Movement Disorders Fellowship Program Section of Neurology Department of Neurosciences King Faisal Specialist Hospital and Research Center

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MOVEMENT DISORDERS FELLOWSHIP PROGRAM

TABLE CONTENTS

| | SECTIONS | |
|------|--|--|
| I | Introduction | |
| II | Objectives | |
| III | Duration and Number of Fellows | |
| IV | Admission Process | |
| | A. Eligibility | |
| | B. Selection | |
| V | Structure of the Training Program | |
| | A. Program Content | |
| | B. Educational Program | |
| | C. Training Committee | |
| | D. Committee Qualification | |
| | E. Appeal Mechanism | |
| | F. Stress management | |
| VI | Program Organization & Responsibility | |
| VII | Performance Evaluation Process | |
| VIII | Promotion | |
| IX | Training Completion | |
| X | Program Interruption | |
| XI | Training Extension | |
| XII | Leaves and Holidays | |
| XIII | Academic Responsibilities of Fellow | |
| XIV | Movement Disorders Program Can-Med Structure | |

I. Introduction

King Faisal Hospital and research Center with its staff and facilities is well equipped to offer a very sound fellowship in movement disorders. Clinical expertise will be acquired in different settings (outpatient, inpatient and emergency department) and will include diagnostic evaluation, treatment, management, counseling and prevention. The fellow will be an integral part of the movement disorders clinic, conducting evaluations of new and established patients and learning the intricacies of diagnosing various subtypes of movement disorders including Parkinson's disease, the atypical parkinsonian syndromes, dystonia, tremors, tics and Tourette's syndrome, chorea, ataxia and other rare disorders. The fellow will also take an active role in structuring patient management and learning interventional therapies, including pharmacotherapy, botulinum toxin injections and deep brain stimulation (DBS) at the largest DBS center kingdom. There will be enhanced learning from our collaborators in other departments including Neuroradiology, Medical Genetics, and the Research Center.

II. Objectives

- 1. To train neurologists to become experts in the recognitions and treatment of patients with all movement disorders.
- 2. To learn how to employ pharmacologic, therapeutic and other treatment approaches to movement disorders.
- 3. To become familiar with genetic testing and counseling relevant to inherited movement disorders.
- 4. To develop expertise with clinical rating scales used in the assessment of movement disorder patients, and in the conduct of clinical trials.

III. Duration & Number of Fellow

Duration - Two years

Numbers of Fellows - One fellow per year

IV. Admission Process

A. Eligibility

- 1. Candidates must have completed an accredited Adult Neurology residency program and must possess a Saudi Specialty certificate (or equivalent).
- Candidates must have passed the subspecialty Saudi Commission for Heath Specialties (SCHS) admission interview and they need to comply with SCFHS admission criteria (including minimum classification senior registrar, and malpractice insurance...etc)
- 3. Three recent letters of recommendation are required to support the candidate's application.

B. Selection

- Academic and Training Affairs (ATA) performs preliminary review of applications and verification of eligibility before forwarding them to the training department.
- 2. An interview will be conducted by the program director and members of the program.
- 3. Upon acceptance, the fellow is required to register with the SCHS
- 4. Sponsored fellows must submit a sponsorship letter, indicating that they are allowed for full time training for the entire duration of the program.

V. Structure of the Training Program

A. Program Content

1. The First Year

- Establishes the solid educational basis of expertise in movement disorders and allows the fellow to progressively gain the clinical knowledge necessary to diagnose and manage a wide range of movement disorders, including the following: Parkinson's disease, Dystonia, Tremor, Huntington's disease and other types of chorea, Myoclonus, Tics, Tardive dyskinesia and other disorders of the basal ganglia.
- During this year, fellows attend three half-days a week in a clinic supervised by individual faculty members. Fellows are immersed clinically, evaluating and managing a wide variety of patients in the outpatient Movement Disorders. Each of these specific weekly sessions is supervised by the same faculty member for consistency and follow-up care. The Fellow sees each patient first (obtaining a history and performing a neurologic and a movement disorder examination) and then presents the patient to the faculty member. Following that, the patient is discussed in terms of a differential diagnosis, a working diagnosis and a plan for treatment.
- All patients encountered in any of these outpatient clinics is followed
 throughout the fellowship by the assigned fellow, who prepares the
 consultation report back to the referring physician and directly involved
 in the treatment plan. If any of the patients requires hospital admission,
 the fellow follows the patient during the hospital stay.
- Training in botulinum toxin injections provides the fellow with knowledge
 of the necessary steps for successful chemodenervation therapy,
 including clinical indications and expected outcomes, target muscle(s)
 selection, toxin reconstitution and injection techniques, use of
 electromyogram guidance, effective doses and troubleshooting of
 possible side effects. Weekly hands-on injection sessions reinforce
 theoretical and practical knowledge throughout the training period.

- After the initial three months, the fellow will attend a Pediatric movement disorder clinic periodically (a clinic once or twice monthly). This would give the fellow ample exposure to the movement disorders that arise in childhood and thereafter continue in adult life.
- Additionally, the fellow attends two cognitive clinics for a period of one
 month during the second half of the first year. There the fellow will be
 exposed to several Neurodegenerative disorders that are closely
 associated with movement disorders, e.g. Alzheimer's disease, Lewy
 body dementia, Parkinson disease dementia, Huntington's disease and
 others.

First year

| Time | Out patient service | Inpatient service | Other rotations |
|-----------------------------|--|--|--|
| 1st 6 months | Three Movement disorders clinics | Movement disorders management/ pre surgical evaluation | |
| 2 nd 6 months | Two Movement disorders clinics+ One Botox clinic | | Cognitive neurology clinics (2 months-one clinic per week) |

2. The second year

- It is tailored towards optimizing independent clinical practice of the fellow. In the first six months, the fellow will have the opportunity to do an elective rotation of 2 months in an established movement disorders program, either local or international. This will broaden the clinical skills and enhance his/her knowledge.
- In the second six months, fellows will expand their learning to include advanced procedural treatments such as Levodopa Carbidopa intestinal gel pump and DBS. They will know how to identify and evaluate prospective candidates for DBS. KFSH & RC offers one of the most rigorous programs of training in the neurosurgical and neurological

management of DBS for medication-refractory movement disorders. Fellows are trained in all multidisciplinary aspects of implantation and long-term management of patients receiving this therapy. In addition to evaluating new candidates for DBS surgery and patients receiving long-term therapy from implanted devices, fellows become well versed in the criteria for DBS implantation in patients with movement disorders. Specific training is focused on finding optimal parameters of stimulation to treat motor symptoms while minimizing stimulation adverse effects.

- Fellows are expected to provide in-patient consultations for patients with movement disorders during their admission to the hospital for other neurologic or medical problems. Clinical fellows in both the first and second years provide these in-patient consultations, assigned on a rotating basis. The fellow sees the patient first, writes a consultation note, and then sees the patient again with a faculty attending to discuss the patient in detail.
- In preparation for the fellows' independent practices, fellows are expected to be confident with their procedural techniques in botulinum toxin injections.

Second Year

| Time | Out patient service | Inpatient service | Other rotations |
|-------------------|--------------------------|-------------------|----------------------|
| 1st 6 | Three Movement disorders | Day time | Elective (2 months)* |
| months | clinics + Botox clinic | consolations | |
| 2 nd 6 | Three Movement disorders | In patient | |
| months | clinics + DBS clinic | programming/Duod | |
| | | ора | |

^{*} Elective rotation should be done in a well-established movement disorders program, either locally or internationally

B. Educational program

1. Clinical program

- Fellows will conduct weekly conferences in which patients' clinical problems are discussed along with review of videotaped neurologic examinations ("video rounds")
- Fellows will present biweekly journal clubs where they will discuss and critically apprise up to dated articles.
- Fellows with join our monthly clinical-radiological conferences and weekly neurology Grand Rounds.
- Fellows will attend the Movement disorders program regular surgical management meeting.

2. Clinical Research

- Fellows are expected to formulate a research plan toward the end of the first year of their fellowship with their mentors and present their proposal to program committee before advancing to their second year.
- They have to prepare abstracts for the international movement disorder and cognitive meetings.
- It is a mandatory requirement for the fellows to have at least a paper published by the end of their fellowship.

3. Sample of the weekly activities

Sample Weekly Schedule (Year One, 1st 6 months)

| | Sunday | Monday | Tuesday | Wednesday | Thursday |
|----|---|---|---|---|---|
| AM | Video Rounds + Inpatient rounds and consultations | Inpatient rounds and outpatient consultations | Neuroscience academic activities & Management Meeting | Movement disorders clinic | Inpatient rounds and outpatient consultations |
| PM | Research | Movement disorders clinic | Movement disorders clinic | Inpatient rounds and outpatient consultations | Journal Club/Didactics |

Sample Weekly Schedule (Year One, 2nd 6 months)

| | Sunday | Monday | Tuesday | Wednesday | Thursday |
|----|---|--|---|--|---|
| AM | Video Rounds + Inpatient rounds and consultations | Movement disorders clinic (Peds) | Neuroscience academic activities & Management Meeting | Inpatient rounds and outpatient consultations | Inpatient rounds and outpatient consultations |
| PM | Research / Cognitive Clinic (for 2 months) | Movement disorders clinic | Movement disorders clinic | Movement disorders clinic/ Botox clinic | Journal Club/Didactics |

Sample Weekly Schedule (Year two, 1st 6 months)

| | Sunday | Monday | Tuesday | Wednesday | Thursday |
|----|---|--|---|--|--|
| AM | Video Rounds + Inpatient rounds and consultations | Movement disorders clinic (Peds) | Neuroscience academic activities & Management Meeting | Research | Inpatient rounds and out patient consultations |
| PM | Research | Movement disorders clinic | Movement disorders clinic | Movement disorders clinic/ Botox clinic | Journal Club/Didactics |

Sample Weekly Schedule (Year two, 2nd 6 months)

| | Sunday | Monday | Tuesday | Wednesday | Thursday |
|----|--|------------------------------------|---|---------------------------------|---------------------------|
| AM | Video Rounds + In patient programmin g/Duodopa | In patient programming/ Duodopa | Neuroscience academic activities & Management Meeting | Movement disorders clinic | DBS clinic |
| PM | Research | Movement disorders clinic | Movement disorders clinic | Research | Journal Club/Didactics |

C. Training Committee

- Movement Disorder Consultants
 - Dr. Amaal AlDakheel Fellowship Director (Two Movement Disorders Clinics)
 - Dr. Thamer AlKhairallah (Two Movement Disorders Clinics)
 - Dr. Saeed Boholega (One Movement Disorders Clinic)
 - Dr. Mohammad Al-Muheizea (One Pediatric Movement Disorders Clinic)

2. Supporting members

- · Dr. Faisal Al-Otaibi Functional Neurosurgeon
- Dr. Najeeb Qadi Cognitive Neurologist

D. Committee Qualification

- Movement Disorder Consultants
 - Dr. Amaal AlDakheel
 - Movement Disorders Specialist
 - Assistant Professor, AlFaisal University
 - Director, Movement Disorders Program
 - Dr. Thamer Al-Khairallah
 - Chairman, Formulary & Therapeutics Committee
 - Movement Disorders Specialist
 - Assistant Professor, AlFaisal University
 - Professor Saeed Boholega
 - Senior Consultant, Adult Neurology
 - Professor of Neurology, AlFaisal University
 - · Dr. Mohammad Al-Muheizea
 - Consultant, Pediatric Neurology
 - Associate Professor, AlFaisal University
 - Deputy Chairman, Department of Neurosciences

2. Supporting members

- Dr. Faisal Al-Otaibi Functional Neurosurgeon
 - Epilepsy Surgery, Stereotactic and Functional Neurosurgery
 - o Assistant Professor, College of Medicine, AlFaisal University
 - o Director of Neurosurgery Training Program
- Dr. Najeeb Qadi Cognitive Neurologist
 - Consultant, Cognitive & Behavioral Neurology
 - Associate Professor, Al-Faisal University
 - o Deputy Chairman, Department of Neuroscience

E. Appeal Mechanism

- 1. The fellowship program committee will maintain and follow the appeal mechanism consistent with SCFHS policies.
- 2. The fellowship program committee thereof should receive and review appeals from fellows and, where appropriate, refer the matter to the departmental training committee and then to Academic and Training Affairs.
- 3. Further action to be taken as required.

F. Stress Management

- 1. The fellowship program committee will establish and maintain mechanisms for fellows to access services to manage stress.
- 2. The fellowship program committee will make sure that the fellows are aware of these available services and how to access them.
- 3. Further action to be taken as required as per KFSHRC established processes.
- 4. The fellowship program committee will establish and maintain mechanisms by which fellows receive ongoing career counselling.

VI. Program Organisation and Responsibility

A. Program Director

The fellowship program director shall be responsible for the following:

- 1. Interview and recommendation for acceptance of fellow applicants.
- 2. Orientation of fellows.
- 3. Fellow's compliance with the program curriculum.
- Planning and organizing fellow's educational activities, including: monitoring of attendance, on call duty, rotation schedule, leaves, and monitoring of compliance with leave policy.
- 5. Counseling of fellows.
- 6. Administration of fellowship program examination.

B. Consultant Staff

- 1. Supervise the fellows closely, promoting proficiency in clinical skills and procedures pertinent to the subspecialty.
- 2. Devote time to teaching fellows, monitor their performance and progress.
- 3. Identify their weakness and provide counseling and guidance as necessary.
- 4. Encourage research project.
- 5. Participate in the evaluation of fellows.

C. Fellow

- 1. The fellows must be committed to the training program and must achieve competence in the subspecialty.
- 2. They will participate in teaching and clinical research.
- 3. It will be mandatory for the fellows to abide by the rules and regulation of the institution and the SCHS (including prompt compliance with registration, if applicable).

VII. Performance Evaluation Process

- 1. The fellowship program committee will be responsible for the assessment of fellows and for the promotion of fellows in the program according to the In-Training Evaluation Report.
- 2. The fellowship program committee will review the fellow's evaluation on a quarterly basis to identify strengths, weaknesses and academic areas of focus.
- 3. The fellowship program committee will discuss the evaluation with the fellow if there is an acute issue if needed and recommend action to ATA if needed.

VIII. Assessment

1. Formative assessment:

Formative assessment outlines the continuous assessment part for the fellows, which provides primarily formative feedback and secondarily ends with promotion decision to either 2nd year or granting training completion certificate. Formative assessment for the *Movement Disorders Fellowship Program* will consist of the following components:

1.1. Written examination:

MCQ examination shall consist of one paper with minimum 120 MCQs with a single best answer (one correct answer out of four options). The exam period shall be two and a half hours (150 minutes).

1.2. In-Training Evaluation Report (ITER):

ITER will aims to evaluate variable aspects of trainee's professional competencies. ITER shall be submitted to the supervisory committee at SCFHS based on a series of workplace-based assessments (WBA) conducted every three months.

1.3. Presentation Rating Form and CBD (Case-Based Discussion):

CBD is a tool used to evaluate the trainee's capabilities of clinical discussions related to patient care. The format and the number of the CBD will be specified in the scientific comity of the Movement Disorders Program.

1.4. Objective Structured Clinical Exam (OSCE):

Trainees will be evaluated for their clinical skills by OSCE once a year.

1.5. Research activity:

Fellows are expected to formulate a research plan toward the end of the first year of their fellowship with their mentors and present their proposal to program committee before advancing to their second year. They have to prepare abstracts for the international movement disorder and cognitive meetings. It is a *mandatory* requirement for the fellows to have at least a paper published by the end of their fellowship.

2. Passing Score for Promotion:

Promotion decision aims to ensure that the trainee have attained the learning objectives planned for the academic year of evaluation. The same thing is applied before granting the trainee the certificate of training-completion. Based on SCFHS executive policy on annual promotion and continuous assessment (available on www.scfhs.org) each trainee is required to show the minimum competency in each component of the continuous assessment. This indicate that a minimum score of (borderline pass) is required in each component. "Clear fail" in any component will result in repeating the academic year. The policy gives the permission for the scientific committee to *consider* promoting trainees with "borderline fail" as long as they score "clear pass" in another component. It is important to understand that this is not a granted decision as it requires the support of program director and the scientific committee (please refer to the policy available on www.scfhs.org).

3. Summative assessment:

This outlines the final written and clinical exams that grants candidate the certification for the subspecialty. SCFHS bylaws and executive policy on examination shall be the reference to set the regulations related to the subspecialty examinations (please refer to www.scfhs.org). The final written and clinical examinations shall be held once each year.

3.1. Final Written examination:

The final written examination shall consist of **one** paper with 120 MCQs (includes clinical scenarios with one single best answer out of four options). The passing score is 70%.

3.2. Final Clinical examination:

The final specialty clinical examination consists of both an Objective Structured Clinical Examination (OSCE) and Structured Oral Examination (SOE). OSCE station and SOE case development shall follow SCFHS standards. To pass the examination, a candidate must attain a score > Minimum Performance Level (MPL) in at least 70% of the number of stations and 60% in each component (OSCE and SOE).

IX. Training completion

- Completion of training will be based on satisfactory performance evaluation, passing the final examination, and meeting all other requirements of training completion.
- 2. Fellowship program committee will prepare the fellow's final evaluation summary, covering the entire training period. This will be submitted to ATA at least one month prior to training completion.
- 3. The fellow's sponsor (if applicable) must be informed of the training completion with a copy of the final evaluation summary.
- 4. A graduation ceremony is held annually in spring. Graduations are recognized, and certificate of training completion are handed to graduates.

X. Program Interruption

- 1. Any training interruption will be handled based on the SCFHS regulations (please refer to the policy on www.scfhs.org).
- 2. Training interruption has to be justified to and accepted by the program director and forwarded to the supervisory committee at SCFHS.
- 2. Any training interruption during the training year without a valid excuse may result in dismissal from the training program.
- 3. If training interruption is less than three (3) months, with a valid excuse, training for that specific year is valid, providing the interruption period is compensated during the annual leave or after completing the training program.

- 4. If training total interruption period exceeds four (4) months during the whole training program and the period was not compensated, the trainee has to repeat the training year in which the interruption mostly occurred.
- 5. Training will be repeated if interrupted for any length of time between three (3) to twelve (12) months during a training year. The training level will be repeated at the start of the subsequent year. Trainee must attend the remainder of the interrupted training year that he/she will be repeating.
- 6. In the occasion that training interruption exceeds twelve consecutive (12) months, the trainee is dismissed from the program.
- 7. If trainee does not return within one month after the start of the subsequent training year he/she will be dismissed from the program.
- 8. After trainee dismissal from a training program he/she cannot enroll in any SCFHS program for a one-year period starting from dismissal date.

XI. Training Extension

- Training extension request is submitted to ATA six months prior to completion of the program.
- 2. The overall performance evaluation and justification for extension must be accompanying the request.
- 3. The extension needs to be approved by training committee plus the approval of sponsoring body on the trainee plan of extension.

XII. Leaves and Holidays

- 1. Fellows enrolled in SCHS Program are entitled for four weeks' vacation annually and 10 days of either Ramadan or Hajj holiday per year.
- 2. This month can be divided as per ATA polices.
- 3. Fellows are entitled to one paid professional leave each year (7days).
- 4. Sponsored Fellows however are entitled to only paid professional leave during their training period.

5. Fellow shall compensate for sick leave or maternity leave during or immediately after the training year.

XIII. Academic Responsibilities of Fellow

The fellow is expected to be academically inclined and show motivation for self-learning. The consultants/faculty will provide the necessary supervision and guidance. A brief outline of academic responsibilities includes:

- 1. Participate in all academic conferences related to movement disorders
- Attend and sometimes present in movement disorders journal clubs and case conferences. Topics include, among others, clinical phenomenology; neurogenetics and physiopathology; and pharmacological and surgical treatment of movement disorders.
- 3. The fellow is expected to complete at least one, preferably more research projects during the fellowship. The fellow will undergo training and certification by the KFSH&RC Review Board in the protection of human subjects and good clinical practice, in addition to being trained and certified in standard clinical rating scales in movement disorders.
- 4. The fellow will be encouraged to write case reports, reviews and original articles during the fellowship. Necessary supervision and help will be provided by the faculty/consultants
- 5. The fellow is expected to supervise and teach the residents/interns taking care of movement disorders patients
- 6. The fellow is expected to actively participate in teaching nursing staff, rehabilitation staff (physical therapists, occupational therapists, speech and language pathologists, social workers) about various aspects of movement disorders
- 7. The fellow will be expected to participate in at least two national and one international meeting of relevance during the training period.

XIV. Core Competencies:

| 1. Medical Expert | 7. Professional: |
|--------------------|--------------------------------------|
| 2. Communicator | Professionalism |
| 3. Collaborator | Physician Health |
| 4. Manager | 8. Patient Safety and Quality |
| 5. Health Advocate | Improvement |
| 6. Scholar: | 9. E-Health |
| Lifelong Learning | |
| Critical Appraisal | |
| Teaching | |
| Research | |

1. Medical Expert:

| Key Competencies | Enabling Competencies |
|-------------------------------------|---|
| Practice movement disorder medicine | 1.1 Demonstrate a commitment to high- |
| within defined clinical scope of | quality care of movement disorders |
| practice and expertise | patients |
| | 1.2 Integrate the CanMEDS Intrinsic Roles |
| | into the practice of medicine |
| | 1.3 Apply knowledge of the clinical and |
| | biomedical sciences relevant to movement |
| | disorders |
| | 1.4 Perform an appropriately timed |
| | consultation, presenting well-documented |
| | assessments and recommendations in |
| | written and/or oral form |
| | 1.5 Carry out professional duties in the |
| | face of multiple, competing demands |
| | 1.6 Recognize and respond to the |

| | T |
|-------------------------------|--|
| | complexity, uncertainty, and ambiguity |
| | inherent in movement disorders practice |
| 2. Perform a patient-centered | 2.1 Identify and prioritize issues to be |
| clinical assessment and | addressed in a patient encounter |
| establish management plans | 2.2 Elicit a history, perform a physical |
| | exam, select investigations, and interpret |
| | the results for the purpose of diagnosis |
| | and management, disease prevention, and |
| | health promotion |
| | 2.3 Establish goals of care with the patient |
| | and his or her family, which may include |
| | slowing disease progression, achieving |
| | cure, improving function, treating |
| | symptoms, and palliation |
| | 2.4 Establish a patient-centered |
| | management plan |
| 3. Plan and perform | 3.1 Determine indicated interventions for |
| interventions for the purpose | the purpose of assessment and/or |
| of assessment and/or | management |
| management | 3.2 Obtain and document informed |
| | consent, explaining the risks and benefits |
| | of the options discussed |
| | 3.3 Triage interventions, taking into |
| | account clinical urgency, the potential for |
| | deterioration, and available resources |
| | 3.4 Develop and implement a plan |
| | incorporating the degree of clinical |
| | uncertainty and the expertise of team |
| | members individually and as a whole |
| | 3.5 Perform the intervention in a skillful |
| | and safe manner, adapting to findings or |
| | |

| | changing clinical circumstances |
|--------------------------------|--|
| | 3.6 Establish and implement a plan for |
| | both pre- and post-procedure care |
| 4. Establish plans for timely | 4.1 Establish the roles of the patient and |
| follow-up and appropriate | all team members for follow-up on |
| consultation | investigations, response to treatment, and |
| | consultations, and ensure that the agreed |
| | follow-up occurs |
| | 4.2 Recognize when care should be |
| | transferred to another physician or health |
| | care provider |
| 5. Actively participate, as an | 5.1 Recognize and respond to adverse |
| individual and as a member | events and near misses |
| of a team, in the continuous | 5.2 Seek opportunities to provide high- |
| improvement of health care | quality care |
| quality and patient safety | 5.3 Contribute to a culture that promotes |
| | the continuous improvement of health care |
| | quality and patient safety |
| | 5.4 Describe how human and system |
| | factors influence decision-making and |
| | provision of patient care |
| | 5.5 Engage patients and their families in |
| | the continuous improvement of health care |
| | quality and patient safety |

2. Communicator:

| Key Competencies | Enabling Competencies |
|----------------------------------|--|
| Establish professional | 1.1 Communicate using a patient-centered |
| therapeutic relationships | approach that encourages patient trust |
| with patients and their families | and autonomy and is characterized by |

| | empathy and respect |
|--------------------------------|--|
| | 1.2 Optimize the physical environment for |
| | patient comfort, dignity, privacy, |
| | engagement, and safety |
| | 1.3 Recognize when the values, biases, or |
| | perspectives of patients, physicians, or |
| | other health care providers may affect the |
| | quality of care, and modify the approach to |
| | the patient appropriately |
| | 1.4 Respond appropriately to patients' |
| | non-verbal communication and utilize |
| | appropriate non-verbal behaviors to |
| | enhance communication with patients |
| | 1.5 Manage emotionally charged |
| | conversations and conflicts |
| | 1.6 Adapt to the unique needs and |
| | preferences of each patient and to his or |
| | her clinical condition and circumstances |
| Elicit and synthesize accurate | 2.1 Use patient-centered interviewing skills |
| and relevant information | to effectively identify and gather relevant |
| along with the perspectives | biomedical information |
| of patients and their families | 2.2 Manage the flow of a physician–patient |
| | encounter |
| | 2.3 Inquire about and explore the patient's |
| | beliefs, values, preferences, context, |
| | expectations, and health care goals |
| | 2.4 Seek out and synthesize relevant |
| | information from other sources, including |
| | the patient's family, with the patient's |
| | consent |
| 3. Engage patients and others | 3.1 Provide explanations that are clear, |

| in developing plans that | accurate, and adapted to the patient's |
|--|--|
| reflect the patient's health | level of understanding and need |
| care needs and goals | 3.2 Share information that is timely, |
| | accurate, and transparent in regard to the |
| | patient's health status, care, and outcome |
| | 3.3 Engage patients in a way that is |
| | respectful, non-judgmental, and ensures |
| | cultural safety |
| | 3.4 Assist patients and others to identify |
| | and make use of information and |
| | communication technologies to support |
| | their care and manage their health |
| | 3.5 Use counselling skills and decision |
| | aids to help patients Make informed |
| | choices regarding their health care |
| | 3.6 Disclose adverse events to patients |
| | and/or their families accurately |
| 4. 4. Document and share written | 4.1 Document clinical encounters in an |
| and electronic information | accurate, complete, timely, and accessible |
| about the medical encounter | manner, in compliance with legal and |
| to optimize clinical decision making, | regulatory requirements |
| patient safety, confidentiality, and privacy | 4.2 Communicate effectively using an |
| | electronic health record or other digital |
| | technology |
| | 4.3 Share information with patients and |
| | appropriate others in a manner that |
| | respects patient privacy and confidentiality |
| | |

3. Collaborator:

| Key Competencies | Enabling Competencies |
|--------------------------------|---|
| 1. Work effectively with other | 1.1 Establish and maintain healthy inter- |
| physicians and other health | and intra-professional working |
| care professionals | relationships for collaborative care |
| | 1.2 Negotiate overlapping and shared |
| | responsibilities with inter- and intra- |
| | professional health care providers for |
| | episodic or ongoing care of patients |
| | 1.3 Engage in effective and respectful |
| | shared decision-making with other care |
| | providers |
| 2. Work with inter- and | 2.1 Demonstrate a respectful attitude |
| intra-professional colleagues | toward other colleagues and members of |
| to prevent | an inter- and intra-professional team |
| misunderstandings, | 2.2 Work with others to prevent conflicts |
| manage differences, and | 2.3 Employ collaborative negotiation to |
| resolve conflict | resolve conflicts |
| | 2.4 Respect differences, limitations and |
| | misunderstandings in others |
| | 2.5 Recognize one's own differences, |
| | misunderstandings, and limitations that |
| | may contribute to inter- and intra- |
| | professional tension |
| | 2.6 Reflect on inter- and intraprofessional |
| | team function |
| 3. Effectively and safely hand | 3.1 Demonstrate effective and safe |
| over care to an appropriate | handover during a patient transition to a |
| health care professional | different setting or stage of care |
| | 3.2 Demonstrate effective and safe |
| | handover during a transition of |
| | responsibility for care |

4. Manager:

| Key Competencies | Enabling Competencies |
|--|--|
| Contribute to the improvement of | 1.1 Demonstrate personal responsibility for |
| health care delivery in health care teams, | improving patient care |
| organizations, and systems | 1.2 Contribute to quality improvement and |
| | patient safety using the best available |
| | knowledge and practices |
| | 1.3 Engage others to work collaboratively |
| | to improve systems of patient care |
| | 1.4 Use and adapt systems to learn from |
| | adverse events and near misses |
| | 1.5 Use health informatics to improve the |
| | quality of patient care and optimize patient |
| | safety |
| 2. Engage in the stewardship of health | 2.1 Allocate health care resources for |
| care | optimal patient care |
| resources | 2.2 Apply evidence and management |
| | processes to achieve cost-appropriate |
| | care |
| | 2.3 Contribute to strategies that improve |
| | the value of health care delivery |
| 3. Demonstrate leadership in professional | 3.1 Develop their leadership skills |
| practice | 3.2 Facilitate change in health care to |
| | enhance services or outcomes |
| | 3.3 Design and organize elements of |
| | health care delivery |
| 4. Manage their practice and career | 4.1 Set priorities and manage time to |
| | balance practice and personal life |
| | 4.2 Manage career planning, finances, and |

| health Human resources in a practice |
|--------------------------------------|
| 4.3 Implement processes to ensure |
| personal practice improvement |

5. Health Advocate:

The fellow should be able to:

| Key Competencies | Enabling Competencies |
|--|--|
| Respond to individual patients' complex | 1.1 Work with patients to address |
| health needs by advocating with them in | determinants of health that affect them |
| the clinical or extra-clinical environment | 1.2 Work with patients and their families to |
| | increase their opportunities to adopt |
| | healthy behaviors |
| | 1.3 Consider disease prevention, health |
| | promotion, or health surveillance when |
| | working with individual patients |
| 2. Respond to the needs of a community | 2.1 Use a process of continuous quality |
| or population they serve by advocating | improvement in their practice that |
| with them for system-level change | incorporates disease prevention and |
| | health promotion activities |
| | 2.2 Work with a community or population |
| | to identify the determinants of health that |
| | affect them |
| | 2.3 Participate in a process to improve |
| | health in the community they serve |
| | |

6. Scholar:

| Key Competencies | Enabling Competencies |
|---|------------------------------------|
| 1. Engage in the continuous improvement | 1.1 Develop, monitor, and revise a |
| and enhancement of their professional | personal learning Plan to enhance |

| activities through ongoing learning | professional practice |
|---|--|
| | 1.2 Regularly analyze their performance, |
| | using various data and other sources to |
| | identify opportunities for learning and |
| | improvement |
| | 1.3 Engage in collaborative learning to |
| | continuously improve personal practice |
| | and contribute to collective improvements |
| | in practice |
| 2. Facilitate the learning of students, | 2.1 Recognize the power of role-modelling |
| residents, other health care | and the Impact of the hidden curriculum on |
| professionals, the public, and other | learners |
| stakeholders | 2.2. Promote a safe learning environment |
| | 2.3. Ensure that patient safety is |
| | maintained when learners are involved |
| | 2.4. Collaboratively identify the learning |
| | needs of others and prioritize learning |
| | outcomes |
| | 2.5. Demonstrate effective teaching to |
| | facilitate learning |
| | 2.6. Seek and provide meaningful |
| | feedback |
| | 2.7. Use assessment tools and practices |
| | that are appropriate to a given learning |
| | context |
| 3. Integrate best available evidence, | 3.1 Recognize uncertainty and knowledge |
| contextualized to specific situations, and | gaps in clinical to a given learning context |
| integrate it into real-time decision making | and other professional encounters and |
| | generate |
| | focused questions that can address them |
| | 3.2 Demonstrate proficiency in identifying, |
| | |

| | T |
|--|---|
| | selecting, and navigating pre-appraised |
| | resources |
| | 1.3 Integrate evidence into decision- |
| | making |
| 4. Critically evaluate the integrity, | 4 4.1 For a given professional scenario, |
| reliability, and applicability of health related | formulate scholarly questions using a |
| research and literature | structure that encompasses the patient or |
| | population, intervention, comparison, and |
| | outcome (PICO) |
| | 4.2 Identify one or more studies or |
| | scholarly sources that shed light on a |
| | given professional question |
| | 4.3 Interpret study findings, including a |
| | discussion and Critique of their relevance |
| | to professional practice |
| | 4.4 Determine the validity and risk of bias |
| | in a wide range of scholarly sources |
| | 4.5 Describe study results in both |
| | quantitative and qualitative terms |
| | 4.6 Evaluate the applicability (external |
| | validity or generalizability) of evidence |
| | from a wide range of biomedical research |
| | products |
| | 4.7 Translate and apply the findings of |
| | studies into professional practice, and |
| | discuss the barriers and facilitators to |
| | achieving this |
| | 4.8 Identify and use automatic information- |
| | delivery services that highlight new |
| | evidence appropriate to their scope of |
| | professional practice |
| | |

5. Contribute to the dissemination and/or 5.1 Describe the principles of research and creation of knowledge and practices scholarly inquiry and their role in applicable to health contemporary health care 5.2 Discuss and interpret the ethical principles applicable to health-related research 5.3 Discuss the roles and responsibilities of researchers, both principal investigators and research collaborators, and how they differ from clinical and other practice roles and responsibilities 5.4 Pose medically and scientifically relevant, appropriately constructed questions that are amenable to scholarly investigation 5.5 Discuss and critique the possible methods of addressing a given scholarly question 5.6 Summarize and communicate to professional and lay audiences, including patients and their families the findings of applicable studies and reports

7. Professional:

| Key Competencies | Enabling Competencies |
|--|---|
| Demonstrate a commitment to patients | 1.1 Exhibit appropriate professional |
| by applying best practices and adhering to | behaviors and relationships in all aspects |
| high ethical standards | of practice, reflecting honesty, integrity, |
| | commitment, compassion, respect, |

| | altruism, respect for diversity, and |
|---|--|
| | maintenance of confidentiality |
| | 1.2 Demonstrate a commitment to |
| | excellence in all aspects of practice and to |
| | active participation in collaborative care |
| | 1.3 Recognize and respond to ethical |
| | issues encountered in practice |
| | 1.4 Recognize and manage conflicts of |
| | interest |
| | 1.5 Exhibit professional behaviors in the |
| | use of technology enabled communication |
| 2. Demonstrate a commitment to society | 2.1 Demonstrate a commitment to the |
| by recognizing and responding to the | promotion of the public good in health |
| social contract in health care | care, including stewardship of resources |
| | 2.2 Demonstrate a commitment to |
| | maintaining and enhancing competence |
| | 2.3 Demonstrate a commitment to quality |
| | improvement and patient safety |
| | 2.4 Demonstrate accountability to patients, |
| | society, and the profession by recognizing |
| | and responding to societal expectations of |
| | the profession |
| 3. Demonstrate a commitment to the | 3.1 Fulfill the professional and ethical |
| profession by adhering to standards and | codes, standards of practice, and laws |
| participating in physician-led regulation | governing practice |
| | 3.2 Recognize and respond to |
| | unprofessional and unethical behaviors in |
| | others |
| | 3.3 Commit to participation in peer |
| | assessment and standard-setting |
| | 3.4 Maintain and promote a culture of |

| | collegiality, respect, and professional |
|------------------------------------|--|
| | relationships |
| 4. Demonstrate a commitment to | 4.1 Exhibit self-awareness and effectively |
| physician health and well-being to | manage the influences on personal well- |
| foster optimal patient care | being and professional performance |
| | 4.2 Manage personal and professional |
| | demands for a sustainable practice |
| | through the physician life cycle |
| | 4.3 Promote a culture that recognizes, |
| | supports, and responds effectively to |
| | colleagues in need |
| | |

8. Patient Safety and Quality Improvement

Patient safety, defined as the reduction and mitigation of unsafe acts within the healthcare system, and the use of best practices shown to lead to optimal patient outcomes, is a critical aspect of quality healthcare. Movement disorders fellow should be familiar with the basic concepts of patient safety core domains:

Domain 1: Contribute to a Culture of Patient Safety – A commitment to applying core patient safety knowledge, skills, and attitudes to everyday work.

Domain 2: Work in Teams for Patient Safety – Working within inter-professional teams to optimize patient safety and quality of care.

Domain 3: Communicate Effectively for Patient Safety – Promoting patient safety through effective healthcare communication.

Domain 4: Manage Safety Risks – Anticipating, recognizing, and managing situations that place patients at risk.

Domain 5: Optimize Human and Environmental Factors – Managing the relationship between individual and environmental characteristics in order to optimize patient safety.

Domain 6: Recognize, Respond to, and Disclose Adverse Events – Recognizing the occurrence of an adverse event or close call and responding effectively to

mitigate harm to the patient, ensure disclosure, and prevent recurrence.

E- Health:

- 1. Be familiar with the advances of electronic health records
- 2. Appreciate the trend and the impact of new technology in the management of movement disorders.
- 3. Understand the concept of tele-movement disorder
- 4. Understand the concept and impact of e learning