Alzheimer Society
BRITISH COLUMBIA

Clinical Fellowship in Cognitive Health

A one- to two-year training opportunity in Victoria, BC, starting in July 2020

For more information and to apply, please see job description below.

Applicants must have completed training in neurology, geriatric medicine or geriatric psychiatry, and be eligible to practice in Canada.

THE UNIVERSITY OF BRITISH COLUMBIA
Faculty of Medicine

University of Victoria | Medical Sciences

Alzheimer Society
BRITISH COLUMBIA

Clinical Fellowship Opportunity in Cognitive Health

Job Description

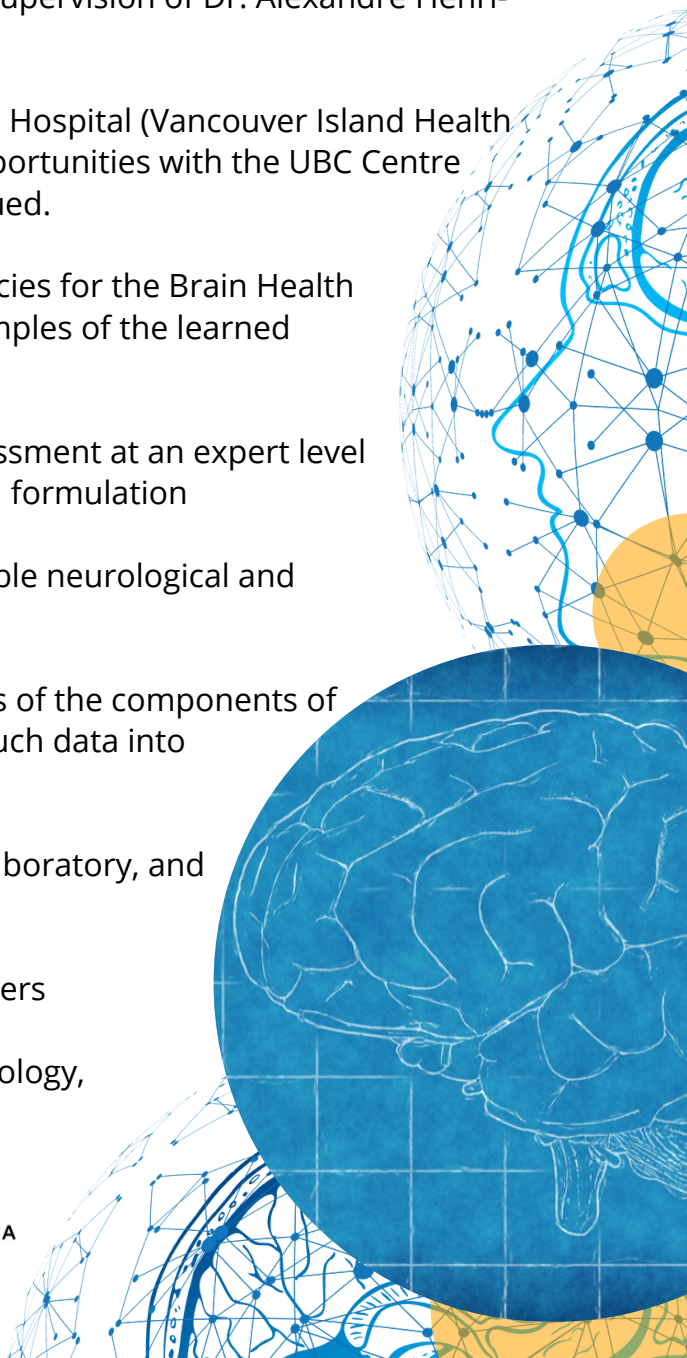
The Alzheimer Society of B.C. is proud to sponsor the Alzheimer Society of B.C. Clinical Fellowship in Cognitive Health in partnership with the University of Victoria's Division of Medical Sciences and the University of British Columbia's Faculty of Medicine.

This one- to two-year clinical training opportunity will begin on July 1, 2020. (An earlier start date is negotiable.) The fellow will work under supervision of Dr. Alexandre Henri-Bhargava and colleagues.

Training will occur in Victoria, BC, at the Royal Jubilee Hospital (Vancouver Island Health Authority) and affiliated sites. Reciprocal training opportunities with the UBC Centre for Alzheimer and Associated Diseases may be pursued.

The fellow will develop skills following the competencies for the Brain Health training program (see below). The following are examples of the learned competencies the fellow will acquire:

- Perform a neurocognitive/neurobehavioural assessment at an expert level as required for differential diagnosis and problem formulation
- Conduct and interpret a comprehensive and reliable neurological and psychiatric examination at an advanced level
- Describe the content and psychometric properties of the components of a neuropsychological assessment and integrate such data into clinical evaluations
- Utilize neuroimaging, neurophysiological, sleep, laboratory, and neuropathology studies
- Describe the neurobiology of specific brain disorders
- Apply relevant treatments such as neuropharmacology, neuromodulation, and psychosocial interventions



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Additionally, the trainee will have the opportunity to pursue scholarly interests in research, education, or quality improvement related to the care of persons with cognitive disorders and dementia.

Applicants must have completed training in neurology, geriatric medicine, or geriatric psychiatry at the start of the fellowship, and must be eligible to practice in Canada. Consideration may be given to candidates from other relevant specialties.

Strong preference will be given to candidates expressing a desire to establish a career on Vancouver Island or in British Columbia.

For more information, please contact Dr. Alexandre Henri-Bhargava at alexhb@uvic.ca

Please submit applications via email to: impadmin@uvic.ca with the subject heading "Clinical Fellowship in Cognitive Health."

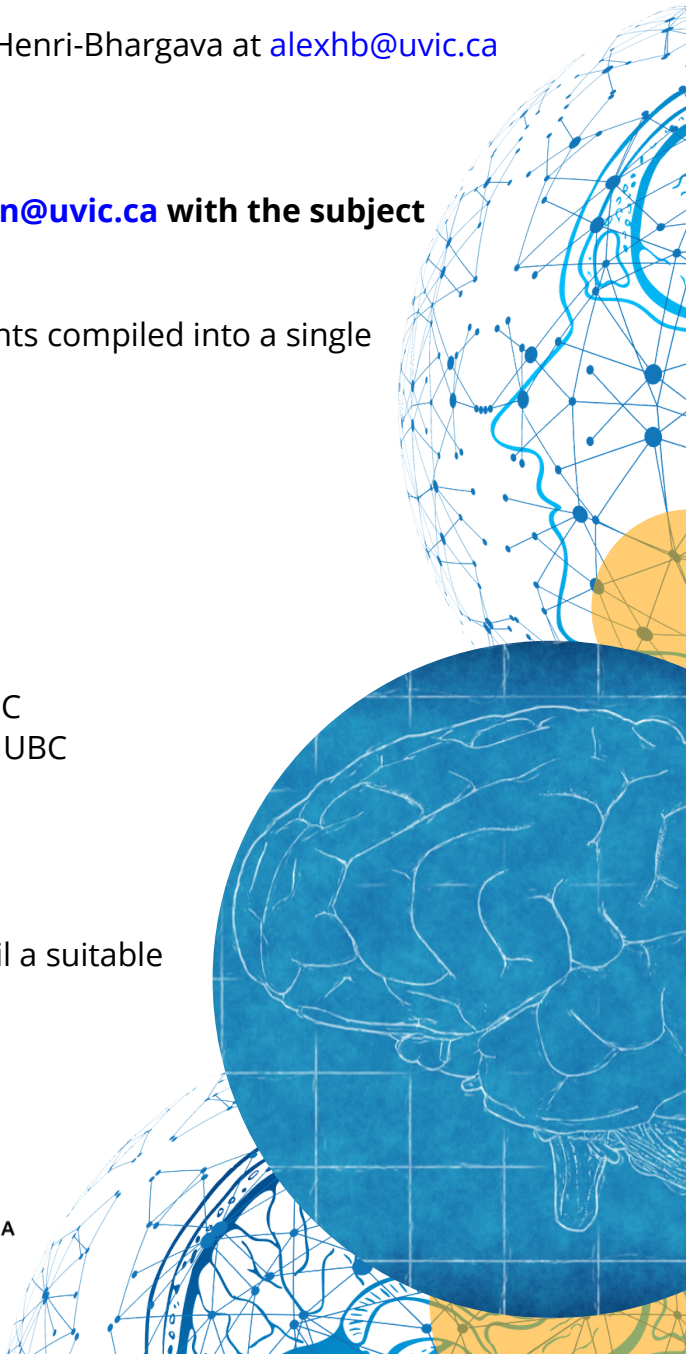
All applications must include the following components compiled into a single PDF document:

- Cover letter
- CV
- Three (3) written reference letters

Finally, please address your application to:

Dr. Alexandre Henri-Bhargava, MD,CM, MScCH, FRCPC
Clinical Associate Professor of Medicine (Neurology), UBC
Medical Director, Neil and Susan Manning
Cognitive Health Initiative
c/o impadmin@uvic.ca

Applications will be considered on a rolling basis until a suitable candidate is identified.



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DEFINITION

Interdisciplinary Brain Medicine integrates medical disciplines concerned with the clinical care and understanding of adult disorders that are at the interface of the brain and mind. Physicians practicing Interdisciplinary Brain Medicine have acquired additional competencies that complement their established specialty or subspecialty. The focus of Interdisciplinary Brain Medicine is on the assessment and treatment of disordered affect, behaviour, and cognition (ABC)[1] in diseases of the brain across the adult lifespan, and the impact of these disorders on function, quality of life, and relationships. Training in Interdisciplinary Brain Medicine allows Fellows to practice within their own specialty or subspecialty, and to share a common vocabulary and set of knowledge, skills, and attitudes that foster collaborative, inter- and intra-professional care. The practice also leads to the emergence of transdisciplinary competencies to further enhance care. Most importantly, Fellows will become agents of positive change by facilitating the collaboration and integration of the multiple disciplines necessary to manage these complex disorders. Training thus better equips physicians to address and advocate for the needs of persons with disorders of ABC. They will be committed to a breadth of practice within each cognate discipline, and to collaboration and coordination within the health care system.

ELIGIBILITY REQUIREMENTS

The trainee must have achieved Royal College certification in a specialty or subspecialty related to clinical neuroscience (i.e., neurology, psychiatry, geriatric psychiatry, or geriatric medicine). Applicants from other specialties sub-specialties may also be considered on a case-by-case basis. All trainees must be certified in their primary specialty or subspecialty in order to be eligible.

GOALS

Upon completion of training, the fellow is expected to function as a competent specialist in his or her own specialty or subspecialty, capable of an enhanced expert practice in this area of focused competence, Interdisciplinary Brain Medicine. The trainee must acquire advanced knowledge of the foundations in the neurosciences and related disciplines that underlie clinical work in the field of Interdisciplinary Brain Medicine.

The fellow will have acquired competency in the core competencies of the diploma. Fellows must demonstrate the requisite knowledge, skills, and attitudes for effective patient-centred care and service to a diverse population. In all aspects of specialist practice, the graduate must be able to address issues of gender, sexual orientation, age, culture, ethnicity and ethics in a professional manner.

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[1] **In the context of this document and the Interdisciplinary Brain Medicine program, "affect, behaviour, and cognition (ABC)" are defined broadly: "affect" includes observable expressions of arousal, mood, and emotion; "behaviour" involves a wide range of observable human mannerisms, including reality orientation; and "cognition" involves all cognitive process including but not limited to attention, concentration, initiative, language, memory, visuospatial function, praxis, executive function, mentalizing, and insight, judgment and reasoning.**

Key and Enabling Competencies for Training in Interdisciplinary Brain Medicine

At the completion of training, the fellow in Interdisciplinary Brain Medicine will have acquired the following competencies and will function effectively as a:

Medical Expert

Definition:

As *Medical Experts*, specialists in Interdisciplinary Brain Medicine integrate medical knowledge, clinical skills, and professional attitudes in their provision of patient-centred care. Overlaps with the parent specialties and subspecialties occur within this role, but the training will build upon and broaden those competencies already mastered.

Key and Enabling Competencies: Fellows are able to:

1. **Effectively perform a neurocognitive / neurobehavioural assessment at an expert level, as required for the differential diagnosis and problem formulation of disordered affect, behaviour, and cognition (ABC). This includes the ability to:**
    - 1.1. Elicit and synthesize necessary historical information from the patient and collateral informants via clinical interview
    - 1.2. Conduct and interpret a comprehensive mental state exam that includes neurobehavioural observations
        - 1.2.1. Neurobehavioural observations include but are not limited to: appearance and comportment, speech, thought process and content, emotion, personality, reality orientation (including perceptual abnormalities such as hallucinations and delusions), social interactions
        - 1.2.2. This includes knowledge proficient use of appropriate instruments to assist in the assessment of mood and behaviour (e.g., mood assessment scales, personality instruments, neuropsychiatric symptom inventories, etc.)
    - 1.3. Conduct and interpret a neurocognitive examination appropriate to the presenting clinical situation
        - 1.3.1. Neurocognitive domains include but are not limited to: arousal, attention, language, memory, praxis, recognition, visuospatial function, executive functions, social cognitive functions, insight and judgment
        - 1.3.2. This includes knowledge and advanced use of appropriate instruments to assist in the cognitive assessment (e.g., paper- and computer-based cognitive assessment batteries)
    - 1.4. Assess the patient's functioning in daily life and how affect, behaviour, and cognition impact that function
        - 1.4.1. Assessment of basic and instrumental activities of daily living
        - 1.4.2. Assessment of social and leisure activities

2. Effectively conduct and interpret a comprehensive and reliable neurological examination at an advanced level, with expert proficiency in detecting physical signs pertinent to diagnosing disorders of affect, behaviour, and cognitive functions

3. Describe the content and psychometric properties of the components of a neuropsychological assessment, and integrate such data into clinical evaluation with proficiency. While fellows are not expected to be able to administer a neuropsychological assessment, they must be able to understand the content of a neuropsychological assessment at a working level and incorporate the summary of such assessments in the clinical context of their patients. This includes working knowledge of:

- 3.1. Principles of neuropsychological testing
  - 3.1.1. Psychometric properties
  - 3.1.2. Use of normative data
  - 3.1.3. Intelligence: concept and controversies
  - 3.1.4. Validity and effort testing
  - 3.1.4.1. Barriers to validity of testing (language, culture etc.)
- 3.2. Identification and interpretation of commonly used tests of:
  - 3.2.1. Executive functions
  - 3.2.2. Attention
  - 3.2.3. Memory
  - 3.2.4. Language
  - 3.2.5. Visual-spatial function
  - 3.2.6. Praxis and psychomotor function
  - 3.2.7. Personality and mood

4. Appropriately utilize neuroimaging studies in the assessment and treatment of disorders of ABC

- 4.1. Provide a proficient description of standard neuroimaging modalities
  - 4.1.1. General principles of operation
  - 4.1.2. Indications, limitations
  - 4.1.3. Risks and common adverse effects
- 4.2. Independently assess structural neuroimaging studies (CT, MRI) for radiological signs relevant to brain disorders. (This does not imply that fellows provide independent radiological reports but rather that they are expert in clinical-radiological correlation).
- 4.3. Apply the contents of standard functional neuroimaging (SPECT and PET scan) reports for clinical correlation
- 4.4. Describe and evaluate the potential utility of emerging neuroimaging techniques (such as fMRI, qEEG, MEG, etc.)

5. Appropriately utilize neurophysiological studies in the assessment and treatment of brain diseases with disordered ABC

5.1. Provide a proficient description of standard electrophysiological modalities

5.2. Apply the contents of EEG reports for clinical correlation (fellows must be proficient with the terminology in the reports but must not necessarily be able to interpret EEG data)

6. Appropriately utilize sleep studies in the assessment and treatment of brain diseases with disordered ABC

6.1. Provide a proficient description of standard sleep studies (polysomnography, multiple sleep latency test)

6.2. Apply the contents of polysomnography reports for advanced clinical correlation and describe the impact of sleep disorders on ABC (fellows must be proficient with the terminology in the reports but must not necessarily be able to interpret polysomnographic studies)

7. Interpret laboratory studies and neuropathology studies relevant to brain diseases with disordered ABC

7.1. Perform a lumbar puncture proficiently, when appropriate, and interpret the results obtained

8. Integrate the data acquired on individual patients in order to create an accurate and comprehensive differential diagnosis, preferred diagnosis and management plan.

8.1. This includes a biopsychosocial formulation summarizing precipitating, presenting, perpetuating, and palliating factors that contribute to the illness in patients with disordered ABC

8.2. With respect to the generation of a differential diagnosis, the fellow will be expected to understand the relevant contributions of developmental disorders, focal neurobehavioral syndromes, psychiatric conditions, and state-related factors such as the effects of pain and sleep and substance intoxication and withdrawal, in determining the causation of the condition.

8.2.1. With respect to this differential diagnosis, the fellow is expected to be able to list the major categories of adult brain disorders and specific diseases therein; and describe the affective, behavioural and cognitive features thereof in detail at an expert level.

9. Describe the neurobiology of specific CNS disorders, in particular the dementias, with a focus on advanced knowledge of their normal and abnormal emotional, behavioural, and cognitive function. This includes advanced knowledge of the relevant:

9.1. Neuroanatomy

9.1.1. Structural components

9.1.2. Functional components (e.g., brain networks)

9.1.3. Neurodevelopment

9.2. Neurochemistry, including emerging proteomic methods

9.3. Neurogenetics, including genomic methods

9.4. Neuropathology

9.5. Neurophysiology

9.6. Cognitive neuroscience

10. Describe "brain health."

10.1. Describe normal changes in biological, psychological (affective and behavioural), and cognitive aspects of brain function across the entire adult lifespan

10.2. Counsel patients, at an expert level, on lifestyle and other interventions that can help maintain brain health across the adult lifespan in both patients with known brain disorders and in healthy adults. This includes being familiar with the current evidence on the role of the following factors in the maintenance of brain health:

10.2.1. Lifespan and demographic variables such as education and socioeconomic status.

10.2.2. Cognitively stimulating activity including "brain training."

10.2.3. Social activity

10.2.4. Physical exercise

10.2.5. Diet, nutrition, and dietary supplementation

10.2.6. Prescription and non-prescription drugs

10.2.7. Medical co-morbidity

10.2.7.1. Especially vascular risk factors

11. Apply therapeutic interventions relevant to disorders of ABC, in particular the dementias:

11.1. List and describe the major classes of *neuropharmacologic drugs* as well as their action and clinical pharmacology, indications, contraindications, interactions, and common side effects

11.1.1. Be able to use specific examples of these drug classes at an expert level, including listing their indications, contraindications, precautions, adverse effects, interactions, recognition and management of overdoses, dosage and administration.

11.2. List and describe the major classes of *psychopharmacologic drugs*, as well as their action and clinical pharmacology, indications, contraindications, interactions, and common side effects

11.2.1. Be able to use specific examples of these drug classes at an expert level, including listing their indications, contraindications, precautions, adverse effects, interactions, recognition and management of overdoses, dosage and administration.

11.3. Identify prescription and non-prescription drugs and natural products affecting ABC

11.4. Describe the indications and contraindications for *psychotherapies* at an expert level and describe a working knowledge the general principles thereof

11.5. Describe the behavioural management of disorders of ABC at an advanced level

11.6. Describe the role of non-pharmacological interventions such as exercise and environmental modifications and utilize them appropriately at an advanced level

11.7. Provide a proficient description of the following neuromodulatory modalities: rTMS, tDCS, MST, ECT, neurosurgical techniques (DBS and stereotactic ablation). This includes:

11.7.1. Listing current and emerging indications

11.7.2. Explaining the concepts of excitability, inhibition, and plasticity as they related to neuromodulatory therapy.

11.7.3. Explaining the putative influence of neuromodulatory modalities on brain neurochemistry

11.7.4. Listing potential biomarkers, both established and emerging, for treatment response

11.7.5. Describing the influence of neuromodulatory therapies on cognition, behaviour, and affect

11.7.6. Recognizing potential adverse effects of neuromodulatory therapies

Communicator

Definition:

As *Communicators*, fellows in Interdisciplinary Brain Medicine effectively facilitate the doctor-patient relationship and the dynamic exchanges that occur before, during, and after the medical encounter.

Key and Enabling Competencies: All fellows in Interdisciplinary Brain Medicine are able to:

1. **Develop rapport, trust and ethical therapeutic relationships with patients suffering from brain diseases with disordered ABC, and their families or proxy decision-makers**

    1.1. Balance the respect for patient autonomy with the requirement to involve proxy decision-makers in communicating with patients who are affected by diseases characterized by an impairment of that autonomy

    1.2. Adjust communication and assessment according to patient factors which may affect their ability to optimally report their symptoms and cooperate with the assessment, at an expert level

    1.3. Expertly and appropriately adapt the neurobehavioural / neurocognitive assessment in patients who are unable or unwilling to co-operate with some portions of the assessment

    1.4. Expertly and appropriately adapt the neurobehavioural / neurocognitive assessment to appropriately adjust for patient impairment, fatigue, drug effects, and other co-morbidities

2. **Develop a common understanding of issues, problems, and plans with patients, families, colleagues and other healthcare practitioners in order to develop a shared plan of care for patients with brain disorders**

3. **Be able to provide expert consultations on referred patients**

    3.1. Clearly document findings from the clinical assessment and investigation

    3.2. Convey orally and in writing, clinical impressions and recommendations that are understandable and effective in informing care and changing behaviour:

        3.2.1. to patients, families, significant others, and proxy decision-makers
        3.2.2. to physician colleagues
        3.2.3. to other healthcare professionals and other practitioners
        3.2.4. to officers of the court
        3.2.5. to private or public agencies

Collaborator

Definition:

As *Collaborators*, fellows in Interdisciplinary Brain Medicine work effectively within a health care team to achieve optimal patient care. It is recognized that in current medical practice, a "team" may be comprised of individual physicians practicing independently in different geographical practice locations. They will also work to collaborate with and integrate care with health care teams from other related disciplines. This will be a fundamental and unique role for Fellows in Interdisciplinary Brain Medicine.

Key and Enabling Competencies: Fellows in Interdisciplinary Brain Medicine are able to…

1. **Delineate their role within a multidisciplinary or interdisciplinary team of physicians treating patients with complex brain disorders affecting ABC. This includes adequate, reciprocal, and continuous communication and collaboration between physicians treating such patients.**

   1.1. Fellows in interdisciplinary brain medicine will strive to work with their colleagues in a co-ordinated manner.

   1.2. Fellows in interdisciplinary brain medicine will foster and advocate for the development of geographically co-located multidisciplinary or interdisciplinary teams.

2. **Demonstrate the acquisition of competence within specific multidisciplinary or interdisciplinary clinical contexts. These should include at least one context, which is substantially different from the context in which the Fellow spent most of their (sub)specialty training. These contexts can include:**

   2.1. Brain health centres
   2.2. Rehabilitation clinics (including traumatic brain injury clinics)
   2.3. Dementia / memory clinics
   2.4. Behavioural neurology clinics
   2.5. Neuropsychiatry clinics
   2.6. Multidisciplinary neurology clinics
   2.7. Multidisciplinary psychiatry clinics
   2.8. Multidisciplinary geriatric / senior health clinics
   2.9. Brain health centres

3. **Explain the role and scope of practice of other health care professions involved in assessing and treating disorders of ABC (e.g., Occupational Therapy, Physiotherapy, Social Work, Neuropsychology, Speech-language Pathology, Recreation Therapy), and:**
   3.1. Appropriately refer to other health professions and services in the provision of care to referred patients

   3.2. Work effectively and appropriately as a member of interprofessional health care teams

4. **Work effectively and appropriately with community organizations**

5. **Act as local expert resources for consulting on patients with a variety of brain diseases with disordered ABC**

Manager

Definition:

As *Managers*, fellows in Interdisciplinary Brain Medicine are integral participants in health care organizations, organizing sustainable practices, making decisions about allocating resources, and contributing to the effectiveness of the health care system.

Key and Enabling Competencies: Fellows in Interdisciplinary Brain Medicine are able to…

1. **Allocate finite health care resources appropriately to maximize health outcomes for patients with brain diseases**

2. **Demonstrate knowledge of locally available community resources for patients with brain diseases and utilize them appropriately and effectively**

3. **Serve in administrative and leadership roles as appropriate**

4. **Participate in the planning, implementation, and evaluation of services for those complex brain diseases with disordered ABC**

5. **Effectively manage a multidisciplinary, or ideally an interdisciplinary and/or interprofessional practice for treatment of disorders of ABC**

Health Advocate

Definition:

As *Health Advocates*, fellows in Interdisciplinary Brain Medicine responsibly use their expertise and influence to advance the health and well-being of individual patients, communities, and populations suffering from complex disorders of ABC.

Key and Enabling Competencies: Fellows in Interdisciplinary Brain Medicine are able to…

1. **Respond to individual patient health needs and issues as part of patient care**

2. **Respond to the health needs of the community they serve**

3. **Advocate for policy change and service improvements for patients with complex brain disorders. This advocacy will take place within their home discipline as well as the broader health care community within which they practice. This is an important way the Fellows will function as agents of change.**

4. **In order to foster the development of this area of practice, provide leadership and/or support to one or more of the major Canadian professional organizations and/or meetings related to the care of persons with complex brain diseases**

5. **Respond to individual patient health needs and issues as part of patient care**
   - 5.1. Identify the health needs of an individual patient
   - 5.2. Identify opportunities for advocacy, health promotion and disease prevention with individuals to whom they provide care

6. **Respond to the health needs of the communities that they serve**
   - 6.1. Describe the practice communities that they serve
   - 6.2. Identify opportunities for advocacy, health promotion and disease prevention in the communities that they serve, and respond appropriately

7. **Identify the determinants of health for the populations that they serve:**
   - 7.1. Identify the determinants of health of the populations, including barriers to access to care and resources
   - 7.2. Identify vulnerable or marginalized populations within those served and respond appropriately

Scholar

Definition:

As *Scholars*, fellows in Interdisciplinary Brain Medicine demonstrate a lifelong commitment to reflective learning, as well as the creation, dissemination, application, and translation of medical knowledge.

Key and Enabling Competencies: Fellows in Interdisciplinary Brain Medicine are able to…

1. **Maintain and enhance their professional activities through continuing professional development**

2. **Search for and critically evaluate emerging information and apply it appropriately to practice decisions**

3. **Educate local practitioners on the diagnosis and management of complex brain diseases with disordered ABC**

4. **Contribute to the creation, dissemination, application, and translation of new medical knowledge and practices. This includes:**

    4.1. Describing and adhering to the Tri-Council Policy Statement (TCPS -2) and Good Clinical Practice (International Conference on Harmonization of Technical Requirements for the Registration of Pharmaceuticals for Human Use) in pharmaceutical and nonpharmaceutical trials and the specific responsibilities of investigators

    4.2. Critically assessing relevant background literature and methodology proposed to address a research question

    4.3. Presenting research data coherently and effectively both orally and in writing

    4.4. Participating in the preparation of research material for publication and/or presentation

    4.5. Demonstrating the ability to translate research findings into their own clinical practice and that of others (i.e., knowledge translation)

Professional

Definition:

As *Professionals*, fellows in Interdisciplinary Brain Medicine are committed to the health and well-being of individuals and society through ethical practice, profession-led regulation, and high personal standards of behaviour.

Key and Enabling Competencies: Fellows in Interdisciplinary Brain Medicine are able to…

1. **Demonstrate a commitment to their patients, profession, and society through ethical practice. Neuroethics and bioethics principles pertinent to this practice include:**
   - 1.1. Challenges surrounding informed decision making for patients with diminished capacity
   - 1.2. Incidental clinical and neuroimaging findings
   - 1.3. Neuroethics of cognitive enhancement in specific populations and normal individuals (e.g., off-label prescription of cognitive enhancers)
   - 1.4. Drug trials ethics specific to complex brain disorders
   - 1.5. Concerns related to clinical research on conditions affecting cognitive capacity
     - 1.5.1. Neuroethical issues in early detection of dementia
     - 1.5.2. Ethical concerns and pitfalls in neurogenetic testing
     - 1.5.3. Neuroethical issues in presymptomatic detection of incurable brain disorders
     - 1.5.4. Issues related to biomarkers
     - 1.5.5. The ability of patients with diminished decision-making capacity to provide informed consent
2. **Fulfill the regulatory and legal obligations required of current practice, which includes but is not limited to:**
   - 2.1. Capacity assessment
   - 2.2. Advance directives
   - 2.3. Power of attorney
   - 2.4. Guardianship
   - 2.5. Trusteeship
   - 2.6. Operation of a motorized vehicle
   - 2.7. Medical-legal reports