Chapter 6: Clinical Neuropsychology Specialty Program

Mission
Mayo Clinic has three missions: To provide the best patient care through integrated practice of patient care, education and research. Consistent with this, the program provides supervised training in patient care, education, research and administration.

Mayo Clinic is accredited by The Higher Learning Commission, and the College of Medicine. Mayo Clinic sponsors the Mayo Clinic Medical Psychology Fellowship Program. Documentation regarding institutional accreditation is available in the Mayo School of Graduate Medical Education on the Mayo Clinic campus in Minnesota.

The primary value at Mayo Clinic is “the needs of the patient come first,” which sets the culture and tone of the institution. The Clinical Neuropsychology Specialty Program’s mission is consistent with this culture in prioritizing the teaching of quality, evidence-based clinical care that influences and is influenced by educational and research activities.

Statement of Purpose and Goals
The primary purpose of the Clinical Neuropsychology Specialty Program is to provide fellows with a depth and breadth of assessment, educational, consultative, intervention, and research experiences in clinical neuropsychology that result in advanced professional practice competency. This Clinical Neuropsychology Specialty Program focuses on advanced education and training of brain-behavior relationships, particularly the effects of brain dysfunction on complex behavior. The fellow will develop further skill and knowledge in adult neuropsychology to be able to practice effectively and independently in general and specialty medical settings.

The Clinical Neuropsychology Specialty Program uses guidelines proposed by the Joint Task Force of Division 40 of the American Psychological Association and the Houston Conference on Specialty Education and Training in Clinical Neuropsychology. Upon completion of this training Specialty, fellows will have an advanced understanding of neuropathologic mechanisms mediating behavioral and cognitive deficits in major categories of neurological disease, a working knowledge of neuropsychological disorders in general medical and psychiatric settings, and will demonstrate rehabilitation skills with neuropsychological disorders. Upon completion of this specialty, fellows will be eligible for board certification in Clinical Neuropsychology by the American Board of Professional Psychology.

Training Philosophy
The Clinical Neuropsychology Specialty Program emphasizes an integration of science and practice. Didactic and experiential opportunities prepare the fellows for advanced practice as clinical neuropsychologists in academic health care settings. The training objectives of the program reflect a commitment to the development of psychologists who are scientist-practitioners with specialized clinical skills. The program promotes a depth of experiences in clinical neuropsychology to refine clinical, research, and teaching skills. The program emphasizes both the use of existing scientific evidence based research to inform clinical practice as well as the development of clinical and translational research to advance and refine understanding of brain-behavior relationships.

**Training Model**
The primary goal of the training program in Clinical Neuropsychology is to produce psychologists who have the knowledge and skills for advanced practice competency in clinical neuropsychology. The Clinical Neuropsychology Specialty Program specifies the following three goals:

**Goal #1:** Acquire advanced clinical neuropsychology knowledge, assessment skills, and intervention skills necessary to effectively treat adult patients within a health care system.

**Goal #2:** Develop scholarship and research skills consistent with the scientist-practitioner model of our program that will equip the fellow to pursue a career as a clinical neuropsychologist in a medical center or academic health science center.

**Goal #3:** Acquire advanced knowledge and skills in consultation and knowledge of administrative aspects of clinical neuropsychology within a health care system.

Fellows develop an individualized learning plan for the two-year fellowship in consultation with the specialty director. The specialty director serves as an overall advisor to the fellow. The fellow outlines a schedule for a 12-month period that is approved by the specialty director and reviewed by the Medical Psychology Fellowship Training Committee. As noted in the Core Training Objectives, the fellows in the program devote at least 30% of their time to research activities and more than 50% of their effort to clinical and consultative activities. The remaining time includes all educational activities.

The fellows receive one-hour of individual supervision on a weekly basis from each psychologist(s) with whom s/he is seeing and treating patients (a minimum of two hours per week of individual supervision). The fellow receives additional day-to-day supervision of practice such as staffing of evaluations, supervision of consultation activities, or as-needed case reviews or support.
Faculty supervisors are all committed to the scientist-practitioner model of training. The fellows are trained in empirically supported methods of assessment and intervention. Faculty members serve both as clinical supervisors and as mentors and collaborators in scholarly and research activities. Further, faculty members are involved in leadership roles in state, regional and national associations (e.g. APA Divisions 22 & 40; International Neuropsychological Society; American Academy of Clinical Neuropsychology, Association of Postdoctoral Programs in Clinical Neuropsychology, American Congress of Rehabilitation Medicine) and are frequent presenters at annual meetings in their areas of research. We expect the role of mentor and role model includes helping fellows in their current and future involvement in professional organizations. Finally, there are also opportunities for fellows to gain administrative experience.

The relationship between fellows and faculty is collegial. The training needs of the fellows are primary and service needs are secondary. The faculty is committed to the fellowship training as demonstrated by the frequent co-authorship of presentations and papers and their enthusiasm for supervising.

**Training Sites**

The principal training sight for outpatient neuropsychological assessment is the *Psychometric Assessment Laboratory (PAL)*, which is located in Mayo Building (West 11) and the Generose Building (Mayo Psychiatry and Psychology Treatment Center). The PAL evaluates both outpatients and inpatients referred by Mayo physicians for neurocognitive evaluations. Primary sources of referrals include neurology, internal medicine, and psychiatry. The PAL is staffed by 18 psychometrists who provide services to 18 consultants and 4 fellows and has state of the art video observation systems to facilitate training. Fellows spend a minimum of 12 months during the course of their fellowship working full-time in the PAL.

As part of their training (and in conjunction with other rotations), fellows complete four 3-month rotations working with a consultant on our Foreign Language Triage service. This service was developed to better serve the needs of non-traditional English and non-English speaking patients. The neuropsychology fellow and supervising consultant contact the referring physician and decide whether the patient would benefit from an evaluation in the PAL, which may include only an interview vs. an interview and testing if deemed appropriate. The fellow is responsible for seeing the patient and completing the necessary documentation.

Fellows also spend a minimum of 2 months during their first year on the in-patient Physical Medicine and Rehabilitation unit located at 3 Mary Brigh at St. Marys Hospital. In this setting, fellows develop skills in mental status evaluations, clinical interviews, consultation and working together in a multidisciplinary treatment team. This rotation is focused on providing care to patients with a wide variety of conditions including acquired brain injury (e.g., CVA, TBI, neoplasm, encephalitis/encephalopathy), spinal
cord injury, and other conditions resulting in disability (e.g., orthopedic injuries, multiple sclerosis, left ventricular assistive device, Guillain Barré Syndrome).

Additional requirements include 1 month working in the Outpatient Brain Rehabilitation Clinic and 1 month working with pediatric neuropsychologists in the PAL.

During the course of their two year fellowship, fellows can choose elective rotations both within and outside the Department of Psychiatry and Psychology. Some examples include the following: Pain Rehabilitation Center, Healthy Action to Benefit Independence and Thinking (HABIT) program, Brain Injury Coping Skills Program (BICS), Epilepsy Service, Behavioral Neurology, Inpatient General Neurology and Stroke Services, Speech Pathology, Neuropathology, Neuroradiology, and Sleep Medicine. Fellows complete these rotations at various sites in the Mayo Clinic-Rochester, including buildings on the downtown campus, Northwest Clinic, Methodist Hospital, and St. Marys Hospital. Fellows also have the option to complete a 1-month elective rotation working with the neuropsychology staff at Mayo Clinic Florida or Mayo Clinic Arizona.

During their fellowship, trainees are also expected to provide psychotherapeutic interventions in individual or group therapy formats. They are not to exceed 3 patients at any given time if they choose to provide individual therapy. Fellows choose supervisors from the psychology staff who have expertise in empirically-supported interventions such as cognitive-behavioral therapy and group therapy formats.

Fellows are often involved in clinical and research activities in several locales with their schedule arranged to maximize efficient use of their time.

**Goals, Objectives, and Competencies**

In addition to the *Core Training Objectives which apply to all fellows*, fellows in Clinical Neuropsychology are expected to possess the knowledge and demonstrate specific skills in the areas of assessment, and treatment/therapy, consultation, scholarship/research, and administration in the Clinical Neuropsychology Specialty Program.

**Goal #1:** Acquire advanced clinical neuropsychology knowledge, assessment skills, and intervention skills necessary to effectively treat adult patients within a health care system.

Objective A for Goal #1: Know how to competently formulate and conduct comprehensive neuropsychological assessments.

**Competency 1:** Develop advanced understanding of brain-behavior relationships, particularly the effects of brain dysfunction on complex behavior.

**Competency 2:** Obtain relevant history and presenting complaints from a review of the medical record. Fellows will also conduct an interview tailored to elicit history, range, and qualitative features of the patient’s neuropsychological
concerns (e.g., onset and course, family report of everyday functioning, observations of personality changes, etc.)

**Competency 3:** Identify psychometric or behavioral assessment instruments to answer the referral question.

**Competency 4:** Demonstrate how to write clear and concise comprehensive neuropsychological assessments that include a summary of relevant history, specific test findings, and diagnostic impressions. In their reports, fellows integrate judgments concerning presence, absence, lateralization, localization, type, chronicity, and potential course of brain dysfunction. Fellows also determine when to refer patients for additional evaluation by neurological, medical, or speech/language experts.

**Implementation- Training Activities for Objective A**

1. Clinical neuropsychology outpatient and inpatient rotations provide experience in assessment of patients with a wide range of medical and neurologic diagnoses
2. Presentation of cases to faculty and at least one hour per week of individual clinical supervision.
3. Attend Clinical Neuropsychology Multisite Seminar Series
4. Attend Department of Psychiatry and Psychology Grand Rounds
5. Attend Medical Psychology Seminar
6. Attend biweekly neuropsychology journal club/case conference seminar
7. Attend Neurology Grand Rounds and Neurology Specialty Seminars
8. Rotation specific readings and/or seminars
9. Audit courses in Neuroanatomy, Neuroscience, Neuroradiology, and General Neurology Lecture Series
10. Complete an ABCN Mock Fact Finding Examination during the second half of the final year of training

**Objective B for Goal #1:** Implement evidence-based individual or group treatment.

**Competency 1:** Work as a member of a multidisciplinary evaluation and rehabilitation team, integrating data and treatment by a number of team members.

**Competency 2:** Teach compensatory techniques for cognitive and behavioral problems secondary to neuropsychological impairment in patients. This may occur in individual or group settings.

**Competency 3:** Perform empirically based individual therapy

**Implementation- Training activities for Objective B**
(1) Individual therapy, group therapy, HABIT Program (Healthy Actions to Benefit Independence & Thinking), Brain Injury Coping Skills Program (BICS)
(2) Individual supervision and observation by faculty.
(3) Opportunities to teach and supervise others such as psychiatry residents in evidence based interventions.

Objective C for Goal #1: Function in an ethical manner.

   Competency 1: Demonstrate knowledge of ethics and demonstrate the ability to address ethical issues as they arise in clinical neuropsychology.

Implementation- Training activities for Objective C
(1) Review Ethical Principles and Guidelines for Psychologists and Code of Conduct within the context of direct supervision.
(2) Discuss/address ethical and legal issues during individual supervision.
(3) Attend Clinical Neuropsychology Multisite Seminar
(4) Attend Medical Psychology Seminar series
(5) Attend Psychiatry and Psychology Grand Rounds
(6) Attend biweekly neuropsychology journal club/case conference seminar

Objective D for Goal #1: Appreciate impact of individual differences and diversity in Clinical Neuropsychology assessment and intervention.

   Competency 1: Demonstrate capacity for assessing and treating a culturally diverse population.

Implementation- Training activities for Objective D
(1) Complete three 3-month rotations on the Foreign Language Triage service
(2) Utilize foreign language interpretive services
(3) Formulate and attend cultural diversity case presentations as part of the Medical Psychology Seminar Series.
(4) Attend institutional seminars and workshops relevant to cultural and individual diversity
(5) Address individual differences and diversity in supervision.
(6) Attend Clinical Neuropsychology Multisite Seminar that includes discussion of diversity issues.
(7) Attend Department of Psychiatry and Psychology Grand Rounds

Goal # 2: Develop scholarship and research skills consistent with the scientist-practitioner model of our program that will equip the fellow to pursue a career as a clinical neuropsychologist in a medical center or academic health science center.

Objective A for Goal #2: Critically review and demonstrate knowledge of the relevant empirical literature in their area of focus.
Competency 1: Demonstrate knowledge by formal review of literature and presentation to multidisciplinary research group or presentation at educational seminar.

Implementation - Training Activities for Objective A
(1) Self-study by reading peer-reviewed journals
(2) Serve as peer-reviewer for journal in collaboration with supervisors
(3) Clinical Neuropsychology Multisite Seminar which includes discussion of relevant journal articles for a given topic
(4) Attend biweekly neuropsychology journal club/case conference seminar
(5) Supervision on research/scholarship by research mentor
(6) Participate in multidisciplinary research team
(7) Protected time for research
(8) Support for travel to national conferences
(9) Support for consultation with biostatistician

Objective B for Goal #2: Develop familiarity with grant writing and funding sources in area of focus.

Competency 1: Complete a grant application in support of research or attend an educational seminar on grant writing.

Implementation - Training Activities for Objective B
(1) Self-study by reading peer-reviewed journals
(2) Serve as peer-reviewer for journal in collaboration with supervisors
(3) Clinical Neuropsychology Multisite Seminar which includes discussion of relevant journal articles for a given topic
(4) Attend biweekly neuropsychology journal club/case conference seminar
(5) Supervision on research/scholarship by research mentor
(6) Participate in multidisciplinary research team
(7) Protected time for research
(8) Support for travel to national conferences
(9) Support for consultation with biostatistician

Objective C for Goal #2: Collaborate on the development, design, implementation, analysis, or presentation and manuscript presentation for a multidisciplinary research project in area of primary focus.

Competency 1: Present research findings at one or more national meetings.

Competency 2: Author or co-author two publications that include at least one peer reviewed publication.
Implementation- Training Activities for Objective C

(1) Self-study by reading peer-reviewed journals
(2) Serve as peer-reviewer for journal in collaboration with supervisors
(3) Clinical Neuropsychology Multisite Seminar which includes discussion of relevant journal articles for a given topic
(4) Attend biweekly neuropsychology journal club/case conference seminar
(5) Supervision on research/scholarship by research mentor
(6) Participate in multidisciplinary research team
(7) Protected time for research
(8) Support for travel to national conferences
(9) Support for consultation with biostatistician

**Goal #3:** Acquire advanced knowledge and skills in consultation and knowledge of administrative aspects of clinical neuropsychology within a health care system.

Objective A for Goal #3: Conduct appropriate and effective consultation with health professionals.

**Competency 1:** Demonstrate ability to communicate clearly and effectively with other health professionals.

Implementation- Training Activities for Objective A

(1) Clinical experience in consultation
(2) Participation in clinical work groups and multidisciplinary teams in area of primary focus
(3) Observation of faculty in consultative roles
(4) Discussion of consultative roles and responsibilities, including limits and boundaries of consultative roles, during weekly supervision
(5) Clinical Neuropsychology Multisite Seminar
(6) Neuropsychology journal club/case conference
(7) Medical Psychology Seminar Series
(8) Department of Psychiatry and Psychology Grand Rounds
(9) Rotation specific readings and/or seminars

Objective B for Goal #3: Develop working knowledge of the process of neuropsychological consultation and intervention in a medical setting that addresses the patient related question and the referring consultant’s concerns.

**Competency 1:** Competently conduct outpatient or inpatient neuropsychological consultations patients referred by medical/surgical specialties.

**Competency 2:** Demonstrate understanding of the limits and boundaries in various roles as consultant.
Implementation- Training Activities for Objective A - B
(1) Clinical experience in consultation
(2) Participation in clinical work groups and multidisciplinary teams in area of primary focus
(3) Observation of faculty in consultative role
(4) Discussion of consultative roles and responsibilities, including limits and boundaries of consultative roles, during weekly supervision
(5) Clinical Neuropsychology Multisite Seminar
(6) Neuropsychology journal club/case conference
(7) Medical Psychology Seminar Series
(8) Department of Psychiatry and Psychology Grand Rounds
(9) Rotation specific readings and/or seminars

Objective C for Goal #3: Participate in experiences in administrative roles that include task forces, administrative meetings and committee participation within the department.

**Competency 1:** Demonstrate a working knowledge of administrative roles for clinical neuropsychologists and how research, educational and clinical services are administered.

Implementation- Training Activities for Objective C
(1) Attendance at biweekly Clinical Neuropsychology Administrative Meeting.
(2) Attendance at monthly Medical Psychology Fellowship Training Committee Meeting.
(3) Attendance at quarterly Psychology Directorate Meeting.
(4) Membership on administrative committee such as Departmental Research Committee.
(5) Rotation on departmental Clinical Practice Committee

How Outcomes are Measured:

(1) Supervisor ratings
   a. Regular evaluation by supervising faculty during and after patient consultations.
   b. Review of written documentation by supervising faculty.
   c. Faculty evaluation after specific rotations via MedHub.
   d. Semi-Annual evaluation by clinical neuropsychology faculty as a group and fellow assessment, with feedback summarized and provided individually to the fellow by the specialty director of Clinical Neuropsychology Fellowship.
   e. Feedback from the Medical Psychology Program Director during semi-annual meeting with each fellow.
Post fellowship employment activities and self-assessment perception that fellowship afforded adequate preparation for clinical neuropsychology position after completion of fellowship.

Minimum Thresholds for Achievement for Expected Competencies:

**Proximal**

MedHub Faculty Rating of Fellow - *Areas of Clinical Skills, Professional Conduct, Cultural and Individual Diversity*

**First Year**
1 = Insufficient proficiency, triggers written remedial action plan
2 = Relative weakness area, development plan discussed with supervisors
3 = Demonstrates adequate specialized knowledge and practice competency
4 = Demonstrates advanced specialized knowledge and practice competency
5 = Recognized for excellence in specialized knowledge and practice

**Second Year**
1 = Insufficient proficiency, triggers written remedial action plan
2 = Relative weakness area, triggers written remedial action plan
3 = Demonstrates adequate specialized knowledge and practice competency
4 = Demonstrates advanced specialized knowledge and practice competency
5 = Recognized for excellence in specialized knowledge and practice

**Distal**

Graduates of the clinical neuropsychology fellowship obtain employment in positions in medical or academic health science settings that recognize and make use of knowledge, assessment and intervention skills necessary to effectively evaluate adult and pediatric patients.

Graduates of the clinical neuropsychology fellowship perceive that the fellowship equipped them with skills that effectively integrated science and practice of brain-behavior relationships to inform patient care consultation, assessment, and intervention.

ABPP certification in Clinical Neuropsychology.

**Curriculum Training Activities**

**Curriculum area:** *Theories and effective methods of psychological assessment, diagnosis and interventions*

**Required training/experiential activities:**
The Clinical Neuropsychology Specialty Program educates fellows in theories and methods of psychological assessment, diagnosis, and interventions through required training and activities included in:
- Clinical Neuropsychology Multisite Seminar
- Medical Psychology Seminar
- Bi-month neuropychology journal club/case conference
- Psychiatry and Psychology Grand Rounds.

Clinical Neuropsychology fellows also have the option to attend Neurology Grand Rounds, Neurology Subspecialty Rounds and the Behavioral Neurology Case Conference.

The Clinical Neuropsychology Multisite Seminars provide up-to-date information on a range of topics relevant to the practice of neuropsychology, including case presentations, discussion of current literature, and ethical issues.

Faculty provide fellows with individualized feedback designed to enhance their skills in clinical evaluation and treatment during weekly supervision and regular clinical work together. Faculty educate fellows in intervention efficacy through measurement of treatment response and outcome.

**Competencies expected:**
1. Accurate/complete biopsychosocial assessment
2. Knowledge of relevant medical/physiological aspects of symptom presentation
3. Effective utilization of measures and/or self-monitoring for patient assessment
   - behavioral observation
   - objective
   - self-report
   - mental status examination
4. Competent case formulations
   - differential diagnosis
   - coherent case presentations
   - identify evidence-based interventions
   - behavioral observation
5. Effective documentation/communication of assessment findings
   - medical record documentation
   - communication to referral source
   - communication to patient
6. Provision of evidence-based individual or group treatment
7. Practice in an ethical manner
8. Incorporate awareness of individual differences and diversity in assessment/intervention

**How outcomes are measured:**
- Attendance Tracking
  The education program coordinator tracks participation in seminars and Psychiatry and Psychology Grand Rounds.

- Global Faculty Evaluations
  Clinical neuropsychology faculty meet and provide formal evaluation about the competencies listed above to the specialty director. Faculty complete formal evaluations quarterly using the Mayo School of Graduate Medical Education’s MedHub Evaluation System.

- Advisor Evaluation
  All clinical neuropsychology fellows meet semi-annually with the specialty director to discuss their progress in the training program, who maintains a small database to track progress on clinical, educational, scholarly activities and licensure progress. The specialty director provides a narrative (qualitative) summary of the fellow’s progress that incorporates the fellow’s self-assessment at the semi-annual and annual review.

**Curriculum area:** Consultation, program evaluation, supervision and/or teaching

**Required training/experiential activities:**
The program educates fellows in consultation by required training and activities included in
- Clinical Neuropsychology Administrative Meeting and Seminar
- Medical Psychology Seminar
- Psychiatry/Psychology Grand Rounds

Some clinical neuropsychology faculty participate in the consultative practice, which allows the fellow to participate in and observe modeling of relevant skills in daily practice. Fellows participate in multidisciplinary workgroups while working on the Brain and Spine Inpatient Services which provide the opportunity to observe and practice the role of consultant. These teams also offer teaching and supervisory opportunities with others disciplines, including speech pathology, occupational therapy, physical therapy, social work, and psychiatry residents.

Optional teaching and supervisory experiences include:
- Teaching a cognitive-behavioral therapy course for psychiatry residents each summer (for second-year fellows only)
- Teaching speech/language, behavioral neurology, geriatric psychiatry and geriatric medicine fellows general principles of neuropsychological assessment
- Supervising psychiatry residents individually as they provide cognitive-behavioral treatment for mood disorders with related readings and mentorship on the supervisory process provided by Dr. Vickers-Douglas

**Competencies expected:**
1. Clarify and address consultation question
2. Effective consultation with health professionals
- Clear, succinct communication
- Participation in multidisciplinary workgroups

3. Perform administrative roles
   - administrative meetings
   - committee participation

4. Seeks supervision appropriately

5. Development of own supervisory skills

6. Develop and present educational material for students/residents/healthcare professionals

**How outcomes are measured:**
- The education program coordinator tracks participation in seminars and Grand Rounds.
- The specialty director tracks participation in teaching activities for each fellow.
- Faculty evaluation of consultation and teaching activities is provided via MedHub, incorporated with fellow self-assessment, and a narrative summary is provided at the semi-annual and annual review.
- Teaching activities approved for continuing education credit through Mayo or regional/national organizations provide audience evaluation summaries.

**Curriculum area:** *Strategies of scholarly inquiry*

**Required training/experiential activities:**
The program educates fellows in strategies of scholarly inquiry by required training and activities included in
- Clinical Neuropsychology Multisite Seminar
- Neuropsychology journal club/case conference
- Medical Psychology Seminar
- Individualized feedback from supervising faculty
- Psychiatry and Psychology Grand Rounds.

The Clinical Neuropsychology Specialty Program utilizes a mentorship model. Incoming fellows are matched with a research mentor at the beginning of the fellowship. This model allows for inclusion of fellows in research projects, as well as time in faculty schedules for scholarly mentorship. As a result of this approach, fellows have been successful in achieving multiple peer-reviewed publications, national presentations, and even successful grant applications during the course of their fellowship.

Each fellow is expected to deliver Grand Rounds in their second year, which requires synthesis and presentation of scholarly efforts acquired throughout fellowship, a scientific presentation that is often also used by clinical neuropsychology fellows in their job interviewing process. Fellows are required to submit at least two publications during fellowship, with at least one as a peer reviewed publication. They are also required to make at least two scholarly presentations at a national conference relevant to their specialty area. Typical conferences for Clinical Neuropsychology fellow presentations
include the International Neuropsychological Society, American Academy of Clinical Neuropsychology, National Academy of Neuropsychology, American Psychological Association, American Congress of Rehabilitation Medicine, Alzheimer’s Association International Conference, World Congress of Psychiatry, and American Psychosomatic Society.

Scholarly activities listed above are supplemented by self-study of empirical literature, serving as peer-reviewer for journals with faculty, grant writing seminars, research support (access to online journals, SPSS, secretarial assistance), and protected time for research.

**Competencies expected:**

1. Demonstrate knowledge of relevant empirical literature
2. Familiarity with grant writing and funding sources
3. Research participation
   - Methodology
   - Implementation
   - Analysis
   - Manuscript/presentation development
   - Research ethics
   - Diversity
4. Presentations
5. Publications
6. Attendance/active participation in didactics

**How outcomes are measured:**

a. Faculty evaluation of research progress, scholarly presentations and manuscript preparation by primary supervisor quarterly using MedHub evaluation form.

b. Evaluation of number of presentations and manuscripts by specialty director for Clinical Neuropsychology Fellowship during semi-annual meetings with each fellow.

c. Semi-Annual review by clinical neuropsychology faculty as a group and fellow self-assessment, with feedback summarized and provided individually to the fellow by the specialty director of Clinical Neuropsychology Fellowship.

d. Feedback on scholarly activities from the Medical Psychology Fellowship Director during semi-annual meeting with each fellow.

**Curriculum area:** *Organization, management and administration issues pertinent to psychological service delivery and practice, training, and research*

**Required training/experiential activities:**

- Mandatory training during their first month of fellowship that trains them to work in a healthcare setting, ethically engage in research, and orientation to the electronic medical record system
- The Medical Psychology Seminar includes topics such as “Practice Models in Psychology”, “Licensure for Psychologists”, “Benefits and Contracts.”
• Psychology Directorate meeting which addresses issues related to licensure, credentialing, evaluation, and recruitment of new psychologists to the department.
• Fellows also have the opportunity to participate in administrative roles in the department including Research Committee, Clinical Practice Committee, and Psychiatry and Psychology Grand Rounds Committee.
• All fellows are required to take the Examination for Professional Practice of Psychology (EPPP) examination. In the last 7 years, 100% of fellows have taken this exam. The fellowship program provides EPPP study materials and content within addresses this curriculum area.

Competencies expected:
1. Perform administrative roles
   § administrative meetings
   § committee participation
2. Efficiently manage administrative tasks
   § Timely documentation
   § Mandatory training
   § Electronic signing of notes
   § Succinct dictation
3. Professional attire and presentation

How outcomes are measured:
The program tracks participation in required training and successful completion of these modules in Pathlore (i.e. an education platform that tracks participation and successful completion of training modules). Most online education sessions have a minimal threshold for successful passing based on number of accurately completed knowledge-based questions.

Clinical neuropsychology faculty members meet and provide formal feedback about the competencies listed above to the specialty director.

Faculty complete formal evaluations quarterly using MedHub.

All clinical neuropsychology fellows meet semi-annually with the specialty director, who maintains a small database to track progress on clinical, educational, scholarly activities and licensure progress. The specialty director provides a narrative (qualitative) summary of the fellow’s progress that includes the fellow’s self-assessment at the semi-annual and annual review. The fellow’s self assessment is incorporated into evaluation of training progress.

Curriculum area: Professional conduct; ethics and law; and other standards for providers of psychological services
Required training/experiential activities:
The program provides mandatory online training in professional conduct, ethical, legal, and other professional standards during the first month of fellowship. This training includes healthcare ethics for clinicians and students, integrity and compliance program, HIPAA privacy/security education, and protection of human subjects training.

The Clinical Neuropsychology Multisite Seminar curriculum includes a discussion of cases that involve ethical dilemmas. Clinical neuropsychology faculty model professional conduct in their daily activities related to psychological services and ethical issues are discussed in supervision.

An institutional committee on ethics is available for consultation on difficult situations.

Following completion of the EPPP, most fellows obtain licensure in the state of Minnesota, which involves study of and examination on the state laws governing psychological practice and the Ethical Principles and Guidelines for Psychologists and Code of Conduct.

**Competencies expected:**

1. Research ethics
2. Practice in an ethical manner
3. Professional attire and presentation
4. Effective documentation/communication of assessment findings
   - medical record documentation
   - communication to referral source
   - communication to patient
5. Provision of evidence-based individual or group treatment

**How outcomes are measured:**
Participation in required training modules is tracked in Pathlore (i.e. Mayo Clinic Education Platform that tracks participation and successful completion of training modules). Most online education sessions have a minimal threshold for successful passing based on number of accurately completed knowledge-based questions. Fellows receive regular evaluation and feedback by supervising faculty on professionalism ethics in the course of clinical care, research, and teaching activities and related supervision. Semi-Annual evaluation by clinical neuropsychology faculty is conducted as a group with feedback summarized and provided individually to the fellow by the specialty director of Clinical Neuropsychology Fellowship.

**Curriculum area:** *Issues of cultural and individual diversity that are relevant to all of the above*

**Required training/experiential activities:**
Fellows participate in the Diversity Case Conferences Series, with fellows required to present case conceptualization and treatment issues within the context of the individual/culture. Grand Rounds and fellowship seminars also address this topic.
Fellows also participate in cultural awareness courses through Mayo Clinic Human Resources (e.g., “Arab Cultures” “The Somali Culture” “The Spanish-Speaking Cultures” “Gay, Lesbian, Bisexual and Transgender Community”). The Mayo Clinic Simulation Center is used for experiential training with actors (e.g., “Cross Cultural Communication Workshop”).

Clinical neuropsychology fellows also complete four 3-month rotations working with a consultant on our Foreign Language Triage service. This service was developed to better serve the needs of non-traditional English and non-English speaking patients. The fellow and supervising consultant contact the referring physician and decide whether the patient would benefit from an evaluation in the Psychometric Assessment Laboratory, which may include only an interview vs. an interview and testing if deemed appropriate. The fellow is responsible for seeing the patient and completing the necessary documentation.

Faculty also address issues of diversity in supervision. Dr. Jarrod Leffler, a clinical child psychology faculty, is the liaison for Diversity and Inclusion for the department and has been advising on ways to enhance the recruitment and retention of fellows and staff with diverse backgrounds into the Medical Psychology Fellowship program.

**Competencies expected:**

1. Research participation:
   * Diversity
2. Clinical Assessment/Intervention:
   * Incorporate awareness of individual differences

**How outcomes are measured:**

Participation in training is tracked through the calendar maintenance system and “MEds Web” card swipe monitoring system. Clinical neuropsychology faculty provide formal feedback about the competencies listed above to the specialty director. Formal evaluations are completed semi-annually using Mayo School of Graduate Medical Education’s MedHub Evaluation System. Faculty evaluate and discuss fellow’s attention to issues of individual and cultural diversity during clinical, research, and teaching activities and following cultural case presentation.

**Didactics**

Fellows receive time for educational activities in addition to supervision hours. They attend weekly Department of Psychiatry & Psychology Grand Rounds, Wednesdays 12:15-1:15 p.m. Clinical neuropsychology fellows attend the monthly Medical Psychology Seminar Series, as well as the Neuropsychology Multisite and Journal Club/Case Conference Seminars that meet biweekly.

**Department of Psychiatry & Psychology Grand Rounds**
The Department of Psychiatry and Psychology sponsors a grand rounds one hour weekly. Nationally and internationally known speakers present on a variety of topics. Recent examples include: diagnostic classification (e.g. David Barlow, PhD), assessment and treatment of bipolar disorder, eating disorders, addictions, and pharmacogenomics. The typical format includes lecture by the presenter, audience participation using an Audience Response System (ARS), and question and answer discussion.

**Medical Psychology Seminar:**
The Medical Psychology Seminar meets monthly and is designed for all fellows as a collective didactic focused on professional development. Topics include diversity, research, developing a clinical practice, and job negotiation. A formal presentation is typically followed by interactive discussion.

**Clinical Neuropsychology Multisite Seminar:**
The Clinical Neuropsychology Multisite Seminar meets two times per month. This is a didactic seminar in which neuropsychology staff and fellows from Mayo Clinic Rochester, Mayo Clinic Florida, Mayo Clinic Arizona, Mayo LaCrosse and Mayo Eau Claire prepare and present on their topic of choice. Second year fellows also complete an ABCN Mock Fact Finding examination during the seminar.

**Training calendars (examples)**
See attached.

**Mayo Clinic Arizona and Florida Rotations**
Clinical Neuropsychology fellows may be able to arrange a rotation at Mayo Clinic Florida (Jacksonville) or Mayo Clinic Arizona (Scottsdale) for one month in the second year. These rotations have been popular, providing exposure to a different patient population, practice environment, and geographic location from Rochester. Mayo provides housing, transportation costs and a rental car. It is the program’s expectation that the resident fly to Jacksonville or Scottsdale unless a strong justification for driving exists. If you feel you must travel by automobile, please make your request known to the education program coordinator 3 months in advance so that, if warranted, coverage can be identified. Final determination of time of assignment will be made by the specialty directors based on the needs at each site.

Fellows should talk to their specialty director if interested in doing a rotation at one of the Mayo sites. A request form must be submitted to the education coordinator and graduate school 6 to 9 months prior to starting the rotation. MSGME approval is required. For further details on rotations to other Mayo sites, please refer to the Mayo School of Graduate Medical Education orientation manual found online at: http://mayocontent.mayo.edu/msgme/DOCMAN-0000043212

**Off-Campus Rotations**
Not applicable.