

**University of Illinois at Chicago
Department of Psychiatry
Residency Education and Training Program**

**BEHAVIORAL NEUROLOGY AND
NEUROPSYCHIATRY
FELLOWSHIP TRAINING PROGRAM**

**Michael J. Schrift, DO,
Program Director**

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PROGRAM DESCRIPTION

Program Name:

The University of Illinois at Chicago - Behavioral Neurology and Neuropsychiatry Fellowship Training Program

Sponsoring Department:

Departments of Psychiatry and Neurology with administrative responsibility by the Department of Psychiatry.

Program Director:

Michael J. Schrift, DO, Associate Professor of Clinical Psychiatry; Director of Neuropsychiatry; Medical Director of the Neurobehavioral Program; University of Illinois at Chicago; Center for Cognitive Medicine; Department of Psychiatry (MC 913). The fellowship program is within the Neurobehavior Program.

Program Length:

2 years

Location:

The fellowship training program is both hospital- and outpatient-based at University of Illinois at Chicago Medical Center and the Neuropsychiatric Institute.

Participants:

By the start of the training the applicant must have completed residency training in an ACGME-approved program in Psychiatry and Neurology and be considered board-eligible by the American Board of Psychiatry and Neurology. In addition, an Illinois medical license is required prior to beginning training.

The program is approved for up to 2 fellowship positions at any one time but may only offer 1 position depending upon funding.

Purpose:

The goal of the Behavioral Neurology and Neuropsychiatry Fellowship Training Program is to train highly qualified behavioral neurologists and neuropsychiatrists for careers in clinical practice, medical education, and research. On completion of the program, fellows will be:

- Well-versed in the fundamentals of neuroanatomy and neuropharmacology
- Able to assess, diagnose, and treat patients presenting with a spectrum of neurobehavioral syndromes and neuropsychiatric disorders
- Able to pursue lifelong independent self-education to keep abreast of the field.

Upon completion of the training program, the graduate will be eligible for board certification by the United Council for Neurologic Subspecialties.

Need:

Behavioral neurology and neuropsychiatry are disciplines among the clinical neurosciences that focus on the clinical and pathological aspects of neural processes associated with cognition, emotion, and behavior. Recent advances in structural and functional brain imaging, clinical electrophysiology, and experimental psychology fostered unprecedented growth in the clinical neurosciences, and have enlightened our understanding of both normal and disturbed cognition, emotion, and behavior.

These technologies and the findings from them complement the clinical interview and examination and extend the core knowledge base and clinical skills that define modern neuropsychiatry and behavioral neurology. A principal goal of this integrative approach is to transcend the mind-brain duality reflected in the separation of psychiatry and neurology. Given the breadth of the clinical problems encountered by behavioral neurologists and neuropsychiatrists, expertise in pharmacological, behavioral, psychosocial, and environmental interventions is required to address comprehensively the needs of patients with these conditions and their families.

Goals and Major Objectives:

To develop clinical expertise in the care of patients with brain dysfunction, including understanding of diagnostic skills, neurologic and mental status examinations, cognitive testing, electrophysiological testing, neuroimaging, differential diagnosis, crisis intervention, application of time-limited psychotherapy, and referral for rehabilitative therapies.

To gain a broad knowledge in the field through extensive exposure to the core literature in neuropsychiatry, neuropsychology, and behavioral neurology. Neuroanatomy and neurochemistry of cognition, emotion, and behavior is emphasized.

To develop an understanding of the principles and practice of neuropsychopharmacology, with special emphasis on psychostimulants and other catecholaminergically active agents, cholinesterase inhibitors, NMDA receptor antagonists, anticonvulsants, atypical antipsychotics, antidepressants, and emerging neuropharmacologic agents, as well as the interactions of such agents with other medications on central nervous system function. This is fostered through the participation in a structured educational curriculum that complements clinical and self-study experiences, usually consisting of rounds, case conferences, individual supervision, didactic lectures, and other courses or seminars relevant to training in Behavioral Neurology & Neuropsychiatry.

To develop an understanding of research and research methodology in Behavioral Neurology & Neuropsychiatry.

Description of Teaching/Learning Activities

This two-year program will combine formal didactic, applied clinical, and mentored research experiences to provide formal training in the four core curricular areas, emphasizing the six core clinical competencies throughout.

All patient care is supervised by qualified faculty. The program director ensures direct supervision of fellows at all times. Fellows are provided with rapid and reliable communication with supervising faculty through direct on-site supervision of all clinical

activity. The faculty schedules are structured to provide fellows with continuous supervision and consultation.

First-year rotations include:

- Neuropsychiatry and Behavioral Neurology clinics -- Longitudinal experience, 2 half-day clinics/week (required).
- Neurobehavioral Consultation Service -- Longitudinal experience, 3 mornings/week (required).
- Neuropsychological assessment -- One-month rotation (required).
- Psychosis clinic -- One-month rotation (highly recommended).
- Neuroradiology and neuropathology -- One-month rotation (required).
- Epilepsy and EEG -- One-month rotation (highly recommended).
- Consultation-liaison psychiatry -- One-month rotation (highly recommended).
- Movement Disorders -- One-month outpatient rotation (highly recommended).
- Neurorehabilitation -- One-month inpatient and outpatient rotation (highly recommended)
- Traumatic brain injury clinic -- One-month outpatient rotation (highly recommended).
- Pediatric Neurology and Autism Clinic -- One month inpatient and outpatient rotation (required)
- ECT service – Inpatient rotation (highly recommended)
- Mentored independent research -- Rotation or longitudinal; (highly recommended)

The Second Year of training: The second year will be more research-oriented, but with continued clinical responsibilities and didactic opportunities. In the second year, the fellow will continue to gain competence as an increasingly independent subspecialist, and will develop an appreciation of research methodologies through the development and execution of a mentored research project.

Second-year rotations include:

- Neuropsychiatry and Behavioral Neurology clinics -- Longitudinal experience, 2 half-days per week (required)
- Neurobehavioral Consultation Service -- Longitudinal experience, 3 mornings per week
- Supervised independent research -- Longitudinal experience

Educational Objectives as Related to Program Activities

Patient Care

The fellow will demonstrate the ability to perform and document a comprehensive neuropsychiatric history and examination in adult, geriatric, and child/adolescent patients to include:

1. Complete present and past psychiatric and neurologic history
2. Social and educational history
3. Family history

4. Substance abuse history
 5. Medical history and review of systems
 6. Physical and neurological examination
 7. Comprehensive mental status examination, including assessment of cognitive functions
 8. Based on a comprehensive neuropsychiatric assessment as previously described, the fellow will demonstrate the ability to develop and document the following:
 - a) Complete DSM/ICD multi-axial differential diagnosis
 - b) Evaluation plan, including appropriate laboratory, medical, imaging, and neuropsychological examinations
 - c) Comprehensive treatment plan addressing biological, psychological, and social domains
2. The fellow will demonstrate the ability to comprehensively assess, discuss, and document the patient's potential for self-harm or harm to others and intervene. This will include:
 - a) Assessment of risk based on known risk factors
 - b) Knowledge of involuntary treatment standards and procedures
 - c) Effectively intervening to minimize risk
 3. The fellow will establish a patient-physician relationship. This will specifically include:
 - a) Establishing and maintaining a therapeutic alliance with patients
 - b) Establishing and maintaining treatment goals
 - c) Ability to interact in a direct and nonthreatening manner
 - d) Ability to be responsive to the patient and give feedback and advice when appropriate
 - e) Ability to understand the patient as a unique individual within his/her family, sociocultural, and community structure

Patient care competency will be evaluated/measured by:

- Patient Care Evaluation Form to be filled out by attending
- Global quarterly rating by attending
- Patient Care Evaluation Form to be filled out by oral examiner
- Objective-Structured Clinical Examination (OSCE)

Medical/Neuropsychiatric Knowledge

1. The fellow will demonstrate knowledge of the major neurobehavioral and neuropsychiatric disorders, based on the scientific literature and standards of practice. This knowledge will include:
 - a) Epidemiology of the disorders
 - b) Etiology of the disorder, including medical, genetic, and social factors
 - c) Phenomenology of the disorder
 - d) DSM and other diagnostic criteria
 - e) Effective treatment strategies
 - f) Course and prognosis

2. The fellow will demonstrate knowledge of neuropsychotropic medications including antidepressants, antipsychotics, antiepileptics, anxiolytics, mood stabilizers, hypnotics, and stimulants. In addition, the fellow will demonstrate knowledge of the cognitive and psychiatric side effects of non-psychiatric medications including steroids, antihypertensives, antiarrhythmics, antibiotics, antifungals, cancer chemotherapeutic agents. The knowledge shall include:
 - a) Pharmacological action
 - b) Clinical indications for psychotropic medications
 - c) Side effects
 - d) Drug interactions
 - e) Toxicity
 - f) Appropriate prescribing practices
3. The fellow will demonstrate knowledge of the neuropsychiatric issues regarding substances of abuse. This knowledge includes:
 - a) Pharmacologic action
 - b) Signs and symptoms of toxicity
 - c) Signs and symptoms of withdrawal
 - d) Manifestations and management of the chronic effects of substance abuse/dependence
 - e) Management of toxicity and withdrawal
 - f) Epidemiology, including social factors
4. The fellow will demonstrate knowledge of brain-behavior relationships involving psychopathology and cognitive disorders. This knowledge includes the brain-behavior relations pertaining to:
 - a) Attention and concentration
 - b) Memory
 - c) Abstract thinking
 - d) Volition
 - e) Mood and affect
 - f) Language and speech
 - g) Calculation
 - h) Visuospatial skills
 - i) Motor regulation
 - j) Self-monitoring
 - k) Social skills
5. The fellow will demonstrate relevant knowledge about psychiatric and behavioral manifestations of neurological and medical diseases, and the management of neuropsychiatric disorders in a medical setting.
6. The fellow will attend didactic courses and seminars including:
 - a) Behavioral Neuroanatomy
 - b) Cognitive and Behavioral Neurology
 - c) Neuroanatomy Review Series
 - d) Applied Neurobehavior Seminar Series
 - e) Behavioral Neuroscience Seminar
 - f) Functional MRI Seminar
 - g) Neuropsychiatry/Behavioral Neurology Literature Seminar

- h) Selected topics during Neurology and Psychiatry Grand Rounds

Medical knowledge competency will be evaluated/measured by:

- Quarterly global and monthly rotation-specific written evaluations by attendings and supervisors.
- Annual oral "Mock Boards" examination
- Tests/papers in didactic courses

Practice-Based Learning and Improvement

Neuropsychiatrists/Behavioral Neurologists must recognize and accept limitations in their knowledge and clinical skills, and practice lifelong learning.

1. The fellow will acquire appropriate skills in obtaining up-to-date information from the scientific and practice literature and other sources to assist in patient care. This shall include, but is not limited to, the competent use of:
 - a) Medical libraries
 - b) Information technology, including Internet-based searches and literature databases (e.g., Medline)
 - c) Drug information databases
2. The fellow shall evaluate caseload and practice experience systematically. This may include:
 - a) Maintaining patient logs
 - b) Reviewing patient records and outcomes
 - c) Obtaining appropriate supervision
 - d) Maintaining a system for examining errors in practice and initiating improvements to eliminate or reduce errors
3. The fellow shall demonstrate the ability to critically evaluate the scientific literature. This may include:
 - a) Using knowledge of common methodologies employed in psychiatric research to evaluate studies, particularly drug treatment trials
 - b) Conducting and presenting reviews of current research in such formats as journal clubs, grand rounds, or original publications
 - c) Researching and summarizing a particular problem that derives from the fellow's caseload
4. The fellow shall be able to:
 - a) Review and critically assess scientific literature to determine how quality of care can be improved in one's practice and to assess the applicability of research findings to patients, taking into account their sociodemographic and clinical characteristics.
 - b) Develop and pursue effective remediation strategies that are based on critical review of scientific literature

Practice-based learning and improvement will be evaluated/measured by:

- Portfolio
- Critical Review Form

- Application of research and statistics (portfolio)
- Use of information technology (portfolio)
- Annual Written Examination

The Fellow shall demonstrate the following abilities:

1. To listen to and understand patients and to attend to nonverbal communication
2. To communicate effectively with patients using verbal, nonverbal, and written skills as appropriate
3. To develop and maintain a therapeutic alliance with patients by instilling feelings of trust, honesty, openness, rapport, and comfort in the relationship with physicians
4. To partner with patients to develop an agreed upon healthcare management plan
5. To transmit information to patients in a clear and meaningful fashion
6. To understand the impact of physicians' own feelings and behavior so that it does not interfere with appropriate treatment
7. To communicate effectively and work collaboratively with allied healthcare professionals and with other professionals involved in the lives of patients and families
8. To educate patients, their families, and professionals about medical, psychosocial, and behavioral issues

The Fellow shall demonstrate the ability to obtain, interpret, and evaluate consultations from other medical specialties. This shall include:

1. Knowing when to solicit consultation and having sensitivity to assess the need for consultation
2. Formulating and clearly communicating the consultation question
3. Discussing the consultation findings with the consultant
4. Discussing the consultation findings with the patient and family

The Fellow shall serve as an effective consultant to other medical specialists, mental health professionals, and community agencies by demonstrating the abilities to:

1. Communicate effectively with the requesting party to refine the consultation question
2. Maintain the role of consultant
3. Communicate clear and specific recommendations
4. Respect the knowledge and expertise of the requesting professionals

The Fellow shall demonstrate the ability to communicate effectively with patients and their families by:

1. Gearing all communication to the educational and intellectual levels of patients and their families
2. Demonstrating sociocultural sensitivity to patients and their families
3. Providing explanations of psychiatric and neurological disorders and treatment that are jargon-free and geared to the educational/intellectual levels of patients and their families
4. Providing preventive education that is understandable and practical
5. Respecting the patients' cultural, ethnic, religious, and economic backgrounds
6. Developing and enhancing rapport and a working alliance with patients and their families
7. Ensuring that the patient and/or family have understood the communication

The fellow shall maintain up-to-date medical records and write legible prescriptions. These records must capture essential information while simultaneously respecting patient privacy, and they must be useful to health professionals outside psychiatry and neurology. Trainees shall demonstrate the ability to effectively lead a multidisciplinary treatment team, including being able to:

1. Listen effectively
2. Elicit needed information from team members
3. Integrate information from different disciplines
4. Manage conflict
5. Clearly communicate an integrated treatment plan

The fellow shall demonstrate the ability to communicate effectively with patients and their families while respecting confidentiality. Such communication may include:

1. The results of the assessment
2. Use of informed consent when considering investigative procedures
3. Genetic counseling and palliative care when appropriate
4. Consideration and compassion for the patient in providing accurate medical information and prognosis
5. The risks and benefits of the proposed treatment plan, including possible side-effects of medications and/or complications of nonpharmacologic treatments
6. Alternatives (if any) to the proposed treatment plan
7. Appropriate education concerning the disorder, its prognosis, and prevention strategies

Interpersonal and communication skills will be evaluated/measured by:

- Patient Care Evaluation Form
- Global Quarterly or Specific Rotation rating by attending
- OSCE
- Annual oral examination

Interpersonal and communication skills will be emphasized throughout the rotations, and will be assessed by means of quarterly evaluations filled out by attending physicians, residents, and nursing and ancillary staff.

Faculty:

Edwin Cook, MD
Phil Gorelick, MD, MPH
Daniel Hier, MD
Yevgenya Kaydanova, MD, PhD
Marilyn Kraus, MD
Linda Laatch, PhD
Deborah Little, PhD
Carol Macmillan, MD
Pauline Maki, PhD
David Nyenhuis, PhD
Thomas Owley, MD
Laura Pedelty, MD, PhD
Neil Pliskin, PhD
Michael J. Schriff, DO
John Sweeney, PhD
Keith Thulborn, MD, PhD

Evaluation Plan

Criteria for Advancement From Year-1 to Year-2:

- Successfully completion Year-1 rotations. The Fellowship Educational Affairs Committee will be responsible for reviewing any unsatisfactory evaluations and for determination of any necessary remediation.
- Passing evaluation for all the required didactic courses.
- Competency to supervise Year-1 fellows, residents, and medical students as rated on the Department faculty evaluation of fellows.
- Ability to perform fellowship duties with minimal supervision as rated on the Department faculty evaluation of fellows.
- Successful performance of all required clinical activities, which include evaluating, admitting and discharging inpatients and outpatients, assessing patients for dangerousness, the prescribing starting and maintenance dosages of commonly used neuropsychotropic medications (and other commonly utilized interventions) and managing the side effects of these medications/interventions, communicating skillfully with staff and patient's relations, developing a good doctor-patient relationship, and referring patients for consultation when indicated. These abilities are documented on the Department faculty evaluation of fellows.
- Demonstrated successful performance as a team leader. Specifically, the fellow has the necessary skills in data gathering, medical/neurologic/psychiatric knowledge, clinical insight, critical thinking, and interpersonal communications with team members to assume a leadership role. Demonstrated evidence of practice-based learning and system-based learning in clinical encounters.
- Successful acquisition of skills necessary to do mentored clinical research in neuropsychiatry/behavioral neurology and completion of an approved research proposal as determined by the program director.

Criteria for Completion of Training:

- Successful completion of Year-2 rotations. The Fellowship Educational Affairs Committee will be responsible for reviewing any unsatisfactory evaluations and for determination of any necessary remediation.
- Ability to perform independently in the practice of neuropsychiatry/behavioral neurology as rated on the Fellowship faculty evaluation of fellows.
- Passing evaluation for all the required didactic courses and examinations.
- Sufficient medical/neurologic/psychiatric knowledge base, problem-solving skills, and clinical judgment to provide satisfactory patient care.
- Demonstrated practice-based learning and system-based learning in clinical encounters.

At every level of advancement and at the time of completion of training, the fellow must demonstrate the following:

- Satisfactory or superior interpersonal and communication skills, as documented by evaluators in inpatient and ambulatory settings.
- Ability to work well with patients, fellow colleagues, faculty, consultants, ancillary staff and other members of the health care team in a manner that fosters mutual respect and facilitates the effective care of patients as demonstrated by satisfactory staff and faculty professional behavior evaluations.
- Successful completion of remediation that originated in disciplinary action for unprofessional behavior. Any disciplinary actions or treatment programs implemented per the University of Illinois at Chicago policies on impaired function must have been successfully completed and reinstatement has been approved by the Program Director.