ISHRS—helping you to help your patients

E. Antonio Mangubat, MD Tukwila, Washington, USA tony@mangubat.com

The 2011 ISHRS Annual Meeting in Anchorage is shaping up to be another great event full of information and new skills that we hope will be valuable in your practice. One of the most important services the ISHRS provides is expert opinions from world-class, experienced hair surgeons.

Most hair restoration surgeons at some time in their practice encounter difficult cases, such as those that:

- 1. Have complications that were not expected.
- 2. Have iatrogenic problems that were created.
- 3. We wish did not walk in our door.
- 4. We have no idea what to do with.

Here's your opportunity to harness the power of the ISHRS: Bring your tough cases to Anchorage for the Difficult Cases session!

Here's your opportunity to harness the power of the ISHRS: Bring your tough cases to Anchorage for the Difficult Cases session! We care about our patients and want to help them, but sometimes the problems are so significant that we are overwhelmed or do not know how to proceed. If you have a case like this, let us help.

At the Anchorage Annual Meeting, you will have the world's best hair surgeons available to help on your specific cases, so I encourage all attendees

to submit your tough cases now. Send your patient's history and photos to me and Mel Mayer at tony@mangubat.com and mayer4sd4@aol.com.

The Difficult Cases session will provide you with the added benefit of learning how to treat your own difficult patients in addition to listening and learning from your colleagues' difficult cases.

See you in Anchorage!

Epigenetic modifications

of MPB. One benefit of understanding these mechanisms is the reversible nature whereby changes to DNA methylation can alter throughout life as a response to the local cellular and external environment, with methyl groups being added or removed from CpG dinucleotides. It is possible that increases in DNA methylation at the AR CpG islands may be protecting occipital hairs from miniaturisation and hair loss. The potential to take advantage of the plasticity of DNA methylation, and accessibility of scalp hair to topical applications, makes this an enticing area for the development of therapeutic and preventive strategies for AGA. The processes through which DNA methylation at the AR CpG island may result in reduced gene expression is unknown but further analysis of the role of DNA methylation in AGA is important.

Editor's note: The full article, "Evidence of increased DNA methylation of the androgen receptor gene in occipital hair follicles from men with androgenetic alopecia" (J.E. Cobb, et al.) has been accepted for publication in the *British Journal of Dermatology*.

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I find that all those old high school math skills come in handy in hair surgery! Test your memory and your mental math capabilities!

Hair calculations

- It is the morning of surgery. The density of your patient's donor area is 65 FU/cm² and you estimate the length of the strip to be 24cm. If the width of the planned strip is estimated to be 1cm wide, what will the estimated number of grafts be?
 - a. 1,560
 - b. 1,872
 - c. 2,340
 - d. 3,120
- 2. Your patient wants to cover an area at his crown that is completely bald and about the size of an average man's palm (assume 10cm × 10cm). If you typically cover an area to a density of 30 FU/cm², and his crown is shaped *more like a circle than a square,* approximately how many grafts will you need to cover this area?
 - a. 500
 - b. 1,000
 - c. 2,000
 - d. 3,000
- 3. Your patient requires at least 1,500 grafts. If your patient's density is 70 FU/cm², his donor area is 20cm wide, his elasticity is 20%, and you plan to take the maximum width available according to the Mayer-Pauls elasticity scale, will you have enough grafts to meet your patient's goals?
 - a. Yes
 - b. No
 - c. No patient needs fewer than 1,500 grafts.
 - d. Every patient needs more than 1,500 grafts.
- 4. If your patient's native hairline density is 60 FU/cm², and assuming that hair loss only becomes noticeable when 30% or less of the hair remains, approximately what density should be your goal in this patient's hairline?
 - a. 10 FU/cm²
 - b. 20 FU/cm²
 - c. 30 FU/cm²
 - d. 40 FU/cm²
- 5. If your patient loses 10% of his absolute hair density per year, in approximately how many years would you expect him to need a hair transplant based on the first noticeable appearance of baldness?
 - a. 1-2 years
 - b. 2-3 years
 - c. 7-8 years
 - d. 9-10 years



The next three questions come from the same case:

- 6. You are working with 3 staff members on a traditional "strip" method hair transplant. The strip has been slivered and each of them has 32 slivers yielding an average of 10 grafts per sliver. If 40% of the slivers have been cut into grafts, which of the following is the best estimate of how many grafts you have cut so far?
 - a. 128
 - b. 384
 - c. 500
 - d. 960
- 7. What is your best estimate of how many sites to make?
 - a. 128
 - b. 384
 - c. 500
 - d. 960
- 8. Your surgery is complete and your estimates turned out to be perfectly accurate. Your patient asks you how many actual hairs were transplanted into his scalp that day. Since you have tracked and counted every graft, you noted that 519 of his grafts were 2-hair FUs, and the remainder was evenly split between 1-hair FUs and 3-hair FUs. One graft was a 4-hair FU. How many hairs were transplanted?
 - a. 1,478 hairs
 - b. 1,918 hairs
 - c. 1,922 hairs
 - d. 2,802 hairs
- 9. Your patient has Norwood Class VI male pattern hair loss that has left him with a completely hairless area 15cm wide and 30cm from front to back (conservative potential frontal hairline to posterior crown fringe). He wants to cover the entire bald area to a density of at least 20 FU/cm². His donor density is 100 FU/cm², his elasticity is 30%, and the area is 10cm high and 25cm wide. How many traditional "strip" surgeries should you tell him he needs to meet his goals assuming you take the maximum amount of donor each time based on his scalp's elasticity? (Assume virgin donor each time for simplicity)
 - a. One surgery
 - b. Two surgeries
 - c. Three surgeries
 - d. This patient's goals are unrealistic.

MESSAGE FROM MELVIN L. MAYER, MD, PROGRAM CHAIR OF THE 2011 ANNUAL MEETING

If you haven't registered for the 19th Annual Scientific Meeting of the ISHRS, NOW is the time. Courses and workshops are filling up fast. Don't be disappointed because many of these have limited registration.

As you plan your trip, be sure to include at least one of the Alaska Scenic tours. The 26 Glaciers Cruise & Wild-life Conservation Center Excursion leaves the Hotel Captain Hook early Tuesday, September 13, for an all day tour. Another option is to venture out whale watching on Kenai Fjords National Park Cruise all day Sunday, September 18. This excursion will not conflict with meetings because the meeting concludes with the Gala Saturday night. Of course, there are many other vacation options to complement this meeting.

In addition to the previously announced topics and sessions, we have added an optional Satur-

day noon session, "Mechanization of HRS." Restoration Robotics and Neograft technology will be featured in a non-CME format with plenty of time for Q&A.

Highly recommended for the beginner is the "hands-on" Basics Course in hair restoration surgery using human cadaver scalps. Also for these new attendees is the expanded Newcomers Program to orient to the ISHRS annual meeting by pairing newcomers with hosts (see page 137 for a full description). We want to introduce you to other colleagues so you maximize the benefit of this excellent experience.

The learning and social interaction is continuous, starting at 7 AM Friday and Saturday mornings with "Breakfast with the Experts," which allows you to choose from 16 different table topics in a casual setting. We are introducing two non-English-speaking tables: one featuring Japanese and the other Spanish. You'll enjoy an interactive educational experience with offerings that include a full-day Board Review Course, several morning Workshops, an FUE-FUT Controversy Panel, Live Patient Viewing, High Definition Surgical Video Theater, and a Hairline Design Panel. The use of the Audio Response System is dynamic and great for audience participation.

We look forward to you being part of this outstanding opportunity for learning, networking, socializing, and exploring the beautiful State of Alaska!

Sincerely,

Melvin L Mayer, MD, 2011 Program Chair

www.ISHRS.org/AnnualMeeting.html

"New Vistas and Trusted Techniques in Hair Transplant Surgery

Answers

Hair's the Question 🗢 from page 129

- 1. A. 65 FU/cm² \times 24cm \times 1cm = 1,560 FUs.
- 2. C. The formula for the area of a circle is πr^2 . Since the diameter is 10cm, the radius would be 5cm: $\pi(3.14) \times (5)^2 =$ 2,355 grafts needed (approximately 2,000).
- 3. A. $10 \text{cm} \times 2 \text{cm} \times 70 \text{ FU/cm}^2 = 1,400 \text{ FUs}; 10 \text{cm} \times 1.5 \text{cm} \times 70$ $FU/cm^2 = 1,050 FUs; 1,400 FUs + 1,050 FUs = 2,450 FUs,$ which is more than enough.
- 4. **B.** 30% of 60 FU/cm² = 18 FUs.
- 5. C. Assuming that hair loss only becomes noticeable when 30% or less of the hair remains, C is the answer.
- 6. **B.** 32 slivers \times 3 techs = 96 slivers; 96 slivers \times 10 grafts per sliver = 960 grafts; 40% of 960 = 384 grafts already cut.
- 7. **D**. 130

- 8. C. If you have 960 total grafts (from the previous answer's calculation) and 519 two-hair grafts \times 2 hairs per graft = 1,038 hairs; 220 one-hair graft \times 1 hair per graft = 220 hairs; 220 three-hair grafts \times 3 hairs per graft = 660 hairs; 1 fourhair graft \times 4 hairs per graft = 4 hairs; Total: 1,038 + 220 + 660 + 4 = 1,922 hairs.
- 9. **B.** To cover an area of $15 \text{ cm} \times 30 \text{ cm}$ to a density of 20 FU/cm^2 you would need 9,000 grafts. With the given elasticity and donor area measurements you would have: 12.5cm × 2.2cm $\times 100 \text{ FU/cm}^2 = 2,750 \text{ FUs}; 12.5 \text{ cm} \times 1.5 \text{ cm} \times 100 \text{ FU/cm}^2 =$ 1,875 FUs; 2,750 + 1,875 = 4,625 FUs from the entire 25cm strip. Thus, he would need at least two surgeries to reach the 9,000 grafts needed to cover the whole area to that density.







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Meetings and Studies

(L) Timothy P. Carman, MD La Jolla, California, USA tcarmanmd@mac.com; (R) David Perez-Meza, MD Mexico City, Mexico DrDavidPM@permanenthairsolutions.com

In this issue we present an interesting summary by Dr. Bessam Farjo of the ISHRS Regional Workshop "The Next Big Thing" held in Istanbul, Turkey. This workshop included a Hair Research and Advanced Live Surgery Workshop with a focus on FUE Method.

Highlights of the Istanbul Workshop: The Next Big Thing

Bessam Farjo, MBChB Manchester, United Kingdom bessam@farjo.com

On May 13-15, 2011, Dr. Melike Kulahci hosted the ISHRS-sponsored Regional Workshop: The Next Big Thing: Hair Research and Advanced Live Surgery Workshop.

After welcome and introductory talks by our host, Dr. Kulahci, and ISHRS President Dr. Jerry Cooley, the scientific presentations commenced. Dr. Ilker Apaydin gave an overview on FUE demand in Turkey and how it forms 70% of their work.

This was followed by a density definition panel involving the entire guest surgical faculty of Drs. Ron Shapiro, Robert Haber, Bessam Farjo, Jerry Cooley, Jennifer Martinick, and Jerry Wong.

Attendees were transported to the Transmed surgical center where 2 procedures were observed by the delegates. In the first

case, Dr. Apaydin harvested the grafts by FUE, followed by hairline design and recipient site creation by Dr. Shapiro. Simultaneously, in a second case, Dr. Ozge Ergun of Transmed performed harvesting by FUE while Dr. Farjo continued with the hairline design and site creations. A third case was done where strip harvesting was performed by Dr. Cooley and hairline and site creations by Dr. Wong.

Day 2 of the workshop began with discussion of the previous day's surgery. This was

followed with a series of scientific lectures. Prof. Valarie Randall presented the latest in research supporting the positive effect of prostaglandins on scalp hair growth. Partly based on this study, Allergan is commencing clinical trials soon. Dr. Cooley talked about extracellular matrix effect on wound healing and his observation of smoother and flat donor scars when ACell strips were left in. Another way he uses the product is in adding a few drops to graft clusters before placing where he has observed enhanced growth and quality. Dr. Gerd Lindner showed us his results with organ culture–based hair follicle generation from cultured hair cells. This is what Intercytex was working on before its financial collapse, and Dr. Lindner appears to have succeeded in growing hair *in vitro*. The next step is to take this into clinical trials.

Dr. Haber updated his latest studies using the lasercap LLLT system. He demonstrated data showing the light restored hair shaft diameter and he is planning imminent clinical trials. Dr. Farjo presented for the first time the effect of thymic peptides on



(*left to right*) Jennifer Martinick, Ron Shapiro, Jerry Wong, Harold Ma, Bessam Farjo, Bob Haber, Melike Kulahci, Jerry Cooley, and Valerie Randall

protein concentrate for transplant patients, and the other by Dr. Silvana Franzini with an update on her talk from Boston about the concept of intradermotherapy on hair loss and growth injecting a variety of factors including minoxidil and finasteride.

The delegates were taken in the afternoon to the surgical center once more where two more operations were performed.

Again the harvesting was done by FUE by Transmed's Drs. Ergun and Kan, while Drs. Martinick and Haber performed the hairline design and recipient site creation, respectively.

The highlight of the half day on Sunday morning was the scientific panel involving all the invited faculty discussing the future of hair restoration and hair biology, and how scientists and clinicians can cooperate. We debated everything from medications to cells, growth factors, techniques, and robotics. The

conclusion was that the future of our field is bright but that new therapies have to be evidence-based. Having said this, some colleagues were concerned about the difficulty of doing such research in private practice. Dr. Cooley assured the delegates that the ISHRS is working towards a blueprint that can be used by members to conduct such studies simply within their facilities yet attain reasonable credibility. Another message was that we should all be encouraged to communicate and cooperate with local scientists to understand each other and accelerate potential advancements.

Dr. Kulahci and her team, in particular her daughter and clinic manager, Melis, organised an outstanding event attended by nearly 100 delegates including faculty. Everyone was looked after and the hospitality could not have been better. The Friday night dinner was enjoyed by all, and the Saturday gala cruise and entertainment over the Bosphorus will live long in the memory.

hair growth in organ culture. Interestingly, they may play a balancing role as some are promoters while others act negatively. Dr. Martinick rounded off the invited faculty lectures by discussing the effect of such advances clinically and from a business point of view. There were two more non-faculty presentations, one by Dr. Larry Shapiro on his positive findings using whey protein concentrate for transplant



Jennifer Martinick placing with assistants.

Review of the Literature

Nicole E. Rogers, MD Metairie, Louisianna, USA nicolerogers11@yahoo.com

Yassa, M., et al. Male pattern baldness and the risk of prostate cancer. Annals of Oncology 2011; epub ahead of print.

French researchers investigated whether early male pattern hair loss (MPHL) could be linked to an increased risk of prostate cancer later on. This question has been answered in previous studies in both the affirmative and the negative. A case control study was performed on a total of 669 patients (388 with a history of prostate cancer) wherein they were asked to score their balding pattern at ages 20, 30, and 40. Prostate cancer patients were recruited from a radiation oncology follow-up clinic in France. Controls were chosen from the same hospital database but with no history of prostate cancer or hormone pathologies. Starting in 2004, all patients were contacted by mail and asked to grade their balding using four diagrams: Stage I (no balding), Stage II (frontal hair loss), Stage III (vertex hair loss), and Stage IV (complete frontal and vertex balding). For prostate cancer patients, additional data was collected to include age at diagnosis, initial stage of disease (T-N-M), Gleason score, and initial PSA. Data revealed patients with prostate cancer were twice as likely to have any form of hair loss (Stages II-IV) at age 20 (odds ratio 2.01, P=.0285). The pattern of hair loss was not predictive of the development of prostate cancer and there was no association between early-onset MPHL and an earlier diagnosis of prostate cancer or with the development of more aggressive tumors.

Although this study is limited by its retrospective nature, including recall bias, the results are worthy of consideration and discussion with patients presenting at an early age. Further gene studies are necessary to better investigate the exact relationship of these two conditions.

REGISTRATION OPENING SOON!

ISHRS ``On Demand" Webinars Enduring Material, Online Format

The ISHRS is pleased to announce its new On-Demand Webinars. The recorded webinars are 60 to 90 minutes in length. You can listen to the webinars 24/7/365. In other words, you can listen to them whenever it is convenient for you. Below is list of the latest recorded webinars. Additional programming is under development.

Going Viral: Unlocking the Secrets of Social Media for Hair Transplant Patient Education and Beyond 60 Minutes; 1.0 CME Credit

Faculty: Alan Bauman, MD

Description: The On-Demand Webinar Program titled *Going Viral: Unlocking the Secrets of Social Media for Hair Transplant Patient Education and Beyond* is an enduring material created by the International Society of Hair Restoration Surgery (ISHRS). This On-Demand Webinar Program is intended for an audience of all levels. This enduring material was developed first as a symposium offered at an ISHRS Annual Scientific Meeting in 2010. Dr. Alan Bauman, a well-known and distinguished expert in the field of hair restoration and self-proclaimed "techno-geek," developed the materials and content based on the pre-determined learning objectives and with the guidance of the CME Committee.

Intro to Biostatistics & Evidence Based Medicine

90 Minutes; 1.5 CME Credit

Faculty: Jamie Reiter, PhD and Jerry E. Cooley, MD

Description: This webinar will provide basic information regarding proper research design and statistics for investigators in hair restoration surgery, through didactic lecture and dialogue between presenters. It is intended to address the needs of the more common research questions in hair restoration surgery. Specific research questions may require more advanced instruction.

Letters to the Editors

Francisco Jimenez, MD Las Palmas, Spain jimenezeditor@clinicadelpelo.com Enrique Poblet, MD Albacete, Spain

Re: Pathophysiology of female pattern hair loss

We have read with great interest the article by Patel, Perez, and Sinclair on the pathophysiology of female pattern hair loss.¹ The hypothesis of a hierarchical organisation of human follicles into primary and secondary follicles is daring and intriguing, but difficult to reconcile with our current knowledge of the anatomy of the follicular unit.

We would like to add the following comments:

- 1. In one part of their article the authors state that a "follicular unit typically consists of a larger, central primary follicle surrounded by smaller secondary follicles." We, as hair transplant surgeons, are used to dissecting thousands of hair follicles and have not noticed such an arrangement. Is it possible that this hierarchical arrangement would be noticeable only at an optical microscopic level? If that is the case, it is important that the authors clarify the histomorphological criteria that they are using to classify a follicle as primary or secondary. Is there any morphometric data (measurements) data available?
- 2. In the second paragraph of their article, it is stated that "the concept of the follicular unit in humans was first described by Headington in 1984 with the observation that in utero central primary follicles are surrounded by smaller secondary follicles." Unless the authors are referring to a different paper, in his seminal article published in the Archives of Dermatology, Headington described the follicular unit after analyzing transverse (horizontal) sections of human adult scalp biopsies.²As far as we know, Headington did not observe the existence of a primary and secondary follicles, but rather defined the follicular unit as a "well-circumscribed structure composed of two to four terminal follicles, and one or, rarely, two vellus follicles, the associated sebaceous lobules, and the insertions

of the arrector pili muscles." Needless to say, primary and secondary follicles should not be confused with terminal or vellus follicles.

3. We share with the authors a special interest in the anatomy of the arrector pili muscle and its relationship with the hair follicles. In 2002, we published an anatomical drawing of the arrector pili muscle as a single muscular unit that divides into branches that are finally inserted into each of the follicles contained in the follicular unit.3 Before that paper, the arrector pili muscle had always been drawn and represented as a single muscle attached to a single follicle, and not as a single unit associated with a single follicular unit. Our anatomical model was basically confirmed by the works of Song, et al., using a three-dimensional reconstruction.⁴ Patel, et al. note that "as terminal hairs miniaturize into vellus hairs, they lose their arrector pili muscles." As we did not look into the anatomy of arrector pili muscles in vellus follicles, this is a question that interests us greatly. We would like to know if the authors could show photomicroscopic evidence of this fact (disappearance of the arrector pili muscle as the terminal hair miniaturizes into vellus hair) or whether perhaps there is a paper on this subject pending publication.

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Rod Sinclair, MBBS, MD Melbourne, Australia Rod.SINCLAIR@svhm.org.au

Re: Response to Jimenez/Poblet

We thank Drs. Francisco Jimenez and Enrique Poblet for their comments relating to our article on the pathophysiology of female pattern hair loss.¹

We would like to respond to their comments:

 The hierarchical arrangement of hair follicles in humans is inferred from that seen in other mammalian species (Figure 1). Histomorphological criteria or markers to

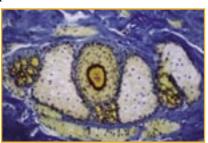


Figure 1. Photograph showing a compound follicular unit in a goat with a single large primary follicle and multiple smaller secondary follicles.

classify human follicles into primary and secondary hair follicles have not been identified.

We stand corrected. The observation that, in utero, hair follicles grow in groups of three or more, with a

2.



Figure 2. Illustration showing developing groups of hair follicles with each group consisting of a primary follicle (P) surrounded by secondary follicles (arrows)

central primary follicle surrounded by smaller secondary and tertiary follicles, was made by Montagna, et al. in their illustration (Figure 2) and not Headington as we suggested. Indeed, Headington defined the follicular unit as a "well circumscribed structure composed of two to four terminal

⇒ bottom of next page

Expanded Newcomers Program set for 2011 ISHRS annual meeting

Robert T. Leonard, Jr., DO Cranston, Rhode Island, USA hairdr@pol.net

I am very excited to chair the Expanded Newcomers Program, a unique offering in Anchorage this year. This event exemplifies one of the founding tenants of our Society, which is to welcome colleagues from all specialties to participate in the world's premier educational conference in the field of hair restoration surgery. Since its inception in 1993, the ISHRS offers its members an opportunity to create and grow friendships that can last throughout one's lifetime.

And...it all begins at the Newcomers Reception!

How It Works

This program is designed to help our newest ISHRS meeting attendees become acquainted with the Society, its members, and the field. "Newcomers" will be paired with volunteer member "hosts" prior to the meeting. We encourage longstanding members to sign up as hosts. All physician and surgical assistant registration types may participate in the program. We expect that non-members who wish to participate for the longer term program apply for membership.

New, Expanded Program

In its third year, the Newcomers Program is expanding its role into an informal mentorship relationship intended for a term of 2 years. This longer period of time will allow the new person to ask questions and become more closely acquainted with the Society, its members, and the field. In addition, the Host may allow the Newcomer to visit his or her practice.

Active Members

If you plan to attend the Anchorage meeting, please consider signing up! Active members will be paired with 2-3 Newcomers. The plan is that your Newcomers will also meet and talk with each other, sit together, and hang out at the meeting.

continued from previous page

follicles, and one or, rarely, two vellus follicles, the associated sebaceous lobules, and the insertions of the arrector pili muscles."²

3. We do have a paper in press on the anatomy of the arrector pili muscle and its relationship with the hair follicle that shows loss of contact of AP muscle with miniaturised hair follicle within a follicular unit (Yazdabadi, A., et al. Miniaturized hairs maintain contact with the arrector pili muscle in alopecia areata but not in androgenetic alopecia: A model for reversible miniaturization and potential for hair regrowth).

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Guidelines

- 1. Host contact the Newcomer prior to the meeting and answer questions.
- Host and Newcomer must attend the Newcomers Orientation & Reception on Wednesday/September 14, 2011, 5:30PM-6:30PM, Quarter Deck, Hotel Captain Cook, Anchorage, Alaska. Meet and greet!
- 3. Host and Newcomer check in with one another; sit together during opening session.
- 4. Host and Newcomer communicate with each other throughout a 2-year term via email, phone, or face-to-face. Newcomers are encouraged to email and call their host with questions or for advice regarding hair restoration surgery matters.
- 5. Neither the Host nor the Newcomer may claim that they "trained" as a result of this Host-Newcomer relationship. Neither may advertise this relationship in their promotional materials, on their website, or in their curriculum vitae.

During the registration process, please select the option (Newcomer or Host) if you would like to sign up for this program.

If you have any questions, please contact Liz Rice-Conboy at ISHRS Headquarters, info@ishrs.org, or me at hairdr@pol.net. We shall be in contact with you once you sign up for the program.

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Surgical Assistants Corner

Patrick Tafoya Orlando, Florida, USA patrickatafoya@yahoo.com

Greetings from Orlando where we are all melting from the never ending heat of the summer. I hope everyone is looking forward to the cooler weather in Alaska as I am and, of course, the educational experience of the meeting, too. I hear from the grapevine that there will be quite a few ground breaking presentations there and a few grizzly bear sightings, too. That should be a unique experience. Hope to see everyone there!

How to help grow a hair

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When carrying out a hair transplant, a number of wounds are deliberately inflicted on the patient's scalp; often a large wound that regularly stretches from ear to ear, held together by a foreign body, a stitch. Next, approximately 500 to 6,000 holes are made in a separate part of the scalp. After "damaging" the scalp, a live organ is placed into each of the small holes that have been created. We then step back and expect the body to heal the wounds without any complications.

We then assume that the body will make new blood vessels and attach them to the hundreds, sometimes thousands, of live organs we've left behind. And, presto, a hair grows!

Maybe we should help. But how can we?

I have found many ways assistants can help to facilitate the healing process:

- 1. Take the donor strip in two phases; the longer the hair stays in the body the better the growth is.
- 2. Use a sharp, sterilised blade/needle to make the incisions. Change it regularly.
- 3. Do not damage the native hairs when making incisions.
- 4. The incisions must be of the correct size and angle to prevent damaging too much the skin's surface.
- 5. Test that incisions will ensure a snug fit for the graft and prevent damaging it.
- 6. Use a sharp blade when cutting and slivering. Change it regularly.
- 7. Tumescence will prevent transection of blood vessels, nerves, and surrounding hairs.
- 8. Trim the epithelium (top outside layer of skin) from the grafts. This will prevent scarring around each individual graft (including pitting and tenting).

- 9. Trim excess tissue from the graft. Each clinic will set its own standard, so trim to your clinic's standard. (Remember, it's a hair transplant not a scalp transplant.)
- 10. Limit the number of cuts per graft. This will ensure the grafts are not damaged and are out of the holding solution for a minimal amount of time.
- 11. Cut one graft at a time and leave the rest in the holding solution.
- 12. Leave a little fatty tissue below the follicle so that you can hold onto this to plant the graft.
- 13. Handle the graft with care. Do not touch the follicle when cutting or planting.
- 14. Do not pile grafts up on your finger when you are planting, just take around 10 at a time and get someone to pass them to you. It is faster to plant this way, and the grafts remain hydrated.
- 15. Emphasize to the patient how important the post-operative care is for the healing process, and ensure that the patient understands this.
- 16. Hydration! The grafts must be kept moist at all times. Dry grafts are dead grafts.

Remember: The body will heal a wound before it will grow a hair. The more damage you inflict on the scalp and the graft, the longer time it will take the body to heal the damage. Only when the damage is healed will the body attach a blood supply to the graft.

Surgical Assistants: Get Involved in the ISHRS

We would love to hear from you. There are many ways you can contribute:

- Write an article or present an idea to the Forum
- Serve on the Surgical Assistants Executive Committee
- Help in the planning of our educational events
- Teach at our meetings and workshops

Contact info@ISHRS.org today!





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Classified Ads cost \$60 plus 60 cents per word per insertion. You will be invoiced for each issue in which your ad runs.

SEEKING DOCTORS TO SUBMIT DIFFICULT CASES

The Difficult Cases session moderated by Dr. Tony Mangubat with a stellar panel of hair transplant experts has become one of the most interesting and educational forums at our Annual Meeting. You are invited to submit a "difficult case" that you request help with or that you have performed that could be presented for the education of others. Submitted cases with the most educational value will be selected.

Send your brief case summary with pictures to mayer4sd4@aol.com and tony@mangubat.com.

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SEEKING DOCTORS TO BRING PATIENTS FOR LIVE PATIENT VIEWING

This is an excellent opportunity for you to show off your work! 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 of, etc. The doctor displays a poster that outlines the details of the case. This is not the format to show off the typical follicular unit transplant.

We are looking to showcase interesting and unusual cases such as:

- FUE (full restoration)
- Megasessions
- Eyebrows/eyelashes
- A new technique
- Scalp surgery/flaps
- Reconstruction—trauma, radiation, etc.
- Repair—plugs, donor scars
- Operation Restore cases
- Complications
- A challenging restoration on a patient who was in a hair system previously

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 patient's surgical results to your colleagues.

If you think you would like to participate, please email Dr. Robert Niedbalski at drniedbalski@gmail.com. If you are unsure if the case is what we are looking for, please ask!



New Vistas & Trusted Techniques in Hair Transplantation

Anchorage, a modern city set amidst the vast expanse of Alaskan wilderness, will host this year's premier international conference on hair transplant surgery.

SEPTEMBER 14-18, 2011

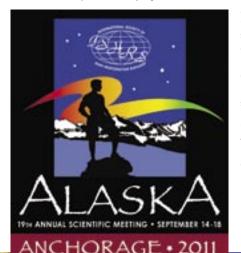
PLAN TO ATTEND: www.ISHRS.org/AnnualMeeting.html

Surgeons and staff will not want to miss this robust conference of thought leaders on the frontiers of best practices. The refreshing and friendly atmosphere of Alaska will invigorate each day of the conference. Pristine waters and breathtaking views of the Chugach Mountains and Mt. McKinley are the backdrop for up close wildlife adventures and glacier excursions, visionary lectures, hands-on workshops and networking events. Inspired by nature's wild beauty and Many exciting formats and topics are being planned for the 19th Annual Scientific Meeting, including a full day, hands-on Basics Course in Hair Restoration Surgery utilizing cadaver scalp, a full day Advanced/Board Review Course, a full day Surgical Assistants Program, several morning workshop on specific topics, a Surgical Assistant Cutting/Placing Workshop utilizing cadaver scalp, lunch symposiums, Breakfast with the Experts table discussion

the highest caliber of educational presentations, this year's event promises to be a trip of a lifetime!

Newcomers Are Welcome!

As a result of the positive feedback from the past two annual meetings, we will again 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.



groups, Live Patient Viewing, several controversy panels, a high definition surgical video theater, a hairline design panel, use of an audience response system to keep the sessions exciting and dynamic, a full exhibits program, and many opportunities for socializing and networking.

Plan Your Pre- And Post-Meeting Activities Early! Wildlife and Glacier Cruises • Flight seeing – glaciers, Denali • Sea kayaking, River rafting, float trips • Dog sledding • Rainforest and alpine hiking, glacier hiking • Bear viewing • ATV tours • Fishing • Canyoneering, rock climbing, ice climbing

International Society of Hair Restoration Surgery

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Advancing the art and science of hair restoration

Upcoming Events

Date(s)	Event/Venue	Sponsoring Organization(s)	Contact Information
DIPLOMAS Academic Year 2011–2012	Diploma of Scalp Pathology & Surgery U.F.R. de Stomatologie et de Chirurgie Maxillo-faciale; <i>Paris, France</i>	<i>Coordinator</i> : Pr. P. Goudot <i>Directors</i> : P. Bouhanna, MD, and M. Divaris, MD	Tel: 33 +(0)1+42 16 13 09 Fax: 33 + (0) 1 45 86 20 44 sylvie.gaillard@upmc.fr
January 2012	International European Diploma for Hair Restoration Surgery	Coordinator: Y. Crassas, MD, University Claude Bernard of Lyon, Paris, Dijon (France), Torino (Italy), Barcelona (Spain). Department of Plastic Surgery www.univ-lyon1.fr	For instructions to make an inscription or for questions: Yves Crassas, MD yves.crassas@wanadoo.fr
September 14-18, 2011	19th Annual Scientific Meeting of the International Society of Hair Restoration Surge Anchorage, Alaska, USA	International Society of Hair Restoration Surgery www.ISHRS.org	Tel: 630-262-5399 Fax: 630-262-1520
October 14-16, 2011	3rd Annual Hair Restoration Surgery Cadaver Workshop St. Louis, Missouri, USA	Practical Anatomy & Surgical Education, Center for Anatomical Science an Education, Saint Louis University School of Medicine in collaboration with the International Society of Hair Restoration Surgery http://pa.slu.edu	d http://pa.slu.edu
November 12-13, 2011	3rd Annual Meeting of the Association of Hair Restoration Surgeons of India (HAIRCON-2011) Mumbai, India	Association of Hair Restoration Surgeons of India www.ahrsindia.org	Tel: + 91-9821308411 drrajeshrajput@gmail.com

HAIR TRANSPLANT FORUM INTERNATIONAL

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

- 2011: 19th ASM, September 14-18, 2011 Anchorage, Alaska, USA
- 2012: 20th ASM, October 17-21, 2012 Paradise Island, Bahamas
- 2013: 21st ASM, October 23-27, 2013 San Francisco, California, USA