CUNY. I believe you will make a substantial contribution to the program’s values of academic and research excellence. I am excited about the opportunity to get to know you, and I am looking forward to an exciting and productive school year. We are optimistic that we will resume a near-normal, post-pandemic experience for the 2022-2023 academic year.

The City University of New York attracts highly regarded faculty, prolific scholars, and passionate researchers and teachers whose expertise spans all areas of cognitive neuroscience. By now, we hope you have selected your faculty mentor. Your mentor will serve to develop and nurture your research skills throughout your education and will assist you with your thesis.

I, along with the faculty and staff of the M.S. Program in Cognitive Neuroscience, want you to succeed. We offer a comprehensive curriculum, access to leading research facilities, weekly seminars, workshops, and an optional internship program. You will have access to top-notch laboratories and researchers at The Graduate Center, the CUNY campuses, and the Advanced Science Research Center (ASRC).

Please take time to connect with other students as they offer a wealth of knowledge and advice on how to navigate your coursework and research. In addition to experience with the administrative intricacies of The Graduate Center, the prior M.S. in Cognitive Neuroscience cohorts have first-hand experience in meeting the program’s rigorous academic structure and navigating the demands outside of the program. They are an inspiration and an excellent resource.

You have made a very positive choice to continue your education at The Graduate Center with a focus in cognitive neuroscience. The students, faculty, staff, and I look forward to meeting each one of you, and we are here to support you toward a successful journey.

Welcome!

Sincerely,

Tony Ro, Ph.D.
Director
ABOUT THE M.S. PROGRAM IN COGNITIVE NEUROSCIENCE

Cognitive neuroscience embodies two fields of research: cognitive psychology and neuroscience. The term “cognitive” refers to cognition, or mental processes such as thoughts, perception, attention, and memory. The term “neuroscience” refers to the study of the nervous system, ranging from the molecular level to higher order functions. Together, these two areas comprise cognitive neuroscience, or the study of the neural basis of cognitive functions, including perception, attention, memory, language, and decision-making.

Approved by the State of New York in November 2017, this program is the first stand-alone M.S. Program in Cognitive Neuroscience in the United States.

PROGRAM GOALS

The M.S. Program in Cognitive Neuroscience aims to prepare its graduates to go on to doctoral programs for further research or get jobs in varied industries, including the biotechnology sector, data analytics, medical imaging, pharmaceuticals, and many other related fields. Specifically, it aims to provide its students with:

1. A broad and specialized knowledge of the neural basis of perception, attention, memory, language, and decision-making.
2. The ability to formulate meaningful research questions in cognitive neuroscience.
3. An opportunity to hone their critical thinking skills.
4. Experience in cognitive neuroscience research, including the ethical conduct of research, methodology and experimental design, and data analysis.
5. Exceptional preparation to pursue future doctoral studies in cognitive neuroscience or related fields and/or contribute to the workforce.

Program Officers

Tony Ro, Director
Email: tro@gc.cuny.edu
Office: 6203.26

Wanda Mercado, Assistant Program Officer (APO)
Email: wmercado@gc.cuny.edu
Office: 6304.15

COLLEGE ASSISTANT(S)

Daisy Reyes, College Assistant
Email: dreyes1@gradcenter.cuny.edu
Office: 6304.25
Program and The Graduate Center Representatives

Executive Committee

The Executive Committee is responsible for the operation and administration of the M.S. Program in Cognitive Neuroscience. The Executive Committee shall consider, approve, disapprove, and modify actions of the program standing committees.

Faculty Representatives | 2022-2025
Jay Edelman
Tatiana Emmanouil
David Johnson
Tony Ro (Director)
Peter Serrano (Associate Director)

Student Representatives | 2022-2023
Vaidehi Patel
Steven Wendel

Diversity, Equity, and Inclusion Committee

The M.S. Program in Cognitive Neuroscience is proud to be a part of the City University of New York, a diverse and inclusive public institution known to be a vehicle for upward mobility. We acknowledge that racism and social injustice still exist, and we are committed to fostering a diverse, equitable and inclusive environment for our students, faculty, and staff. We believe that diversity in race, ethnicity, gender, sexual orientation, (dis)ability, socioeconomic background, and age are factors that ENRICH our community and our contributions to science.

Faculty Representatives | 2022-2025
Asohan Amarasingham
Richard Bodnar
Elizabeth Chua
Yu Gao
Jennifer Mangels
Susana Mingote
Yoko Nomura
Tony Ro
Orie Shafer
Peter Serrano
Osceola Whitney

Student Representatives | 2022-2023
Anastasia Martashvili
Rebecca McCune
Vaidehi Patel
Admissions Committee

The Admissions Committee is responsible for developing student admission procedures and admission standards for the program, as well as reviewing applications for admissions decisions.

Faculty Representatives | 2022-2025
Andrew Delamater
Jay Edelman
Tatiana Emmanouil
Jon Horvitz
David Johnson
Thomas Preuss
Tony Ro
Peter Serrano
Jennifer Wagner

Student Representatives | 2022-2023
Lauren Barack
Melissa Elder
Aleksandra Feshchenko
Ella Gregorio
Anastasia Martashvili
Rebecca McCune
Kendra Stephens-Jones

Curriculum and Examinations Committee

The Curriculum Committee is responsible for reviewing and proposing curricular recommendations and reviewing curriculum and exam issues, such as requests for transfer credits, appropriateness of elective courses, reviewing of grade appeals, etc.

Faculty Representatives | 2022-2025
Jin Fan
Tony Ro
Kerstin Unger

Student Representatives | 2022-2023
Vaidehi Patel

Elections Committee

The Elections Committee oversees the election process for vacancies on committees.

Faculty Representatives | 2022-2025
Richard Bodnar
Awards Committee

The Awards Committee is responsible for reviewing applications and allocating funds requested for student research.

Faculty Representatives | 2022-2025

Robert Duncan
Tony Ro
Orie Shafer

Faculty Membership Committee

The Faculty Membership Committee is responsible for reviewing faculty applications and CVs whenever they are submitted for membership in this program. In addition to reviewing new applications, this committee reviews faculty of this program to ensure that they are meeting the teaching, research, and service requirements necessary to maintain membership.

Faculty Representatives | 2022-2025

Andrew Delamater
Yoko Nomura
Tony Ro

Program Ombuds

The program’s ombuds is a confidential, neutral, and impartial person to speak to regarding program-specific or school-related problems or concerns.

Faculty Representative | 2022-2025

Peter Serrano

Degree Requirements

TIME TO DEGREE

Students must fulfill the program’s requirements no later than four years after being admitted to the program. Leaves of absence do not count towards the time limit. Extensions require approval from the program’s Director, Tony Ro, and the Vice President for Student Affairs, Matthew G. Schoengood.
COURSE REQUIREMENTS

Students are required to satisfy 32 credit hours by taking Neuroscience I, Neuroscience II, Statistics/Statistics lab, Cognitive Neuroscience, Neuroanatomy, Research Methods in Cognitive Neuroscience, Thesis Research, and 3 electives.

Students are strongly recommended to follow the prescribed course schedule. Core courses are only available once per academic year (e.g., Neuroscience I is offered in the fall, and Neuroscience II is offered in the spring; See Appendix 2). The M.S. in Cognitive Neuroscience program affords students the ability to attend part-time or full-time. To be considered full-time students, students must take at least 9 credit hours per semester; to be considered part-time students, students must take less than 9 credit hours per semester. The maximum amount of credit hours a Master's student can take is 15. However, because of the program’s high course workload and additional requirements, students are recommended to take no more than 12 credit hours per semester.

**Course schedules are subject to change; an updated course schedule can be found on the M.S. Program in Cognitive Neuroscience's website.**

Core Requirements

CNS 70001: Neuroscience I | 4 credit hours | Fall session

This course is the first in a two-course sequence designed to provide a uniform foundation for students engaged in graduate work in the Neurosciences. Its focus is on the molecular, cellular, and developmental aspects of neural function. The course is often team-taught, and, in addition to a standard textbook, utilizes a variety of readings, problem sets, and research presentations designed to introduce students to the methods and data of contemporary neuroscience research.

CNS 70002: Neuroscience II | 4 credit hours | Spring session

This course is the second in a two-course sequence designed to provide a uniform foundation for students engaged in graduate work in the Neurosciences. Its focus is on systems, behavioral, and cognitive neuroscience. The course is often team-taught and, in addition to a standard textbook, utilizes a variety of readings, oral presentations and research critiques designed to introduce students to the methods and data of these disciplines. Completion of Neuroscience I would be highly desirable.

CNS 70003: Cognitive Neuroscience | 3 credit hours | Spring session

This course will provide students with an overview of cognitive neuroscience. Topics to be covered in this course include the neural basis for higher aspects of perception, object recognition, attention, reward and motivation, memory, language, executive control, decision-making, social cognition, and consciousness.

CNS 70300: Neuroanatomy | 3 credit hours | Fall and Spring sessions

This course will provide students with an overview of the structure and function of the nervous system and its subdivisions. It will introduce students to the organizational structure of the human brain, including slide material of gross neuroanatomy, cerebral vasculature, spinal organization, and internal structure from medulla to cortex. Functional system mini-lectures are also provided for the sensory and motor systems, the thalamus, hypothalamus, basal ganglia, limbic system, cerebellum, and cortex.
Neuroanatomical mapping of major neurochemical systems and their receptors is also provided. Course expectations include both visuo-spatial and written fluency of the material.

**CNS 70200: Methods in Cognitive Neuroscience | 3 credits hours | Fall session**

This course will provide an opportunity for graduate students to evaluate the strengths and weaknesses of commonly used methods that cognitive neuroscientists use to measure central and peripheral nervous system activity. These methods include single-unit recordings, the lesion method, electroencephalography (EEG) and event-related potentials (ERPs), transcranial magnetic stimulation (TMS), transcranial direct current stimulation (tDCS), functional magnetic resonance imaging (fMRI), and optical imaging.

**CNS 70100: Statistics and CNS 70101: Statistics Lab | 4 credit hours | Fall session**

This course will cover descriptive and inferential univariate statistics, including correlation, regression, comparing means, non-parametric tests, and analysis of categorical data. Students will learn how to: (1) match specific univariate methods to particular types of research data, (2) compute univariate data analyses using the R programming language, (3) test assumptions and interpret results of statistical analyses, and (4) write up and present statistical findings. The Statistics Lab focuses on the applications of statistical concepts using R. As with CNS 70100, it will cover descriptive and inferential univariate statistics, including correlation, regression, comparing means, non-parametric tests, and analysis of categorical data.

**CNS 70900: Thesis Research | 3 credit hours | Fall and Spring sessions**

Students complete the M.S. in Cognitive Neuroscience by completing a master’s thesis. The thesis research and manuscript enables students to integrate and synthesize the knowledge and data that they have acquired during their MS coursework and research. For this course, students will work with an advisor to formulate a research question that will culminate into the master’s thesis. Students should enroll in this course in their last semester.

**Electives**

Many of these electives are offered sporadically. We try to offer as many courses as we can to cover a wide range of topics/interests. However, course offerings depend on numerous factors. Therefore, it is important to note that we cannot guarantee the availability of specific courses.

- BME I5100: Signal Processing
- BME I5000: Medical Imaging and Image Processing
- CS 74030: Computer Vision and Image Processing
- CS 84090: Vision, Brain and Assistive Technologies
- CNS 80300: Developmental Cognitive Neuroscience
- PSYC 80103: Neural Basis of Decision Making
- PSYC 80103: Neuro-cognition and neurodegenerative disorders
- CNS 80300/PSYC 87203: Neuroscience of Consciousness
- PSYC 87103: Attention
- PSYC 80103: Theoretical Neuroscience
PSYC 70802: Neurophysiology
PSYC 80103: Cortical Circuitry
PSYC 84603: Social Cognitive and Affective Neuroscience
PSYC 80103: Neuroscience-based Digital Health Interventions
PSYC 73500: Psychology of Perception
PSYC 80103: Functional MRI
PSYC 76000: Psychometrics
PSYC 80103: Behavioral Neuroendocrinology
PSYC 80103: Neurobiological bases of crime
PSYC 88200: Neurochemistry of Learning
PSYC 80103: Basal Ganglia and Behavior
PSYC 73800: Cognitive Psychology, BIOL 72302: Neuroscience II
PSYC 88300: Learning & Memory
PSYC 80103: Systems of Cognition and Psychiatric Disorders
PSYC 81403: Cognitive Neuroscience Memory
PSYC 80103: Behavioral Neuroendocrinology
PSYC 80207: Professional Dev and Ethics
PSYC 80103: Clinical Neuroscience
PSYC 80103: Affective neuroscience
SPCH 71700: The acquisition of language
SPCH 80700: Seminar in Language Science: Executive functions and language processes
SPCH 70600: Hearing Science
SPCH 80800: Seminar in Hearing Science
SPCH 71500: Introduction to Neurolinguistics
SPCH 81500: Seminar in the Neurolinguistics of Bilingualism
SPCH 82200: Neuroscience of Aphasia
SPCH 71300: Neuropsychology of Language
SPCH 81900: Seminar in Electrophysiological Methods
SPCH 82000: Seminar in Neurobiology of Child Language Disorders
SPCH 82400: Seminar in Autism
SPCH 82600: Language Disorders in Children
SPCH 82800: Research Methods in Language
SPCH: Speech Science
SPCH: Speech Production
SPCH: Speech Perception
SPCH: Articulatory Phonology

CNS 80100: Internship | 3 credit hours | Elective | Fall, Spring and Summer sessions

This course will provide students the opportunity to undertake an internship related to their area of study in the M.S. Program in Cognitive Neuroscience. Students are required to submit an application and documentation about the internship to the program before they are approved to take the internship course. Prior to giving a student permission to enroll in the internship course, the Director of the program will consult with a representative of the organization in which the internship will be located to
determine the tasks to be carried out. (These may not be clerical in nature but should involve substantial work related to the mission of the organization.) Applications are due the semester before the internship is to occur. Students will devote approximately 140 hours (10 hours a week for 14 weeks) to this internship. A designated faculty member will oversee the course and will meet regularly with students to monitor their progress and to make sure that the internship is progressing appropriately. Students will keep a weekly online report of their activities and will prepare a final report documenting the work carried out. The final report must be sent to the M.S. Program in Cognitive Neuroscience at cogn neuro@gc.cuny.edu by the deadline indicated.

CNS 80200: Independent Research | 3 credit hours | Elective | Fall, Spring and Summer sessions

The course will provide students with an opportunity to conduct individual reading and research in cognitive neuroscience under the guidance of a faculty member. Students will devote approximately 140 hours (10 hours a week for 14 weeks) towards this research. Prior to registering for this course, students must receive approval from their mentor to oversee their research, and students must submit an Independent Research Application to cogn neuro@gc.cuny.edu. Students’ faculty mentors will oversee the student’s research and will meet regularly with the student to monitor progress. They will assign and submit grades for this course to an Instructor of Record; concurrently, the students and their mentors must complete an Assessment Form, indicating overall research progress during the semester, what further training activities will be beneficial, and what remains to be accomplished on the research project. The Assessment Form and supporting documents (if applicable) must be submitted to cogn neuro@gc.cuny.edu by the deadline indicated.

CNS 80300: Seminar in Special Topics | 3 credit hours | Elective | tba

This seminar in special topics course will provide students with an opportunity to read and discuss the literature on a more focused area in cognitive neuroscience.

PSYC 80102: Seminar in Special Topics (CUNY Neuroscience Collaborative Colloquium Series) | 2 credit hours | Elective | Fall and Spring Sessions

This seminar in special topics course will provide students with an opportunity to learn more about different topics through guest speakers; we invite many scholars, teachers and researchers from different backgrounds to accommodate our many students’ research and professional interests. For more information, please see the section “CUNY Neuroscience Collaborative Seminars/Colloquia.”

Courses Outside of the Options Offered

Upon approval, students may take courses other than those offered through our program. For approval, students must submit a Core or Elective(s) Permit Request Form and the course syllabus for each course for review by the Curriculum and Exams Committee prior to registration. The committee considers each course on a case-by-case basis. For approval, the courses must at least be at the graduate level, must cover a topic in cognitive neuroscience, and must not overlap with other available courses that the program offers. If the course(s) is approved and is at another CUNY campus, the student must apply for an ePermit through CUNYfirst (See Appendix 7).
LABORATORY WORK/MENTORSHIP

Students accepted to the M.S. Program in Cognitive Neuroscience will conduct research in a lab affiliated with our program as part of their thesis. Laboratories have different specialties and research focuses. Students are encouraged to look through the list of available faculty members and make note of which faculty members they would like to work with. We will try to match students with advisors based on their research interests and preferences, as well as by how many students each faculty member will be able to accommodate into their labs. However, it is, ultimately, students’ responsibility to reach out to a faculty member and develop a student-to-mentor relationship with him or her. Students should inform their mentors of their research interests, career aspirations, program requirements, and current M.S. Program in Cognitive Neuroscience research funding opportunities. We encourage students to meet with several faculty members prior to selecting their advisors. Although we do not have a formal rotation system in place for master’s students, if a student decides after one semester that he or she would like to do research in a different lab, then we will try our best to facilitate such a switch. Students are welcome to rotate through different labs provided the faculty are willing to allow the students to do so; however, rotations may slow students’ progress on data collection for the thesis.

Lab hours and meeting times are at the mentor’s discretion.

MASTER’S THESIS

Students are required to submit a thesis involving empirical research in order to be eligible for graduation. The thesis should be approximately 50-60 pages long, and the content is up to the discretion of students’ mentors, who ensure that their mentees’ thesis is up to a Master’s level standard. Students are required to turn in a short (3-4 page) prospectus to their mentor (with a copy to cognepro@gc.cuny.edu). Deadlines are set between students and their mentors. Regardless of whether the work is published or unpublished, the thesis must be deposited to the library. The faculty mentor, second reader, and Director will evaluate the thesis.

Please follow the Library’s instructions on how to deposit your thesis. In addition, students are advised to review the M.S. Program in Cognitive Neuroscience’s Thesis Research Overview for more information on thesis requirements and the thesis deposit process.

Research Awards/Assistantships

Students in the M.S. Program in Cognitive Neuroscience are eligible to apply for a Research Award and Research Assistantship for the academic year (fall and/or spring) for a maximum of two academic years.

The M.S. Program in Cognitive Neuroscience is committed to providing students with Research Awards to cover research expenses (e.g., EEG caps and gel, MRI scans, payment to human subjects), presentations at national or international conferences, research-related travel expenses, and/or lab expenses. To be eligible to receive the funds, students must submit the corresponding application form to be approved by the Admissions and Awards Committee. Contingent upon available funds, students may apply for Research Awards up to twice per academic year (fall and spring); however, they may only receive up to $3,000 per year. If approved, students must submit additional documentation, including, but not limited to, flyers, plane tickets, and receipts. Research funds may affect students’ financial aid; therefore, we
suggest students contact The Office of Financial Aid before accepting any awards. Guidelines and a list of frequently asked questions can be found on the program’s website.

Faculty considering a research assistantship must nominate a student by submitting a Research Assistantship Application to cognnuro@gc.cuny.edu for review and consideration by the Executive Committee. The Research Assistantship (RA) is $1,800 ($18 per hour for 100 hours) for the semester and/or spread across one year and available to M.S. Program in Cognitive Neuroscience students. Research assistants perform a range of research-related duties and should work effectively under the supervision of a faculty mentor and/or as part of a research team. Research assistants plan and schedule their work based on defined objectives, tasks, and priorities with the review and approval of a faculty mentor. Faculty should encourage their students to consult with The Office of Financial Aid and The Office of International Students (if applicable) before applying.*

Although students can apply for the Research Award and/or Research Assistantship, please note that the Research Award and Research Assistantship applications have been consolidated to a single application (See our website).

*Note: Research Award and Research Assistantship applications are currently under review, and it is possible that only Research Awards are available for the foreseeable future.

Program Policies

REGISTRATION

Students are required to be advised before registering. During these advisement sessions, students will be given personalized conversations regarding their current academic standings and research and will devise a plan on how to meet their goals. Students will be notified to set up an advising appointment before registration officially begins. Students who fail to meet for advisement will have an Advisement Hold or ADV on their CUNYfirst account and will not be able to register for classes.

After advisement, students will have their hold removed. If there are other types of holds, the student must address them through either The Office of the Registrar or The Office of Financial Aid, depending on the hold (See Appendix 8). Once all holds are released, the student may register for classes via CUNYfirst. If you are an incoming student, The Office of the Registrar will contact you to issue a CUNYfirst identification number. Establishing a CUNYfirst account allows students to view courses and grades, register, etc.

Please refer to The Graduate Center Academic Calendar, The Graduate Center Student Handbook, and The Graduate Center Bulletin for registration dates and add/drop periods.

CUNYfirst

For information and guides on how to access CUNYfirst, search for and add classes, view class schedules, view holds, etc., refer to The Graduate Center’s website.
TRANSCRIPTS (OFFICIAL AND UNOFFICIAL)

Students can request unofficial transcripts at no cost through CUNYfirst’s Student Self-Service. Official transcripts can be requested online, by mail, or in-person. There is a $7.00 fee per transcript (the $7.00 fee is waived for CUNY transcripts sent to other CUNY schools), and there is a $2.00 convenience service charge per transcript for online requests. For more information, please review The Office of the Registrar’s section on “Transcript Requests.”

TRANSFER CREDITS

Requests for transfer of credits is initiated with the program. A maximum of 12 acceptable graduate credits taken at other institutions may be applied toward the degree, provided the courses were completed with a grade of B or higher within an appropriate period of time and are equivalent to comparable courses at the City University of New York and the program. Undergraduate courses are not transferrable. The Curriculum and Examinations Committee must review the course(s) before accepting any transfer of credits. In the case of uncertainty, The Office of the Provost will make the final determination of the acceptance or denial of transfer credit.

The Graduate Center’s Ph.D. Programs in Neuroscience

Because some of our courses overlap with The Graduate Center’s CUNY Neuroscience Collaborative, comprised of the Psychology and Biology Ph.D. programs, it may be possible to transfer credits from our Master’s program to one of these Ph.D. programs.

LEAVES OF ABSENCE

The Graduate Center mandates that students make requests for Leave of Absence in writing to the program’s Director, Tony Ro, prior to the semester or academic year in which the leave will occur. The student must be in good standing, and he or she cannot request more than four semesters of leave time. Once he signs the form, the Director will forward the request to The Office of the Registrar. The Office of the Registrar will then forward the leave request to The Office of Financial Aid, The Office of International Students, The Mina Rees Library, The Office of the Bursar, and The Business Office. For more information, consult The Graduate Center Student Handbook. Students requesting leaves for military service or students who are international students should especially consult The Graduate Center Student Handbook.

WITHDRAWAL

The Graduate Center requires that students submit their requests of withdrawal to the program Director, Tony Ro, using a Request for Withdrawal Form (Program Withdrawal Form). Upon approval, the Director will forward the request to The Office of the Registrar. The Office of the Registrar will then forward the withdrawal request to The Office of Financial Aid, The Office of International Students, The Mina Rees Library, The Office of the Bursar, and The Business Office. For more information, consult The Graduate Center Student Handbook.

READMISSIONS

The Graduate Center states that readmission following a withdrawal and whether course credit for courses taken prior to the student’s withdrawal will count toward degree completion are at programs’
discretions. In addition to filling out an Application for Readmission, the student must submit a $20 readmission fee. For more information, please consult The Graduate Center Student Handbook.

MAINTENANCE OF MATRICULATION

Students who have completed their required credits and need an additional semester to complete their Master's thesis must consult with their advisors, The Office of Financial Aid, and the M.S. Program in Cognitive Neuroscience at cogneuro@gc.cuny.edu before registering for “Maintenance of Matriculation”. In addition, before registering, international students must contact The Office of International Students. Students should register for “Maintenance of Matriculation” based on when they intend to deposit their theses; they should carefully review the Library's deadlines for depositing theses. Students may only register for “Maintenance of Matriculation” up to two times. Although summer does not count as an additional semester, spring and fall count as an additional semester. Therefore, if you are a student who has completed your coursework in spring 2022, and you plan on submitting your thesis in January/February 2023, you may choose to enroll in Maintenance of Matriculation in fall 2022 because the January/February deadline requires that you are enrolled in the preceding fall semester to deposit your thesis. However, if you are a student who has completed your coursework in spring 2023, and you plan on submitting your thesis in September 2023, you will not have to enroll in Maintenance of Matriculation for fall 2023, since the September 2023 deadline requires that you are enrolled in the preceding spring semester (spring 2023).

As delineated in The Graduate Center Student Handbook, The Graduate Center Bulletin, and The Graduate Center's website, to obtain a “Maintenance of Matriculation” status, New York State students must pay $225, and Out-of-State Residents and International Students must pay $370. This fee is subject to change; therefore, students should consult The Graduate Center Student Handbook, The Graduate Center Bulletin, and The Graduate Center's website periodically.

COMMENCEMENT AND GRADUATION

Although degrees are awarded three times a year (The Graduate Center Student Handbook), commencement is held in June every year. Graduation invitations and instructions are mailed to all eligible graduates in April. You must inform the Assistant Program Officer, in a timely manner, at cognneuro@gc.cuny.edu of your full name, your CUNYfirst ID, when you intend to graduate, and your contact information (address, email, phone number) so that an Application for a Master's in Science Degree can be signed by the Director and sent to The Office of the Registrar. If the application is not
registered with The Office of the Registrar, you may not be considered an eligible graduate. According to The Office of the Registrar, if you deposit your thesis in September, then you will be invited to the following June Commencement Ceremony. For more information on how to apply for graduation, please review The Mina Rees Library's instructions and graduation dates. Diplomas are given to graduates at the commencement ceremony. If you are not participating in the commencement ceremony, you may pick up your diploma two business days after the commencement ceremony at The Office of the Registrar. For more information, including diploma delivery and diploma replacements, please review The Graduate Center's webpage.

Grading
Grades/GPA

The Graduate Center Student Handbook and The Graduate Center Bulletin describe the school's grading criteria:

<table>
<thead>
<tr>
<th>Grade Letter</th>
<th>Point Value</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>4.00</td>
<td>Excellent</td>
</tr>
<tr>
<td>A</td>
<td>4.00</td>
<td>Excellent</td>
</tr>
<tr>
<td>A-</td>
<td>3.70</td>
<td>Excellent</td>
</tr>
<tr>
<td>B+</td>
<td>3.30</td>
<td>Good</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
<td>Good</td>
</tr>
<tr>
<td>B-</td>
<td>2.70</td>
<td>Good</td>
</tr>
<tr>
<td>C+</td>
<td>2.30</td>
<td>Fair (lowest passing mark)</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
<td>Fair (lowest passing mark)</td>
</tr>
<tr>
<td>C-</td>
<td>1.70</td>
<td>Fair (lowest passing mark)</td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
<td>Fail</td>
</tr>
<tr>
<td>P</td>
<td>Does not get calculated in GPA but counts towards Degree Progress</td>
<td>Pass</td>
</tr>
<tr>
<td>INC</td>
<td>See Section Below</td>
<td>Incomplete</td>
</tr>
<tr>
<td>W</td>
<td>0.00</td>
<td>Withdrew Without Academic Penalty</td>
</tr>
<tr>
<td>WA</td>
<td>0.00</td>
<td>Administrative Withdrawal</td>
</tr>
<tr>
<td>WN</td>
<td>0.00</td>
<td>Never Attended</td>
</tr>
<tr>
<td>WU</td>
<td>0.00</td>
<td>Student attended class at least once, stopped attending any time before the final exam week, and never officially withdrew</td>
</tr>
</tbody>
</table>

Please note that two important changes have been made by the University to the uniform grading policy, effective the Fall 2021 semester:

1. The WU (unofficial withdrawal) grade, defined as a grade which is to be assigned to students who participate in an academically related activity at least once, completely stopped attending at any time before the culminating academic experience of the course, i.e., final exam, final paper, etc., and did not officially withdraw, is no longer considered a failing grade and is no longer calculated into the grade point average.
2. Graduate Students who receive an Incomplete (INC) grade must fulfill their academic obligation within one calendar year of the end of the semester in which the grade of Incomplete is given. Incomplete grades unresolved within the one year time-period will become FIN (F from Incomplete) grades in student records. The FIN grade is calculated into the grade point average as a failing grade and may not be changed thereafter. This policy is effective beginning the Fall 2021 semester.

The new policy does not apply to any INC grades from prior semesters (Spring 2021 or earlier) which will remain non-punitive grades when they convert to permanent incomplete grades consistent with the policy as published in the Fall 2020 GC Bulletin.

Satisfactory Academic Progress

Students must be making satisfactory progress toward the degree to maintain status at The Graduate Center and to be eligible for any student financial assistance. A student is deemed not to be making satisfactory progress if he or she has a grade point average below 3.00, has accumulated more than two open grades (“INC,” “INP,” “NGR,” “ABS,” and “ABP”), has received two “NRP” grades in succession, or has exceeded the time limit for the degree—four years. The Graduate Center reviews each student’s record every semester. If formal standards have not been met, a student may register only upon successful petition to the program’s Director and the Vice President for Student Affairs. Students whose petitions are approved are considered to be making satisfactory progress toward the degree and are eligible to receive financial aid.

M.S. Program in Cognitive Neuroscience’s Student Workspace

OVERVIEW

The M.S. Program in Cognitive Neuroscience has a Student Workspace, room 7214, available to all of its students. This workspace was established to give students a space to relax, study, network, and/or conduct their research. It has a color printer, 3D printer, television, mini refrigerator, and computers.

MAINTENANCE

The M.S. Program in Cognitive Neuroscience is not responsible for any lost/stolen personal items. Although the space is solely for the program, students should not leave items unattended. We urge
students to keep the Student Workspace clean and to lock the door upon leaving for the day. If you are using the space during the weekend, contact the Assistant Program Officer one week prior to arrange to use the space. Generally, the space may be accessed at any time during regular Graduate Center hours. However, there may be instances in which the space will be used for Executive Committee or staff meetings. The program will post a schedule in advance so that there are no misunderstandings. We apologize for the inconvenience in advance. However, if the space is not open when there are no meetings scheduled, please contact the program’s College Assistant(s).

Computers

Please save your information on a flash-drive, One Drive, Google Drive, or through email before signing out of computers, as information may be deleted. The Information Technology (IT) Services Department and Student Disabilities Services provide assistive software on a designated computer in the Student Workspace, room 7214. If you need further accommodations, please do not hesitate to contact the Program’s Officer or College Assistant(s).

Equipment

The equipment (computer, TV, and printers) is for M.S. in Cognitive Neuroscience students’ use only. Misuse of equipment may result in immediate removal. It is the students’ responsibility to ensure computers, printers, and any other equipment in the room, is properly used. Unless authorized, the removal of equipment from the space is not permitted.

3D Printer

The M.S. Program in Cognitive Neuroscience has a MakerBot Replicator + 3D printer, which serves as a resource for research and a learning tool for courses such as Neuroanatomy. Carefully read the User Manual before using the MakerBot Replicator + 3D printer and submit the 3D Printer Permission Form to cogneuro@gc.cuny.edu. Under no circumstances should students try to fix, tamper with, or perform maintenances on the 3D printer.* The User Manual contains safety guidelines on how to navigate the Control Panel and how to print. If students would like access to the 3D printer or if they need assistance, they must contact the program’s College Assistant(s).

*The M.S. Program in Cognitive Neuroscience is not liable for any injuries, accidents, or loss due to misuse of the MakerBot Replicator +.

Mailboxes

Students can be assigned a mailbox to receive mail from the school and the program. In addition, students may use their mailboxes for personal use; students simply have to address their mail to The Graduate Center’s M.S. Program in Cognitive Neuroscience in room 6304.15. To ensure confidentiality, the mailboxes are assigned numbers. When assigned a mailbox, students are given mailbox numbers known only to them.

Refrigerator

To ensure that this space is a pleasant environment for everyone, we ask that students in the M.S. Program in Cognitive Neuroscience keep the refrigerator clean.
The Graduate Center Student Resources

NOTE: Due to the COVID-19 pandemic, offices may be closed during the fall/spring semesters; however, you may reach their office by email. Workshops or events hosted by any of these resources will be shared via email and/or our Twitter (@gc_cogneuro).

THE MINA REES LIBRARY

The Graduate Center
365 Fifth Avenue
New York NY 10016-4309
Phone: 212-817-7040

ONLINE LIBRARY SERVICES: https://library.gc.cuny.edu/online-services/

Students in the M.S. Program in Cognitive Neuroscience are encouraged to visit The Mina Rees Library for their research and take advantage of its collection of print and digital resources. All students with a Graduate Center Identification (GC ID) have access to The Mina Rees Library provided they have a current validation sticker on their GC ID. Validation stickers may be obtained each semester from The Office of the Bursar. To borrow books from any CUNY library, students must first register for a library account at the Circulation Desk with a current GC ID. To access online materials, students can sign-in to their library account (top right corner on https://library.gc.cuny.edu) using their library bar code (obtained after registering for a library account).

The Mina Rees Library has been kind enough to assign our program a library liaison, Mason Brown, who has experience in the sciences, including his most recent position at Hunter College as Science Research Librarian, and works closely with satellite researchers involved with the Advanced Science Research Center (ASRC). Mason Brown has created a Cognitive Neuroscience Research Guide to assist our students in their endeavors.

Mason Brown
Phone: 212-817-7066
Email: mbrown3@gc.cuny.edu

THE OFFICE OF CAREER PLANNING AND PROFESSIONAL DEVELOPMENT

The Graduate Center
Room: 3300.08
Phone: 212-817-7425
Email: careerplan@gc.cuny.edu

The Office of Career Planning and Professional Development provides Master’s and Ph.D. students with career and writing services. Advisors will help students with career planning and job interview preparation. Writing Consultants are available to assist students in all stages of the writing process from brainstorming to organization to formatting and editing. In addition, The Office of Career Planning and
Professional Development hosts events such as The Graduate Center Peer Reviews and workshops on how to achieve professional goals. In order to make an appointment, visit their [website](#).

**CUNY NEUROSCIENCE COLLABORATIVE SEMINARS/COLLOQUIA**

The Neuroscience Collaborative Seminar Series is available to both Ph.D. and Master’s students. We invite many scholars, teachers, and researchers from different backgrounds to accommodate our many students’ research and professional interests. For information on the currently scheduled seminars, please contact us at cogneuro@gc.cuny.edu. All talks are held on Fridays from 3:00 PM to 4:30 PM, at The Graduate Center, room to be announced. An email will be sent at least 4 days before the event as a reminder and/or to announce of sudden changes or cancellations made to the schedule. Individuals interested in attending these colloquia do not need to RSVP.

**THE OFFICE OF THE REGISTRAR**

**The Graduate Center**
Room: 7201  
Phone: (212) 817-7500  
Fax: (212) 817-1627  
Email: registrar@gc.cuny.edu  
Office Hours: Monday – Friday, 9:00 AM to 5:00 PM

The Office of the Registrar assists students with registration, student records/transcripts, etc. For more information, visit The Office of the Registrar’s [website](#).

**THE OFFICE OF THE BURSAR**

**The Graduate Center**
Room: 8105.07  
Phone: (212) 817-7680  
Fax: (212) 817-1637  
Email: Bursar@gc.cuny.edu  
Office Hours: Monday – Friday, 9:00 AM to 5:00 PM

The Office of the Bursar processes student tuition and fee payments and refunds. For more information, visit The Office of the Bursar’s [website](#).

**THE OFFICE OF ADMISSIONS**

**The Graduate Center**
Room: 7201  
Phone: (212) 817-7470  
Email: Admissions@gc.cuny.edu

The Office of Admissions helps students with all stages of the admissions process. Students recently accepted to the program must ensure that they send an official transcript to The Office of Admissions prior to enrolling in the program. For more information, visit The Office of Admissions’ [website](#).
THE OFFICE FOR STUDENT AFFAIRS

The Graduate Center
Room: 7301
Phone: (212) 817-7400
Fax: (212) 817-1621
Email: studentaffairs@gc.cuny.edu

The Office for Student Affairs aims to improve student’s experiences at The Graduate Center. It concerns itself with overseeing student matters such as incomplete grades, leaves of absence, withdrawals, and clarifying The Graduate Center policies and procedures. For more information, visit The Office for Student Affairs’ website.

THE OFFICE OF FINANCIAL AID

The Graduate Center
Room: 7201
Email: financialaid@gc.cuny.edu
Office Hours: Monday – Friday, 9am to 5pm

Apart from the Dean’s Merit Scholarships, the M.S. Program in Cognitive Neuroscience does not offer any other internal fellowships or scholarships at this time. However, The Graduate Center offers students several options to help fund their education. For opportunities, contact The Office of Financial Aid.

Fellowships | Scholarships

All master’s students entering in the fall have the possibility of being awarded the Dean’s Merit Scholarship. Students who receive the scholarship will be awarded $4,000, to be spread over three or four semesters. Students are automatically considered for the scholarship upon enrollment. However, to be eligible, students must be enrolled in at least 6 credits per semester.

Loans

Students may obtain federal or private loans at their discretion. Federal loans include subsidized and unsubsidized loans. For more information, please visit The Graduate Center’s website or contact The Office of Financial Aid to ask questions or schedule an appointment.

INFORMATION TECHNOLOGY

Information Technology (IT) Service assists students with technology-related issues. For more information, visit Information Technology’s website. IT has a Self Service Center, where students may create tickets regarding their technology-related issues. After clicking on the link to access IT’s Self Service, students will be prompted with the following screen:
To log-in, students should use their credentials for The Graduate Center. That is, students should use the section before “@” on their email as their username (e.g., example@gradcenter.cuny.edu → User Name*: example) and their respective password. Thereafter, students will be greeted with the following screen to either create a new ticket (new work order), view previously submitted tickets, or manage their profiles:

After clicking the option to “Add a New Work Order,” students will be given a chance to provide a brief summary of their concern, contact information, and a chance to choose the type of issue that they are encountering (e.g., CUNYfirst, Email, CUNY Portal).

Students who wish to email IT may do so at itservices@gc.cuny.edu. Furthermore, if students have an emergency, they may call 212-817-7300 from Monday through Friday, 9:00 AM to 5:00 PM (Fall and Spring Sessions) or Monday through Thursday, 9:00 AM to 5:00 PM (Summer Session).
STUDENT DISABILITIES SERVICES

The Graduate Center
Room: 7301
Phone: (212) 817-7400
Email: disabilityservices@gc.cuny.edu

Clare Wilson
Manager of Student Disability Services
Room: 7301.02
Phone: (212) 817-7413
Email: cwilson1@gc.cuny.edu

Elise Perram
Director of Student Affairs
Room: 7301.04
Phone: (212) 817-7400
Email: EPerram@gc.cuny.edu

Matthew Schoengood
Vice President for Student Affairs
Room: 7301.01
Phone: (212) 817-7400
Email: mschoengood@gc.cuny.edu

Student Disabilities Services aims to provide non-discriminatory equal access to The Graduate Center's programs, services, and activities to individuals with disabilities, and they provide exceptional accommodations for those with disabilities, regardless of program location or resident status, such as auxiliary aid, note-takers, and assistive technology. All information is confidential. To request accommodations or for information regarding available services, contact the Manager of Student Disability Services, the Director of Student Affairs, or the Vice President for Student Affairs and consult the Student Disability Services website.

THE WELLNESS CENTER

The Wellness Center Student Counseling Services
The Graduate Center
Room: 6422
Phone: (212) 817-7020
Fax: (212) 817-1602
Email: wellness@gc.cuny.edu

The Wellness Center Student Counseling Services offers students short-term individual and group counseling, therapy, consultation services, and workshops. For more information, visit The Wellness Center's website.

THE LACTATION ROOM OR THE MOTHER'S ROOM

The Graduate Center
Room: 7408
In addition to the Child Care Center and Eighth Floor pantry, the Lactation Room, or the Mother’s Room is available to all nursing students, faculty, and staff. For more information, please visit The Graduate Center’s website.

THE CHILD DEVELOPMENT AND LEARNING CENTER

The Graduate Center
Room 3201
Phone: (212) 817-7032

Molly Polin-Kane
Interim Director
Phone: (212) 817-7033
Email: mpolin@gc.cuny.edu

The Child Development and Learning Center is a child-oriented program that provides children of matriculated students with a safe, nurturing educational environment. For more information, visit The Child Development and Learning Center’s website.

THE OFFICE OF INTERNATIONAL STUDENTS

The Graduate Center
Room: 7200
Phone: (212) 817-7490
Email: intstu@gc.cuny.edu

Linda Asaro
Director of the Office of International Students
Room: 7200
Phone: (212) 817-7490
Email: lasaro@gc.cuny.edu

Paul Croser
International Student Counselor
Room: 7200
Phone: (212) 817-7490
Email: pcroser@gc.cuny.edu

Bei Zhang
International Student Counselor
Room: 7200
Phone: (212) 817-7490
Email: bzhang@gc.cuny.edu

The Office of International Students provides students from outside the United States assistance with immigration issues, including maintaining F-1 or J-1 status, academic enrollment, employment, and taxes. If you are an international student, you are strongly encouraged to familiarize yourself with The Office of International Students.
THE OFFICE OF SECURITY AND PUBLIC SAFETY

The Graduate Center
Room: 9117
Phone: (212) 817-777
Email: security@gc.cuny.edu

The Office of Security and Public Safety aims to provide a safe and secure environment at The Graduate Center. For information on how to report an emergency, please visit their webpage.

THE OFFICE OF OMBUDS

The Graduate Center
Room: 8108
Phone: (212) 817-7191
Email: ombuds@gc.cuny.edu

The Office of Ombuds is an impartial and confidential resource available to all students, faculty, staff and administrators to discuss or resolve work or study related issues. For more information, visit the Ombuds Office’s website.

THE OFFICE OF RESEARCH AND SPONSORED PROGRAMS

The Graduate Center
Room: 3300

Hyuni Suratt
Director of Sponsored Research
Room: 3300.03
Phone: (212) 817-7526
Email: hsuratt@gc.cuny.edu

Adrienne Klein
Director of Budgets, Grants, and Special
Room: 3300.04
Phone: (212) 817-7522
Email: AKlein@gc.cuny.edu

Alicia Bikram
Grants Administrator
Phone: (212) 817-7528
Email: abikram@gc.cuny.edu

The Office of Research and Sponsored Programs (RSP) helps students, faculty, and staff at The Graduate Center through the process of acquiring external funding for their research. They provide in-person, individualized advising sessions, tools, and resources to find, acquire, and manage funding. For more information, visit The Office of Research and Sponsored Program’s website.
M.S. in Cognitive Neuroscience Faculty

TONY RO
Position: Presidential Professor
Campus Affiliation: The Graduate Center
Website: tro@gc.cuny.edu
Email: tr0@gc.cuny.edu

Tony Ro’s research explores the cognitive and neural mechanisms underlying attention, perception, and action. Combining psychology with neuroscience, computer science, physics, and other scientific disciplines, his work seeks to untangle the mysteries surrounding information processing. How does the human brain encode the vast arrays of sensory information we take in, and what proportion of this information enters our awareness for conscious perception? How does attention influence our perceptual representations of the external world and shape subsequent actions? How do different areas of the brain work in tandem to generate those perceptions and actions?

Currently, Ro’s laboratory is investigating the cognitive and neural architecture involved in perception, attention, consciousness, multisensory integration, and synesthesia using transcranial magnetic stimulation (TMS), electroencephalography (EEG), functional magnetic resonance imaging (fMRI), and optical imaging in neurologically healthy and impaired individuals. The lab has garnered funding from the National Institutes of Health (NIH), the National Science Foundation (NSF), and a variety of philanthropists.

As a leading scholar in his field, Ro has contributed insights to international media outlets, ranging from The New York Times to CBS, Bloomberg, Smithsonian Magazine, BBC News, and PBS NewsHour. He has authored over 70 research articles, which have appeared in journals such as Annals of Neurology, Current Biology, Journal of Neuroscience, and the Proceedings of the National Academy of Sciences. In recognition of his achievements, Ro was named a presidential professor in psychology and biology by The Graduate Center upon his appointment to the faculty in 2015.

Ro joined The Graduate Center after seven years at the Colin Powell School for Civic and Global Leadership at CUNY’s City College. His previous positions included an associate professorship in the department of psychology at Rice University and a postdoctoral fellowship at University College London, where he studied face perception and attention as part of a Human Frontiers Science Program project.

SEBASTIÁN ALVARADO
Position: Assistant Professor
Campus Affiliation: City College of New York
Website: sebastian.alvarado@qc.cuny.edu
Email: sebastian.alvarado@qc.cuny.edu

Sebastián Alvarado is interested in how epigenetic mechanisms shape neuronal substrates and how they relate to evolution. His lab has adopted an African cichlid model system that shows robust changes to morphology and behavior to investigate these processes. Specifically, it uses the blue-yellow color morphs of Astatotilapia
burtoni to understand the cellular and molecular substrates of color changes in the periphery and its subsequent effects on behavior in the central nervous system using a combination of molecular, computational, microscopy and “-omics” tools.

ASOHAN AMARASINGHAM

Position: Assistant Professor
Campus Affiliation: City College of New York
Website: [Link]
Email: aamarasingham@ccny.cuny.edu

Professor Amarasingham received his Ph.D. in Applied Mathematics from Brown and completed his postdoctoral training in Neuroscience at Rutgers. His current research interests span topics in statistics as well as neural coding and computation, with an emphasis on questions raised by large-scale neurophysiological data sets, and their implications for our understanding of the dynamics and functional properties of neuronal circuits.

JEFF BEELER

Position: Professor
Campus Affiliation: Queens College
Website: [Link]
Email: jeff.beeler@qc.cuny.edu

My lab focuses on behavioral flexibility and motivation with a focus on dopamine mechanisms in the basal ganglia. We use mouse genetic, viral and pharmacological tools to dissect the neural substrates mediating behavior, with an emphasis on using semi-naturalistic home cage paradigms to study adaptive behavior. The lab is currently in the process of setting up physiological techniques to better assess underlying mechanisms in the behavior we are studying, including optogenetics and cyclic voltammetry and, through collaboration, slice electrophysiology. There are two umbrella projects within the lab: (1) Aberrant learning and plasticity associated with dopamine denervation, including its role in the symptoms, course and treatment of PD and, (2) an alternative hypothesis on dopamine that suggests the primary function of dopamine is to adapt energy expenditure to the energy economy in which the organism finds itself. Within this latter project, the emphasis is on obesity and addiction.

MAROM BIKSON

Position: Professor
Campus Affiliation: City College
Website: [Link]
Email: bikson@ccny.cuny.edu

Marom Bikson is a Cattell Professor of Biomedical Engineering at the City College of New York (CCNY) of the City University of New York (CUNY) and
codirector of the Neural Engineering Group at the New York Center for Biomedical Engineering. Bikson has published over 200 papers and book chapters and is inventor on over 30 patent applications. He is known for his work on brain targeting with electrical stimulation, cellular physiology of electric effects, and electrical safety. Bikson coinvented High-Definition transcranial Direct Current Stimulation (HD-tDCS), the first noninvasive, targeted, and low-intensity neuromodulation technology. He consults for medical technology companies and regulatory agencies on the design, validation, and certification of medical instrumentation. Bikson is cofounder of Soterix Medical Inc. and WiPOX LLC. Marom Bikson received a Ph.D. in biomedical engineering from Case Western Reserve University, in Cleveland, and a B.S. in biomedical engineering from Johns Hopkins University, Baltimore.

**RICHARD BODNAR**  
**Position:** Acting Executive Officer and Professor  
**Campus Affiliation:** The Graduate Center / Queens College  
**Website:** [Website](#)  
**Email:** richard.bodnar@qc.cuny.edu

Richard Bodnar is the Acting Executive Officer of the doctoral program in Psychology at The Graduate Center of the City University of New York, and professor in the Psychology Department at Queens College. He served as Dean of Research and Graduate Studies of Queens College (2008-2016), Chair of the Queens College Psychology Department (1998-2008) and Neuropsychology Doctoral Subprogram Head (1992-1998). Since its inception in 1979, his Behavioral Pharmacology Laboratory examined the underlying pharmacology and neuroanatomical sites of action of two major neurobehavioral homeostatic systems: a) Neurobehavioral Mechanisms of Food Intake, and b) Neurobehavioral Mechanisms of Pain Inhibition. In the study of Neurobehavioral Mechanisms of Food Intake, the following themes have been examined: i) Pharmacology and Neuroanatomy of Conditioned Flavor Preferences, ii) Genetic Variance in Ingestive Responses, iii) Molecular Opioid Manipulations and Ingestive Behavior, iv) Neuroanatomical Mapping Studies of Opioid-induced Feeding, and v) Opioid Receptor Subtypes and Ingestive Behavior. In the study of [Neurobehavioral Mechanisms of Pain Inhibition], the following themes have been examined: i) Sex Differences in Opioid-Induced Analgesia, ii) Neuroanatomical Mapping Studies of Opioid-Induced Analgesia, iii) Stress-induced Analgesia, and iv) Non-Opioid Analgesic Responses. Since 2002, Richard has written the Endogenous Opioids and Behavior Annual Reviews, which covers all of the peer-reviewed articles in the field for the previous year.

**RICHARD BROWN**  
**Position:** Professor  
**Campus Affiliation:** LaGuardia Community College  
**Website:** [Website](#)  
**Email:** onemorebrown@gmail.com

Dr. Brown is a philosopher at the City University of New York. He is a Professor in the Philosophy Program and an Adjunct Professor in the Psychology Program at LaGuardia Community College. In addition, he is a
member of the Cognitive Neuroscience faculty at The Graduate Center, CUNY. He has research interests in the neuroscience and philosophy of consciousness. His work is focused on the philosophy of mind, consciousness studies, and the foundations of cognitive science. Additionally, he has interests and projects in the philosophy of language, metaethics, philosophy of physics, logic and the philosophy of logic, and the history of philosophy.

**JOSHUA BRUMBERG**

**Position:** Professor  
**Campus Affiliation:** Queens College  
**Website:** [link]  
**Email:** joshua.brumberg@qc.cuny.edu

Dr. Brumberg’s research is characterized by the integration of anatomical and physiological techniques to further our understanding of the individual building blocks of cortical microcircuit and the role that sensory activity has on their development. Using the rodent sensorimotor cortex as a model system the Brumberg lab demonstrated that following sensory deprivation (via whisker trimming) there is a dramatic reduction in the extracellular matrix surrounding a specific class of GABAergic neurons. His more recent studies have focused on how sensory deprivation influences structural changes in the brain by analyzing dendritic architectures, spine densities as well as the impact on glial cells. In parallel, Dr. Brumberg has also investigated how information is relayed in the brain between distinct functional areas. His results have shown that neurons participating in specific pathways (e.g., callosal versus cortico-thalamic) have specific anatomical, physiological, and synaptic characteristics which are likely adapted to their roles in interareal communication within the brain. The focus of the Brumberg’s lab research is to characterize the neurons of the mouse barrel cortex with an emphasis on the interactions between the sensory and motor systems that govern the animals whisking behavior.

**ELIZABETH CHUA**

**Position:** Associate Professor  
**Campus Affiliation:** Brooklyn College  
**Website:** [link]  
**Email:** echua@brooklyn.cuny.edu

Dr. Chua has broad interests in the cognitive and neural bases of human memory and metacognition. Her research thus far has focused on three major areas: associative memory, biases in memory, and metamemory (knowledge of one’s memory). The methods used in her laboratory to answer questions on these topics include functional magnetic resonance imaging (fMRI), transcranial direct current stimulation (tDCS), transcranial magnetic stimulation (TMS), and eye tracking techniques.
ANDREW DELAMATER  
**Position:** Professor  
**Campus Affiliation:** Brooklyn College  
**Website:** [Link]  
**Email:** andrewd@brooklyn.cuny.edu

Dr. Delamater is Professor of Psychology at Brooklyn College and is a member of the Psychology Doctoral Faculty of CUNY. He serves as a member of the executive committee in the Behavioral & Cognitive Neuroscience (BCN) Training Area, and also participates in the Animal Behavior & Comparative Psychology (ABCP), and Cognition, Language, & Development (CLD) Training Areas. Dr. Delamater earned his Ph.D. degree from Dalhousie University and also was an NRSA post-doctoral Fellow at the University of Pennsylvania before coming to work at Brooklyn College in 1994. His area of research focuses on understanding the nature of associative learning processes in rodents and humans with special interests in (1) the representations that govern performance in Pavlovian and instrumental learning tasks, (2) experimental extinction processes, (3) the neural mechanisms of representation and extinction processes in Pavlovian learning, and (4) computational and neural net models of simple associative learning. He has been serving as Associate Editor for the *Quarterly Journal of Experimental Psychology* and serves as Consulting Editor for the *Journal of Experimental Psychology: Animal Behavior Processes, Learning & Behavior*, and the *Neurobiology of Learning and Memory*. In addition, he has previously served in various administrative capacities for the Eastern Psychological Association, including President for the 2012 meeting. Dr. Delamater was made a Fellow of the Association for Psychological Science as well as the Eastern Psychological Association in 2007. His research has been funded over the years through National Institutes of Health and City University of New York research grants.

TRACY DENNIS  
**Position:** Professor  
**Campus Affiliation:** Hunter College  
**Website:** [Link]  
**Email:** tracy.dennis@hunter.cuny.edu

Dr. Dennis (Ph.D., Pennsylvania State University) is a Professor in the Psychology Department at Hunter College, The City University of New York. Trained in clinical psychology and neuroscience, she is interested in how emotions and thoughts work together to promote well-being and stress resilience but, conversely, can create vulnerability for mental illness such as mood and anxiety disorders. Her research focuses on identifying neurocognitive signatures of emotional disruptions with an eye towards improving early detection, creating more targeted treatment approaches, and better predicting treatment response. She also focuses on translation of neuroscience findings on the anxious brain to the development of low-barrier and effective treatment approaches, including mobile mental health interventions for stress and anxiety.
ROBERT DUNCAN
Position: Assistant Professor
Campus Affiliation: York College
Website: [Link]
Email: rduncan@york.cuny.edu

Dr. Duncan's primary research interests are (1) to study the physiological mechanisms of visually guided behavior in healthy individuals and (2) to develop novel functional magnetic resonance imaging (fMRI) techniques to quantify neuronal, vascular, and metabolic contributions to neurodegenerative visual disorders. Dr. Duncan's current research uses fMRI to compare measurements of neuronal activity and blood flow throughout the retino-cortical pathway to standard clinical measures of visual function. Dr. Duncan's secondary research interest is in developing and assessing the value of Serious Games in education.

Areas of Expertise:
- Neurodegeneration in human glaucoma
- Individual differences in functional brain topography
- Cortical contributions to visual and tactile spatial resolution
- Physiology of motion perception
- Virtual Reality
- Game-based learning
- Undergraduate Research
- Interactive Digital Narrative

JAY EDELMAN
Position: Associate Professor
Campus Affiliation: City College
Website: [Link]
Email: jedelman@ccny.cuny.edu

My research focuses on human sensorimotor systems. I use behavioral, psychophysical, and neurophysiological techniques to study how the human brain integrates volition, vision, and memory to generate movements of the eyes. Current projects focus on how spatial memory increases the accuracy of eye movements in complex visual scenes, how cognition alters extremely rapid visuomotor reflexes, and EEG investigation of human saccadic eye movement programming.
Dr. Ellmore earned his doctorate studying associative learning and memory retrieval in the Cognition and Neural Systems Program in the Department of Psychology at the University of Arizona. He then completed a postdoctoral fellowship studying language lateralization at the University of Texas Medical School at Houston, followed by an appointment as research assistant professor position there studying working memory using a combination of intracranial EEG and fMRI. He is now Associate Professor of Psychology and head of the Memory and Cognition Lab at The City College of New York. His research focus is the cognitive neuroscience of memory, with an emphasis on the interaction between working memory and long-term memory systems. His methodological approach in healthy subjects includes combining the techniques of functional and diffusion MRI and EEG. A component of his research is patient-based, and he has published studies of brain structure and function in epilepsy, Parkinson’s disease, autism, sleep disorders, and stroke. Dr. Ellmore’s research program adds a unique component to the BCN program by bridging basic and clinical approaches to understanding the neural substrates of memory.

Tatiana Aloi Emmanouil, Assistant Professor of Psychology, investigates the cognitive and neural mechanisms of vision in humans. Her work spans the fields of visual attention, awareness and memory as it attempts to understand how we process, store and experience the complex visual world that surrounds us. Professor Emmanouil received a BA in Psychology from UC Berkeley, a PhD in Psychology and Neuroscience from Princeton University under the tutelage of Anne Treisman, and worked as a postdoc at CUNY with Tony Ro. Her work is based on cognitive psychology theory and uses both psychophysical measures and neuroscience methods such as functional Magnetic Resonance Imaging, transcranial magnetic stimulation, and electroencephalography.
JIN FAN  
**Position:** Professor  
**Campus Affiliation:** Queens College  
**Website:** [Link](#)  
**Email:** jin.fan@qc.cuny.edu  

Dr. Fan’s research focuses on human attentional processes conceptualized as a system of anatomical areas forming specialized networks. Through independent research and collaboration, he has conducted behavioral, developmental, and patient-based studies using functional magnetic resonance imaging, event related potentials, genetics, and computational modeling to investigate the anatomy, circuitry, pathology, and development of attentional networks. Dr. Fan has expertise in cognitive neuroscience, specifically various neuroimaging methods. His current research is focused on understanding the mechanisms of brain circuits underlying cognitive functions, such as attention and emotion, in normal and patient populations by employing behavioral, developmental, functional magnetic resonance imaging (fMRI), event related potentials (ERP), computational modeling, and genetics methods.

YU GAO  
**Position:** Professor  
**Campus Affiliation:** Brooklyn College  
**Website:** [Link](#)  
**Email:** yugao@brooklyn.cuny.edu  

Yu Gao joined Brooklyn College in fall 2010 after having spent two years as a postdoc at the University of Pennsylvania, and prior to that, five years as a graduate student in the Department of Psychology at the University of Southern California.

JON C. HORVITZ  
**Position:** Professor  
**Campus Affiliation:** City College  
**Website:** [Link](#)  
**Email:** jhorvitz@ccny.cuny.edu  

Jon Horvitz received his PhD in Psychology from University of California, Santa Barbara, and was a post-doctoral fellow in Neuroscience at Princeton University. He was an Associate Professor in the Dept. of Psychology at Columbia University and at Boston College before moving to CCNY where he is a full professor. His laboratory examines the neurochemical bases of learning and motivation, and focuses particularly on motivational functions of dopamine within the nucleus accumbens. The NIDA-funded work of the lab has particular relevance to drug addiction, for it seeks to understand the neural mechanisms by which environmental stimuli associated with (natural or drug) rewards activate motivational/motor systems
and drive reward-seeking behaviors, and the changes that occur in these neural mechanisms as the
reward-seeking behavior becomes an automated habit.

DAVID JOHNSON
**Position:** Assistant Professor
**Campus Affiliation:** York College
**Website:**
**Email:** djohnson10@york.cuny.edu

My research focuses on the learning and memory processes by which humans accomplish the important goal of anticipating and avoiding danger. In my lab, we use classical fear conditioning as a model paradigm to study these processes on behavioral, genetic and psychophysiological levels of analysis. One line of research explores ways in which fear memories can be altered during memory reconsolidation. Another line of research examines how shared social group membership can impact learning that occurs by observing the experiences of other individuals. A primary goal of this research is to understand the role that emotional learning processes and associated neural mechanisms play in the development of fear-related disorders such as PTSD and phobia, with the hope that the findings will inform better diagnosis and more effective clinical treatments of these disorders.

JUNGHOO KIM
**Position:** Assistant Medical Professor
**Campus Affiliation:** City College
**Website:**
**Email:** jkim@med.cuny.edu

My lab uses state-of-the-art neuroimaging and neuropsychological methods to investigate various neurorehabilitation issues in traumatic brain injury. Research topics include: 1) understanding the nature and extent of cognitive deficits resulting from traumatic brain injury; 2) identifying neural correlates and predictors of natural recovery from traumatic brain injury, and 3) revealing the mechanisms of various interventions (brain stimulation, psychoactive drugs, and cognitive training) for individuals with traumatic brain injury.

ANDREAS H. KOTTMANN
**Position:** Associate Medical Professor
**Campus Affiliation:** The Graduate Center
**Website:**
**Email:** Akottmann@med.cuny.edu

**Research Interests:** Understanding the regulation of structural plasticity in the adult brain during motor learning and memory; neurogenesis; molecular etiology of progressive neurodegenerative diseases like Parkinson’s disease and ALS.
The research in Dr. Levitt’s laboratory concerns the normal organization and development of mammalian cerebral cortex. He is interested in characterizing anatomical circuits among different brain regions, and how these circuits underlie physiological properties of individual neurons, and human perceptual and cognitive behavior. He also aims to understand how early brain damage or sensory experience leads to changes in the normal organization and function of the brain.

Animals and humans have a remarkable capacity to learn complex skills, such as using tools or performing intricate vocalizations. Research in my lab focuses on identifying the strategies that evolved for the efficient leaning of skilled behaviors, focusing on learned vocalizations. One line of research studies song learning in zebra finches, an Australian songbird species. Young zebra finch males learn their courtship song by listening to their father’s singing, and gradually matching their own singing to resemble it (a developmental process that takes several weeks of vocal “practice”). We combine experimental methods for controlling and manipulating song learning with artificial stimuli, and computational tools for analyzing continuously recorded vocal output to tease apart the components of this process. A parallel line of research focuses on translating the insights and methodology from our birdsong studies to understand how humans acquire the pronunciation of a new language.

At Baruch, she is Principal Investigator of the Dynamic Learning Lab, whose research goals are to understand the complex manner in which attention, learning, and memory interact. Currently, there is a strong neuroeducation focus to this work, in that her research integrates basic social, affective and cognitive neuroscience research to help understand how students can bridge gaps in knowledge and overcome academic challenges. In particular, she addresses how the stimulus material, individual differences in personality
and/or the social environment facilitate or inhibit the motivation to seek out and effectively encode and retrieve information from long-term memory.

KLARA MARTON
Position: Professor
Campus Affiliation: Brooklyn College
Website:  
Email: kmarton@brooklyn.cuny.edu

Klara Marton is a neuropsychologist with a doctoral degree in developmental psychology and a Ph.D. in speech and hearing sciences. She is interested in the development and interaction between language and cognition across the lifespan. In her current research, Marton focuses on the relations between various cognitive factors, such as working memory and executive functions, and language processing in monolingual and bilingual children and adults as well as in different clinical populations. She is the director of the Cognition and Language Laboratory at the CUNY Graduate Center.

SUSANA MINGOTE
Position: Associate Professor
Campus Affiliation: The Graduate Center | Advanced Science Research Center (ASRC)
Website:  
Email: smingote@gc.cuny.edu

The Mingote lab is researching the neural circuits regulating complex cognitive processes, such as recognition memory, spatial learning and behavior flexibility. My goal is to identify the brain networks that enable organisms to alter behavior and adapt to changing and conflicting environmental conditions. This will allow us to gain new mechanistic insights into cognitive deficits associated with Alzheimer's disease and Schizophrenia.

We use transgenic mice and viral strategies to manipulate specific circuits in the brain and probe their behavioral functions, in particular interactions between the dopamine system and its key cortical and subcortical targets. We use several techniques to manipulate or measure neural dynamics, including optogenetics, chemogenetics, fiber photometry, and slice electrophysiology. Currently, the lab is focusing on two major projects: (1) identify brain circuits encoding memories of familiar and novel objects and how these networks are altered through aging and by Alzheimer’s disease; (2) identify cortical network dysfunctions induced by altered dopamine transmission and dopamine neuron glutamate co-transmission. Here, I am also interested in understanding how these dysfunctions lead to cognitive deficits associated with Schizophrenia, such as aberrant salience processing and behavioral inflexibility.
Dr. Yoko Nomura is a newly tenured Professor in the Department of Psychology (in behavioral neurosciences) Queens College, CUNY, and Associate Clinical Professor in the Department of Psychiatry Icahn School of Medicine at Mount Sinai. She is the Principal Investigator of an NIH-funded, population based, longitudinal research study in developmental psychopathology, known as the Stress in Pregnancy (SIP) Study. The study focuses on the gestational period (during pregnancy), which is a critical, but often overlooked, stage for optimal child development.

In addition to her position in Speech-Language-Hearing Sciences, Loraine K. Obler has a joint appointment in the Linguistics Program. She and Martin Albert co-headed the NIH-funded Language in the Aging Brain Laboratory of the Boston University School of Medicine Harold Goodglass Aphasia Research Center at the Boston VA Healthcare Center from 1976-2018. Her research articles reflect her interests in such topics as the language changes associated with healthy aging and Alzheimer's disease, neurolinguistic study of bilingualism, cross-language study of agrammatism, and neuropsychology of talent as it relates to dyslexia and individual differences in second-language acquisition. The books she has co-authored or co-edited include Language and the Brain (with K. Gjerlow, Cambridge University Press, 1999), Language and Communication in the Elderly (with M.L. Albert, D.C. Heath and Co., 1980), Neurobehavior of Language and Cognition: Studies of Normal Aging and Brain Damage (with L. Connor, Kluwer Academic Publishers, 2000), and The Bilingual Brain: Neuropsychological and Neurolinguistic Aspects of Bilingualism (with M.L. Albert, Academic Press, 1978).

The general area of interest is how temporal information of natural stimuli is encoded and processed by the brain. Experimental techniques focus on interpreting and modulating brain activity in humans non-invasively using
electro-encephalography and trans-cranial electrical stimulation, in short: “reading” and “writing” the brain with electric fields. The work is often coupled with auditory and visual psychophysics and always incorporates computational or mathematical models.

THOMAS PREUSS
Position: Professor
Campus Affiliation: Hunter College
Website:  
Email: tpreuss@hunter.cuny.edu

Dr. Preuss’ current research focuses on behavioral and neurophysiological aspects of sensorimotor integration and decision-making in the startle–escape system of fish. Current projects include: (i) elucidating the mechanisms that underlie the sensory filtering phenomenon prepulse inhibition (PPI). Significance: PPI serves as an important research tool for a number of information processing disorders, notably schizophrenia. (ii) Understanding how social experience and social stress affects behaviors and neural circuits. Significance: how social life affects brain function at all levels of biological organization is fundamental for tackling the causes and consequences of affective disorders. (iii). Dendritic integration of sensory information at the level of individual neurons: Significance: establishing a vertebrate model system of behavioral choice in which we can elucidate key aspects of the decision-making process in the CNS. Dr. Preuss is a review editor for Frontiers in Integrative Neuroscience and an elected member of the Society for Neuroscience and the International Society for Neuroethology.

DAVID ROSENTHAL
Position: Professor of Philosophy; Coordinator, Interdisciplinary Concentration in Cognitive Science; Professor of Linguistics; Professor of Cognitive Neuroscience
Campus Affiliation: The Graduate Center
Website:  
Email: davidrosenthal1@gmail.com

Research Interests
- Philosophy of Mind, especially consciousness, intentionality, sensation, and the self
- Philosophy of Psychology
- Philosophy of Neuroscience
- Philosophy of Language
- Metaphysics
- Ancient Philosophy
- 17th-Century Rationalism
**PETER SERRANO**  
**Position:** Professor  
**Campus Affiliation:** Hunter College  
**Website:** [Link](#)  
**Email:** serrano@genectr.hunter.cuny.edu

My research interest is to understand the signal transduction mechanisms involved when stress significantly alters the morphology of dendritic spines affecting synaptic plasticity, learning and memory. It is understood that depending on the stress, the effect on memory and learning can be enhanced or impaired. My lab is specifically interested in how stress can regulate the expression of various synaptically localized proteins that are important for memory, such as protein kinase M zeta. We use animal models to assess behavioral parameters on memory and learning and use several different molecular and imaging techniques to assess changes in protein expression and spine shape morphology and evaluate synaptic strength using electrophysiology involving long-term potentiation. My lab has several different projects, which collectively provide a unique perspective on the interaction between several brain regions including the hippocampus, amygdala and frontal cortex as they relate to stress, traumatic brain injury and Alzheimer’s disease.

**ORIE SHAFER**  
**Position:** Professor  
**Campus Affiliation:** The Graduate Center  
**Website:** [Link](#)  
**Email:** Orie.Shafer@asrc.cuny.edu

Dr. Shafer’s research interests focus on the neurobiological basis of circadian timekeeping, the mechanism that times sleep and activity; and entrainment, the process by which circadian clocks are set to local time. His research employs genetic, physiological, imaging, and behavioral methods to understand how neural networks create a robust yet entrainable circadian rhythm, and he is particularly interested in how such networks operate when challenged by the unreliability of the modern light environment.

**VALERIE SHAFER**  
**Position:** Professor  
**Campus Affiliation:** The Graduate Center  
**Website:** [Link](#)  
**Email:** vshafer@gc.cuny.edu

Valerie L. Shafer is a full Professor in the Ph.D. Program in Speech-Language-Hearing Sciences and Associate Director of the M.S. Program in Cognitive Neuroscience at The Graduate School and University Center of the City University of New York. Her research focuses on the neurophysiological basis of speech perception and
language in monolingual and bilingual populations. She is also interested in language acquisition in children with typical development or disorders.

YING-LI TIAN
Position: Distinguished Professor
Campus Affiliation: City College / The Graduate Center
Website: ytian@ccny.cuny.edu

Dr. Ying-Li Tian is a professor in the Department of Electrical Engineering at the City College of New York. She received her PhD from the Department of Electronic Engineering at the Chinese University of Hong Kong in 1996 and her BS and MS from TianJin University, China in 1987 and 1990. She is experienced in computer vision topics ranging from object recognition, scene understanding, to human behavior analysis, facial expression recognition, gesture recognition, and assistive technology.

After she worked in National Laboratory of Pattern Recognition at the Chinese Academy of Sciences, Beijing, China, Dr. Tian joined the Robotics Institute in Carnegie Mellon University as a postdoctoral fellow. She focused on automatic facial expression analysis. From 2001 to 2008, Dr. Tian was a research staff member at IBM T. J. Watson Research Center, Hawthorn, New York. She focused on moving object detection, tracking, and event and activity analysis. She was one of the inventors of the IBM Smart Surveillance Solutions (SSS) and was leading the video analytics team. She received the IBM Invention Achievement Awards every year from 2002 to 2007. She also received the IBM Outstanding Innovation Achievement Award in 2007. As an Adjunct Professor at Columbia University, she co-taught a course on Automatic Video Surveillance (Spring 2008). Dr. Tian has published more than 130 papers in journals and conferences and has filed more than 30 patents. She is a senior member of IEEE.

KERSTIN UNGER
Position: Associate Professor
Campus Affiliation: Queens College
Website: kerstin.unger@qc.cuny.edu

My research focuses on the question of how developmental changes in (1) attentional control, (2) working memory and rule-guided behavior, and (3) affective-motivational processing contribute to the striking human ability to adapt to novel situations. Appropriate behaviors critically depend on efficient selection of goal-relevant aspects of information out of irrelevant noise. Previous research, however, remains controversial as to whether selective attention works preferably through enhancement of relevant information or also by suppression of irrelevant information. Further, a seemingly simple task like opening a water tap can require entirely different sets of actions depending on the specific context, such as moving the handle up vs. down or turning it to the left vs. right. Rapid identification of appropriate action strategies thus depends on some form of abstraction, such by creating higher-order rule representations that abstract
over simpler items-specific rules and can be generalized to novel situations. Another challenge to adaptive behavior regulation arises from the requirement to account for the motivational and affective significance of action outcomes. Consider for example the consequences of confusing the channel up/channel down buttons on a TV remote control vs. confusing gas pedal and brake when you have to stop for pedestrians at a crosswalk.

My work is motivated by the goal to understand the neurocognitive mechanisms supporting these selection and monitoring demands from a lifespan perspective. Specifically, I use behavioral, EEG, fMRI, and computational modeling methods to test the following main hypotheses: (1) flexible, goal-directed attentional mechanisms operate both at early and later stages of visual processing and work through enhancement of relevant information as well as suppression of irrelevant information, (2) developmental improvements in rule-guided behavior from middle childhood through adolescence derive from updating mechanisms in working memory (WM) that are supported by a hierarchically organized corticostriatal gating architecture, and (3) increased influence of affective-motivational processing in adolescence is associated with greater cognitive flexibility and more efficient motivational learning.

Dr. Wagner has research interests in early cognitive development spanning several areas, including social and emotional processing, numerical cognition, and learning and memory. Dr. Wagner’s lab uses eye-tracking methods to study these topics in both typically-developing children and those at risk for later developmental difficulties, such as infants at risk for autism spectrum disorder. Dr. Wagner also brings considerable expertise in neuroscience methods for studying Human Development, including the use of near-infrared spectroscopy (NIRS) and event-related potentials (ERPs).

Walder’s research program focuses on neurodevelopment of mental health disorders (e.g., schizophrenia, depression). She studies biomarkers of risk (using neurohormone assay, genetics, neuropsychological testing, brain imaging techniques) and environmental factors (e.g., stress) among healthy, high-risk youth and young adults. This includes use of prospective methods to better understand the early trajectory of illness, with an eye toward prevention and early intervention.
WEI WANG

Position: Associate Professor
Campus Affiliation: The Graduate Center / Baruch College
Website: [Link]
Email: wwang@gc.cuny.edu

Wei Wang is an Associate Professor at the Graduate Center, City University of New York. He is also a faculty member of the Industrial/Organizational Psychology at Baruch College and the Educational Psychology at the Graduate Center. His research interests primarily lie in quantitative methods and computational modeling, and their broad applications in various psychological, managerial, and educational areas. Currently, he has received funding from the National Science Foundation and won the Best Convention Paper Award from the Management of Academy (AOM). Before joining CUNY, Dr. Wang has experiences in both the academia (UCF, Northwestern University) and the consulting industry, where he worked as an R&D manager developing assessments (using IRT models and computer gamification simulations) for personnel selection and training for various companies, including tech giants.

In addition to joining The Graduate Center as an associate professor of psychology and of educational psychology, Wang is a faculty member in the Industrial/Organizational Psychology program at Baruch College. His research interests primarily lie in quantitative methods and computational modeling, and in their broad applications in various psychological, managerial, and educational areas. Currently, he is conducting research around three themes: social networks, applied psychometrics, and big data analytics and technology. Wang has received funding from the National Science Foundation and he won the Best Convention Paper Award from the Academy of Management.

DOUGLAS H. WHALEN

Position: Distinguished Professor
Campus Affiliation: The Graduate Center
Website: [Link]
Email: dwhalen@gc.cuny.edu

Douglas H. Whalen has conducted research on a broad range of topics in speech perception, speech production, and cognitive neuroscience, as well as coordinating efforts to document endangered languages. He joined The Graduate Center faculty in 2011 from Haskins Laboratories in New Haven, Connecticut, where continues to hold the position of vice president of research. His perceptual work has highlighted the way in which listeners use all information available to them when perceiving a speech signal, even when the information might be misleading and thus better left unattended. Both behavioral and neural imaging work indicate that such a phenomenon is due to the precedence that the speech signal takes in the processing of our perceptual world. Whalen has been principal investigator for fourteen years on a grant from the National Institute of Deafness and Other Communication Disorders, “Links between production and perception of speech.”

His results have been published in a wide variety of journals, such as Science to the Journal of Speech, Language and Hearing Research, and Language. His work with the late Alvin M. Liberman has received
the most attention; both the evidence for and theory about the recovery of speech gestures during perception has generated continuing debate. He has also edited, with Louis M. Goldstein and Catherine T. Best, a volume of papers from the eighth Laboratory Phonology conference. Whalen is president and founder of the Endangered Language Fund, which provides support for documentation and revitalization of languages that may cease to be spoken this century. He received his Ph.D. in Linguistics from Yale University in 1983. He was elected a fellow of the Acoustical Society of America in 2008.

OSCEOLA WHITNEY  
**Position:** Assistant Professor  
**Campus Affiliation:** City College of New York / The Graduate Center  
**Website:** [Link]  
**Email:** owhitney@ccny.cuny.edu

Dr. Whitney uses molecular, anatomical, and behavioral techniques to investigate how and why birds sing. His current research focuses on deconstructing the neurogenetic mechanisms of social influences on vocal development, the epigenetic mechanisms relevant for cellular and behavioral memory, and the role these two mechanisms have in defining the sensitive period for learned vocal behavior.

ZHIGANG ZHU  
**Position:** Professor  
**Campus Affiliation:** City College  
**Website:** [Link]  
**Email:** zzhu@ccny.cuny.edu

Dr. Zhu is currently a Herbert G. Kayser Professor of Computer Science, at The City College of New York and The CUNY Graduate Center. He is Director of the City College Visual Computing Laboratory (CcvcL), and Co-Director of the Center for Perceptual Robotics, Intelligent Sensors and Machines (PRISM) at CCNY. Previously he has been an Associate Professor at Tsinghua University and a Senior Research Fellow at the University of Massachusetts, Amherst. From 1997 to 1999 he was Director of the Information Processing and Application Division in the Computer Science Department at Tsinghua University.

Dr. Zhu's research expertise spans the areas of 3D computer vision, human-computer interaction (HCI), augmented reality, video representations, multimodal sensing and processing, and various applications in education, environment, robotics, surveillance, transportation, security inspection, art analysis and assistive technologies. He has published over 130 technical papers in the related fields. Currently he is mainly working with various research issues and applications of computer vision and multimodal sensing, supported by AFOSR, AFRL, ARO, DARPA, NCIIA, NSF, as well as industry.

In 2012 Dr. Zhu is named the **Herbert G. Kayser Chair Professor** of Computer Science, a distinction "in recognition of his outstanding achievement as a faculty member in the Grove School of Engineering" at The City College of New York. In May 2013 Professor Zhigang Zhu received **President's Award for**
Excellence, The City College of New York, in the inaugural year of the President’s Awards. He is the recipient of CUNY "Certificate of Recognition" yearly from 2004 to now, "Science and Technology Achievement Award" (second prize winner) from Ministry of Electronic Industry China in 1996, "Outstanding Young Teacher in Beijing" in 1997, and "C. C. Lin Applied Mathematics Scholarship" (first prize winner) at Tsinghua in 1997. His Ph.D. thesis "On Environment Modeling for Visual Navigation" was selected in 1999 as a special award in the top 100 dissertations in China over the last three years, and a book based on his Ph.D. thesis was published by China Higher Education Press in December 2001.

He is a senior member of the IEEE, a senior member of the ACM, an Associate Editor of the Machine Vision and Applications Journal (2006 - now), Technical Editor, IEEE/ASME Transactions on Mechatronics (09/2010 - now). He is Co-General Chair of the 2013 IEEE/NSF Workshop on Multimodal and Alternative Perception for Visually Impaired People (MAP4VIP) July 15th, 2013, San Jose, USA, Co-General Chair (with Prof. Thomas S. Huang) of the 2007 IEEE Workshop on Multimodal Sentient Computing, in conjunction with CVPR 2007 in Minneapolis, Minnesota, and Co-Guest Editor (with Prof. Takeo Kanade) of Special Issue on Modeling and Representations of Large Scale 3D Scenes, International Journal of Computer Vision.
Appendix 1. Summary of Requirements

M.S. Program in Cognitive Neuroscience

Summary of Requirements

The Graduate Center, CUNY

Research Interests: _______________________________
Mentor Name: _______________________________
Laboratory Name: _______________________________

Core Courses

☐ CNS 70001: Neuroscience I (4 credits), Semester/Year ________
☐ CNS 70002: Neuroscience II (4 credits), Semester/Year ________
☐ CNS 70003: Cognitive Neuroscience (3 credits), Semester/Year ________
☐ CNS 70300: Neuroanatomy (3 credits), Semester/Year ________
☐ CNS 70200: Research Methods in Cognitive Neuroscience (3 credits), Semester/Year ________
☐ CNS 70100: Statistics and CNS 70101: Statistics Lab (4 credits), Semester/Year ________
☐ CNS 70900: Thesis Research (3 credits), Semester/Year ________

Thesis Title: __________________________________________________________________________

Total Number of Credits to Date: _______

Electives (3 electives – 8-9 credits)

☐ Elective 1, ________________________________ (2 credits), Semester/Year ________
OR ☐ ________________________________ (2 credits), Semester/Year ________
☐ Elective 1, ________________________________, (3 credits), Semester/Year ________
☐ Elective 2, ________________________________, (3 credits), Semester/Year ________
☐ Elective 3, ________________________________, (3 credits), Semester/Year ________

Total Number of Credits to Date: ________
## Appendix 2. Sample Schedule – Full Time

<table>
<thead>
<tr>
<th>Term: Fall 1</th>
<th>Term: Spring 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course Number &amp; Title</strong></td>
<td><strong>Course Number &amp; Title</strong></td>
</tr>
<tr>
<td>CNS 70001: Neuroscience I</td>
<td>CNS 70002: Neuroscience II</td>
</tr>
<tr>
<td>Elective I</td>
<td></td>
</tr>
<tr>
<td>CNS 70200: Methods in Cognitive Neuroscience <strong>AND/OR</strong></td>
<td>Elective II</td>
</tr>
<tr>
<td>CNS 70300: Neuroanatomy <strong>AND/OR</strong></td>
<td></td>
</tr>
<tr>
<td>Term credit total</td>
<td>Term credit total</td>
</tr>
</tbody>
</table>

### Term: Fall 2

<table>
<thead>
<tr>
<th>Course Number &amp; Title</th>
<th>Credits</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNS 70300: Neuroanatomy <strong>AND/OR</strong></td>
<td>3-7</td>
<td></td>
</tr>
<tr>
<td>CNS 70200: Methods in Cognitive Neuroscience <strong>AND/OR</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CNS 70100 &amp; 70101: Statistics and Lab</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective III</td>
<td>2-3</td>
<td></td>
</tr>
<tr>
<td>CNS 70900: Thesis</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Term credit total</td>
<td>9-14</td>
<td>Program Total: 32 Credits</td>
</tr>
</tbody>
</table>
Appendix 3. Sample Schedule – Part Time

<table>
<thead>
<tr>
<th>Term: Fall 1</th>
<th>Term: Spring 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Number &amp; Title</td>
<td>Credits</td>
</tr>
<tr>
<td>CNS 70001: Neuroscience I</td>
<td>4</td>
</tr>
<tr>
<td>Term credit total</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term: Fall 2</th>
<th>Term: Spring 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Number &amp; Title</td>
<td>Credits</td>
</tr>
<tr>
<td>CNS 70200: Methods in Cognitive Neuroscience OR CNS 7100 &amp; 70101: Statistics and Lab</td>
<td>3-4</td>
</tr>
<tr>
<td>Elective I</td>
<td>2-3</td>
</tr>
<tr>
<td>Term credit total</td>
<td>5-7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term: Fall 3</th>
<th>Term: Spring 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Number &amp; Title</td>
<td>Credits</td>
</tr>
<tr>
<td>CNS 70200: Methods in Cognitive Neuroscience OR CNS 7100 &amp; 70101: Statistics and Lab</td>
<td>3-4</td>
</tr>
<tr>
<td>Elective II</td>
<td>2-3</td>
</tr>
<tr>
<td>Term credit total</td>
<td>5-7</td>
</tr>
</tbody>
</table>

Program Total: 32 Credits
Appendix 4. Plagiarism

CUNY regards acts of academic dishonesty (e.g., plagiarism,) as serious offenses against the values of intellectual honesty. The University is committed to enforcing the CUNY Policy on Academic Integrity. We will pursue cases of academic dishonesty according to University Academic Integrity Procedures. For more information, refer to the CUNY Policy on Academic Integrity.
Appendix 5. Academic Calendar

For important deadlines, please consult the Academic Calendar on The Graduate Center's website.
Appendix 6. Beyond the Lab: Workshop Series

The M.S. Program in Cognitive Neuroscience hosts its *Beyond the Lab: Workshop Series* in the fall and spring semesters. These professional development workshops aim to help students navigate the nuances of the program and graduate student life, and to provide the foundation for students to achieve their academic and professional goals. For current and past workshops, consult the program’s [website](#).
Appendix 7. ePermit for Students

ePermit for Students
Permit Out – taking a class at another CUNY campus

Students may apply to take a class at another CUNY campus. This will require:

1) Clearing any holds with Enrollment impact
2) Submitting an ePermit application, described below
3) Application is approved by Registrar at Grad Center (HOME campus)
4) Application is approved by your academic department
5) HOST campus activates you in their system
6) You enroll in the class at the HOST campus

Check for enrollment Holds:
In your student Center verify you have “No Holds”
If you have a hold, click into the details to see what you have to do to clear the hold

ePermit Application

In your student Center, in the Academics section,

select “ePermit” from the drop down list

click on the >> button

Select the “Add ePermit” radio button

Then select the term you wish to take the class:

Click [Continue] button
Select General Elective in the Permit Type

Select the HOST college course information, using the drop down lists, or search tool for each selection.
Enter any comments you need to justify this ePermit (permit out) to your academic department.

Click the Submit button

You can return to the eperm page, selecting “Search ePermit” and the term to see the status of your application.
To cancel the application: select the ePermit, click [Continue], then click [Cancel] in the permit.

Registrar and Departmental Approvals

Your ePermit is then routed through the Registrar’s office and to your academic department for approval. You will see this status when it is waiting for approval by your department:

Afterwards, it is approved once more by the Registrar and forwarded to your HOST campus.

Then the ePermit Status will change to “Approved”:

HOST campus

At this point you may communicate directly with the registrar’s office at the HOST campus to find out about the registration dates and policies for ePermit students. You will be enrolling into the class using the enrollment functionality in your Student Center.
Appendix 8. Other types of “holds”

If you have a hold on your CUNYfirst account, you will not be able to register. Note the program can only release advisement holds. For any other type of hold, we recommend you contact the appropriate office for assistance.

If you receive an email from the Registrar (see sample below), follow their instructions to have the hold(s) cleared.

From: Registrar
Sent: Tuesday, April 16, 2019 10:43 AM
Subject: Fall 2019 HOLDS Information

April 16, 2019

SAMPLE STUDENT:

Our records indicate that there is currently a hold on your Fall 2019 registration from the office(s) listed below. Registration begins on April 30, 2019.

SAP: Satisfactory Progress Hold. Contact your academic department.
BUR: Financial Hold. Contact the Bursar 817-7680

Any questions related to these holds should be directed to the office(s) listed above; only they can clear current holds. The Registrar’s Office cannot clear holds placed by other offices.

View the details of each hold on your CUNYfirst Student Center.

Office of the Registrar
Acknowledgements

Tony Ro
Director, M.S. Program in Cognitive Neuroscience

Wanda Mercado
Assistant Program Officer, M.S. Program in Cognitive Neuroscience

Daisy Reyes
College Assistant, M.S. Program in Cognitive Neuroscience

Cover Image
The Graduate Center/Chris Cooper