

## ***Policies, Procedures and Guidelines of the Fellowship Training Programs of the International Society of Hair Restoration Surgery (ISHRS)***

### **Introduction & Goals of Training**

The goal of the Fellowship Training Program (FTP) is to assist the Fellow in developing the medical and surgical skills necessary to practice aesthetically sound, safe hair restoration surgery. The FTP does this by encouraging the Program Directors to offer a curriculum that is based on the ISHRS Core Curriculum and Core Competencies, and assure that they are committed educators. To ensure that all trainers do indeed provide such an educational environment, all programs must meet specific guidelines both in terms of the credentials of the Program Director and the Program's site. To ensure compliance with the guidelines, the ISHRS Fellowship Training Committee (FTC) will review programs both at application and during periodic site visits.

Furthermore, the Fellowship Training Program wants Fellows to become proficient in the core curriculum, core competencies and scientific skills necessary to develop study protocols to contribute sound research to the knowledge about hair loss and restoration, with the communication skills necessary to contribute to the body of hair restoration literature.

### **Programs**

Fellowships are to be 9 to 12 months in duration. As the primary purpose of the Program is to provide Fellows with an exceptional opportunity to acquire hair restoration surgery experience, there is a minimum caseload requirement of at least 70 cases per fellow. The sufficiency of these duration and caseload numbers are contingent upon the Program Director's opinion about the Fellow's proven competence and confidence in executing the skills necessary to be a hair restoration surgeon.

### **Directors**

The Director of an ISHRS Fellowship Training Program shall be: a licensed physician in the jurisdiction in which the Program is located, of high ethical and moral character, and a member in good standing of the ISHRS who has practiced hair restoration surgery for more than ten (10) years. The director should be academically oriented and committed to personally contributing to the professional education of the Fellow.

The Director should be proficient at hair restoration surgery, and be actively involved in 100 cases per year.

The Program Directors shall attend one continuing education meeting annually conducted by the Fellowship Training Committee (FTC) for the express purpose of improving their teaching skills.

### **Director Application Process**

Each Training Program Director Applicant must apply to the ISHRS for approval of his/her Program by submitting a Director Application Form along with the documents outlined within. The facilities, training program and Program Director will be evaluated. The application process must be completed within one year of receipt of the initial written application. The Applicant must be a member in good standing of the ISHRS who has practiced hair restoration surgery for more than ten (10) years. A credential verification must take place. If an independent credential verification service is used, e.g., the AMA Credentialing Service, the fees associated with that service are the responsibility of the Applicant.

The following are required of all Program Director applicants:

1. A completed application form with a nonrefundable US\$1,000 application fee.
2. Case log documenting a caseload of 100 cases per year. This log is intended to document that the practice is sufficient to expose the trainees to all aspects of hair restoration surgery.
  - The case log shall include:
    - Patient initials or ID number
    - Date of surgery
    - Type of procedure (e.g., transplant, scalp reduction, hair lift, etc.)
    - Size of procedure (e.g., if a transplant, the number of grafts)
    - Special notes (e.g., complications, pre op problems that add complexity)
3. Ten percent (10%) of the cases submitted must qualify as complex. These are the cases that have special notes as indicated in paragraph 2. Complex cases should include pre- and post-op photography, treatment plans, and operative and progress notes. They include those patients who require reconstruction due to injury or prior surgery, are high risk because of a medical condition, or required the management of a complication.
4. Proof of Basic Life Support (BLS) with External Defibrillator Certification.
5. Program Director applicant's Curriculum Vitae (CV).

6. Copies of medical school degree, residency and post-residency certificates, all current state medical licenses and specialty board certifications.

After review and approval of the Director's written application the final step in the approval process will be a site visit, or a video site visit by the ISHRS Fellowship Training Committee. The focus of the site visit will be:

1. Survey the facility to ensure there is adequate space and equipment.
2. Space allowed for the Fellow to office and study.
3. Available library and access to reference materials.
4. Compliance with Occupational Safety and Health Administration (OSHA) or non-U.S. equivalent, including manuals and compliance logs.
5. Emergency treatment and evacuation policies and procedures in place.
6. If a program has more than one site or facility, then all must meet the site standards. An additional fee may be charged for peripheral site visits, or random visits to multiple site programs.

The Fellowship Training Program Director may not identify the Program as an ISHRS Fellowship to trainees or potential trainees until after the approval by the ISHRS Fellowship Training Committee (FTC), and the Board of Governors of the ISHRS.

### **Co-Directors**

All Programs must have a designated training Director responsible for the Program and actively involved in the training of Fellows. Some may wish to designate Co-Directors to help with the teaching responsibilities. Co-Directors are encouraged to participate in the didactic components of the Fellowship Training Program, including lectures and discussion groups.

The Program Co-Directors shall attend one continuing education meeting annually conducted by the FTC for the express purpose of improving their teaching skills.

### **Program Changes**

Should either the Training Program or the Program Director have a change of status, the FTC will re-evaluate the Program. In the event of the death, transfer or disability of the Program Director, the FTC will re-evaluate the Program and make recommendations to the Board of Governors of the ISHRS as to the continuance of the Program under an interim Program Director.

If the Program relocates to a facility within the same city, where the patient base and referral patterns are the same, the Fellows may be permitted to continue their training at the new location pending FTC review and approval of the new location.

If a Program Director leaves the Program before completion of the Fellow trainee's training period, the program is no longer approved by the ISHRS. The ISHRS is aware that academics change positions occasionally. It is the responsibility of the Program Director to plan changes in position well in advance so as not to interrupt or preclude the Fellowship Training Program. Although the ISHRS and the FTC are sympathetic to the trainees desire to complete their education, it is neither the FTC's nor the ISHRS's responsibility to ensure the completion of the trainee's education. Transfer to another approved training program will be considered on an individual basis.

### **Re-Evaluation Process**

The purpose of site visits is to ensure that the standards outlined for the ISHRS Fellowship Programs are being met. It is the responsibility of the Fellowship Training Committee to ensure the Program Director is equipped and capable of providing the highest quality educational experience.

Each site will be reviewed once every ten years. Program Directors will be asked three (3) months in advance of the inspection to prepare specific documents for the surveyors. They will include in the least: current CV of the Directors and Co-Directors, teaching plans, and emergency preparedness policies.

The re-evaluation will be based on the aforementioned submissions and a video site visit. The video visit will require the same information be provided as with a live site visit.

### **Program Survey Process**

Program surveyors, be they primary applications or re-evaluation, are selected by the FTC and are members of the FTC or an ISHRS Board member who is a Fellowship Training Director. The surveyor must not practice in the same geographic area as the Program he/she is surveying.

The site will be reviewed based upon adherence to these guidelines, the ISHRS Core Curriculum for Hair Restoration Surgery, Core Competencies for Hair Restoration Surgery, and the Site Survey Organizer outlined in Appendix 3.

The FTC will review the completed Site Survey Organizer and make recommendations to the ISHRS Board of Governors. An approved Fellowship may be re-surveyed with or without notice at any time.

### **Appeals**

If a Program is found to be deficient during a primary or re-evaluation survey, the Program will be placed on probation and notified in writing of the deficiency and the length of time probation. The probationary periods will be of such a length of time as to reasonably enable the program to come into compliance relative to the deficiencies. The deficiencies must be corrected and documented as such to the satisfaction of the FTC. Additional site visits may be necessary to document the correction of deficiencies.

A Program may request one extension of its probationary period. The request must be in writing and will be considered and answered by the FTC within 15 days of receipt of the request. Extensions are at the discretion of the FTC only.

A program may appeal the probation decision to the ISHRS Board of Governors (BOG). Appeals must be made in writing, within 15 days of receiving the probation notice. Within 30 days of receiving the appeal, the BOG will hold a hearing to review the probation decision and its appeal. The decision of the BOG after the hearing of the appeal is final, and the Program must comply with the decision or lose its accreditation.

If a program's accreditation has been revoked, it must submit a new application form and go through the application process to become an accredited program.

### **Fees**

Each Fellowship Program will be assessed a one-time non-refundable US\$1,000 application fee. These fees are intended to cover the cost of an initial site survey, and the re-evaluation survey every ten years. There will be no additional fees unless a repeat survey is needed to reinstate a probationary program. Under those circumstances the Program on probation will reimburse the FTC the cost of the second survey.

It is anticipated that from time to time there will be grants provided to the ISHRS Fellowship Training Program by corporations or individuals interested in advancing the education process in hair restoration surgery. The Fellowship Training Committee may, depending upon the available funds designated for Fellowship Training, reduce or waive program renewal fees.

### **Reporting & Forms**

Each Fellowship Training Director will be required to submit a written status report annually to the FTC. The report shall include a list of individuals enrolled in the Program, a list of individuals who have completed the program in the given year,\* and any changes that have been made to the Program. These reports shall include changes in the curriculum, trainees, site locations, faculty, Co-Directors, or anything else that may impact upon the FTC's decision to re-evaluate the Program. This report will also include a list of the trainees who have successfully completed the program, and a letter recommending that ISHRS recognize their accomplishment.

\*Upon the recommendation of the Fellowship Training Program Director the Board of Governors will review and approve a certificate of completion to be issued to Fellows who have completed their programs.

The Survey Organizer will be provided by the FTC to every survey team and the Program Directors so they will have a clear understanding of what constitutes the current guidelines.

A Fellow Exit Interview will be provided to every Fellow upon completion of their program, asking them to review their experience and make recommendations for program improvement.

### **Fellowship Eligibility**

Ideally any physician accepted to an ISHRS Fellowship Training Program shall be licensed to practice medicine in the jurisdiction where the Program performs surgeries and have high moral and ethical standards. He or she shall be board certified or qualified to take a specialty board. It is understood that the international nature of the ISHRS, encourages physicians to request training in jurisdictions where they may not be eligible for licensure. These candidates must understand that although the didactic components of the program may be the same, it is impossible to provide the extensive "hands on" training opportunities needed to enable loosely supervised independent practice. These candidates may bring their Program Director to their jurisdiction to demonstrate their acquisition of competency in hair restoration procedures. It is the responsibility of the program director to understand and follow local laws regarding delegation of procedures to fellows who cannot obtain local licensure.

In Programs outside the United States, the trainees must meet the licensing and board certification requirements of their country. No credit will be given for training received prior to the trainee entering the Fellowship Program nor will any part of the Fellowship Training be applied to residency training. All trainee candidates must have passed and

received a certificate from an Advanced Cardiac Life Support course. Additional criteria for Fellow eligibility may be added by the Program Director.

### **Education of the Trainee**

Formal training in surgical anatomy, physiology and pathophysiology of hair loss in males and females, and surgical techniques shall be sufficient so that each trainee upon completion of the Program is comfortable and competent to make a proper diagnosis, and design and execute a treatment plan for patients with the most complex and difficult hair loss problems. It is the intent of the FTC that there is a two-on-one relationship between the Fellow and the Director/Co-Director Faculty. The trainee to faculty ratio should not exceed 2:1.

Each trainee must assist as the first assistant surgeon in at least 70 cases over a minimum of 9 months, participating in the evaluation and treatment planning of the majority of these cases. The trainees will keep a surgery log of their cases to include:

1. Patient initial or ID number
2. Procedure performed
3. The component of the procedure performed by the trainee
4. Date of surgery
5. The Program Director or Co-Director who participated in the case

The trainee must participate in one research project relating to hair loss, hair restoration; or submit two articles for presentation at an ISHRS meeting or publication in a recognized peer-reviewed medical journal.

It is strongly recommended that the Fellow attend, at their expense, an ISHRS World Congress, an ISHRS Advanced Review Course, and/or an ISHRS Live Surgery Workshop, Regional Meetings/Workshops associated with the ISHRS or members of the Global Council of Hair Restoration Surgery Societies. The ISHRS will provide access to the online Basics Lecture Series to the trainee at no cost as supplemental education.

If there is approval by the Directors involved, interest by the Fellow, and there is time to do so, it should be encouraged to spend time with one or more ISHRS Fellowship Training Programs and/or another ISHRS physician who can offer the Fellow additional training. The Fellow is responsible for any additional travel expenses for this opportunity.

The core curriculum of each Program shall include the topics outlined in Appendix 1. The recommended minimal bibliography for each Program is included in Appendix 2. The Core Competencies should be included with the goals of training as outlined in Appendix 3.

### **ISHRS Recognition of a Trainee's Program Completion**

Upon receipt of the Program Director's letter of recommendation certifying a trainee's successful completion of their program, and the Fellow has documented attendance of one ISHRS conference, then the ISHRS will issue to the Fellow a certificate commending the Fellow's successful completion of an approved ISHRS Fellowship Training Program.

Program directors may retroactively include training for a fellow who began prior to the new program's approval as long as this retroactive period does not exceed a period of 6 months before the FTC is in receipt of a completed application.

### **Preceptorships**

Preceptorships are not considered part of the ISHRS Fellowship Training Program.

### **Fellowship Training Committee**

The FTC shall evaluate all training Programs. It is their responsibility to ensure that the highest quality of educational opportunities are offered in the Programs approved by the ISHRS. It is their responsibility to deny applications that come to the ISHRS for unworthy or inappropriate Programs.

The FTC will conduct annually a continuing education meeting for Program Directors and Co-Directors specifically designed to improve their teaching skills.

Appendix 1: Core Curriculum in Hair Restoration Surgery

Appendix 2: Recommended Bibliography

Appendix 3: Core Competencies for Hair Restoration Surgeons

*Approved by BOG 3-06-07, revised and BOG approved 7/22/09, revised and BOG approved 11/13/19*

## ***Appendix 1: Core Curriculum of Hair Restoration Surgery***

Refer to latest revision.

Note: Originally published in *Dermatologic Surgery*, January 2006 issue.

## **Appendix 2: Recommended Bibliography**

### **Textbooks to read:**

1. Hair Transplant 360. Volumes 1, 3 and 4. Editor: Lam S. Publisher: Jaypee Brothers
2. Hair Transplantation. 6<sup>th</sup> Edition (2019). Editors: Unger R and Shapiro R. Publisher: Thieme Georg Verlag
3. Cicatricial Alopecia: an approach to diagnosis and management. Editors: Price V, Mirmirani P. Publisher: Springer (2011)
4. Hair and Scalp Disorders (second Edition 2018) McMichael A, Hordinsky M. CRC Press
5. Dawber's Textbook on Hair and Scalp Disorder (wait for the new Edition; expected to come out on 2020 or 2021. Editors: Messenger A, and Paus R.)
6. Practical Aspect of Hair Restoration Surgery in Asians: Pathomvanich, Imagawa by Springer 2018
7. The Alopecias Diagnosis and Treatments: by Pierre Bouhanna, Eric Bouhanna by CRC press 2015
8. Aesthetic Series: Hair Transplantation by Nicole Rogers, Marc Avram by Jaypee Brothers Medical Publishers 2016

### **Classic and Selected Articles to read (This is a partial list only):**

1. Abaci HE, Coffman A, Doucet Y, Chen J, Jacków J, Wang E, Guo Z, Shin JU, Jahoda CA, Christiano AM. Tissue engineering of human hair follicles using a biomimetic developmental approach. *Nat Commun.* 2018; 9 (1):5301
2. Cooley JE. Bio-enhanced hair restoration. *Hair Trasplant Forum* 2014; 24 (4): 121.
3. Epstein J. Facial hair restoration: hair transplantation to eyebrows, beard, sideburns, and eyelashes. *Facial Plast Surg Clin North Am* 2013; 21: 457-67.
4. Harris JA. New methodology and instrumentation for follicular unit extraction: lower follicle transection rates and expanded patient candidacy. *Dermatol Surg* 2006; 32: 56.
5. Headington JT. Transverse microscopy anatomy of the human scalp. *Arch Dermatol* 1984; 120: 449.
6. Jimenez F, Ruifernandez JM. Distribution of human hair follicles in follicular units. *Dermatol Surg* 1999; 25: 294-8
7. Jimenez F, Izeta A, Poblet E. Morphometric analysis of the human scalp hair follicles: practical implications for the hair transplant surgeon and hair regeneration studies. *Dermatol Surg* 2011; 37: 58-64.
8. Jimenez F and Shiell R. The Okuda Papers. *Exp Dermatol* 2015; 24: 185-6.
9. Josephitis D, Shapiro R. FUT versus FUE graft survival: a side by side study of 3 patients undergoing a routine 2000+ graft hair transplantation. *Hair Transplant Forum* 2018; 28(5): 179-82.
10. Keene SA, Rassman WR, Harris JA. Determining safe excision limits in FUE: factors that affect and a simple way to maintain aesthetic donor density. *Hair Transplant Forum* 2018; 28 (1).
11. Limmer BL. Micrograft survival. In: hair replacement: surgical and medical. Stough DB and Haber RS. Mosby, St Louis. 1996; 147-50.
12. Lorenzo J, Devroye JM, True R, Cole JP. Standardization of the terminology used in FUE: Part III. *Hair Transplant Forum* 2014; 24: 93-4.
13. Orentreich N. Autografts in alopecias and other selected dermatological conditions. *Ann NY Acad Sci* 1959; 83; 463-79.
14. Parsley WM, Perez Meza D. Review of factors affecting the growth and survival of follicular grafts. *J Cut Aesthetic Surg* 2010; 3: 69-75.
15. Pitchon M. Preview long hair follicular unit transplantation: an immediate temporary vision of the best possible final result. *Hair Transplant Forum* 2006; 16(4): 113.
16. Rassman WR, Pak JP, et al. Scalp micropigmentation: a concealer for hair and scalp deformities. *J Clin Aesthetic Dermatol* 2015; 8: 35-42
17. Rassman W, Pak J. Follicular Unit Extraction: evolution of a technology. *J Transplant Technol Res* 2016

18. Rassman W, Bernstein R et al. Follicular Unit Extraction: minimally invasive surgery for hair transplantation. *Dermatol Surg* 2002; 28: 720-8.
19. Rompolas P, Greco V. Stem cell dynamics in the hair follicle niche. *Semin Cell Dev Biol* 2014; 25-26: 34-42
20. True RH. Graft quality index: a morphologic classification of follicular unit excision (FUE) grafts. *Hair Transplant Forum* 2018; 28 (2): 45
21. Vogel J, et al. Hair Restoration Surgery: The state of the art. *Aesthe Surg Journal* 2013; 33: 128-51

**Journals:**

Dermatologic Surgery

Hair Forum International

Plastic and Reconstructive Journal

### **Appendix 3: Core Competencies for Hair Restoration Surgery (Rev. March 2009)**

- (1) Counsel and advise patients on the risks and benefits of hair restoration surgery. Address the patient's specific general medical and psychological condition, including consideration of the patient's age, sex, physical examination, and family history of hair loss.
- (2) Identify, advise, and manage patients whose hair loss is not androgenetic in etiology.
- (3) Design integrated medical and surgical treatment plans, including hairlines and crowns, for patients between the ages of 16 and 65 who have Norwood-Hamilton patterns II through VII and Ludwig patterns I, II, and III.
- (4) Set up a hair transplant operating room that will provide a safe environment for patients and staff, including, but not limited to, sterile techniques, proper management of biohazardous materials, and ergonomically sound work stations.
- (5) Harvest hair bearing donor scalp using techniques that minimize follicular damage and maximize donor scar cosmesis.
- (6) Prepare follicular unit grafts from donor tissue with minimal follicle transection. Demonstrate techniques to maximize graft survival between preparation and implantation.
- (7) Prepare appropriate sized recipient sites for hair grafts with proper attention to exit angle, hair direction, depth of incision, and spacing, so as to attain a natural appearance and optimize hair growth.
- (8) Place follicular unit grafts into appropriately sized recipient sites with minimal physiologic and physical follicular trauma.
- (9) Calculate and administer an appropriate dose of medication for sedation and local anesthesia for hair replacement surgery, including the use of tumescent solution and high dose epinephrine solution.
- (10) Recognize and demonstrate appropriate modifications to transplant design and treatment plan for patients who have had prior scalp surgery and identify the appropriate time to integrate scalp extension or expansion into a patient's treatment plan.
- (11) Demonstrate the proper use of basic life support equipment, including automatic external defibrillators and adjunctive equipment to airway management.
- (12) Manage complications of hair restoration surgery, including syncope, postoperative infections, hemorrhage and hematomas, postoperative pain syndromes, wide donor scars, and suboptimal results.
- (13) Use the basic principles of adult education in the demonstration format to train nurses, medical assistants, and surgical technicians to become hair transplant technicians competent in slivering, cutting, and placing follicular unit and multiunit grafts.

Note: Originally published in *Dermatologic Surgery*, March 2009 issue.