Information for candidates applying for clinical fellowship in the Stroke Program at the University of Alberta Hospital, Edmonton, Canada.

### Program:

The Stroke Research Program at the University of Alberta presently has 8 stroke neurologists and 1 stroke internist. The stroke fellowship training at the university of Alberta is a combined clinical and research program. Every year 3-5 clinical/research stroke fellows are recruited. Fellowship training is for 1-2 years with the possibility of extension especially those who want to pursue research/masters. The research program is diverse and includes a spectrum of projects from basic science (studying mechanisms of focal ischemia and designing drug therapies for limiting neuronal damage) to clinical trials and observational studies.

The projects that may be of particular interest include assessment of risk factors for stroke patients in the clinic, evaluation of appropriate strategies to prevent recurrences, looking at intimal medial thickness in patients with diabetes, the study of cognitive function in patients with cardiac transplantation, the usefulness of MRI in hyperacute stroke, and management of high blood pressure acutely after a stroke. As well, we are currently involved in projects through the NIH and the Canadian Stroke Network. We are involved in several clinical trials including IV thrombolysis in acute stroke, endovascular treatment in acute stroke, neuroprotective strategies, treatment of blood pressure in acute ischemic stroke and hemorrhage and sonothrombolysis, to mention a few.

The fellows are encouraged to look into research projects of their own. There is extensive clinical material including over 1500 acute stroke visits to the emergency at the University of Alberta hospital, over 2400 visits to the AH Owen & Family Stroke Prevention Clinic and an expanded program in the city where other hospitals are involved in the critical care path for management of acute stroke.

There is significant emphasis on teaching with weekly stroke rounds, weekly intervention stroke rounds with neuro radiologists, TCD rounds, monthly Stroke Journal Club and a very active stroke service at the University of Alberta hospital.

#### MEDICAL EXPERT:

#### **Activities:**

# **Outpatient Stroke Prevention Clinic (SPC):**

- Three to four half days per week
- SPC activities include stroke risk assessment, etiologic investigations, and secondary prevention measures
- One- to- one case discussion with the strokologist
- Availability of carotid duplex and transcranial Doppler (TCD)in SPC
- Clinical research
- Drug trials

### On call for acute stroke:

- Will carry "Stroke Critical Care Hotline" pager
- Will assess acute stroke patients at the emergency department
- Each patients will be discussed with the attending strokologist or neurologist for acute management
- Will be able to utilize and/or obtain acute priority CT, MRI (diffusion-perfusion), MRA, angiography, TCD
- Will be able to order intravenous thrombolytic or intra-arterial thrombolytic therapies for acute stroke according to pre-approved protocols
- Will be able to enroll patients into acute stroke drug trials according to protocols approved by the ethics committee
- Backup strokologist will be able to come to emergency department within 30 minutes to further enhance the management of acute stroke
- Average 1-3 thrombolytic therapies offered each week
- Fellows are usually on call for a week fellow will be responsible for emergency and in patient acute stroke/TIA management, will round with staff and/or independently including weekends. Fellows are encouraged to take lead in teaching medical students and residents especially during their call and in outpatient setting

# Acute stroke unit & inpatient follow-up:

- All acute strokes admitted to monitored beds at the acute stroke unit
- Currently two to four monitored beds available. The overflow is admitted to neuroscience intensive care unit
- Step-down unit is the general neurology ward
- Patients will be followed at these units
- Necessary investigations can be ordered with excellent turn-around time
- On site Physical therapy, Occupational therapy, Speech pathology

### **Specific Objectives:**

By the end fellowship training the fellows will be expected to have learned;

- Basic science knowledge about the cerebral hemodynamic.
- Integration of basic science into clinical application with timely evaluation of patients in the emergency department to institute rapid management decisions.

- Participation in the care of patients with cerebrovascular disorders in the stroke unit, neuro-intensive care unit (NICU) and emergency room, and stroke clinics.
- To be able to asses and manage patients with complex stroke syndromes and to be able to differentiate cerebrovascular from non cerebrovascular disorders in the outpatient and inpatient setting.
- To be able to answer follow up queries of patients/care givers' on the phone or in person in the stroke clinic. The fellows will be trained to the level to provide brief consultation to the referring physicians on the phone under the supervision of the stroke faculty.
- Will be able to run independent follow up stroke clinical research clinics.
- Technical / procedural skills and interpretation will be developed in carotid Doppler and transcranial Doppler ultrasound.
- Interpretation of cranial CT, CTA, perfusion/diffusion MRI and MRA.
- Through regular presentations in the stroke rounds the fellows will develop expertise in providing didactic teaching to students, residents and junior fellows.
- Will develop the art of participating in clinical research.

## COMMUNICATION/COLLABORATION RESPONSIBILITIES:

- Will communicate effectively with patients, families
- Will communicate effectively with other health professionals
- Documentation, clinical correspondence, email, etc. will be timely and accurate

### MANAGERIAL:

- Will use information technology effectively
- Allocation of finite healthcare resources will be used wisely
- Effective management of time
- Will apply quality improvement principles effectively

#### **HEALTH ADVOCATE:**

- Will be able to identify socio-economic determinants of health of patients and communities
- Will have understanding of when and how to advocate appropriately on behalf of patients and communities

#### **SCHOLAR/EDUCATIONAL:**

- Weekly stroke cases conference
- Weekly neuroscience lectures and conference
- Monthly journal club
- National / International stroke conference preference given to those with abstract submission
- Training in TCD (Trans Cranial Doppler)
- Will contribute to development of new knowledge
- Will help others learn

### **PROFESSIONAL:**

- Will demonstrate integrity, honesty, compassion and respect for diversity
- Will apply ethic principles appropriately
- Will seek and accept advice and demonstrate awareness of personal limitations
- Will be punctual and meet deadlines

#### RESEARCH OPPORTUNITIES:

- Epidemiologic
- Clinical
- Experimental animal models
- Fellows strongly supported in their research activities
- May be involved in carrying out thrombolytic treatment under the supervision of the stroke faculty in the CT ambulance via telestroke

# Housing:

- Modern high-rise apartments available within walking distance of the hospital.
- Windsor Park Plaza (two towers, total of 620 apartment units, with heated saltwater swimming pool, exercise and recreational rooms, Suite 100, 8210 111 street, Edmonton Alberta, Canada, T6G 2C7; Telephone: (780) 439-4957; Fax: (780) 439-0477) One bedroom apartment: rent \$1047-\$1200 (Can.) Two bedroom apartment: rent \$1355-1600 (Can.). Rent includes all expenses except telephone and cable. www.westcorp.net/p\_res\_windsor\_plaza/index.html
- University Plaza. 11103-84 Avenue.
  It basically has condos with open living concept. All are 2 bedroom and 2 bathroom. Rent varies from 1500-1750 per month. property.trovit.ca/for-rent-university-plaza-edmonton
- Rent may be less further away from the hospital (then you will need a car)
- The university and the hospital are located in a prime residential area
- Further information regarding accommodation can be obtained by visiting the following links:

http://www.su.ualberta.ca/su/businesses and services/inforeg/housing/hreglists http://www.uofaweb.ualberta.ca/uai\_current/offcampushousing.cfm

#### **ELIGIBILITY / CONTRACT:**

- Successful completion of Neurology or Internal medicine residency training from Canadian or USA medical schools.
- Foreign graduates with successful completion of neurology or internal medicine training are also eligible. All foreign candidates are required to fulfil English proficiency (IELTS academic version: minimum 7.0 in each component or TOEFL IBT academic version: minimum of 24 in each component). For candidates from the countries that have English as a first and native language, please refer to the

- list of countries at the website of College of Physicians & Surgeons of Alberta at <a href="http://www.cpsa.ab.ca/Services/Registration\_Department/IMGs.aspx">http://www.cpsa.ab.ca/Services/Registration\_Department/IMGs.aspx</a>
- Initially the contract will be offered for one year, which may be renewed for another calendar year. The fellows are entitled for 4 weeks annual leave. The annual leave should preferably be completed before the last month of training.
- You will be registered as a postgraduate medical trainee in the Faculty of Medicine and Dentistry and will be bound by the terms and conditions as outlined in the University Calendar <a href="http://registrar.ualberta.ca/calendar/">http://registrar.ualberta.ca/calendar/</a>

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Stroke Fellowship\2011 Description of the Stroke Program