Limb Lengthening and Reconstruction Fellowships

International Center for Limb Lengthening
The Limb Lengthening and Reconstruction Fellowship Program consists of two types of fellowships: clinical and research. Clinical fellows will acquire advanced experience to develop the knowledge, skills, and clinical judgment essential to the practice of limb lengthening and reconstruction. Research fellows will work on multiple research studies and submit several publications to peer-reviewed medical journals.

The International Center for Limb Lengthening is widely recognized for adult and pediatric limb reconstructive surgery and the treatment of a wide range of congenital, developmental, degenerative, and traumatic disorders of the upper and lower limbs. Our physicians and staff continue to innovate and transform the field of limb lengthening and deformity correction. Drs. Herzenberg and Standard were instrumental in the development of the Precice Intramedullary Limb LENGTHening System. Since 2011, the physicians and staff have created educational tools such as the Bone Ninja app, Multiplier app, The Art of Limb Alignment textbook, and The Art of Limb Alignment: Taylor Spatial Frame textbook, which are used at the annual Baltimore Limb Deformity Course (DeformityCourse.com). This international symposium has been held since 1990, and registration fees are waived for our clinical and research fellows. Fellows are also encouraged to participate in an international mission trip (details provided during orientation).

Clinical Fellowship Positions

Our physicians treat a wide range of clinical problems including limb length discrepancy (LLD), fracture malunions/nonunions, osteomyelitis, angular deformities, and congenital deficiencies. Each week, the physicians see over 50 new patients and 120 follow-up patients. Fellows will learn to determine current LLD, predict LLD at skeletal maturity, evaluate limb alignment, and analyze single and multiapical deformities. We offer three clinical positions: two focus on pediatric orthopedics and one focuses on adult orthopedics. The pediatric fellows will rotate with Drs. Herzenberg, Standard, and McClure for ten months and with Drs. Conway and Assayag for two months. The adult fellow will rotate with Drs. Conway and Assayag for eight months and Drs. Herzenberg, Standard, and McClure for four months. The salary is commensurate with Sinai Hospital’s PGY-7 scale.

At the end of the fellowship, the fellow should be able to competently perform limb lengthening and reconstruction surgical procedures and understand the technical aspects, indications, risks, results, prognosis, and limitations of these procedures. Per week, the physicians perform 25 to 30 surgical cases. Clinical fellows will apply external fixation and insert femoral and tibial intramedullary nails. They will also perform Gigli saw osteotomies, fixator-assisted nailing or plating, epiphysiodesis, hemiepiphysiodesis, and bone transport. Fellows will treat hypertrophic, atrophic, and infected nonunions and learn to resect necrotic bone to treat osteomyelitis. They will also correct foot deformities, including clubfoot.

Clinical fellows are required to collect data and produce at least one scientific paper that will be submitted to a peer-reviewed journal. They will attend orthopedic grand rounds, research meetings, and in-service training lectures. They will also help prepare for and attend weekly preoperative conferences.

NOTE: Because of the relatively new nature of the techniques and methodologies, ACGME has not published any guidelines for accreditation. Although this fellowship is not accredited by the ACGME, the program guidelines have been modeled after guidelines for similar programs.

Research Fellowship Positions (Unpaid)

Research fellows are required to design studies, collect data, and produce multiple scientific manuscripts for submission to peer-reviewed journals. A research manager and coordinator, manager of academics, medical editor, medical illustrator, graphic designer, and medical photographer will assist with the research process. Fellows will also attend research meetings, research in-service training lectures, and orthopedic grand rounds. Previous research experience is required. Research fellows have opportunities to observe in the clinic and operating room. Although the position is unpaid, a small stipend is available to help pay for attendance at national conferences.

For more information, contact the Fellowship Director:

John E. Herzenberg, MD, FRCSC
International Center for Limb Lengthening Rubin Institute for Advanced Orthopedics Sinai Hospital of Baltimore 2401 West Belvedere Avenue Baltimore, Maryland 21215 USA

E-mail: jherzenb@lifebridgehealth.org
Web Site: www.limblength.org/fellowships
Tel: 410.601.1724
Fax: 410.601.9576
Limb Lengthening and Reconstruction Fellowship Application

International Center for Limb Lengthening
Rubin Institute for Advanced Orthopedics
2401 West Belvedere Avenue, Baltimore, Maryland 21215 USA
Tel: 1.410.601.9798 Fax: 1.410.601.0585

Name: ____________________________________________

Present Home Address: ____________________________________________

Telephone (include country code): ____________________________

E-mail: __________________________________ Fax (if available): ____________

Medical School: ____________________________________________

Residencies/Fellowships: ____________________________________________

Current Position: ____________________________________________

Citizenship: □ U.S. □ Other (specify): __________________ VISA/Status: __________________

Position Desired: □ Clinical Fellow: Pediatric Focus (paid) □ Clinical Fellow: Adult Focus (paid) □ Research Fellow (unpaid)

Fellowship Start Date
The fellowship typically lasts 12 months and starts on August 1; however, fellows must be available in July for two days of mandatory orientation. Options exist to complete the orientation/training earlier if necessary.

Desired Length of Fellowship: □ 6 months □ 1 year □ 18 months □ 2 years

Preferred Dates of Fellowship: ____________________________________________

Please include the following with your completed application:¹

• Statement of Personal and Professional Goals
• Medical School Transcript (certified copy)
• Medical School Diploma
• Passport-Size Photo (1)
• Recommendation Letters (3) – must be on official stationary (no faxes will be accepted) and mailed to the address at the end of this application
• Curriculum Vitae (include current work status)
• Orthopedic Residency Certificate(s)
• USMLE Scores I & II or Canadian Equivalent (if applicable)²
• Copy of ECFMG Certification (if applicable)²
• Samples of research papers (2)³

¹Documents in languages other than English must include certified translations
²Item is required only for clinical fellowship applications
³Item is required only for research fellowship applications
Personal Information

1. Are you able to perform the essential functions of the position without reasonable accommodations (Americans with Disabilities Act)?
   - Yes  
   - No (please specify special accommodations that you require in the “Comments” section)

2. Have you ever been convicted of any criminal charges (other than minor traffic violations)?
   - Yes (please explain in the “Comments” section)  
   - No

3. Are you currently using illegal drugs?
   - Yes (please explain in the “Comments” section)  
   - No

4. Do you have any impairment due to current chemical dependency/substance abuse that would prevent you from carrying out the essential functions of this fellowship position?
   - Yes (please explain in the “Comments” section)  
   - No

5. How did you hear about this fellowship opportunity? (please check all that apply)
   - AAOS Annual Meeting
   - AAOS Postgraduate Orthopaedic Fellowships Listing
   - ASAMI Meeting
   - Baltimore Limb Deformity Course
   - EPOS Annual Meeting
   - IPOS Meeting
   - LLRS: ASAMI Annual Meeting
   - POSNA Annual Meeting
   - Colleague
   - Other: __________________________

Applicant’s Certification

I certify that all the information I have provided is complete and accurate. I understand that any appointment will be contingent on my providing the necessary employment eligibility documentation prior to the appointment.

____________________________________________________________________              ______________________________________
Comments (use additional pages if necessary):  _____________________________________________________________________________
___________________________________________________________________________________________________________________
___________________________________________________________________________________________________________________
___________________________________________________________________________________________________________________
___________________________________________________________________________________________________________________

Send completed application and supporting documents to:

Madeline Bacon, Manager of the Academic and Research Program
Rubin Institute for Advanced Orthopedics
Sinai Hospital of Baltimore
2401 West Belvedere Avenue
Baltimore, Maryland 21215 USA

For Office Use Only:

Complete Application Received: ___________________________    PAS #: ___________________________

Dates of Fellowship: ___________________________ to ___________________________

Status:  
  - Accept
  - Pending
  - Reject

Comments: ____________________________________________

________________________________________________________________________

10-19