Hair's the Question*

Sara Wasserbauer, MD, FISHRS *Walnut Creek, California, USA* drwasserbauer@californiahairsurgeon.com

*The questions presented by the author are not taken from the ABHRS item pool and accordingly will not be found on the ABHRS Certifying Examination.

Like it or not, our specialty experiences cycles of patient interest. Over the past few years, beard and body hair transplantation has been one of these topics. Have you been able to answer all of your patient's questions? Test yourself and increase your knowledge of this interesting subject in the process!

Beard Hair Transplantation

1–4: Match the average number of grafts needed to fill in the appropriate facial hair area:

1. Cheek (one side)
2. Goatee
3. Sideburns
4. Moustache

A. 350-500 grafts
B. 600-700 grafts
C. 200-250 grafts
D. 150 grafts

5. What is the average density of beard hair?
   A. 30 FU/cm^2
   B. 60-70 FU/cm^2
   C. 110 FU/cm^2
   D. 10 FU/cm^2

6. What is the densest part of the beard area?
   A. Under chin
   B. Philtrum (look it up in your old anatomy book if you don't recall the term…)
   C. Cheeks
   D. Sideburns

7. Beard hairs generally
   A. are thicker than scalp hair.
   B. are thinner than scalp hair.
   C. have more hairs per FU than scalp hair.
   D. have a longer anagen phase than scalp hair.

8. How long is the anagen phase for beard hair?
   A. 2-10 years
   B. 1 year
   C. Less than 1 month
   D. 4-14 weeks

9. What is one of the major challenges of transplanting facial hair?
   A. Finding suitable donor hair
   B. High skin laxity/elasticity
   C. Low skin laxity/elasticity
   D. Post-operative drooling

10. What post-operative warnings should patients be given when considering this type of surgery?
    A. Finasteride MUST be taken to ensure adequate growth.
    B. Patients cannot chew anything for 1 week post-operatively.
    C. Transplanted hair might thin over time.
    D. Only one surgery can typically be done due to increased scarring and low vascularity in these areas.

11. Which of the following might be a useful technique to employ during a beard restoration surgery?
    A. Deep tumescence
    B. Traction
    C. Sagittal incisions
    D. Minimal anesthesia

12. Which of the following is a special consideration for transplanting facial hair?
    A. As with a typical hairline, single-hair FUs should be used to feather in the edges of facial hair.
    B. All grafts should be single-hair FUs if using scalp hair to restore facial hair.
    C. Scars (including healed skin grafts) in this area are NOT transplantable due to the lack of adequate blood supply.
    D. This surgery moves quickly and thus two surgeries per day should be scheduled to maximize staff time.

⇨ *Answers on page 158*

Hair's the Question *from page 157*

Answers

1. **B**
2. **B**
3. **C**
4. **A**
5. **A**
6. **B.** Did you have to look up "philtrum?" If you didn't, give yourself an extra point! B is true. Generally speaking, the midline areas (chin, neck, etc.) are all the highest density areas of facial hair—about 10 FU/cm2 more than the others (so about 40 FU/cm^2).
7. **A.** Beard hairs are generally single and double FUs so answer C is incorrect. Thus, if you need to use scalp hair (thinner) to restore a beard or moustache (thicker), consider using grafts with 2 or more hairs per FU to mimick the higher caliber of the recipient zone hairs (but not because that is the number of hairs per FU that are typically in this area—get it?). Scalp hair tends to have the longest anagen phase of any hair on the body (2-10 years), so D is incorrect.
8. **D.** Re-growth typically occurs in the 14-32 week time frame. Answer A is the anagen phase for scalp hair.
9. **B.** Personally, I like answer D. But while post-op drooling CAN occur, answer B is actually correct! This area can be very elastic and may alter the angulation so coronal sites should be considered. Donor hair can be obtained from the scalp or from other facial areas so finding donor grafts is not typically a problem.
10. **C.** This is true according to Dr. Aman Dua (see references). Facial hair is one of those areas where DHT actually stimulates (rather than retards) growth, but the effect of finasteride in this area is unclear, so no suggestions can definitively be made as to its use. There are no eating restrictions post-op (although I might be tempted to use this as an opportunity to get a patient to quit smoking!). These areas are extremely vascular so consider using very superficial tumescence and realize that additional surgeries may be desired for increased density.
11. **B.** Not only is this the correct answer, it is absolutely necessary due to the high elasticity/laxity of the skin in this area. Consider having staff provide tension and using very superficial tumescence while the surgeon makes the sites. Coronal incisions may help maintain angulation and direction of the sites. Ask any guy and they will tell you that this area is extremely sensitive, so please use adequate anesthesia! A block of the 5th cranial nerve might be useful if you know how to do it (and if not—learn!).
12. **A.** Scars CAN be transplanted! Check blood supply with a needle stick (20G) and look for blood return (less than 5 seconds is optimal in my practice). If you are concerned, try a lower density first and plan a follow-up surgery for density. Beard transplant surgery is more involved for many reasons, so don't expect it to take less time just because of the smaller numbers of grafts.

Bibliography

- Dua, A. Presentation entitled "Beard and Body Hair Transplant" at Annual Conference of Association of Cutaneous Surgeons. April 2015.
- Epstein, J. Facial hair restoration: hair transplantation to eyebrows, beard, sideburns, and eyelashes. *Facial Plast Surg Clin North Am.* 2013(Aug); 21(3):457-467.
- Gandelman, M., and J.S. Epstein. Hair transplantation to the eyebrow, eyelashes, and other parts of the body. *Facial Plast Surg Clin North Am.* 2004(May); 12(2):253-261.
- Hair Transplantation, 5th ed. W.P. Unger and R. Shapiro, Eds. pp 299-303.◆

Call for Cases: Live Patient Viewing and M&M

Consider submitting cases for either (or both) the Live Patient Viewing Session and M&M Conference at the ISHRS Annual Scientific Meeting in Chicago this September.

Please note that usual disclosures of conflict of interest and ACCME guidelines apply to both of these programs, as they are sanctioned for CME.

Live Patient Viewing Chair: Márcio Crisóstomo, MD

If you are not familiar with the format, physicians bring a patient with a completed result for the attendees of the meeting to see, touch, inquire, etc. The doctor displays a poster that outlines the details of the case. The session will take place on Saturday/September 12, 2015, and is an excellent opportunity for you to show off your work!

The ISHRS does not reimburse physicians for the expenses involved in bringing patients to this event. It is seen as a privilege to serve as faculty for this event and present your patients' surgical results to your colleagues.

If you have a patient in mind, please talk with him or her as soon as possible.

We are looking to showcase interesting and unusual cases.

If you would like to participate in the Live Patient Viewing session, please e-mail Dr. Crisostomo at marcio@implantecapilar.med.br.

M&M Conference Chair: Marco Barusco, MD

The M&M Conference is an opportunity to learn about the unexpected complications that have been encountered in the practice of hair restoration.

We are usually happy to share the stories and photos of great patient outcomes. The M&M Conference is a chance to share and learn from our colleagues when patient care doesn't go the way we hoped it would. Information presented at the M&M Conference is protected and held in confidence.

We would like to formally invite you to participate by presenting your own case during the M&M Conference. This is a ticketed event that will occur on the evening of Friday/September 11, 2015, and the cost of the ticket will cover the cost of dinner. However, faculty of the course will be offered complimentary registration.

If you would like to submit a case for presentation, please contact Dr. Barusco at drbarusco@tempushair.com.

How I Do It

Timothy Carman, MD, FISHRS *La Jolla, California, USA* tcarmanmd@mac.com

FUE has certainly gained popularity as a method of obtaining grafts from the donor area as an alternative to grafts created from harvested strip tissue. Dr. El-Maghraby of Cairo, Egypt, shares with us his discovery of a lightweight disposable motorized FUE tool as an alternative to others commercially available.

Sharing our ideas with one another makes us clinically stronger as a collective group in the ISHRS. Please feel free to email me your ideas at tcarmanmd@mac.com for consideration for publication in our journal.

New Disposable Cordless FUE Motor

Shady El-Maghraby, MB BCh, MSc Derm *Cairo, Egypt* shady@maghraby.net

More physicians today perform follicular unit extraction (FUE). This procedure still remains difficult in that involves more focus and dedication on the part of the team and the physician. There are three ways to perform FUE, namely manual FUE; motorized FUE; and robotic FUE (ARTAS®).

Currently in my practice, I employ the use of a motorized unit, which, to me, is more effective and much faster in producing grafts. However, in my experience, the drawback to using the motorized unit is the subsequent development of hand fatigue from the heavy hand piece after frequent long FUE sessions. To address this problem, I present the use of a lighter, disposable, cordless FUE handheld unit (Figure 1).

Figure 1. The disposable FUE machine

This is an inexpensive device, which costs around $10(US), so it can be seen as disposable after each patient use. This unit will be very useful, most of all, in countries that follow strict guidelines on the clinic sterilization process, giving preference to the use of disposable instruments, as in the UK. In addition, it is a "good backup" FUE unit. It's also useful when doing FUE involving patients with HIV, HBV, or any other blood borne infection, wherein the physician prefers to use a complete disposable kit.

Since it's small in size and cordless, two physicians can do the scoring from the scalp simultaneously to save time. In addition, one physician can score from the scalp and the other can score from the beard or from the body hair donor sites (Figure 2).

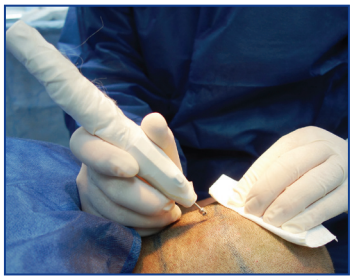


Figure 2. Small, handy, and simple device

How It Works

This disposable FUE device works only with sharp punches. It rotates in moderate speed (1,500 RPM), which is enough to score grafts from almost all the scalp type situations, and also from soft skin when extracting beard hair (see the video link at the end of the article) (Figures 3 and 4).

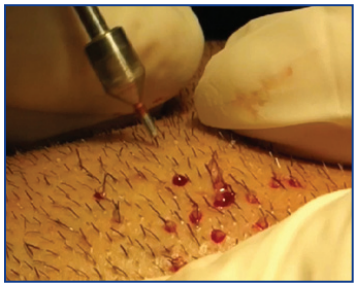


Figure 3. Scoring from the beard hair

Figure 4. Extracted curly African hair

The device is lightweight (74 grams with the batteries inside and 45 grams without the batteries). It's also small in size (16.5cm in length and 8cm in circumference). The batteries work well for 3 or 4 sessions (averaging 3 hours each).

This device is different than the other FUE motor devices in that it is

- disposable (can be replaced for each patient),
- inexpensive (around $10),
- the lightest in weight when compared to other cordless devices,
- always cool (never gets hot or even warm, even after 4 hours of extraction),
- completely cordless (operated by 2 AA batteries),
- handy, simple, and easy to operate,
- not bulky as with most of the cordless devices,
- easily adaptable to the punches (no need to use adaptors or connectors),
- saves the time and effort involved in cleaning and covering the whole FUE system, or autoclaving parts as in other non-disposable units, and
- designed for single use, so no maintenance is needed.

Please see our video at: http://tinyurl.com/disposable-fue.

Editor's acknowledgement: In reference to his article, "Designing the Hairline: The Role of the Thumb" (How I Do It. *Hair Transplant Forum Int'l.* 2015; 25(2):64), Dr. Muhammad Ahmad would like to acknowledge that this technique was initially created and shown to him by Dr. M. Humayun Mohmand, MBBS, ABHRS, FISHRS of Pakistan in his training association with him. Dr. Mohmand further informed me that he has used his technique for over 14 years, demonstrating it formally during the Orlando Live surgery workshop in 2006. Thank you to both physicians for this clarification and contribution to our journal.◆

HypoThermosol®

THE OPTIMIZED GRAFT STORAGE SOLUTION TRUSTED BY LEADING HAIR RESTORATION PROFESSIONALS WORLDWIDE

Join the growing list of hair restoration professionals that trust *ex vivo* graft storage to HypoThermosol.®

BioLife Solutions®

BIOPRESERVATION TOOLS FOR CELLS, TISSUES, AND ORGANS

866.424.6543 | www.biolifesolutions.com

info@biolifesolutions.com

ISHRS Members Urged to Join the AMA

On behalf of the ISHRS Board of Governors, I urge you to consider joining the American Medical Association (AMA). I will explain.

The AMA is the most influential medical organization in the world, and when it speaks all the State Medical Boards listen.

In 2006, the ISHRS became a member of the American Medical Association's Specialty and Service Society (SSS), which is a caucus of the AMA's House of Delegates (HOD). In 2009, the ISHRS was given a seat in the AMA HOD, which is the world largest representative democratic organization with 647 voting members.

The ISHRS's participation in the AMA HOD speaks to our physician peers that our specialty has arrived, and provides our members the opportunity to have a voice in developing the medical profession's position on important policy issues such as the definitions of our scope of practice, marketing professional ethics, and physician and patient responsibilities within the Doctor-Patient relationship.

In order to retain our voice in the House of Delegates, at least 100 of our U.S. members must join the AMA. If you are an AMA member, please renew your membership. If given the option, please indicate your specialty or society affiliation (ISHRS). If you have not joined, then I urge you to do so, to help the ISHRS continue to represent your best interests in the House of Medicine.

Your prompt action is appreciated: https://commerce.ama-assn.org/membership/

Sincerely,

Carlos J. Puig, DO

ISHRS Delegate to the AMA House of Delegates

Past President, ISHRS (International Society of Hair Restoration Surgery)

Your AMA membership includes:	**How this benefits you:**
The JAMA Network (with free *JAMA* print subscription, savings on 9 specialty journals print subscriptions)	AMA members receive full access to The JAMA Network online, plus the new JAMA Network Reader—a new web app designed to work on any tablet or smartphone. The JAMA Network brings together JAMA and 9 specialty journals to offer fully integrated access to the research, reviews, and perspectives shaping the future of medicine **(valued at more than $250).**
Expert support through CPT® Network	• Free Knowledge Base access to more than 5,000 commonly asked coding questions and answers **($250 value).** • Six complimentary coding inquiries to help you understand and properly use CPT codes and conventions. • Plus, download free CPT® E/M Quick Reference App at the AMA iTunes store.
AMA model physician employment agreements	The AMA offers members detailed Hospital and Group Model Employment Agreements to walk you through negotiating a contract(s) before entering a group or hospital setting **(valued at $149 each)**.
AMA Physician Profiles sent free upon request	As a member, obtain unlimited complimentary profiles for licensing boards for licensure application/reapplication **($37 value per profile).**
New payment model resources	Learn how to evaluate your options and negotiate new payment and delivery models with AMA resources, including webinars, live sessions and presentations.
Help shape AMA policy	Through online forums or live meetings, members weigh in on key issues facing medicine.
A nationwide network of colleagues	Participate in member groups and sections including the Organized Medical Staff Section, Minority Affairs Section and Women Physicians Section.
AMA Insurance savings	Save up to **40%** on AMA Insurance products and financial services designed exclusively for physicians.
Member Value Program	Member savings available in AMA's Member Value Program from Mercedes-Benz, Hyatt, UPS®, Wells Fargo®, Henry Schein®, Reputation.com™, HP®, Hertz® and other providers.
AMPAC Political Education programs	AMA members are eligible to apply for and attend AMPAC's Campaign School and Candidate Workshop with their registration and accommodation expenses covered by AMPAC (AMA's Political Action Committee). These programs have trained physicians to be effective advocates for almost 30 years; graduates have been elected to public offices across the country, including the U.S. Congress **(Valued at more than $1,000)**.
AMA Store savings	Save up to **25%** at the AMA Store on the books you need (many available in **e-book** format).

ISHRS Best Practices Survey Project
MODULE: Who Does What
SUMMARY ANALYSIS

Introduction

The International Society of Hair Restoration Surgery (ISHRS) has an ongoing project to define current and best practices in hair restoration surgery (HRS). This project is looking at all aspects of the HRS practice including diagnostic skills, patient education and consultation routines, surgical procedure routines, personnel utilization, and management of quality assurance and risk management. The aspects have been categorized into 14 modules. The goal of the project is to identify important learning objectives for the ISHRS's continuing education programs by looking for the gap between "best practices" for the specialty, as identified by a core faculty of 58 experienced HRS surgeons, compared with the "current practices," as defined by surveying the general membership of 600+ physicians.

The project is managed by the ISHRS's Continuing Medical Education Committee, Subcommittee Expert Panel, who is made up of senior surgeons and educators, whose charge is to survey the membership to determine current practice, and search the literature and opinions of experiences physicians to set the best practices.

The ISHRS CME Committee has elected to define many best practices by identifying the critical-to-quality steps or tasks within the process that are essential to achieving excellence in patient outcomes. For example, creating recipient sites is considered a critical-to-quality task that should be performed by the physician because it strongly impacts the aesthetic result of the surgery and can influence graft survival. Aesthetically, recipient site creation determines the exit angle and direction of hair growth, and spacing is important for creating natural looking transitional densities; these are all considered in the context of the patient's current age and potential future hair loss. Graft survival can be adversely affected by spacing the grafts too close together, which compromises the blood supply to regions of the recipient area. This, in turn, can create sites that are too small for the diameter of hair or size of the grafts, making them more difficult to place, and causing transfer injury.

Similarly, donor harvesting, be it follicular unit extraction or strip harvesting, is considered by the ISHRS CME Committee to be a critical-to-quality, physician-specific task. It is essential to properly select donor sites that will not be compromised by future hair loss, harvest them with minimal injury to surrounding tissue, leave behind minimal scarring, and not over-harvest the donor so that the posterior scalp has a see-through hair density.

This paper summarizes the module "Who Does What?" in the hair transplant surgery procedure. The CME Committee's opinion will be described as well, in order to allow program directors and faculty to align their core curricula with the educational needs of physicians practicing hair restoration surgery.

Methods

Physician members of the ISHRS were contacted by email during May-June 2010 and asked to participate in an online survey. The survey included 18 multiple-choice questions reflecting demographics, personnel roles in various aspects of hair restoration surgery, practices related to follicular unit extraction (FUE), jurisdiction limitations regarding roles of various personnel, and one open-ended section for comments. See Appendix for survey items. Participation was voluntary. Data from the surveys were compiled, summarized in tables, and analyzed using chi-square tests at alpha=0.05. (Note: Response options for many of the questions included "Always," "Most of the time," "Sometimes," or "Never." Because sample sizes for some of these categories were too small to enable proper analysis, they were combined into groups representing "Always/Most of the time" and "Sometimes/Never.")

Results

Demographics

The survey was completed by 258 of 613 physicians, nearly 33% of the ISHRS membership. Of the expert group (n=58), 82.4% have been practicing HRS 16 years or more, and 22.8% have been practicing HRS for 31 years or more. Of the general group (n=200), 27% have been practicing HRS for more than 16 years. In the expert group, 73.2% stated that more than 75% of their practice was focused in HRS, in the general group only 53.3% spent more than 75% of their practice in HRS. Please see the attached Excel spreadsheet.

Statistically speaking, the samples do have significant differences with a chi-square test of sample proportions at the 95% confidence level. We suspect this is because the U.S. is under represented (by 7%) and Mexico and Asia are both over represented (by 4%).

With that said, this is a fairly representative sample (non-statistically speaking). There is representation of all countries and none of the differences in proportions are larger than 10%. You could probably adjust for this with weighting if you were really concerned about it—but small sample (those under 10) might need to be regrouped into the other category to really accommodate for them in weighting.

Practice Roles or Procedural Task Assignments

This survey was designed to specifically identify the tasks performed by different personnel in the hair transplant surgery procedure and compare differences in task assignments between experts and the general membership. Unless otherwise indicated, there were no statistically significant differences between the two groups.

Graft Dissection

As would be expected, the task of graft dissection was rarely performed by the physician, with 5.1% versus 24.6% indicating "Always" or "Most of the time" for the expert versus general physician groups, respectively. This difference was significant at $p<0.01$. The reason the general physicians more often perform

the surgery compared to experts may be due to either having a less mature practice or a practice not primarily devoted to HRS, thereby resulting in fewer medical assistants available to perform graft dissection in order to meet graft yields. For the other personnel categories, there were no significant differences between the expert and general groups: 60.2% "Always" or "Most of the time" used physician assistants (PAs) or nurse practitioners (NPs) for graft dissection; 73.7% "Always" or "Most of the time" used registered nurses (RNs) or licensed practical nurses (LPNs) for graft dissection; 82.1% "Always" or "Most of the time" used licensed medical assistants for graft dissection; and 72.9% "Always" or "Most of the time" used non-licensed medical assistants for graft dissection.

Making Recipient Sites

Making recipient sites was another task where the findings were as anticipated, and there were no significant differences between the two physician groups. Of the expert physician group, 96.3% create their own recipient sites "Always" or "Most of the time," compared to 97.3% of the general group. The ISHRS CME Committee's position is that recipient site creation is a physician task, critical-to-quality, for aesthetically optimized outcomes. Recipient site creation has many important and independent variables to be delegated such as exit angle, hair direction, depth, transitional spacing, blood supply, and ischemia.

Implanting Grafts

As would be expected, implanting grafts is mostly a medical assistant task, with 80.6% of experts delegating the task to this group "Always" or "Most of the time" versus 62.7% of the general physicians. A statistically significant difference was observed between the percentage of physicians implanting the grafts themselves, with 32.6% of the expert physicians group and 57.1% of the general physicians group, respectively, implanting grafts ($p<0.01$). Once again, this may reflect a younger growing practice. Along the same lines, only 9.3% of the expert physicians utilize traveling technicians, and 15.3% of the general physicians utilize traveling technicians.

Donor Harvesting

Similar percentages of physicians harvest their own donor strips "Always" or "Most of the time" (98.2% and 98.9% for expert and general groups, respectively), with a small percentage occasionally delegating the task to a PA or NP. The ISHRS CME Committee's Force's position on this issue it that this is a critical-to-quality step that should always be performed by the physician and never delegated to other personnel.

Follicular Unit Extraction

There was essentially no difference between the expert and general groups in the incidence of incorporating FUE into their practices. As a whole, about 11% devote more than 50% of their practices to FUE.

Excise Donor Tissue via Manual FUE Method: There was no significant difference between the two groups with regard to delegation of task for excising the donor tissue via the manual FUE method. Approximately 76% overall have the physician perform this task "Always" or "Most of the time." The vast majority, 87.4-93.5% "Sometimes" or "Never" delegate this task to other personnel. It is the ISHRS CME Committee's position that FUE donor harvesting is a critical-to-quality procedural step that should be performed by the physician and never delegated to other personnel.

Excise Donor Tissue via Motorized FUE Method: In motorized FUE procedure, 98.6% "Sometimes" or "Never" delegate this task to other personnel.; 48.9% of physicians "Always" or "Most of the time" perform this task; and 51.1% "Sometimes" or "Never" perform this task. This tells us the motorized FUE method is not mainstream and not incorporated into all practices.

As with recipient site creation, this is a task that has many important and independently operating variables that make the task difficult: accuracy of harvest angle changes often and quickly, and over-harvesting an area or tight spacing can compromise blood supply, future harvesting, and the ability of the patient to cover the harvested zone. It is the ISHRS CME Committee's position that FUE donor harvest by motorized method should only be performed by physicians, or appropriately licensed physician extenders.

Excise Donor Tissue via Motorized with Suction FUE Method: There was no significant difference between the two groups with regard to the percentage of physicians utilizing the motorized with suction FUE method. Ninety-four percent to 100% of the expert group do not have their personnel excise donor tissue via motorized with suction FUE method. Seventeen percent of expert physicians perform this task "Always" or "Most of the time," compared to 22.6% of the general physician group. Eighty-three percent "Sometimes" or "Never" perform this task, which we interpret that they do not do this technique. It is the ISHRS CME Committee's position that FUE donor harvest by motorized with suction method should only be performed by physicians, or appropriately licensed physician extenders.

Jurisdiction Limitations on Who Does What:

The survey also asked the physicians what tasks different assisting personnel are legally allowed to do in their practice jurisdiction. Keep in mind that the ISHRS is an international organization, and 61.6% of the respondents are not practicing in the United States. The following table summarizes their answers:

	IN MY COUNTRY*				
Task	Physicians can legally	PA & NP can legally	RN & LPN can legally	Licensed MA can legally	Unlicensed MA can legally
Excise Tissue	99.2	22.1	6.1	6.8	3.6
Make Recipients Sites	97.1	32.5	22.4	18.6	9.5
Implant Grafts	91.2	78.8	78.7	71.1	47.6

Note: Based on data from international survey representing many countries.

Discussion

The mission of the ISHRS is "To achieve excellence in patient outcomes by promoting member education, international collegiality, research, ethics, and public awareness" (President's Message, *Hair Transplant Forum Int'l.* 21(4); 2011). In an effort to "achieve excellence in patient outcomes by promoting education" the Board of Governors has adopted ACCME standards for development of ISHRS educational programs. Part of the ACCME educational standard is to develop processes that identify any gaps that may exist between the specialty's current practices and the best practices, as defined by either professional experience or evidence-based medical investigation.

⇨ page 164

Best Practices Survey *from page 163*

This survey has confirmed that most of the profession is practicing at or near the ISHRS Expert Panel best practice level relative to task delegation. However, gaps have been identified that would necessitate training programs aimed at reducing or eliminating the gaps between best practices and current practices relative to surgical task assignments. Specifically, the following gaps have been observed:

- Excise Donor Strip: 3-15% overall indicated that non-physician personnel "Always" or "Sometimes" excise the donor strip. This should be 0% since it is a critical-to-quality step that should always be performed by the physician.
- FUE—Manual: 15-20% overall indicated that non-physician personnel "Always" or "Sometimes" excise tissue via manual FUE method. This should be 0% since it is a critical-to-quality step that should always be performed by the physician.
- FUE—Motorized: 6-14% overall indicated that non-physician personnel "Always" or "Sometimes" excise tissue via motorized FUE method. This should be 0% since it is a critical-to-quality step that should always be performed by the physician.
- FUE—Motorized with suction: 2-6% overall indicated that non-physician personnel "Always" or "Sometimes" excise tissue via motorized FUE method. This should be 0% since it is a critical-to-quality step that should always be performed by the physician.

Collectively, the findings from this survey indicate a substantial need for education on the topics listed above to ensure physicians are aligned with the ISHRS CME Committee's recommendations. The ISHRS is sharing this information to encourage program directors and program faculty to keep these issues in mind when preparing continuing medical education curriculum, so as to realize the organization's mission.◆

Survey Questions

DEMOGRAPHICS

1. My primary location of practice:

   United States
   Canada
   Mexico/Central & South America
   Europe
   Asia
   Australia
   Middle East
   Africa
   Other

2. I have been performing hair restoration surgery for:

   Less than a year
   1-2 years
   3-5 years
   6-10 years
   11-15 years
   16-20 years
   21-25 years
   26-30 years
   31 or more years

3. Of your entire personal medical practice, roughly what percent is specifically devoted to hair restoration?

   0-25%
   26-50%
   51-75%
   76-100%

ROLES

4. In my practice, the following personnel performs **graft dissection**:

	Always	Most of the time	Sometimes	Never	Does not apply
Physician	○	○	○	○	○
Physician Assistant (PA)/Nurse Practitioner (NP)	○	○	○	○	○
Registered Nurse (RN)/Licensed Practical Nurse (LPN)	○	○	○	○	○
Medical assistant, licensed	○	○	○	○	○
Medical assistant, non-licensed	○	○	○	○	○

5. In my practice, the following personnel makes **recipient sites**:

	Always	Most of the time	Sometimes	Never	Does not apply
Physician	○	○	○	○	○
Physician Assistant (PA)/Nurse Practitioner (NP)	○	○	○	○	○
Registered Nurse (RN)/Licensed Practical Nurse (LPN)	○	○	○	○	○
Medical assistant, licensed	○	○	○	○	○
Medical assistant, non-licensed	○	○	○	○	○

6. In my practice, the following personnel **implants grafts into the recipient sites**:

	Always	Most of the time	Sometimes	Never	Does not apply
Physician	○	○	○	○	○
Physician Assistant (PA)/Nurse Practitioner (NP)	○	○	○	○	○
Registered Nurse (RN)/Licensed Practical Nurse (LPN)	○	○	○	○	○
Medical assistant, licensed	○	○	○	○	○
Medical assistant, non-licensed	○	○	○	○	○

7. I utilize traveling techs:
   Always
   Most of the time
   Sometimes
   Never

8. In my practice, the following personnel **excise the donor strip**:

	Always	Most of the time	Sometimes	Never	Does not apply
Physician	○	○	○	○	○
Physician Assistant (PA)/Nurse Practitioner (NP)	○	○	○	○	○
Registered Nurse (RN)/Licensed Practical Nurse (LPN)	○	○	○	○	○
Medical assistant, licensed	○	○	○	○	○
Medical assistant, non-licensed	○	○	○	○	○

FUE

9. What percentage of your hair restoration practice is FUE?
   0-25%
   26-50%
   51-75%
   76-100%

10. In my practice, the following personnel **excise donor tissue via a *manual* FUE (follicular unit extraction) method**:

	Always	Most of the time	Sometimes	Never	Does not apply
Physician	○	○	○	○	○
Physician Assistant (PA)/Nurse Practitioner (NP)	○	○	○	○	○
Registered Nurse (RN)/Licensed Practical Nurse (LPN)	○	○	○	○	○
Medical assistant, licensed	○	○	○	○	○
Medical assistant, non-licensed	○	○	○	○	○

11. In my practice, the following personnel **excise donor tissue via a *motorized* FUE (follicular unit extraction) method**:

	Always	Most of the time	Sometimes	Never	Does not apply
Physician	○	○	○	○	○
Physician Assistant (PA)/Nurse Practitioner (NP)	○	○	○	○	○
Registered Nurse (RN)/Licensed Practical Nurse (LPN)	○	○	○	○	○
Medical assistant, licensed	○	○	○	○	○
Medical assistant, non-licensed	○	○	○	○	○

12. In my practice, the following personnel **excise donor tissue via a *motorized with suction* FUE (follicular unit extraction) method**:

	Always	Most of the time	Sometimes	Never	Does not apply
Physician	○	○	○	○	○
Physician Assistant (PA)/Nurse Practitioner (NP)	○	○	○	○	○
Registered Nurse (RN)/Licensed Practical Nurse (LPN)	○	○	○	○	○
Medical assistant, licensed	○	○	○	○	○
Medical assistant, non-licensed	○	○	○	○	○

COMMENTS

In my state/province/country the following personnel only are legally able to perform the following techniques (please select all that apply) – for questions 13-17 below:

13. Physicians can…
   Excise donor tissue (drop down box with Yes, No, I don't know.)
   Make recipient sites (drop down box with Yes, No, I don't know.)
   Implant grafts (drop down box with Yes, No, I don't know.)

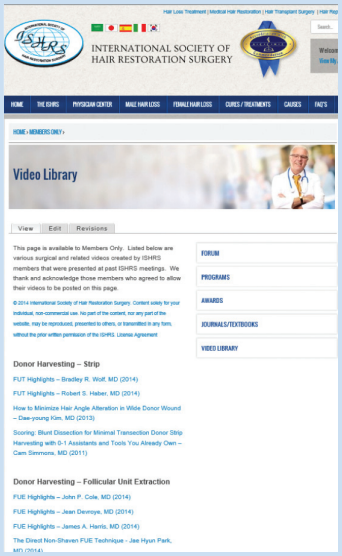
14. Physician Assistant (PA)/Nurse Practitioner (NP) can…
   Excise donor tissue (drop down box with Yes, No, I don't know.)
   Make recipient sites (drop down box with Yes, No, I don't know.)
   Implant grafts (drop down box with Yes, No, I don't know.)

15. Registered Nurse (RN)/Licensed Practical Nurse (LPN) can…
   Excise donor tissue (drop down box with Yes, No, I don't know.)
   Make recipient sites (drop down box with Yes, No, I don't know.)
   Implant grafts (drop down box with Yes, No, I don't know.)

16. Medical assistant, licensed can…
   Excise donor tissue (drop down box with Yes, No, I don't know.)
   Make recipient sites (drop down box with Yes, No, I don't know.)
   Implant grafts (drop down box with Yes, No, I don't know.)

17. Medical assistant, non-licensed can…
   Excise donor tissue (drop down box with Yes, No, I don't know.)
   Make recipient sites (drop down box with Yes, No, I don't know.)
   Implant grafts (drop down box with Yes, No, I don't know.)

18. Comments: _____



ISHRS Online Video Library

We have compiled with authors' permissions the ISHRS Online Video Library containing surgical videos. Access is exclusive to ISHRS Members with no additional charge. All videos are educational in nature and non-commercial. Most are 5 minutes in length.

Thank you to the physicians who created and allowed us to post their videos. The Society has always been about sharing education so our members can be better practitioners and our patients can receive the best treatments.

If you feel you have a worthwhile educational surgical video showing a particular technique or pearl and it meets these parameters, please e-mail our Executive Director Victoria Ceh with a link and description of the video at info@ishrs.org, and the CME Committee will review it.

To access the ISHRS Online Video Library, login to the Members Only at www.ISHRS.org. On upper navigational bar, click "Members Only" and then Video Library. If you have trouble logging-in, please contact one of our staff at ISHRS Headquarters and they can walk you through it.

MOBILE LASER THERAPY CAP

FOR HAIR REGROWTH

FDA-CLEARED & CLINICALLY PROVEN TO REGROW HAIR

30 MINUTES. EVERY OTHER DAY.

Our Capillus272 laser light therapy cap isn't your typical, everyday hat. It's a physician-supervised approach that's clinically proven to regrow hair – affordably and easily.

Over the years, numerous studies have shown the effectiveness of laser light therapy for hair regrowth. **And our cap is FDA-cleared*, so you can prescribe it to patients with confidence.** In fact, nothing tops it for laser output, head coverage and convenience. Patients just tuck it underneath a regular ball cap, and wear it for thirty minutes every other day. It's a great solution for any lifestyle or any age.

The Capillus272 is completely mobile and recommended for 30 minutes every other day. Wear it anywhere around the house...while cooking, while working, or even while driving.

Interested in offering the Capillus272 to your patients? Talk to a Capillus representative to see how you can get started, today.

Find Out How to Get a
FREE FDA-CLEARED CAPILLUS272 OFFICEPRO
for Your Office!

AS SEEN IN AMERICAN WAY MAGAZINE

JOIN THE NETWORK OF CAPILLUS AFFILIATED PHYSICIANS

INCLUDING INTERNATIONAL SOCIETY OF HAIR RESTORATION SURGEONS,
Dr. Bernardino A. Arocha, Dr. Sean S. Behnam, Dr. Mark A. Bishara, Dr. Shelly A. Friedman, Dr. Robert T. Leonard, Dr. Bernard P. Nusbaum, Dr. Thomas Rosanelli, Dr. Paul T. Rose, Dr. William D. Yates, and many more.

WWW.CAPILLUS.COM/PHYSICIANS • +1 786 888-6249

* THE CAPILLUS272 AND THE CAPILLUS272 OFFICEPRO HAVE BEEN CLEARED BY THE FDA BY A 510(K) FOR THE TREATMENT OF ANDROGENETIC ALOPECIA IN FEMALES WITH LUDWIG-SAVIN CLASSIFICATIONS OF I- II; AND WITH FITZPATRICK CLASSIFICATION OF SKIN PHOTOTYPES I TO IV. EFFICACY DEMONSTRATED IN CAPILLUS CLINICAL TRIAL. SEE CLINICALTRIALS.GOV FOR MORE INFORMATION. THE CAPILLUS272 IS MADE IN THE USA.

Meetings and Studies

Henrique N. Radwanski, MD *Rio de Janeiro, Brazil* hnradwanski@hotmail.com

The 4th Scientific Meeting of the Asian Association of Hair Restoration Surgeons (AAHRS) took place in Bangkok this past March. This event was packed with topics for everyone: strip, FUE, and combinations thereof. Lectures were mixed with live surgery; specifics of Asian anatomy and technical details were shared, all in a climate of true camaraderie. It is fascinating to witness how hair restoration has spread to all corners of the globe; wherever a meeting occurs, surgeons of the highest level are there, exchanging their experience with younger and eager colleagues. Here is the summary of the meeting in the incomparable words of our co-editor, Mario Marzola.

Review of the 4th AAHRS Annual Scientific Meeting & Live Surgery Workshop March 28-29, 2015 • Bangkok, Thailand

Mario Marzola, MBBS *Adelaide, Australia* Mario@marzola.net

This 4th Scientific Meeting of the Asian Association of Hair Restoration Surgeons met all the criteria of a successful gathering for busy hair restoration surgeons. Two tightly packed days, the first didactic and the second live surgery workshop, had us happy and exhausted at the end and we vowed to come back next time. Under the guidance of Dr. Jerry Wong as president and Dr. Damkerng Pathomvanich as secretary and co-chair, membership is growing nicely. Then add Dr. Gholamali Abbasi as the program chair and we have a meeting worth going to. Local knowledge in Dr. Pathomvanich's hometown was very evident as he arranged transportation, accommodations, and conference facilities with ease. The Sofitel Sukhumvit Hotel was very comfortable and allowed us to settle seamlessly into the program.

This being the Asian Association, the morning's didactic presentations concentrated on the particular needs of the Asian scalp, hair and esthetics. Dr. Wong, still an FUT devotee, showed very neat surgical removal of the strip leaving all blood vessels including veins uninjured. He is a great believer of circulation protection in both donor and recipient areas to help healing and growth. Next, Dr. John Cole presented "Sharp Punch in Asian Hair," Dr. Jim Harris presented "Dull Punch in Asian Hair," and Dr. Jose Lorenzo presented "Manual Punch in Asian Hair." Each technique was slightly adjusted for the stronger, straighter Asian hair with less density and less hairs per follicular unit but slightly greater diameter. Already in one hour we had a lot of information, but Dr. Cole reminded us that it takes 10,000 hours of experience at something before we can be anything like an expert. In the next session, speakers talked of their experiences with the harvesting options including Prof. Chang-Hun Huh's with robotic harvesting in Asian hair.

Of course, there is not just one type of Asian head, hair, or hairline. Like all other parts of the world, there are many variations on a theme, but in general, compared with the Caucasian head, we see a more rounded skull, broader forehead, and therefore a flatter hairline. Dr. Kuniyoshi Yagyu, our next ISHRS president, moderated a session on this very idea, showing differences between East Asian, Middle Eastern, and Indian hairline designs. The presenters, Dr. Yagyu, Dr. Abbasi, and Dr. Vasa, respectively advised that one design does not fit all, but rather we should look at the presentation, designing a hairline that is esthetically pleasing for that individual. We were further advised to consult textbooks and hairline articles on the way to our 10,000 hours of experience.

Wise words from panel member Dr. Jennifer Martinick

The afternoon started with Dr. Kapil Dua's video on body hair FUE, beard and chest. One thousand beard hair grafts at one time he thought was enough, and on the chest the hairs were acutely angled and superficial. Low drill speeds with a sharp punch gives best results in his experience. As in other body hair experts, we were advised to shave the chest five days before to see which hairs are in anagen as the ones heading for telogen will not have grown. This session also included eyebrow, eyelash, and beard reconstruction. There were panel discussions on the role of FUT in the era of FUE, which was the preferred

Happy audience

➪ page 168

Meetings *from page 167*

method, and what were the trends. When the audience was asked for a show of hands, 10% said they did FUT exclusively, 30% FUE exclusively, and 60% did both. This accords with most opinions around the world, but nearly all agreed that FUE is growing in popularity. Donor closure in FUT still varies wildly, single layer, double layer, undermining or not, sutures or staples, and if sutures, dissolvable or not, and then trichophytic or not. Still, there is no consensus here.

Drs. Gholamali Abbasi, Jerry Wong, and Mario Marzola

Discussions on storage solutions, PRP, ACell, ATPv, strength of epinephrine in the tumescence, or anything to help the follicle survive its journey, were very interesting as this is a reasonably new frontier. The consensus was to use all of it but minimize the epinephrine.

It was wonderful to see so many presenters, many new, in the three sessions of free papers that were scheduled during the day, 15 free papers in all. Dr. Bill Ehringer won the free paper prize on a count back as there were so many worthy contenders. Of course, if ATPv can increase growth, it is hard to ignore. All of these presentations with the final session of potpourri rounded off a mine of information for our brains to absorb. Exhausted, we headed for the Gala Dinner (more on that below).

The Live Surgery Workshop

There's nothing like seeing something in action. The clues and cues that we pick up are better than in any other experience. Dr. Ratchathorn Panchaprateep arranged the day at Chulalongkorn University Hospital, using four operating rooms (ORs).

OR 1. Drs. Wong and Panchaprateep demonstrated FUT, Hyaluronidase, PRP, and ACell. Dr. Wong's excellent work was great to watch, confirming his status as one of the world's best FUT surgeons. Of great interest also to the observers was the preparation and administration of PRP by Dr. Jin Mo Park. Some credible looking results were seen the day before from Dr. Jin Mo Park, so this modality was front of mind.

OR 2. Here Dr. John Cole again demonstrated his sharp FUE methods, something he has done many times before and it showed. He is renowned for his mathematical calculations of how many grafts can come from any particular area, but the ease, accuracy, and speed with which he harvests is a pleasure to watch. Dr. Cole is a great teacher and generous with his time.

In the afternoon Dr. Jae Park demonstrated scalp micro pigmentation, which is gaining in popularity quickly. This technique is demanding more time in our discussions and demonstrations.

OR 3. Manual FUE. How Dr. Jose Lorenzo manages to harvest so many grafts so quickly and so accurately with a manual punch is clearly understood once you see him in action. He has very dexterous fingers with the delicate touch of a classical piano player. The mere mortals amongst us need to resort to a hand engine.

Have you heard of ultrasound-guided FUE harvesting? Dr. Hakkyu Lee used ultrasonic guidance to check the hair angles in the various harvesting zones. Dr. Lee agreed that it needed further development, but full marks for lateral thinking and trying, we thought.

OR 4. Dr. James Harris has shown us how his revolutionary Hex Dull Punch shakes its way down the hair shaft with what appears to be even less transection than the previous round dull punch. He showed a video of the bulbs being drawn into the hex punch rather than being transected. If this can be verified, it may be easier, certainly for beginners, to lower the transection rate of an FUE operation with this punch.

OR 1. In the afternoon, Dr. Mario Marzola showed how a high female hairline can be lowered 1.5-2.0cm with an "anterior" scalp reduction. From start to finish, it took just over one hour. In that time 15cm2 of hair-bearing scalp was added to the hairline (10cm hairline, lowered 1.5cm). The closure was under no tension and with the help of trichophytic trimming of the advancing scalp, resulted in most hairline scars being hidden when healed. Sometimes a few grafts are needed at this scar and in the temples to round them out as in the normal female pattern.

The Six Tenors!

Again it was a full day with lots to see but also plenty of time during the day to discuss any subject with colleagues. As we know, these informal conversations are often the best way to pick up clues, share concerns we may have with our patients as well as update our knowledge.

Now to best part! The Gala dinner at the end of the first day was replete with well-dressed guests, many of whom were being presented with awards. The most disarming and pleasant surprise was when our local host, Dr. Pathomvanich, mounted the stage; he did not deliver his speech, but rather delivered a faithful rendition of "Words" by the Bee Gees instead! Much clapping and appreciation. It set the scene for so many of us, pale reflections compared with his standard, to get up there and sing until midnight. Ahh, the East… love their Karaoke.

After our live surgery day was finished, we went for a dinner cruise on the Chao Phraya river. A most pleasant evening, blessed with great weather. This was the first opportunity that some of us had to see some of Bangkok, but it was not enough. We will be back.◆

The complexities of hair restoration surgery have to be mastered by the surgeon's team. It is the assistants' role under the surgeon's oversight to ensure that grafts are dissected, trimmed, preserved, and implanted while maintaining full viability. This training is usually done by having the older members teach new staff; while practical, this method may perpetuate vices and errors and is not usually open to new ideas and instrumentations. The Workshop for Assistants, recently held in Denver, was designed to provide up-to-date information on the myriad tasks that are required of those that plan to build a team on HRS. Apparently, this was done with great success. Here is the coordinator's report. —HR

Review of the ISHRS Regional Workshop for Assistant Training May 1-3, 2015 • Denver, Colorado

Emina Karamanovski Vance *Plano, Texas, USA* emina@hairtx.com

The idea to create a complimentary training program for surgical assistants came to Tina Lardner and me as we were finishing teaching the assistant workshop in St. Louis. It was our sixth successful year and though the workshop was the most comprehensive workshop available to train surgical assistants, Tina and I felt that something was missing. Over the years, I expanded the curriculum in St. Louis, assigned more lab time, and increased number of faculty and yet I felt the meeting did not offer a comprehensive view of the assistant's role. The students repeatedly asked for more experience and more information. They needed to see a surgical setting, observe a surgery and see the teamwork, the collaboration between physicians and assistants. They also wanted more time to practice. In addition, most of the physicians who attended the physician workshop in St. Louis were asking for help in training surgical assistants. They lacked the experience to train assistants and didn't know where to find experienced assistants, so Tina and I felt this was an opportunity to help. We started brainstorming and Tina came up with the idea to hold a workshop at the recently expanded Hair Sciences Center of Colorado. She presented the idea to Dr. James Harris and shortly after the idea was sent to the ISHRS, approved, a date was set, and the course outlined. The course would offer live surgery viewing and it was designed to focus on skill development. The students were required to watch pre-recorded lectures and read recommended literature prior to attending the course. The ISHRS Board of Governors allowed attendees access to the online Resource Center for Surgical Assistants.

Workshop faculty and attendees

Since it was a first of its kind, we decided to limit the number of students to see if the course design worked to everyone's satisfaction. To our surprise and excitement, the course sold out shortly after it was opened for registration. Janiece McCasky was in charge of registration and did a great job making sure the students felt taken care of and that the workshop ran smoothly. The team of dedicated assistants helped set up the rooms, prepare the tissue, and assist in teaching. The workshop could not have been as successful without them.

The students came from across the United States and as far as Germany. The group consisted of mostly novice assistants, one PA, an RN, and a physician who attended the course in St. Louis last fall. The workshop setup was ideal for learning. The operating room was spacious, and each student had a microscope with the setup that could easily be replicated in their office. A comfortable meeting room was equipped with a hi-tech smart board that served as a screen for presentations, a white board for explanation, and a monitor for video streaming. The students were able to observe every aspect of the procedure— the patient pre-operative consultation, the surgical preparation, both a strip and FUE harvest, recipient site creation, graft placement, and post-operative instructions. During the video streaming, the students were able to ask questions, see minute details of graft placement and hair curl orientation, and interact with all three of the faculty. Students found the surgery viewing very valuable, and we the teachers were excited about the unique opportunity to provide this experience to them.

The first day agenda included observation of the surgery and learning basic principles of slivering and graft dissection. The students were taught the proper instrument handling and hand movement and then given an inanimate model (grapefruit skin) to dissect under the microscope. This initial practice helped develop hand-and-eye coordination. Then the students received a block of cadaver tissue to sliver and dissect. Throughout the day, their hands seemed to move in slow motion and their facial expressions revealed frustration and fatigue.

Tina Lardner demonstrates graft placement to students.

The second day began with critical thinking related to slivering and graft dissection. We discussed how to recognize a good from a bad sliver and to identify the subtleties of proper graft trimming,

➪ page 170

Meetings *from page 169*

and we introduced proper ergonomics. Teaching continued with Tina's demonstration of the basics of proper graft placement on an inanimate model prepared by Dr. Harris, and then the students were divided into two groups. Two operating rooms were set up, one for graft preparation and second for graft placement. I was in charge of slivering and graft dissection and Tina was in charge of graft placement. Dr. Harris observed both groups, interjecting when he felt appropriate to add additional insights, demonstrating the tight collaboration between physician and assistants. The students were rotated every 90 minutes. Over the course of the three days, both Tina and I were able to follow each student closely, provide feedback, correct or encourage their movements, and monitor their progress.

Dr. James Harris teaching students.

Similarly, throughout the day, Dr. Harris interacted with students complementing our teaching with physician's perspective. At the end of the second day, we addressed "Dos and Don'ts" for surgical assistants, making them aware of their responsibilities as well as legal limitations and assessed the students' experience. It was exciting to hear that all students gained more clarity, had their own "aha moments," and more importantly, felt more confident. Finally, the experience of the day was brought to another level when ISHRS President Dr. Sharon Keene gave a short speech and a plaque of recognition to each faculty member.

Emina K. Vance demonstrates graft preparation to students.

Workshop faculty receive plaques from ISHRS President Dr. Sharon Keene.

The third day started with critical thinking regarding graft placement led by Tina. The students were encouraged to think through their actions, assume proper posture, and recognize the proper graft hydration and placement. We did two more rotations of graft preparation and placement during which time Tina and I assessed students' skills. Each student received a written evaluation of their skills with recommendations for improvement when applicable. The setting and format of the workshop worked well for the students and we heard comments such as "This course gave me more than I expected" and "I had some knowledge before the course, but now I have the skills too." Students left smiling and the faculty shared contentment for the opportunity we had to impart our passion for hair restoration.

As I am writing this report, I am thinking about the evolution of the training for surgical assistants and smiling because I was able to witness and be a part of an important educational event. I am very thankful to Tina Lardner for the many hours of organization and preparation and to James Harris for his gracious hosting, both of whom were critical to the success of this event.◆

Message from the 2015 Annual Scientific Meeting Program Chair

Nilofer P. Farjo, MBChB, FISHRS *Manchester, UK* dr.nilofer@farjo.com

After a year of planning I am very excited that the 23rd annual meeting is nearly here, so this is my final message as program chair before the Chicago meeting. Behind the scenes there has been a tremendous effort focused on getting together the best program possible. I thank all of you who took the time to submit abstracts. I know that some of you have been disappointed that you were not offered an oral presentation, but there is a limited number of spaces available so only those that received the highest scores were offered this opportunity. For those who will be speaking, congratulations and I look forward to hearing your presentations. There were 132 submitted abstracts of which 34 were accepted for oral or video presentation, 33 were rejected, 63 were chosen for posters and 2 for the live patient viewing session. I would also like to thank those who responded to my eblast to propose a session or suggest an invited guest speaker. I received some very helpful suggestions, some of which I have incorporated.

I am very grateful to ISHRS President Sharon Keene for appointing me to this post. Although a very challenging task, it has certainly been a rewarding experience and I am also highly indebted to the ISHRS administrative team that has been a tremendous help in steering me in the right direction. They have a very well organised plan of action for the meetings and everything runs seemingly effortlessly because of this. Finally, the program itself would not run at all without the volunteers who have given up hours of their free time to help put it together: Advanced Course chairs, Basics Course chairs, Mini Course directors, Workshop chair, Newcomers chair, Tables with the Experts volunteers, and invited speakers. I also would like to thank the Moderators for their assistance in reviewing all the talks to ensure they meet the learner objectives.

The program content will not only be very educational but will contain many practical tips, not only for the novice but also for those experienced in hair restoration. So what will be some of the highlights?

Without doubt, the pre-Congress courses are not to be missed with a full-day Basics Course and FUE beginner's courses using 3 different methods of extraction. For those who want to add scalp micropigmentation to their practice to help patients disguise linear scars or as background skin camouflage, Dr. Rassman has a course that will introduce the theory and practical aspects of this technique. But do register early for these workshops because space is limited. If you are planning on sitting the ABHRS exam, the Advanced Board Review course is a must. Headed by a dynamic team of instructors you are sure to get all the guidelines you need to pass with flying colors.

On the opening day, newcomers will get the chance to meet established surgeons in the return of the very popular Speed Networking session, which this year will be hosted by Dr. Jennifer Martinik. In the main meeting, not to be missed are the two sessions on donor removal techniques with a chance to debate these methods. Also on the first day, two guest speakers will discuss different aspects of hair follicle regulation from a biological point of view. Don't forget to read the e-posters that will be shown in the main Congress Hall and in the Normandie Lounge near the registration desk. There is usually some very informative content in the poster session, so perhaps you will learn a new tip from one of these posters. Finally, get the chance to mingle with old friends and look at the exhibits at the opening reception in the Exhibit Hall while enjoying a few drinks and hors d'oeuvres.

Other highlights over the 3½ days include expert speakers on post-finasteride syndrome and on female pattern hair loss etiology. Two of the four guest speakers will discuss their topics at lunchtime symposia at which time delegates will be provided with boxed lunches so make sure you look for your lunch ticket in your registration material and bring this along with you. Learning in a smaller group session can often suit delegates' learning needs more appropriately, so there are a number of small group workshops covering a range of topics that will allow for more in-depth discussions with experts over a 90-minute time period. These will be held on the Friday morning and at lunchtime (ticketed). Included are topics such as hairline design, bioenhancements, beard/eyebrow restoration techniques, non-surgical treatments, team building, repair methods, and avoiding complications. Some of these topics will be touched upon in the main session as well, but not in the same detail. Other small group sessions included are the two Tables with the Experts sessions where you can rotate to the different tables each with a different topic (see the list of topics in your program guide). On Friday afternoon and Saturday morning, these sessions will have one or two experts available at each table where you can sit on a first-come, first-served basis and rotate to as many tables as you wish.

Following feedback from last year's meeting, the ISHRS & ABHRS Morbidity and Mortality conference will change back to a more intimate small group setting. Dr. Marco Barusco is in charge of gathering speakers with complications to discuss (if you have a case you wish to present send details to: drbarusco@tempushair.com). The meeting will be held again on the Friday evening over dinner. Space is limited, so get your ticket to attend well in advance.

Representatives from our international membership will be on hand in the Regulations session on Saturday morning to update us on current and upcoming legislation in hair restoration and cosmetic surgery. This will lead on to a debate on ethical issues, which is a very topical and controversial subject at the moment. Lastly, on the Saturday is the Live Patient Viewing where you will be able to see the results of hair transplantation from your colleagues on actual patients. If you wish to participate, please contact Dr. Marcio Crisostomo at marcio@implantecapilar.med.br.

The Gala dinner dance and awards ceremony will be a spectacular masquerade ball with the main conference room transformed into a wonderful ball room surrounded by gilt balconies. So if you want to be transported back to times of old bring along a costume and mask or just show up in your finery to eat, drink, celebrate and dance the night away. It will be a late night finish, but don't worry, the next day will start later and will include brunch to eat during a debating session. This will be a less structured event with the chance to ask speakers more detail about their talks or to just debate a controversial topic. So bring along your questions or submit them ahead of time to the moderators. It will be a lively two-hour session chaired by Drs. Carlos Puig and Bob Haber.

I look forward to seeing you soon in Chicago.◆

Message from the 2015 Surgical Assistants Program Chair

Janna Shafer *Bloomington, Minnesota, USA* janna@shapiromedical.com

I hope everyone's having a wonderful summer! Can you believe we're well into July already? Summer's half over? I know they say the older you get the faster the time flies, but this is ridiculous! Well, I've no doubt summer is passing too quickly for all of you too. Perhaps it's partly due to my anticipation for the SA program or just seeing all the friends I've made over the years, but I'm very much looking forward to the ISHRS Conference in Chicago. We're expecting record number of attendees so be sure to register for the conference and book your hotel rooms soon. Let's all keep our fingers crossed for beautiful weather. Chicago is a wonderful city to visit.

I'm happy to inform you that the SA program is jam-packed with very informative presentations. There will be 19-20 presentations given from 7:30AM till noon on Wednesday, September 9, that will cover all aspects of surgery for surgical assistants from beginning to end. Thanks again to all the skilled assistants and physicians who are sharing their knowledge and experience. Another reminder for the SA workshop, which will be held Thursday, September 10, from 7:30AM to noon. Again, the ever popular SA workshop will fill up soon so register early. Sara Roberts (assistant to Drs. Nilofer and Bessam Farjo) will be putting together a fantastic program.

Please feel free to email me at janna@shapiromedical.com if you have any questions or comments on this year's SA program. Enjoy the rest of your summer and see you all soon in Chicago!◆

Classified Ads

Hair Transplant Physicians and Technicians

PAI Medical Group is executing its expansion plan. We require physicians and technicians with hair transplant experience for the US mid-western, eastern, and southern states and for Canada's Ontario, Quebec, Alberta and B.C. provinces.
To become part of the growing resources of PAI Medical Group, provide, where applicable, résumé, certification, license information, and your experience.
Please send to one of: www.paihair/en/employment; fcorsale@pa-intl.com; fax 613-225-0717.

Looking for Practice Opportunities in Vancouver, Canada

Canadian licensed, experienced hair restoration surgeon looking for practice opportunities in Vancouver, Canada (or nearby). Looking for full-time (or part-time) opportunities in hair transplantation. Private practice or company based. FUE, FUSS, and ARTAS are all possibilities. Serious inquiries only please.
Email: hairtransplantsurgeonvancouver@yahoo.com

RN / PA / NP with FUE Experience Needed

Seeking RN, PA or NP with FUE or hair transplant experience to join our team. Part- or full-time available. We are a busy dermatology and Mohs surgery practice with a Medicare certified ASC and offices in Thousand Oaks and Santa Barbara. Position includes Neograft FUE and placement as well as assisting with Mohs surgery and reconstruction. Competitive wage and benefits package.
Send your résumé to akaufman@dermatology-center.com or fax to 805-449-4184.

For Sale: Canadian HT Clinic

FOR SALE: Firmly established and fully equipped Canadian Hair Transplant Clinic located in Winnipeg, Manitoba, Canada. No significant competition in the area. Willing to train New Owner, if necessary.
Contact (204) 489-2694. Website: www.hairtransplantcanada.com

To Place a Classified Ad

To place a Classified Ad in the *Forum*, simply e-mail cduckler@ishrs.org. In your email, please include the text of what you'd like your ad to read—include both a heading, such as "Tech Wanted," and the specifics of the ad, such as what you offer, the qualities you're looking for, and how to respond to you. In addition, please include your billing address.

Classified Ads cost $85 per insertion for up to 70 words. You will be invoiced for each issue in which your ad runs. The Forum Advertising Rate Card can be found at the following link:
http://www.ishrs.org/content/advertising-and-sponsorship

www.ISHRS.org/AnnualMeeting.html

The ISHRS annual scientific meeting is THE premiere meeting of hair transplant surgeons and their surgical assistants.

You don't want to miss it.

GENERAL SESSIONS

- Combining FUE and Strip Surgery
- Advances in Hair Biology
- Update on Finasteride and Side Effects
- Hair Loss Diagnostic Dilemmas
- Unique Issues in Ethnic Transplantation
- Live Patient Viewing
- Small Group Discussion Tables
- Interactive Panels
- Female Pattern Hair Loss
- Management of Complex Cases

OTHER OFFERINGS

- FUE Hands-On Mini-Courses
- Lunch Symposia and Workshops
- Basics in Hair Restoration Surgery Course
- Advanced/Review Course
- Surgical Assistants Program & Hands-On Workshop
- M&M Conference
- Exhibits Program
- E-Poster Exhibits
- Social program including optional tours and activities, Welcome Reception, Gala Dinner/Dance

NEWCOMERS ARE WELCOME!

We offer a "Meeting Newcomers Program" to orient those who are new to the ISHRS annual meeting. Newcomers will be paired with hosts. We want to welcome you, introduce you to other colleagues, and be sure you get the most out of this meeting.

2015 ANNUAL SCIENTIFIC MEETING COMMITTEE

Nilofer P. Farjo, MBChB, FISHRS
Chair | UK

Sara M. Wasserbauer, MD, FISHRS
Advanced/Board Review Course Chair | USA

Ratchathorn Panchaprateep, MD
Advanced/Board Review Course Co-Chair | THAILAND

Nicole E. Rogers, MD
Basics Course Chair | USA

Aman Dua, MBBS, MD
Basics Course Co-Chair | INDIA

Samuel M. Lam, MD, FISHRS
Workshops Chair | USA

Marco N. Barusco, MD
M&M Chair | USA

Márcio Crisóstomo, MD
Live Patient Viewing Chair | BRAZIL

Jennifer H. Martinick, MBBS
Newcomers Chair | AUSTRALIA

Janna Shafer
Surgical Assistants Chair | USA

John D.N. Gillespie, MD, FISHRS
Surgical Assistants Co-Chair | CANADA

Damkerng Pathomvanich, MD, FISHRS
Immediate Past Chair | THAILAND

Jeffrey Donovan, MD, PhD | CANADA

Piero Tesauro, MD | ITALY

Plan to Attend

SEPTEMBER 9-13

CHICAGO '15

ISHRS 23RD ANNUAL SCIENTIFIC MEETING

International Society of Hair Restoration Surgery
303 West State Street, Geneva, IL 60134 | TEL 630 262 5399 or 800 444 2737
FAX 630 262 1520 | info@ishrs.org | www.ISHRS.org

HAIR TRANSPLANT FORUM INTERNATIONAL
International Society of Hair Restoration Surgery
303 West State Street
Geneva, IL 60134 USA

Forwarding and Return Postage Guaranteed

Presorted
First Class Mail
US Postage
PAID
Mt. Prospect, IL
Permit #87

Dates and locations for future ISHRS Annual Scientific Meetings (ASMs)

2015: 23rd ASM
September 9-13, 2015
Chicago, Illinois, USA

2016: 24th ASM
October 19-22, 2016
Panama City, Panama

HAIR TRANSPLANT forum INTERNATIONAL

Advancing the art and science of hair restoration

Upcoming Events

Date(s)	Event/Venue	Sponsoring Organization(s)	Contact Information
September 9-13, 2015	23rd Annual Scientific Meeting of the International Society of Hair Restoration Surgery *Chicago, Illinois, USA*	International Society of Hair Restoration Surgery *www.ishrs.org*	Tel: 1-630-262-5399 Fax: 1-630-262-1520
October 2-4, 2015	HAIRCON 2015 *Hotel Fariyas, Lonavala, Maharashtra, India*	Association of Hair Restoration Surgeons–India *http://www.ahrsindia.org/index.html*	Dr. Narendra Patwardhan, President, AHRS-India Tel: +91 9822057712 *ngpatwardhan@gmail.com*
November 18-21, 2015	9th World Congress for Hair Research *Miami, Florida, USA*	North American Hair Research Society *www.hair2015.org*	For details: *info@nahrs.org*
November 19-22, 2015	7th Annual Hair Restoration Surgery Cadaver Workshop *St. Louis, Missouri, USA*	Practical Anatomy & Surgical Education (PASE), Center for Anatomical Science and Education, Saint Louis University School of Medicine In collaboration with the International Society of Hair Restoration Surgery *http://pa.slu.edu*	Dr. Samuel L. Lam, Course Director Emina Karamanovski Vance, Assistant Course Director *http://pa.slu.edu*
December 5-6, 2015	20th Annual Meeting of the JSCHR *Kochi, Japan*	Japan Society of Clinical Hair Restoration (JSCHR) Hosted by Ryuichiro Kuwana, MD	Dr. Ryuichiro Kuwana, Program Chair *der-r-kuwana@mte.biglobe.ne.jp* *www.jschr.org*