



**UNIVERSITY OF COLORADO  
SCHOOL OF MEDICINE  
DENVER, CO**

**NEUROPSYCHOLOGY FELLOWSHIP  
2018-2020**

**APPCN Member Program**

**TRAINING DESCRIPTION**

Michael R. Greher, Ph.D., ABPP-CN & Christopher H. Domen, Ph.D., ABPP-CN  
September 2017

## 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). 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 Study<sup>1</sup> in clinical neuropsychology that meets the guidelines set forth by the Houston Conference Guidelines on Specialty Education and Training in Clinical Neuropsychology<sup>2</sup>, 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 and a series of case conferences, as well as optional didactics offered through the departments of neurology and neurosurgery. 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)/ABCN. 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 new campus with state of the art research facilities. The school was founded in Boulder and moved in 1924 to Colorado Boulevard and 9<sup>th</sup> 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 campus features two research towers, the University of Colorado Hospital (UCH), The Children's Hospital (TCH), and new VA Medical Center.

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

---

<sup>1</sup> 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: [10.1080/13854046.2017.1314017](https://doi.org/10.1080/13854046.2017.1314017)

<sup>2</sup> 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, the Memory and Dementia Clinic, and the Concussion Program. Referrals also come from general practice areas in the UCH system, as well as neurologists, neurosurgeons, physiatrists, psychiatrists, and primary care physicians throughout the Denver area and beyond. The clinic has five neuropsychologists, four neuropsychology technicians, and various other trainees (minor rotation interns and 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*

- Brianne M. Bettcher, Ph.D., Assistant Professor of Neurosurgery and Neurology
- Christopher H. Domen, Ph.D., ABPP-CN, Assistant Professor of Neurosurgery and Neurology
- Michael R. Greher, Ph.D., ABPP-CN, Associate Professor of Neurosurgery and Neurology
- Brian D. Hoyt, Ph.D., ABPP-CN, Associate Professor of Neurosurgery and Neurology
- Thomas R. Wodushek, Ph.D., ABPP-CN, Assistant Professor of Neurosurgery and Neurology

#### *Program Administrative Structure*

Each member of the Neuropsychology Faculty hold 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 Fellowship Director. Trainees include two Neuropsychology Fellows, one minor rotation Psychology Intern, and one Practicum Student 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 located in the Neurosciences clinic in UCH's Anschutz Outpatient Pavilion (AOP). Administrative offices for the faculty are located in the adjacent Academic Office One Building (AO1) and the UCH Leprino Building (LB). 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 a shared test admin/scoring computer. 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 \$47,484 in year one and \$47,844 in year two, along with a full benefits package, including health insurance, paid vacation, etc.

## 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 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 based on a combination of clinical experience gained through seeing patients and 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 through 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 two to three 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. Technician support for testing and scoring may be available on a limited basis.

### *Supervision: Structure, Process and Expectations*

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, 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. Fellows are assigned a primary supervisor for three 4-month rotations each year. This facilitates greater depth of experience via exposure to supervisors' styles and clinical experience. Also, fellows have the opportunity to work with neurosurgeons, neurologists, neuroradiologists, neuropathologists, and physiatrists through the various team conferences noted below.

### *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.

An encouraged research opportunity is with Dr. Bettcher, a geriatric neuropsychologist who directs neuropsychology research at the Rocky Mountain Alzheimer's Disease Center. The focus of this research opportunity will be on the cognitive neuroscience of aging and Alzheimer's disease, and may include opportunities to examine cognitive profiles of typical aging adults and adults with Down Syndrome and Alzheimer's disease. Additional opportunities may include attending didactics on basic and advanced statistical analysis methods; analyzing small multi-method data sets; participating in multidisciplinary Alzheimer's Disease center research meetings; co-reviewing external manuscripts; and collaborating on cognitive and neuroimaging manuscripts using pilot data. Note that participation in research activities with Dr. Bettcher is contingent upon satisfactory completion of clinical responsibilities.

### *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 through 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 twice per month at the School of Medicine on the Anschutz Medical Campus. It is staffed by the neuropsychology faculty and all trainees. The focus of the seminar is on presenting various neurological conditions to the group, with a focus on 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 at the School of Medicine and is staffed by the neuropsychology faculty. During these meetings, the neuropsychology fellow is expected to give a brief presentation on one particular topic area relevant to neuropsychology practice. 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 a given topic. The fellow presenting will also discuss a recent case that is relevant to the topic matter at hand.

*Neuropsychology Research Training Meeting (required):* This monthly meeting is the primary meeting for the University of Colorado School of Medicine Neuropsychology Research Program. It is held in the Department of Neurosurgery and involves detailed discussions regarding various research projects from data incorporated in the University of Colorado School of Medicine Neuropsychology Database. The meeting is also used to discuss ongoing involvement in projects being completed in collaboration with other faculty here on the University of Colorado School of Medicine campus, primarily in the Department of Neurosurgery and the Department of Neurology. Some involve clinical trials while others are part of NIH-funded observational studies. There is also detailed discussion of research projects under development, and submissions for presentation and publication. Fellow involvement in these projects is mapped out in these meetings in an effort to match their interests with ongoing studies, and provide guidance through the entirety of a research project, including study design, data analysis, and poster/manuscript preparation.

*Neuropsychology Board Certification Preparation (required):* The purpose of this didactic is to prepare fellows for the board certification process through ABPP/ABCN, consistent with the mission of the University of Colorado School of Medicine Neuropsychology Fellowship program. 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.

*Other Didactic Opportunities:*

Child Neuropsychology Seminar (at Children's Hospital)  
Deep Brain Stimulation Patient Care Conference

Epilepsy Surgery Patient Care Conference  
 Neurobehavioral Clinic  
 Brain Tumor Conference  
 Behavioral Neurology and Neuropsychiatry Conference  
 Multiple Sclerosis Team Conference  
 Neurosurgery Grand Rounds  
 Neurology Grand Rounds  
 Nervous System (University of Colorado School of Medicine Course, select modules)  
 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 preparations for taking the EPPP and state jurisprudence exam, post-fellowship professional goals (i.e., professional routes, job searches and applications), and board certification. 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 through 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 through 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 4-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 4-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 4-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.

## 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 Study (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 January 1<sup>st</sup> of 2018. Following initial consideration, competitive applicants will be offered interviews at the International Neuropsychology Society conference in Washington D.C., in February of 2018. For applicants not attending the meeting, interviews can be arranged at the University of Colorado School of Medicine or by teleconference before INS, if necessary.

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](http://www.natmatch.com) or 416-977-3431. Our program code number is 8312.

For program inquiries:

Michael R. Greher, Ph.D., ABPP-CN  
 E-mail: [Michael.Greher@ucdenver.edu](mailto:Michael.Greher@ucdenver.edu)  
 Phone: 303-724-5957



To apply, please email your application to [Krystin.Martinez@ucdenver.edu](mailto:Krystin.Martinez@ucdenver.edu) 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
  - 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](http://appcn.sitewrench.com/assets/1748/doctorate_verification_form.pdf)
  - Three letters of recommendation from current or former supervisors/mentors (letters may also be emailed directory to Ms. Martinez, if referees prefer).

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

**Via US Postal Service:**

Krystin Martinez  
Residency Coordinator  
Department of Neurosurgery  
12631 E. 17<sup>th</sup> Avenue, C307  
Aurora, CO 80045

**Via UPS/FedEx:**

Krystin Martinez  
Residency Coordinator  
Department of Neurosurgery  
Academic Office One, Rm. 5001  
12631 E. 17<sup>th</sup> Avenue  
Aurora, CO 80045