



UNIVERSITY OF COLORADO SCHOOL OF MEDICINE Aurora, CO

NEUROPSYCHOLOGY FELLOWSHIP

Updated October 2024

APPCN Member Program

TRAINING DESCRIPTION

Michael R. Greher, Ph.D., ABPP-CN & Christopher H. Domen, Ph.D., ABPP-CN

INSTITUTION AND PROGRAM DESCRIPTION

Clinical Neuropsychology Fellowship Mission and Goals

The Neuropsychology Fellowship offers two 2-year clinical training positions in adult clinical neuropsychology and is a member program of the Association of Postdoctoral Programs in Clinical Neuropsychology (APPCN; recruiting for one position for 2024-2026). Training is designed to adhere to the APPCN mission to foster the development of advanced postdoctoral education and training programs in clinical neuropsychology and to establish standards for residency programs in clinical neuropsychology that lead to the development of competency in this area of specialty practice. In accordance, the University of Colorado School of Medicine Neuropsychology Fellowship offers a Major Area of Study¹ in clinical neuropsychology that meets the guidelines set forth by the Houston Conference Guidelines on Specialty Education and Training in Clinical Neuropsychology², which have since been adopted by the American Board of Clinical Neuropsychology (ABCN). Clinical experiences include interviewing and neuropsychological testing, test interpretation and case conceptualization, report writing, consultation to medical and allied health professionals, and providing feedback to patients and families. Fellows will also attend and participate in a didactic series dedicated to neuropsychology, as well as optional didactics offered through the departments of neurology and neurosurgery and the school of medicine. Our faculty strongly encourages all fellows to enter the fellowship program with the end-goal of seeking board certification in clinical neuropsychology through the American Board of Professional Psychology (ABPP). In an effort to facilitate this, faculty members provide fellows with regular encouragement and guidance regarding the board certification process, and a board certification preparation series that includes educational exercises intended to help fellows successfully become board certified (e.g., mock fact finding). Opportunities also exist for fellows to participate in clinical research. It is the faculty's hope that graduates of the fellowship program will go on to be active and productive members of the neuropsychology community, and contribute in the areas of clinical service, training, and/or research.

Institutional History and Mission

The University of Colorado School of Medicine began in 1883 with just two students and two professors. Today it is part of a vast campus with state of the art research facilities. The school was founded in Boulder and moved in 1924 to Colorado Boulevard and 9th Avenue in Denver. In 2008, it completed the move to new quarters on the Anschutz Medical Campus in Aurora. The medical school is part of a bioscience center that also includes schools of dental medicine, pharmacy, public health and nursing. The Anschutz Medical Campus features the University of Colorado School of Medicine, the University of Colorado Hospital (UCH), which is part of the larger UCHealth medical system, The Children's Hospital (TCH), and a VA Medical Center.

The mission of the University of Colorado School of Medicine at Anschutz Medical Campus is to provide Colorado, the nation and the world with programs of excellence in:

¹ Sperling, S.A., Cimino, C.R., Strickler, N.H., Heffelfinger, A.K., Gess, J.L., Osborn, K.E., & Roper, B.L. (2017). Taxonomy for education and training in clinical neuropsychology: Past, present, and future. *The Clinical Neuropsychologist*, DOI: <u>10.1080/13854046.2017.1314017</u>

² Hannay, H.J., Bieliauskas, L.A., Crosson, B., Hammeke, T., Hamsher, K.D., & Koffler, S.P. (1998). The Houston Conference on specialty education and training in clinical neuropsychology. *Archives of Clinical Neuropsychology*, *13*, 160–166.

Education - through the provision of educational programs to medical students, allied health students, graduate students and house staff, practicing health professionals and the public at large

Research - through the development of new knowledge in the basic and clinical sciences, as well as in health policy and health care education

Patient Care - through state-of-the-art clinical programs which reflect the unique educational environment of the University, as well as the needs of the patients it serves

Community Service - through sharing the School's expertise and knowledge to enhance the broader community, including our affiliated institutions, other healthcare professionals, alumni and other colleagues, and citizens of the state

General Medical Setting, Department and Associated Institutions for Training
UCH is a partner academic hospital to the University of Colorado School of Medicine. The
UCH Neuropsychology Clinic is an outpatient consultation-based service housed in the
Neurosciences section of UCH that works in close affiliation with several neurosurgery and
neurology clinics, allowing for a rich and varied patient population, such as the Deep Brain
Stimulation Clinic, Epilepsy Clinic, the Rocky Mountain Multiple Sclerosis Center, the
Neurobehavior Clinic, and the Concussion Program. Referrals also come from general practice
areas in UCH, as well as neurologists, neurosurgeons, physiatrists, psychiatrists, and primary
care physicians throughout the Denver area and beyond. The clinic has six neuropsychologists,
four neuropsychology technicians, and other trainees (e.g., practicum students from local
graduate programs).

Client Population Served

Patients seen at the UCH Neuropsychology Clinic are typically adults struggling with a variety of neurological and/or medical conditions, such as brain tumor, Parkinson's disease, multiple sclerosis, epilepsy, dementia, concussion, moderate/severe traumatic brain injury, or stroke, to name the most common.

List of Faculty (alphabetical)

- Christopher Domen, PhD, ABPP-CN (Associate Fellowship Director, Associate Professor)
- Michael Greher, PhD, ABPP-CN (Fellowship Director, Associate Professor)
- Brian Hoyt, PhD, ABPP-CN (Head, Neuropsychology Division, Associate Professor)
- Michelle Miranda, PhD (Assistant Professor)
- Joie Molden, PhD (Assistant Professor)
- Thomas Wodushek, PhD, ABPP-CN (Clinical Director, Associate Professor)

Program Administrative Structure

Each member of the Neuropsychology Faculty holds primary academic appointments in the University of Colorado School of Medicine's Department of Neurosurgery and secondary appointments in the Department of Neurology. Together, they form the Division of Neuropsychology within the University of Colorado School of Medicine Department of Neurosurgery. Dr. Hoyt is the Head of the Division of Neuropsychology. Dr. Wodushek is the

Clinical Director of the UCH Neuropsychology Clinic. Dr. Greher is the Director of Neuropsychology Training and Fellowship Director, and Dr. Domen is the Associate Training Director. Trainees typically include two Neuropsychology Fellows and one to two Practicum Students from a local doctoral psychology program.

Staff

Associated UCH Neuropsychology Clinic Staff include four Neuropsychology technicians and administrative staff, including insurance authorization and scheduling staff.

Physical Facilities

The UCH Neuropsychology Clinic is primarily housed in the Neurosciences clinic in UCH's Anschutz Outpatient Pavilion (AOP). One clinic office is also located off of the Anschutz Medical Campus in the nearby UC Health Central Park outpatient medical building, within the Neurobehavior clinic. Administrative offices for the faculty are located in the Academic Office One Building (AO1) and the UCH Leprino Building (LB) on the Anschutz Medical Campus. The fellows' shared office space is located within the AO1 Building. They are provided with one laptop computer each, along with access to email, internet and printing, and shared test admin/scoring computers. The fellows also have full access to the University of Colorado Health Sciences Library, which is located on the Anschutz Medical Campus, including on-line access to journals.

Benefits

The fellowship includes a salary of \$63,754 in year one and \$66,588 in year two along with a full benefits package, including health insurance, paid vacation, etc. Neuropsychology fellows are eligible to take a maximum of 18 days of paid time off per year for each of their two years, in addition to all holidays afforded all employees by the University (currently 12 days). Fellows are expected to track their time and submit all requests for vacation to the fellowship director, their immediate supervisor, and the clinic director a minimum of three weeks ahead of time (except in emergency situations, of course). The fellow's workload/patient report status will need to be reviewed before the time requested is granted. Fellows will not be asked to take vacation days for job interviews.

Neuropsychology fellows in good standing are eligible for three days of time for one professional conference per year (e.g., INS, AACN, NAN), as well as financial support from the Department of Neurosurgery for travel and conference registration. Additional time and support may be afforded for meetings in which the fellows are presenting a poster or paper.

TRAINING ACTIVITIES

Specific Training Activities Available Through the Program

The University of Colorado Neuropsychology Fellowship provides training in adult neuropsychological assessment and consultation for patients struggling with various neurologically related conditions, including those struggling with conditions such as Parkinson's disease, epilepsy, brain tumor, multiple sclerosis, traumatic brain injury, stroke, etc. As previously indicated, training is designed to represent a Major Area of Study in clinical neuropsychology at the fellowship level, in accordance with the APPCN mission, that meets the Houston Conference Guidelines on Specialty Education and Training in Clinical

Neuropsychology. Our training model is primarily focused on fellows developing a professional level of practice in neuropsychology, including clinical interviewing, test selection, test administration, case conceptualization and differential diagnosis, report writing, consultation with multidisciplinary teams, and providing feedback to patients and their families. Fellows are trained to excel in their understanding and practice of each of these areas of functional competence through clinical experience gained by seeing patients with close attention and guidance provided by the faculty. In addition, each of our fellows is expected to further develop their foundational competencies (e.g., knowledge of psychometrics, neuropathology, etc.) through directed readings as part of supervision activities and required attendance of various neuroscience related didactic experiences, described below. Further opportunities for professional growth and development also exist for fellows though participation in clinical research. Finally, our fellows participate in a board certification preparation series that includes educational exercises intended to help them successfully become board certified (e.g., mock fact finding).

Clinical Service Requirements

Fellows find the Neuropsychology Fellowship to be a busy training experience consistent with most major academic medical centers. Typically, fellows are expected to see about four patients per week. They are responsible for test administration, scoring, report-writing, consulting with other medical providers, and providing feedback for all of their patients. Historically, technician support for testing and scoring has been available for two of the four patients per week.

Supervision: Structure, Process and Expectations

Fellows are assigned two primary supervisors for two 6-month rotations each year, though this is somewhat of a flexible model that may be modified. This facilitates greater depth of experience via exposure to supervisors' styles and clinical experience. An additional 4-month minor rotation may be completed with Dr. Brianne Bettcher during the 2-year fellowship, at her discretion. Dr. Bettcher is a geriatric neuropsychologist who directs neuropsychology research at the Rocky Mountain Alzheimer's Disease Center and completes clinical evaluations in the UCH Neuropsychology Clinic once per week. Fellows are expected to receive two to three hours of direct supervision per week. This includes direct observations during patient interviews and follow up appointments, one-on-one discussion and supervision for the purpose of case conceptualization, group supervision via the Neuropsychology Case Conference didactic, and supervision provided on an as-needed basis depending on clinical demands. In addition, supervision is provided in the form of detailed editing and discussion with supervisors on all neuropsychology reports completed by the fellow. Finally, we strive to provide the opportunity for fellows to supervise more junior trainees (e.g., practicum students) within the context of a vertical supervision model (i.e., under the umbrella of faculty supervision) to begin the process of learning about training from the supervisor perspective.

Research Requirements

Although the Neuropsychology Fellowship is intended to be primarily clinical in focus and research is only a minor component of the program (10% of training time), the neuropsychology faculty are currently involved in various research projects. Consequently, research opportunities are available to fellows in addition to their clinical training responsibilities. At a minimum, fellows are expected to either submit to present a research project at a national/international neuropsychology conference, such as AACN or INS, or a manuscript for publication in a peer

reviewed journal. Fellows are also strongly encouraged to assist faculty in tasks such as manuscript reviews for various journal submissions.

Didactics

An essential component of the Neuropsychology Fellowship is the didactic experiences offered, as they further round out trainees' knowledge of neurological functioning and their understanding of brain-behavior relationships. We are pleased to be able to offer a wide range of opportunities that the Anschutz Medical Campus affords. While fellows do not have to participate in *all* of these opportunities every week, we encourage our fellows to take full advantage of the rich learning experiences offered though these various meetings. Furthermore, a minimum of three didactic hours are required each week (as noted below, attendance is required at a handful of meetings). The opportunities currently offered include the following:

Adult Neuropsychology Seminar (required): This meeting is held once per month. It is staffed by the neuropsychology faculty and all trainees. The focus of the seminar is on presenting various neurological conditions to the group, addressing topics such as epidemiology, etiology, pathophysiology, treatment and prognosis, as well as related clinical and research techniques (e.g., MRI, fMRI, Wada testing). Presenters include the neuropsychology faculty, neuropsychology fellows, and physician colleagues from Neurology and Neurosurgery.

Neuropsychology Case Conference (required): This meeting is held once per month and is staffed by the neuropsychology faculty and all trainees. During these meetings, a faculty member or neuropsychology fellow is expected to present a clinical case, with emphasis on interpretation of test results and case conceptualization, as well as present and lead discussion on a relevant journal article or book chapter. The intention of this meeting is to have an open and lively discussion and as a group generate critical thinking questions and potential answers about clinical cases and topics.

Neuropsychology Board Certification Preparation (required): This meeting is held once per month. The purpose of this didactic is to prepare fellows for the board certification process through ABPP/ABCN. This didactic includes exercises mimicking portions of the written and oral ABPP/ABCN examination, including the APPCN written examination, group and individual fact findings, group and individual evaluation of ethical vignettes, and group and individual case defenses.

Neuroanatomy Review (required): This meeting is held once per month and is staffed by the neuropsychology faculty and all trainees. The purpose of this didactic is review of neuroanatomy and related topics (e.g., neuroradiology) relevant to the practice of clinical neuropsychology. During these meetings, the fellow is expected to lecture on topics provided by the faculty. Topics range from a review of basic neuroanatomy to the functional neuroanatomy of different aspects of cognition (e.g., memory and language). Neuroanatomy through Clinical Cases by Hal Blumenfeld is a principal text, with copies given to fellows.

Other Didactic Opportunities:

Pediatric Neuropsychology Seminar (Children's Hospital Colorado) Deep Brain Stimulation Patient Care Conference Epilepsy Surgery Patient Care Conference Behavioral Neurology and Neuropsychiatric Conference
Multiple Sclerosis Team Conference
Brain Tumor Conference
Neurosurgery Grand Rounds
Neurology Grand Rounds
Nervous System (University of Colorado School of Medicine Course)
Neurosurgery Observation
Wada Observation

Director-Fellow Meeting (required): This is a monthly meeting held between all of the fellows in the Division of Neuropsychology, the fellowship director, and associate fellowship director. Topics to be discussed in this meeting include professional development, such as completion of the EPPP, state jurisprudence exam, and licensure (all of which are expectations during fellowship), as well as post-fellowship professional goals (i.e., professional routes, job searches and applications), board certification, and medical billing. This meeting is also designed to address general concerns raised by the fellows about training and issues.

EVALUATION PROCEDURES

Process of Evaluation for Neuropsychology Fellows

Each fellow will receive ongoing feedback regarding their professional development and competency to practice clinical neuropsychology at the highest levels throughout their fellowship, both though informal and formal means. For example, while foundational competencies (e.g., knowledge of psychometrics, neuropathology of specific disorders, etc.) may be informally assessed during supervision activities, each fellow will complete the APPCN resident exam at the completion of their first year (the results of which will also be used to guide didactic activities for each fellow's second year). Also, while primarily meant as an educational exercise to help fellows successfully become board certified, mock fact finding exercises are another formal means by which faculty may assess foundational competencies. Functional competencies are largely assessed informally though direct observation during clinical activities (e.g., clinical interviewing) and supervision (e.g., case conceptualization). However, each fellow receives formal evaluation of his/her work at the end of each 6-month rotation with each supervisor. Specifically, evaluation of the fellow is addressed via a rating system for each of the areas noted below, along with additional comments by the supervisor as appropriate: 1) general professional, 2) assessment, 3) consultation and intervention, 4) scholarly activity, 5) didactics, 6) supervisory relationship, and 7) professional development. This information is discussed in detail with the fellow during a post-rotation evaluation meeting. In turn, the fellow is asked to complete a formal review of their supervisor to offer feedback on their supervision and the training received.

Methods to Ensure Competence and Understanding of Ethical Standards, Cultural/Individual Differences, and Diversity

The neuropsychology faculty practice in accordance with the APA Ethical Code of Conduct, are aware of relevant publications in the field, such as position papers on issues such as third-party observers, test security, etc., and provide instruction to the fellow accordingly. The topic of ethics in neuropsychology is emphasized in supervision during Neuropsychology Case Conference, presentations during Neuropsychology Seminar, and individual supervision. In

addition, patients seen in the UCH Neuropsychology Clinic tend to be fairly racially, ethnically and financially diverse relative to the overall population of the Denver area, and this experience is expected to foster greater understanding of the importance of diversity issues with regard to neuropsychological evaluation. The fellow's understanding of ethics is addressed at the end of each 6-month rotation, as part of the regular evaluation process. Also, while primarily meant as an educational exercise to help the fellows successfully become board certified, each fellow will participate in the dissection of ethical vignettes supplied by APPCN in a manner akin to that which they will face during the ABPP oral examination.

Methods and Frequency for Residents to Evaluate Faculty and Training Program
As indicated above, the Neuropsychology Fellowship provides the fellow with the opportunity to give regular feedback on the training program and faculty during the aforementioned faculty review at the end of each 6-month rotation, as well as informally during the monthly Fellow-Director meeting. In addition, upon exiting from the Neuropsychology Fellowship, the fellow completes a formal exit interview with the director to elicit any additional feedback about their experience which might be helpful or relevant for improved program development.

Disciplinary and Grievance Procedures

The Neuropsychology Fellowship adheres to the disciplinary policies and procedures set by University of Colorado School of Medicine Human Resources office. Please refer to the website for specifics.

Link: https://www.ucdenver.edu/offices/human-resources

Residents may also contact the Ombuds Office and CU Anschutz Office of Professional Excellence (OPE).

Link: https://www.ucdenver.edu/offices/ombudsoffice Link: https://www.ucdenver.edu/offices/ombudsoffice

APPLICATION AND SELECTION PROCEDURES

Competitive applicants will hold a Ph.D. or Psy.D. from an APA or CPA accredited program in clinical or counseling psychology, have completed/currently be completing an APA or CPA accredited internship, and have a history of training at the doctoral and internship levels demonstrating that clinical neuropsychology has been a Major Area of Study² (e.g., at the internship level, 1. At least 50% of training time in clinical neuropsychology AND 2. Didactic experiences consistent with Houston Conference guidelines for knowledge and skill).

Applicants are asked to send a letter of interest along with their CV, three letters of recommendation, two sample reports, and official graduate school transcripts. Application materials are due no later than January 1st of 2024. Following initial consideration, competitive applicants will be offered interviews. In accordance with APPCN policy, interviews will be conducted virtually over video conference in early 2024 but with an option for in-person interviews also offered at INS.

As an APPCN member, the University of Colorado Neuropsychology Fellowship participates in the APPCN National Match Program and observes the procedures and rules involved in this process. Applicants are instructed to register with the National Matching Service. Information can be obtained from NMS at www.natmatch.com or 416-977-3431. Our program code number is **8311**.

For program inquiries:

Michael R. Greher, Ph.D., ABPP-CN E-mail: michael.greher@cuanschutz.edu

Phone: 303-724-5957

To apply, please email your application to <u>jennifer.hasenbalg@cuanschutz.edu</u> using the following format:

- One PDF file with documents in the following order:
 - Cover letter, with detailed statement of goals for postdoctoral training and intended professional practice
 - o Curriculum Vitae
 - Two de-identified sample reports
 - Copies of graduate transcripts
 - Verification of Completion of Doctorate (to be completed by Dissertation Chair or Director of Clinical Training). The form may be downloaded from: http://appcn.sitewrench.com/assets/1748/doctorate verification form.pdf
- Letters to be emailed from the following individuals:
 - o Three letters of recommendation from current or former supervisors/mentors

If hard-copy application materials must be sent, please use the following information:

Via US Postal Service:

Jennifer Hasenbalg Department of Neurosurgery 12631 E. 17th Avenue, C307 Aurora, CO 80045

Via UPS/FedEx:

Jennifer Hasenbalg Department of Neurosurgery Academic Office One, Rm. 5001 12631 E. 17th Avenue Aurora, CO 80045