# APPCN Neuropsychology Fellowship Program





University of Iowa Health Care



# POSTDOCTORAL FELLOWSHIP PROGRAM IN CLINICAL NEUROPSYCHOLOGY

Benton Neuropsychology Clinic Department of Neurology University of Iowa College of Medicine

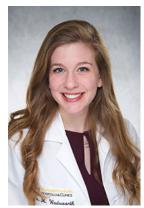
Date of Preparation: October 10, 2023

# **Program Directors:**



Daniel Tranel, PhD, ABPP/Cn Professor of Neurology

Senior Residency Director



Hannah Wadsworth, PhD Assistant Professor of Clinical Neurology

Residency Director

# **Program Faculty:**



Steven W. Anderson, PhD, ABPP/Cn Associate Professor of Neurology



Joseph Barrash, PhD, ABPP/Cn Emeritus Professor of Clinical Neurology



Natalie Denburg, PhD Professor of Neurology



Kimberly Diah, PhD Assistant Professor of Clinical Neurology



Robert D. Jones, PhD, ABPP/Cn Professor of Clinical Neurology

#### PROGRAM AT A GLANCE

- Application deadline: December 1, 2023.
- Required materials: Statement of purpose, curriculum vitae, three letters of reference, two sample case reports, and graduate school transcripts (unofficial is acceptable).
- Submit materials through the APPA CAS application portal.
- Interviews will be held around the time of INS, by Zoom or in person.
- APPCN match number is **9812**.
- Follows Minnesota and Houston Conference Guidelines and APPCN requirements. Two-year fellowship commitment.
- Primarily adult neuropsychology training and occasional experience with child/adolescent populations (95% adult, 5% child/adolescent).
- Training through a general outpatient clinic in the department of neurology at a large, tertiary academic medical center.
- Caseload includes 1-2 patients/day, typically with technician support.
- Initially, the majority of fellowship time is spent clinically; 20-40% research time is available once the fellow's clinical skillset is solidified; more research time possible in year 2.
- Didactics are available twice/week within the Division of Neuropsychology, with additional didactic opportunities in a variety of other venues in the College of Medicine throughout the week.
- Salary consistent with NIH stipend guidelines for postdoctoral fellows 2023 salary: \$56,484.
- Dedicated to diversifying the field of neuropsychology and making an explicit effort to recruit and train individuals from underrepresented groups.

#### PROGRAM OVERVIEW

The postdoctoral fellowship training program in clinical neuropsychology at the University of Iowa is administered through the Department of Neurology, in the University of Iowa Hospitals and Clinics. The Benton Neuropsychology Clinic is the principal training site, and the program has a Major Area of Study in Clinical Neuropsychology. The Program is directed by Daniel Tranel, PhD. The Program has close ties to the University of Iowa Neuroscience PhD Program (http://neuroscience.grad.uiowa.edu), the Department of Neurosurgery (http://www.medicine.uiowa.edu/neurosurgery), the Department of Psychological and Brain Sciences (http://www.psychology.uiowa.edu), and the Iowa Neuroscience Institute (Iowa-Neuroscience-Institute@uiowa.edu). The training program normally accepts one fellow each year, and emphasis is placed on individual instruction by maintaining a low fellow-to-faculty ratio. Our training model stems from the scientist-practitioner tradition, and conforms to the guidelines provided by the Minnesota Conference and Houston Conference. We agree with the spirit of the Minnesota Conference guidelines. As a consensus is reached and an official statement is published, we will update our program accordingly. The program is a charter member of the Association of Postdoctoral Programs in Clinical Neuropsychology (APPCN), and participates in the match program administered through APPCN. Most fellows graduating from the program have pursued careers in hospital-based practice (see fellow outcomes below), and many have maintained a balance between clinical practice, research, and teaching. The background of past fellows has been primarily in clinical psychology and counseling psychology, with specific experiences in neuropsychology. Additionally, our Fellowship Program is dedicated to the diversification of the workforce in our field. Persons of color (BIPOC) are severely underrepresented in the field of clinical neuropsychology, and this limits the quality of services that can be provided to patients. We have made explicit efforts to address this gap, by recruiting and training postdoctoral students who come from underrepresented groups and diverse backgrounds. A commitment to diversity, equity, and inclusion is a top priority of our Program.

The Program is housed at the University of Iowa Hospitals and Clinics (UIHC), which is one of the largest university-owned teaching hospitals in the United States. The Benton Neuropsychology Clinic serves approximately 2000 patients per year with specialized diagnostic and rehabilitation services. Referral sources are located throughout the UIHC and other medical centers around Iowa and surrounding states. Within UIHC, referrals come from a number of departments including Neurology, Neurosurgery, Internal Medicine, Oncology, Psychiatry, and Family Practice. The patient population is primarily comprised of adults, though a small percentage of slots are provided to children (approximately 5%). The majority of cases are seen as outpatients. Also, inpatients with urgent needs are commonly evaluated (approximately 2-5 cases per week). On rare occasions, we use televideo assessment to evaluate patients.

The Program has special strengths in assessment of neuropsychological syndromes associated with stroke, Alzheimer's disease and other neurodegenerative conditions, traumatic brain injury, CNS tumors, epilepsy, Parkinson's disease and other movement disorders, metabolic/medical conditions, and forensic evaluations. Given the setting in a tertiary medical center and the large catchment area of UIHC, fellows can expect to be involved in the care of patients with rare neuropsychological syndromes such as prosopagnosia, pure alexia, and Balint's syndrome, as

well as traditional syndromes of aphasia, amnesia, agnosia, executive dysfunction, and personality disturbance following brain damage. Fellows also participate in Wada evaluations for patients being evaluated for epilepsy surgery, as well as pre/post-surgical evaluations for epilepsy and DBS placement.

Instruction in neuropsychological assessment is the core of the fellowship. The training model emphasizes developing the skills necessary to effectively work with technicians in conducting high quality neuropsychological evaluations. Fellows normally participate in the evaluation of one to two patients per day (typically one if the fellow is doing their own testing; typically two if the fellow is working with a technician). The Benton Neuropsychology Clinic uses a core battery that is two to four hours in length, with additional assessment instruments guided by the referral question, the condition of the patient, and findings from the core battery (see Benton, 1994; Lezak et al., 2012; Tranel, 2009). Typically, reports are roughly two pages, varying in length depending upon the referral question and patient issues.

The program follows NIH guidelines (<a href="https://grants.nih.gov/grants/guide/notice-files/NOT-OD-22-132.html">https://grants.nih.gov/grants/guide/notice-files/NOT-OD-22-132.html</a>) for salary of postdoctoral fellows. There are full health insurance benefits, and interested candidates are encouraged to inquire about the specifics of such benefits. For more information on the program please see the program website at <a href="https://medicine.uiowa.edu/neurology/education/fellowships/postdoctoral-fellowship-clinical-neuropsychology">https://medicine.uiowa.edu/neurology/education/fellowships/postdoctoral-fellowship-clinical-neuropsychology</a> and the UIHC careers website <a href="https://uihealthcare.org/find-your-career-university-iowa-health-care">https://uihealthcare.org/find-your-career-university-iowa-health-care</a> for information about the community and working at UIHC.



#### **FACULTY**

**Directors:** Daniel Tranel, PhD, ABPP/Cn, Professor of Neurology and Psychological and Brain Sciences, Senior Residency Director

Hannah Wadsworth, PhD, Assistant Professor of Clinical Neurology, Residency Director

### **Core Faculty:**

Steven W. Anderson, PhD, ABPP/Cn, Associate Professor of Neurology Natalie Denburg, PhD, Professor of Neurology Kimberly Diah, PhD, Assistant Professor of Clinical Neurology Robert D. Jones, PhD, ABPP/Cn, Professor of Clinical Neurology

#### **Emeritus Faculty:**

Joseph Barrash, PhD, ABPP/Cn, Emeritus Professor of Clinical Neurology

## **Postdoctoral Fellows:**

Chase Presley, PhD (University of Texas Southwestern) Mark Bowren, PhD (University of Iowa) Stephanie Torres-Ramos PhD (Ponce Health Sciences University)

## **Affiliated Faculty:**

Georgina Aldridge, MD, PhD, Assistant Professor of Neurology (behavioral neurology)

Aaron Boes, MD, PhD, Associate Professor of Pediatrics (general neurology)

Joel Geerling, MD, PhD, Assistant Professor of Neurology (behavioral neurology)

Mark Granner, MD, Professor of Clinical Neurology (epilepsy)

Jeremy Greenlee, MD, Professor of Neurosurgery (neurosurgery)

Matthew Howard, MD, Professor and Head, Neurosurgery (neurosurgery)

Annie Killoran, MD, Clinical Assistant Professor of Neurology (movement disorders)

Hiroto Kawasaki, MD, Associate Professor of Neurosurgery (epilepsy surgery)

Enrique Leira, MD, Professor of Neurology (stroke)

Nandakumar Narayanan, MD, PhD, Associate Professor of Neurology (movement disorders)

Peg Nopoulos, MD, Professor and Head, Psychiatry (neuropsychiatry)

Hyungsub Shim, MD, Associate Professor of Clinical Neurology (behavioral neurology)

Ergun Uc, MD, Professor of Neurology (movement disorders)



# ALUMNI NEUROPSYCHOLOGY FELLOWS AND OUTCOMES

Alumni Neuropsychology Fellow Outcomes (1992-2023)			
Years	Name	Graduate Program	Current Position
1992-94	Jane Cerhan, PhD	University of Iowa	Mayo Rochester – Emeritus
1994-96	Julie Suhr, PhD	University of Iowa	Ohio University
1997-99	Natalie Denburg, PhD	Michigan State University	University of Iowa
1998-00	Derek Campbell, PhD	University of Kentucky	Private Practice, Des Moines, Iowa
2000-02	Sonia Mosch, PhD	University of Minnesota	Private Practice, Minneapolis, Minnesota
2001-03	Stefanie Griffin, PhD	University of Nebraska	Private Practice, Dover, New Hampshire
2003-05	John Wright, PhD	St. Louis University	Private Practice, St. Louis, Missouri
2004-06	Brian Harel, PhD	University of Connecticut	Takeda Pharmaceuticals
2004-06	Jyoti Pundlik, PhD	Northeastern University	TIRR Memorial Hermann
2006-08	Bruce Parkinson, PhD	University of Florida	Virginia Commonwealth University
2007-09	David Cordry, PhD	Michigan State University	Iowa City VA, Iowa City, Iowa
2008-10	Catalina Hooper, PhD	University of Minnesota	Hennepin County, Minnesota
2010-12	Eric Waldron, PhD	University of Houston	University of Minnesota
2011-13	Jason Southwick, PhD	Brigham Young University	St. Luke's Boise Medical Center, Boise, Idaho
2012-14	Jessie Morrow, PhD	Nova Southeastern University	St. Louis, Missouri
2013-15	James N. Porter, PhD	University of Minnesota	University of Minnesota
2014-16	Katie McCulloch, PhD	University of Houston	Private Practice, Longview, Washington
2015-17	Nasseem Dezhkam, PsyD	University of Nova	Private Practice, Woodland Hills, California
2015-17	Janina Kamm, PsyD	The Chicago School of Professional Psychology	The Chicago School of Professional Psychology
2016-18	Richard Laurent, PhD	St. Louis University	Private Practice, Mount Juliet, Tennessee
2017-19	Isaac Hunt, PhD	Brigham Young University	Essential Health-Duluth
2017-19	Lauren Piper, PhD	Illinois Institute of Technology	Shirley Ryan AbilityLab
2018-20	Hannah Wadsworth, PhD	University of Texas Southwestern	University of Iowa
2019-21	Ransom Campbell, PhD	Virginia Tech	US Government
2020-22	Kimberly Diah, PhD	Nova Southeastern University	University of Iowa
2021-23	Nicholas Neibergall, PhD	University of Missouri	Minnesota Department of Human Services

#### **GOALS FOR PROGRAM FELLOWS**

- To learn the principles and methods of neuropsychological assessment, including standardized measurement of perception, attention and orientation, intellect, memory, speech and language, reasoning and decision-making, and personality.
- To gain an understanding of neuropsychological manifestations of neurological and psychiatric disease, including agnosia, amnesia, aphasia, disorders of personality and social conduct, and dementia.
- To learn the relationship between medical diseases (e.g., Alzheimer's disease, Parkinson's disease, stroke, trauma) and the associated neuropsychological clinical presentations.
- To efficiently provide high quality neuropsychological services to diverse patients, including effective clinical interviewing, test selection, interpretation of results, feedback, report writing, and supervision of technicians and practicum students.
- To design and execute research in clinical neuropsychology and cognitive neuroscience.
- To learn methods of neuroscience research, with an emphasis on lesion method techniques and structural and functional imaging at systems level (CT, MRI, PET, fMRI).
- To learn to be ethical and responsible in all professional activities, including service to patients, interactions with staff, colleagues, and the general public, and the conduct of research.



#### DESCRIPTION OF CLINICS AND LABORATORIES

The neuropsychology services in Neurology are located centrally in UIHC and provide easy and rapid access to all parts of the Hospital, including inpatient units on the Neurology and Neurosurgery wards, outpatient Neurology, and neuroimaging centers. Another clinic is staffed by Dr. Denburg at the Iowa River Landing location (about two miles from UIHC). Fellows are provided with secretarial services, computers with high-speed internet access and MEDLINE capabilities, laser printers, appropriate professional and scientific software, and other amenities to foster professional development. Fellows are supported to attend relevant national and international conferences, including the annual winter meeting of the International Neuropsychological Society.

In the Benton Neuropsychology Clinic, neuropsychologists carry on a tradition of neuropsychological assessment that dates back to the 1950s and the early work of Arthur L. Benton. Neuropsychology at Iowa has been a leader in the field for three quarters of a century, and this tradition continues. The Senior Director, Daniel Tranel, is a co-author of the latest (5<sup>th</sup> edition) of the Lezak book on neuropsychological assessment (Lezak, Howieson, Bigler, & Tranel, 2012), and is currently leading the effort to prepare the 6<sup>th</sup> edition. Many neuropsychological tests and experimental procedures that now enjoy widespread clinical utilization have been developed here. Standardized instruments for the analysis of higher behavior and cognition are available and are routinely used in our service. A wide variety of neuropsychological services are provided, ranging from brief consultations that may take no longer than a half hour, to comprehensive evaluations that may take 6 or more hours of test administration. An integrated system for neuropsychological data management is in place.

Pioneering methods for lesion analysis were developed in the Department of Neurology at Iowa (Hanna Damasio, 2005; Damasio & Damasio, 1989). These methods revolutionized the lesion approach in studies of brain-behavior relationships in humans, and fueled the growth of world-renown research programs in cognitive neuroscience in Neurology at Iowa. A focus on teaching brain-behavior relationships and focal neuropsychological syndromes continues to influence the training program to this day.

#### **Benton Neuropsychology Clinic**

The Benton Neuropsychology Clinic is located in the Roy Carver Pavilion of the UIHC, and is comprised of multiple examination rooms with extensive assessment instruments, technicians' offices, faculty offices, a workroom for students and faculty, a neuropsychological rehabilitation facility, and a reception center and waiting room. Four full-time technicians, as well as rotating practicum students, help to perform assessments. There are private offices for fellows.

# Neuropsychological Rehabilitation Laboratory

The Neuropsychological Rehabilitation Laboratory is dedicated to the development and administration of psychological interventions to facilitate recovery and rehabilitation of cognitive, behavioral, and emotional disturbances resulting from brain damage. Interventions and counseling are available to patients with varied neurological conditions and concerns, including cognitive and behavioral changes, sleep disorders, movement disorders, and

pain management. The detailed neuropsychological evaluations conducted in the Benton Clinic are used to guide systematic individualized treatment programs that draw upon findings from cognitive neuroscience, psychotherapy, and educational research. Neurological patients, their families, and their caretakers are provided with training in behavioral compensatory strategies, hierarchically-arranged cognitive retraining programs, and task-specific procedural learning techniques, in order to promote cognitive-behavioral competencies, functional independence, and emotional and physical well-being.



#### FELLOWSHIP EXPERIENCES

The following is an outline of experiences during the two-year postdoctoral fellowship program in clinical neuropsychology. Below, the specific training experiences are divided into activities related to clinical service, research, and education, although in practice these three domains are often blended. For example, a clinical conference is likely to lead to a discussion of the research literature on a given topic or condition. As noted earlier, our program conforms to the guidelines of the Minnesota Conference and Houston Conference, and is intended for highly motivated postdoctoral residents who aim to establish a career in the practice and science of clinical neuropsychology. Fellows are formally evaluated by faculty every six months, and provided feedback regarding strengths and weaknesses to maximize the provision of training needs and interests. In addition, fellows take the APPCN Postdoctoral Examination at the end of their first year (see below).

# A. First Year Fellow Experiences

## 1. Clinical

Clinical activities comprise approximately 80% time during the first year. On average, first year fellows see 1-2 patients per day once they begin completing evaluations with the assistance of technicians. Initially, patients are seen directly by the fellow. After demonstrating proficiency in neuropsychological test administration and scoring, fellows are taught to complete assessments with the aid of technicians (psychometricians) who complete the testing under the supervision of the fellow and a faculty neuropsychologist. Fellows receive considerable training and experience in supervising technicians in neuropsychological evaluations. Time is spent principally in diagnostic work. As fellows gain experience, there can be increasing involvement in the Rehabilitation Laboratory. A clinical faculty member supervises each case individually (we do not use group supervision).

In the Benton Clinic, a typical examination is comprised of approximately three hours of patient contact. Reports are concise. Fellows are taught, on a case-by-case basis, to identify core neuropsychological syndromes associated with different neurologic conditions, effective and concise report writing, and how to identify relevant demographic, historical, medical, and psychological information in developing a neuropsychological diagnosis (see Tranel, 2009 for a summary of the Benton Clinic method). Once Fellows demonstrate proficiency in formal testing, they are responsible for clinical interviewing, test selection, technician supervision, report writing, and providing verbal feedback in consultation with and under the supervision of faculty neuropsychologists.

The method of assessment derives from the tradition of Arthur Benton, following a hypothesis-based testing approach (Benton, 1994). Fellows conduct examinations on diverse outpatient and inpatient populations with a variety of presenting conditions and referral questions, including dementia, traumatic brain injury, metabolic and other chronic health conditions, neurological disorders, neuropsychiatric disorders, and learning disorders/ADHD. Referral questions are diverse as well, including differential diagnosis, treatment and discharge planning, decision

making capacity, driving safety, and academic accommodations. Fellows are exposed to complex cases that often involve both neurological and psychiatric issues. The approach to evaluations places an emphasis on individual supervision, hypothesis testing, concise and rapid report writing, and clear verbal communication of results to patients and their families, treatment teams, and referring providers.

To assist Fellows in obtaining optimal success in their position, Epic training and participation in a provider communication course are required during the onboarding process.

#### 2. Research

The Benton Neuropsychology Clinic maintains a registry of individuals representing different lesion sites and neuropsychological manifestations. In addition to access to patients with focal lesions, there are numerous opportunities to study patients with specific neurological and medical conditions (e.g., Alzheimer's disease, Parkinson's disease, TBI, temporal lobectomy). In the Benton Clinic, patients who may be of special interest to research studies are identified daily in the outpatient clinics and in inpatient Stroke Rounds. The availability of cooperative and well-studied patients has permitted a fundamental departure from the traditional orientation of neuropsychological studies: rather than studying interesting, isolated cases as they happen to occur, investigators are able to accrue and use extensive data about many neuropsychological and neuropsychiatric disorders. Moreover, for the past 40 years, all the patients seen through the Benton Neuropsychology Clinic have been coded and classified according to basic demographic information, neuropsychological syndrome (e.g., aphasia, amnesia, dementia), and neurologic disease (e.g., stroke, traumatic brain injury), permitting quick access to specific patient types. The neuropsychological data derived from assessment of these individuals are stored in permanent digital form and are available for research studies.

Research experience is initially provided through individual consultation with faculty, attendance at research seminars, and reading relevant textbooks and primary literature. Regular research meetings are attended by first-year fellows, with the aim of developing an area of interest. These meetings are typically multidisciplinary, and include faculty neuropsychologists and neuroscientists, neurologists, neuropsychology technicians, psychology graduate students, neuroscience graduate students, and undergraduate students in psychology and neuroscience. In the latter half of the first year, fellows are encouraged to develop a research interest, to consult with faculty regarding specific projects, and to initiate such projects as appropriate.

The tradition of research excellence in the University of Iowa's neuropsychology and cognitive neuroscience domains is hard to overstate. Carrying on the legacies of Arthur Benton and Antonio and Hanna Damasio, and capitalizing on a strong record of continuous NIH and private foundation funding, scientists in the Benton Clinic conduct cutting edge research in clinical and experimental neuropsychology. Fellows have many opportunities to become involved in ongoing projects or to develop their own lines of investigation.

#### 3. Education

Enrollment in an Epic training course and a provider communication course is a mandatory part of the onboarding process. Early educational experiences include consulting with faculty regarding clinical cases, attendance at Neurology Grand Rounds, Stroke Rounds, Neuroscience Seminars, and Benton Lectures. A core set of readings is provided at the outset of training, to provide fellows with fundamental knowledge and principles related to the practice of clinical neuropsychology, neuropsychological syndromes, common neurologic diseases, and current issues in professional clinical neuropsychology. Many of these activities overlap substantially with research or clinical interests of the group. Readings are provided on an individual basis, based on the fellow's individual interests, strengths, and educational needs. Specific didactic classes or experiences may be arranged, depending on the interests and educational needs of the fellow. Optional venues for educational growth include formal coursework (e.g., graduate courses such as Functional Neuroanatomy; Principles of Neuropsychology; Topics in Cognitive Neuroscience; Neurobiology of Disease) and specialty rounds (e.g., Epilepsy Surgical Case Conference, Radiology Conference, Dementia Clinic meetings, Neurology and Neurosurgery Bed Rounds). Also, as noted earlier, the Program supports fellows to attend the annual winter meeting of the International Neuropsychological Society.

#### 4. Examination

Following the first year of the fellowship program, fellows are administered the APPCN first-year test. This is a 50-item, 4-alternative multiple-choice test that assesses advanced knowledge in neuropsychological assessment and treatment, neuropsychological syndromes, and relevant neurological and psychiatric diseases. The general format of the exam is akin to the EPPP licensing exam and the ABPP/Cn board examination, with content specific to neuropsychology. Fellows are provided their score and feedback from the Program Director, and results are used to guide specific directions for second-year training.

#### **B. Second-Year Fellow Experiences**

The second year of the fellowship is considered a continuation of the first, and many of the same activities are continued. However, in general, there is a greater emphasis on more complex cases, supervision of technicians and practicum students in clinical work, and research. Greater independence in clinical activities is fostered. Many second-year fellows participate in teaching, e.g., through presentations in the Tranel Morning Meeting and Departmental Grand Rounds.

#### 1. Clinical

Depending on the career goals of the individual, the clinical appointment is approximately 60-80% time during the second year, with the possibility of a focus on specific areas of interest (e.g., dementia, stroke, epilepsy, TBI). Also, opportunities for involvement in medical-legal assessment cases are provided, and fellows are able to observe depositions and court appearances by staff neuropsychologists. Fellows can expect to see approximately 1-2 cases per day, under

the technician model. In addition, fellows often maintain a partial clinical load (e.g., 10%) in the Rehabilitation Laboratory.

#### 2. Research

For fellows with a strong research interest, background and career interests, research activity may have an increased emphasis in the second year, comprising a greater proportion of the fellow's time. For fellows with a strong research orientation, protected research time, free from clinical activities, is provided. Typically, this proportion is 20-40% release time, but may be higher in the second year for fellows with particularly strong interests, aptitude, and productivity in research. Fellows must obtain approval from their supervisors and the training director for research release time. Fellows work closely with faculty members, and often submit completed research to relevant conferences and meetings (e.g., International Neuropsychological Society, Society for Neuroscience) and peer-reviewed journals.

#### 3. Education

Ongoing educational activities include attendance at Neuroscience Seminar, Benton Lectures, Neuropsychology Rounds, Neurology Grand Rounds, and numerous lectures, colloquia, and seminars offered in the Department of Neurology and elsewhere in the College of Medicine and the University. Additional educational activity at this level is dedicated primarily to research endeavors, although particular areas of interest or areas of relative weakness may be addressed through didactic and experiential education.

## C. Principles of Scholarly Integrity and Responsible Conduct of Research

Fellows are provided with support and time to complete the NIH-required course on Principles of Scholarly Integrity and Responsible Conduct of Research, which is offered through the UI Carver College of Medicine. This course focuses on core issues in the ethical conduct of scientific research, including data integrity, treatment of human subjects, authorship, peer review, mentor-mentee relationships, and collaboration.

## **D. Other Special Training Opportunities**

#### 1. Wada Testing

As core members of the UI Comprehensive Epilepsy Program, Benton Clinic neuropsychologists conduct specialized comprehensive "Phase I" evaluations of all candidates for resection surgery for treatment of pharmacoresistant epilepsy. The neuropsychological findings are presented at the multidisciplinary Epilepsy Surgical Case Conference, in which neuropsychology plays a central role in discussions regarding patients' candidacy for surgical intervention. If candidacy advances, neuropsychologists perform Wada testing on appropriate patients to assess hemispheric contributions to language and memory. Approximately 15 Wada procedures per

year are performed, with sequential injections of each hemisphere, typically with half-hour interval between injections.

#### 2. Stroke Rounds

A number of previous fellows have taken part in morning Stroke Rounds through the University of Iowa Stroke Center. Staffed by senior neurologists, Stroke Rounds provides a unique venue for teaching both the medical and behavioral/cognitive effects of acute brain injury and are attended by a number of students including residents, fellows, and medical students. This experience affords the opportunity to see interventions with acutely ill patients with focal brain lesions, learn about neurological examinations, and see behavioral syndromes that are typically transient in nature following an acute lesion (for example akinetic mutism, hemispatial neglect).

#### 3. Neurosurgery

Through cooperation with the Department of Neurosurgery, a number of previous fellows have attended brain surgery. Specifically, fellows have followed patients that they have seen for assessment through the process of surgery for medication resistant epilepsy. Such an experience provides the fellow with an appreciation of the full course of surgical treatment for pharmacoresistant epilepsy, beginning with the neuropsychological evaluation, through specialized Wada testing, resective surgery, and follow-up.

# 4. Parkinson's Disease Multidisciplinary Clinic (MDC)

The University of Iowa has been designated a Center of Excellence by the Parkinson's Disease Foundation, and neuropsychology is a core member of the MDC for patients with Parkinson's Disease, with the goal of coordinated and integrated care of "the whole patient" for a wide range of potential issues arising from or impacting on their Parkinson's disease, adaptive functioning and quality of life. Coordinated by the treating neurologist, the multidisciplinary team includes members from psychiatry, pharmacology, social work, physical therapy and occupational therapy, as well as neuropsychology. Neuropsychology presents findings and recommendations from our clinical exam to inform the team to address cognitive, behavioral, emotional and psychosocial issues, as well as potential obstacles to the patient and family's ability to implement the team's treatment recommendations. Neuropsychology also is a core component in the evaluation of patients for deep brain stimulation (DBS) surgery.

#### SALARY AND BENEFITS

The salary follows NIH guidelines for postdoctoral fellows (<a href="https://grants.nih.gov/grants/guide/notice-files/NOT-OD-22-132.html">https://grants.nih.gov/grants/guide/notice-files/NOT-OD-22-132.html</a>). Health and dental insurance are provided and interested candidates are encouraged to correspond with Departmental Administrators regarding the specifics of the insurance benefits. Vacations, sick leave, and maternity/paternity leaves are consistent with the leave policy established for medical residents and currently include 3 weeks of annual leave plus sick leave and conference leave.

#### APPLICATION PROCEDURE

The application process includes submission of the following components: cover letter; curriculum vitae; three letters of reference; two sample case reports; and graduate school transcripts (which may be unofficial). Materials should be submitted online through the APPA CAS Postdoctoral Fellowship application portal. The link to this portal is:

# https://appicpostdoc.liaisoncas.com/applicant-ux/#/login

Other materials that the candidate would like the Program Selection Committee to consider are welcome. Applications are due on December 1<sup>st</sup> of the year prior to when the fellowship begins (applications for the 2024-2026 position are due **December 1<sup>st</sup>, 2023**). Applicants are notified of their status vis-à-vis our Program in the month of January, and arrangements are made to interview with our faculty in the applicants preferred interview format (televideo, phone interview, in-person interview at University of Iowa or at INS).

Our Program participates in the APPCN Match Program. The APPCN match number for our Program is **9812**. We rank all competitive applicants. Applicants are provided feedback about their status vis-à-vis our Program in accord with APPCN guidelines. The match process ultimately dictates which applicant(s) are accepted to our Program.



# Living in Iowa City

The community of Iowa City has a population of approximately 75,000. Iowa City has a small college town atmosphere, but with diverse entertainment and recreational activities associated with the University of Iowa including numerous concerts, literary events (including those through the Writer's Workshop), theatre, and sporting events. Downtown Iowa City is a tenminute walk from UIHC, or a five-minute bus ride via the free University shuttle. Many of our past fellows have lived within walking distance of the hospital. Iowa City has been described as bright, welcoming, and diverse. It is affordable with many amenities often available in larger cities. Please ask the current fellows about their experiences living in Iowa City!







# **University of Iowa Nondiscrimination Statement**

The University of Iowa does not discriminate in its educational programs and activities on the basis of race, national origin, color, religion, sex, age, or disability. The University also affirms its commitment to providing equal opportunities and equal access to University facilities without reference to affectional or associational preference. For additional information on nondiscrimination policies, contact the Coordinator of Title IX and Section 504 in the Office of Affirmative Action, telephone (319) 335-0705, 202 Jessup Hall, The University of Iowa, Iowa City, Iowa, 52242-1316.



#### SELECTED PUBLICATIONS AND SUGGESTED READING

- Abel, T. J., Rhone, A. E., Nourski, K. V., Kawasaki, H., Oya, H., Griffiths, T. D., Howard, M. A., & Tranel, D. (2015). Direct physiologic evidence of a heteromodal convergence region for proper naming in human anterior temporal lobe. *Journal of Neuroscience*, *35*(4), 1513-1520.
- Adolphs, R., Tranel, D., & Damasio, A. R. (1998). The human amygdala in social judgment. *Nature*, *393*, 470-474.
- Anderson, S. W., Barrash, J., Bechara, A., & Tranel, D. (2006). Impairments of emotion and real world complex behavior following childhood- or adult-onset focal lesions in ventromedial prefrontal cortex. *Journal of the International Neuropsychological Society*, 12, 224-235.
- Anderson, S. W., Bechara, A., Damasio, H., Tranel, D., & Damasio, A. R. (1999). Impairment of social and moral behavior related to early damage in human prefrontal cortex. *Nature Neuroscience*, *2*, 1032-1037.
- Anderson, S. W., Todd, M. M., Hindman, B. J., Clarke, W. R., Torner, J. C., Tranel, D., Yoo, B., Weeks, J., Manzel, K. W., & Samra, S. (2006). Intraoperative hypothermia and neuropsychological outcome after aneurysm surgery. *Annals of Neurology*, 60, 518-527.
- Andreasen, A., King Johnson, M. L., & Tranel, D. (2022). Stability of psychological well-being following a neurological event and in the face of a global pandemic. *Rehabilitation Counseling Bulletin*, http://doi.org/10.1177/00343552221139878.
- Barrash, J. (1998). A historical review of topographical disorientation and its neuroanatomical correlates. *Journal of Clinical and Experimental Neuropsychology*, 20, 807-827.
- Barrash, J. (2017). Iowa Scales of Personality Change. In J. S. Kreutzer, J. DeLuca, & B. Caplan (Eds.), *Encyclopedia of clinical neuropsychology*. Advance online publication. http://doi.org/10.1007/978-3-319-56782-2\_9006-1
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