



# World Society for Reconstructive Microsurgery

The purpose of the Society shall be to stimulate and advance knowledge of the science and art of Microsurgery and thereby improve and elevate the standards of practice in this field of surgical endeavor. The Society shall be the highest medium of recognition in the field of Microsurgery as evident by superior attainment and by contribution to its advancement. It shall provide an international forum for the exchange of ideas and the dissemination of innovative techniques.



## Message from the Editor

This is the third issue of the WSRM Newsletter, the previous issue having been published in the winter of 2011. As reported in the last issue, WSRM will do a bi-annual newsletter (fall and spring) to provide updated news on the members' activities in terms of research and clinics as posted on the website's "members only" section, and to serve as an avenue to share their experiences as a network of members. Through the great efforts of our secretary, Ms. Krista Greco, this issue has been published on schedule to bring the updated news of WSRM. I am grateful for her continuous work.

Dr. Robert L. Walton, Chairman of WSRM 2013, gave an update on the status of the preparations for the forthcoming congress. After reading his report, I am sure that WSRM 2013 in Chicago will be a very exciting congress for all attendees, and I am looking forward to seeing all the WSRM members as well as our friends from across the globe there.

I was very surprised after I read Drs. Bakhach and Zgheib's report entitled "Microsurgery in the Cedars Land – Lebanon," the content was too much for me who never experienced war to believe, but at the same time, I greatly appreciate their unremitting efforts to establish the Lebanon Reconstructive Microsurgery, and I would likewise ask all WSRM members to help their cause. I know there are many young surgeons in underdeveloped countries that want to study reconstructive microsurgery but have difficulty finding an educational microsurgery center. I have personally accepted foreign microsurgical fellows for the last 17 years, and I would like to propose that WSRM members should open their microsurgery centers to accept these young candidates. As the matter of international microsurgery opportunities is one item in the WSRM Newsletter, we welcome you to introduce your center and society for young prospective candidates.

Kazuteru Doi, MD, PhD  
Editor-in-Chief, President

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## What's New in Microsurgery?

### **Peripheral nerve regeneration with a fibrin scaffold holding fibroblasts producing VEGF**

Authors: Lasso JM, (M.D., Ph.D.); Goñi E, (M.D.).

#### **Introduction**

Nerve reconstruction is a big challenge for plastic surgeons and for this reason multiple researchers are performing studies in order to improve the quality of the nerve regeneration but also to accelerate its functional recovery. We have developed a method to regenerate the peripheral nerve based in gene therapy.

Our idea consists in transducting fibroblast with adenovirus encoding VEGF, that is a growth factor that promotes nerve regeneration.

#### **HYPOTHESIS AND OBJETIVES**

##### **1.1 Hypothesis**

Peripheral nerve regeneration may be stimulated by a device comprising three components:

- Biological homing device
- Extracellular matrix scaffold.
- Transduced cells promoting during a lost lasting period growth factors.

##### **1.2 Objectives**

1. Studying the behavior of nerve regeneration through guidance enhancing extracellular biological substances for regeneration.
2. Studying guides for nerve regeneration in biological transfected cells (used as a vehicle adenovirus) expressing endothelial growth factor.
3. Assessment of the regeneration by morphological methods to differentiate between activation and the onset of inflammatory response.
4. Immunohistochemical study of the activity of the transfected cells, survival in the system and the generation of side effects.

#### **MATERIALS AND METHODS**

##### **2.1 Materials**

###### **2.1.1 Animal Experimentation**

New Zealand rabbit breed.

##### **2.2 Methodology**

#### **2.2.1 Preparation of the study groups**

We operated on a total of 40 rabbits which were randomly divided into two groups of 20 subjects each:

Group I: 10 Rabbits in which we performed a nerve resection (4cm), and a guidance tube was done with a vein was placed between both nerve ends. The lumen was refilled with fibrin glue.

Group II: 10 Rabbits in which we performed a nerve section (4 cm) and a guidance tube was done with a vein was placed between both nerve ends. The lumen was refilled with a fibrin glue, holding fibroblasts encoding the production of VEGF.

In both groups, 10 animals were sacrificed after 21 days, and 10 animals were sacrificed after 80 days in order to study the evolution of the nerve regeneration.

#### **2.2.2 Surgical procedure**

There were two types of sequential surgical procedures to analyze the development of animals:

Surgery for nerve section and set the different study groups

Surgery for making results after each period of study

In each animal in group II were taken 2 square centimeters of skin to elaborate the gel with the transfected cells.

#### **2.2.3 Method cell culture**

Were maintained at 37 ° C humidified composed of 95% air and 5% CO<sub>2</sub>. The culture medium was changed depending on the cell monolayers.

The fibroblasts were obtained from skin biopsies (2cm<sup>2</sup>) of each of the rabbits

#### **2.2.4 Preparation of fibrin gels and adenoviral vectors**

Fibrin cryoprecipitate obtained from rabbit blood and vectors derived from human adenovirus serotype 5.

#### **2.2.5 Management of experimental animals**

##### **2.2.5.1 Surgical Technique**

About 6 inches of gluteal vein were dissected.

A section was performed in the peroneal nerve, removing 4 cm of it.

After the selected operation was carried out according to the group that owns the animals.

Group I: nerve section removing 4 cm of it, and interposition venous fragment as guide tubule cells with no fibrillar matrix.

Group II: section of nerve and interposition venous fragment occupied by fibrillar matrix and fibroblasts expressing endothelial growth factor.

## What's New in Microsurgery? - continued from pg 2

### 2.2.5.2 Second surgery

All groups had common times for the slaughter of animals that were at 21 and 80 days.

### 2.2.6 Methods of assessment

#### 2.2.6.1 Clinical and surgical assessment

Degree of difficulty in the dissection of soft tissue

Color and appearance of viability of the area

Signs of infection

Appearance of structures not previously (neuromas).

### 2.2.6.2 Histology

The study axonal regeneration rate, amount of regeneration, infiltration by macrophages and angiogenesis

### 2.2.6.3 Immunohistochemical Study

We studied antibodies to endothelial antibodies against neurons in general

### 2.2.6.4 Statistical analysis of results

SPSS.

## RESULTS

### 3.1.1 Group I

Were visualized macroscopic differences in the subgroups of rabbits that showed the difference in treatment was carried out between the two subgroups.

In the 21-day specimens showed a smaller diameter of the venous graft that held the nerve structure built in the vascular area.

In the case of specimens of 80 days, the structure established by surgery was maintained, but the size of the vein graft was lower by changing the morphology and appearing narrow.

### 3.1.2 Group II

The surgical specimens of animals in this group presented evidence that established themselves as unique differentiating with respect to their comparative group I.

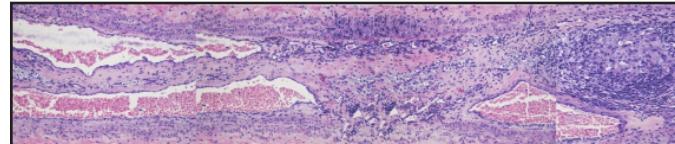
At 21 days, maintaining the volume increase at both ends of the nerve as in the vein graft. Also evidenced the onset of a vascular component established new vascular structures in the area

At 80 days the cases were good planes of sections and structures could be identified easily. Both the

nervous component of distal and proximal ends, such as venous graft volume remained. The vascular plexus area decreased but maintained venous graft vascular on different formations of the tibial nerve.

### 3.2 Technical Evaluation of Pathology

#### 3.2.1 Hematoxylin / eosyn



Nerve regeneration after 21 days in group II.

#### 3.2.1.1 Group I

At 21 days it was confirmed the presence of nerve regeneration, showing in some fascicles arrangement of Schwann cells surrounding the axonal regeneration. Images were also presented regeneration of fascicles fronts establishing Bünger bands, but with a low rate of regeneration. Against these bundles were visualized some cases without regeneration and in other ones with neuroma formation type. At 80 days there was complete degeneration of both ends by the failure in nerve regeneration.

#### 4.3.1.2 Group II

At 21 days it was apparent the presence of nerve bundles with well-structured pattern, which ran in the vein graft. It was presented was in the proximal fusion between the perineurium and endothelium but also was observed at different points along the regenerated nerve. Neuromas were not visualized or scar tissue. There was no inflammatory activity. In some specimens were found regenerating nerve fascicles near the distal end. At 80 days were observed nerves with full presence of neural structures of the components, but of smaller size.

### 4.3.2 Neurofilament Detection

Using the monoclonal antibody "mouse anti-human neurofilament" clone 2F11 (anti-NF, 2F11).

#### 4.3.2.1 Group I

Neurofilament positivity was observed proximal marked in all samples analyzed, a total of 20.

#### 4.3.2.2 Group II

Neurofilament positivity was observed proximal marked in all samples of group II, in a total of 20 to day 21 and day 80.

#### 4.3.3 Detection of vascular endothelial growth factor (VEGF)

The study was performed using an anti-VEGF monoclonal antibody, JH Colen 121 ("mouse monoclonal IgG") of the commercial Millipore.

##### 4.3.3.1 Group I

VEGF expression was found in the proximal nerve filaments associated with regeneration at 21 days of treatment.

It stood in front of the VEGF positivity in the booklets and was kept regeneration and capillary positivity in outbreaks that were located in the peripheral venous endothelium dependent.

##### 4.3.3.2 Group II

It was observed compared VEGF positive staining in both the proximal end and the distal, with granules being located in transportation.

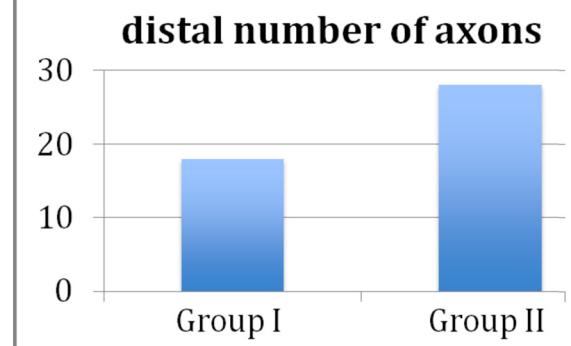
In the group of 80 days was found positive on both the proximal and distal end level neurotubules structures that exist on both ends.

#### 4.4 Assessment of Statistics Technical

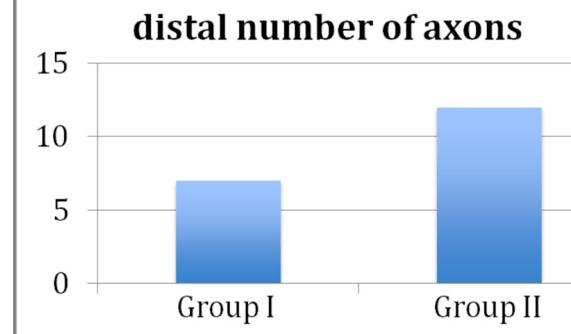
The number of axons counted were reduced in distal and proximal sides in the two groups, and differences were not statistically significant.

In both groups we can see a noticeable drop in the number of axons for the distal stump that were significant between the treatment at day 21 and 80 ( $p = 0.05$ ).

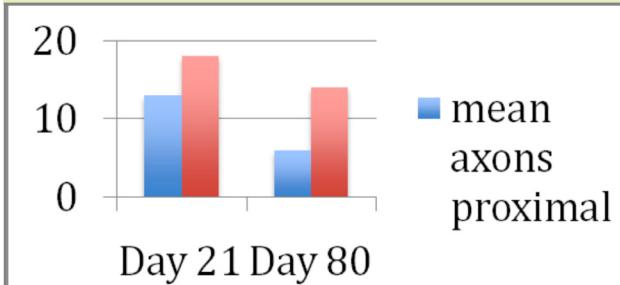
Mean of axons in distal stump at 21 days



Mean of axons at distal stump after 80 days



Averages of axons distal and proximal in Group I



#### 5. DISCUSSION

In both groups we can see a noticeable drop in the number of axons for the distal end that is most evident in the longer term determinations.

We have also observed that the survival time of regenerating axons is higher achieving a higher rate of effective regeneration.

In this work we observed high angiogenesis action manifested in group II. The origin of this activity was intrinsic to the main action of the growth factor. We can see the proximity of both proximal and distal cones enhances axonal survival and to maintain a greater number of axons that regenerate the distal end.

We can also observe the survival time of the specimens treated with the endothelial factor. This data is expressed specifically in the distal comparative averages.

#### 6. CONCLUSIONS

1. The device chosen as guide channel allows the development in axonal growth in an appropriate cellular environment and active for nerve regeneration.
2. The presence of endothelial growth factor creates a microenvironment that promotes the survival and neuronal regeneration. It produces activation in the two major cell types of peripheral nerves.
3. The morphological findings derived of endothelial growth factor are considered to be the basis for the activation of nerve regeneration in both the central and peripheral nervous system

## News from the Executive Council

The Executive Council of World Society of Reconstructive Microsurgery has been active with various issues over the last few months. Listed below is an update on a few of the items.

### News from the Council Meeting

Between the winter issue and this summer issue, we did not have the formal council meeting, however, several actions proceeded.

- **WSRM 2013 in Chicago**

Preparations for the 7th Congress of WSRM are making steady progress by the great efforts of local chairman, Prof. Robert Walton and the organizing committee. Please, read the local chairman's report in this issue of the newsletter. I am looking forward to see all WSRM members in Chicago next summer.



- **The Regional Congress of the Asian-Pacific Federation of Societies for Reconstructive Microsurgery (APFSRM).**



The First Congress of APFSRM will be held on October 8 and 9, 2012 in Singapore. The purpose of this Congress is to share our wealth of experience and knowledge among surgeons of the Asian Pacific countries with regards to the practice, new developments and new applications of microsurgical techniques. I hope that this Congress will offer an opportunity for all participants to form personal ties, especially among members of Asian Pacific countries. Above all, I hope that this Congress will enable you to exchange results, gleam new ideas and create new projects that will drive future progress in reconstructive microsurgery.

On behalf of the WSRM committee, I would like to thank the 2 Co-Chairmen, Dr. Tann Soo Heong and Dr. Tan Bien Keem as well as the members of the Local Organizing Committee, for their effort in organizing the Congress. I look forward to seeing you in Singapore.

- **Quick Approval of New Membership Application**

By the great efforts of Prof. Scott Levin, Chairman of Membership Committee, and the Committee members, membership application can now be examined during the on-line committee meeting every month and approval can be decided. In the previous years, it would have taken more than a year from application to approval because of the annual committee meeting being held on site. Quick approval of new membership applications should accelerate the growth of WSRM members.

- **Regular Subscription of Online Journal of Reconstructive Microsurgery (JRM).**

I noticed that shipping of JRM to a WSRM member was fetched up after the first issue of the 2011 volume due to a Thieme's communication error. We discussed this matter with the agent of the Thieme, and asked them to restore the regular subscription of the online journal at the cost of 70 US\$. Presently, we have received it at a regular interval without delay.

*News from the Executive Council continued next page*

## News from the Executive Council - *continued from pg 5*

### **Hosting Future WSRM Meetings**

The World Society for Reconstructive Microsurgery (WSRM) is aimed “to stimulate and advance knowledge of the science and art of Microsurgery” and aims to “provide an international forum for the exchange of ideas”. The WSRM Congress brings together practitioners and scientists to build and develop thriving scientific societies, health care agencies and academic institutions in all parts of the world and to integrate their knowledge toward a common language of accepted standards and practice in reconstructive microsurgery. During the WSRM Congress, members of the international microsurgery community have the opportunity to share and learn about new research and best practices in the field. The Host organization shall benefit from global visibility and recognition as a key global player in the development of reconstructive microsurgery. If you are interested please [click here](#).

### **WSRM Endorsement Microsurgery Seminars, Meetings & Workshops Worldwide**

WSRM is making an effort to show its support of the various microsurgery activities and meetings that take place around the world. Please [click here](#) to view the endorsement guidelines. A formal request must be submitted addressing the guidelines stated and your qualifications. The WSRM WILL NOT endorse a meeting within the same region within one year of the biennial congress. The WSRM will ONLY endorse national meetings.

#### **WSRM Country Liaisons**

##### **Argentina**

Guillermo Loda, MD

##### **Australia**

Wayne Morison, MD

##### **Austria**

Manfred Frey, MD

##### **Belgium**

Phillip Blondeel, MD

##### **Canada**

Ronald Zuker, MD

##### **China**

Xiao-Song Gu, MD

##### **Cyprus**

Alkiviades Alkiviadous, MD

##### **Denmark**

Christen Krag, MD

##### **Egypt**

Tarek El-Gammal, MD

##### **England**

Simon Frostick, MD

##### **Finland**

Simmo Vilkki, MD

##### **France**

Michel Merle, MD

##### **Germany**

Gunter Germann, MD

##### **Greece**

Catherine Vlastou, MD

##### **India**

Raja Sabapathy, MD

##### **Israel**

Yaffe Batia, MD

##### **Italy**

Marco Lanzetta, MD

##### **Japan**

Isao Koshima, MD

##### **Korea**

Duke Whan Chung, MD

##### **Lebanon**

Bishira Atiyeh, MD

##### **Malaysia**

A. Sukaris Halim, MD

##### **Netherlands**

Ed Hartman, MD

##### **Poland**

Leszek Romanowski, MD

##### **Taiwan**

David Chuang, MD

##### **Romania**

Alexandru Georgescu, MD

##### **Russia**

Kirill Pshenisnov, MD

##### **Singapore**

Lam-Chuan Teoh, MD

##### **Sweden**

Hans Mark, MD

##### **Switzerland**

Audrej Banic, MD

##### **Turkey**

Ayan Gulgonen, MD

##### **Serbia**

Marko Bumbasirevic, MD

##### **USA**

Robert Walton, MD

## Liaison Update

### Microsurgery in the Cedars Land – Lebanon

Joseph Bakhach, M.D. Elias Zgheib, M.D.

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Lebanon, a small country situated on the eastern border of the Mediterranean sea, has a surface area of 10452 Km<sup>2</sup> and a population of 4 million 150 thousand. The medical level of the country is relatively advanced with 80 specialized plastic and reconstructive surgeons and around 600 specialized orthopedic and reconstructive trauma surgeons.

The majority of the aforementioned received high level education and training in major and well renounced centers in Northern America or Europe. In addition, Lebanon comprises six universities that graduate students in all medical specialties, giving them an education equivalent to the highest international standards. One of these, and the oldest, is the American University of Beirut, founded in 1886 and sought after by many students from Lebanon, nearby Arab countries (including the Gulf countries), in order to acquire the high educational level and specialized trainings this institution provides. These universities are affiliated to medical centers with advanced technological equipment and are well recognized within the scientific community. This combination of highly specialized training and well equipped centers puts Lebanon on the map as a medical destination, luring patients from nearby and distant countries such as Syria, Iraq, Egypt, and Gulf countries, not taking into account the Lebanese emigrants who are dispersed all over the world and whose number represents four times the Lebanese population, and whom on their vacation to their native country profit from the excellent medical services it has to provide.

The medical coverage and social security system in Lebanon is deficient in light of the political situation. We rely on multiple public organizations that account for the

salaries of the different sectors (agricultural, educational, internal security, army, etc...), aided by several other complimentary organizations of the private sector and profit-directed insurance companies which account for any deficit in financial coverage. Nevertheless, the latter have limitations in financial coverage and are deficient in the field of reimbursements, faced by the elevated cost of medical care in a country with a relatively low basic salary. These social coverage and insurance institutions represent a lobby, and function in a manner nearly independent with minimal professional conscience or medical deontology, having the sole purpose of limiting the price of the medical care and its expenses. Being not only a plastic surgeon, but a reconstructive, hand, and microvascular surgeon, I have been faced with several situations that can be qualified as immoral, specifically in the field of work-related accidents. I was presented on several occasions with patients suffering from complete digital amputations requiring microvascular reimplantation but nevertheless were not covered by their insurance that argued that loss of one finger would cost them twenty times less than its reimplantation, not taking into consideration the psychosocial effect in that matter. The situations faced create a double-edged sword with a major bulk of the underprivileged population ending up with no medical coverage which enables them to receive the proper and adequate medical attention. On the other hand, the financially stable and relatively rich people whom we have noticed to present from the Gulf countries and Iraq, and of whom a major bulk are Lebanese in origin, are able to afford the high-cost medical attention and the expensive surgical procedures.

This social injustice has strongly contributed to the formation of a chaotic sanitary and medical situation, preventing doctors across the country to become involved in highly specialized centers of care. In spite of this trend, operations requiring high medical expertise and an advanced level of care such as finger reimplantation, surgeries with extensive soft tissue losses are still confined to tertiary referral and university-affiliated centers such as the American University of Beirut Medical Center (AUBMC) which excels in giving adequate treatment and postoperative care to the patients involved. On the other hand, and in other university-affiliated centers, these types of procedures are rarely done except some sporadic cases of attempted digital reimplantation and microvascular free flap transfer, all with limited success.

## Liaison Update - continued from pg 7

As you already know, the practice of reconstructive microsurgery necessitates a long and tedious learning process, which includes the acquisition of the basic surgical principles encountered by rotating in General and Plastic and Reconstructive surgery. The acquisition of the correct skills and the ability to successfully perform these tedious and challenging operations relies on the surgical endowment of the surgeon and his experience, coupled with the regular and continuous use of these skills during the procedures. Despite the fact that reconstructive microsurgery is the Michael Angelo of plastic surgery, allowing the repair of what an accident had destroyed or what a tumor had devoured, it is sad to say that the majority of the Plastic Surgeons in Lebanon have chosen to abandon Reconstructive Microsurgery in favor of the more lucrative and less tedious Aesthetic surgery.

Actually, Lebanon contains few microsurgeons that can be counted by hand; two of which are working at the American University of Beirut Medical Center, me included. After twelve years of private surgical practice in a clinic specialized in Hand and Reconstructive Microsurgery, I returned to my native country and was recruited by AUBMC. We subsequently created the "Hand and Microsurgery Unit" within the "Plastic and Reconstructive Surgery" department. As a result, we have already performed several microsurgical procedures to reconstruct defects on the face and extremities sustained by blast injuries, and containing loss of various amounts of composite and complex tissues and resulting in anatomic deformities. Unfortunately, the majority of these cases are referred from the zones of conflict that lie in our neighboring countries Syria and Iraq.

The particularity of these post-blast injuries as compared to the classical traumatic lesions resides in the fact that a bomb explosion entails several phenomena:

- The shock sustained by the body due to shrapnel injuries is exacerbated by the kinetic effect of the fragments on the superficial and deep anatomic structures, in particular those within the crush and tear zones.
- The thermal effect that is produced by the contact and passage of shrapnel through the tissues, causing soft tissue burn and damage.

- Finally, the blast waves produced by the explosion, particularly if in proximity to the body (Bomb Maker injuries), cause soft tissue loss.

In light of this kind of substance loss, it is fundamental to pay attention to the mechanisms of injury. There is always a need for a complete physical examination of the different anatomic neural and vascular structures in proximity to the site of injury, a debridement as wide as possible with excision of all suspicious structures before starting to plan the reconstruction. In addition, a study of the principal vascular structures with the help of a CT angiogram or an angiography to assess the patency of the different vessels, particularly those which will be used as a nourishing pedicle for the free flap, are necessary.

Moreover, these deep lesions that are encountered serve as a nidus for infections especially that these lesions are sustained in individuals living in a state of stress related to armed conflict. Their early management is mainly in primary care or basic field hospitals with limited resources and capabilities in addition to poor hygiene. As a result, these patients present to us in the subacute or chronic phase with significant soft tissue loss, in addition to poorly treated wounds complicated by infection with multi-resistant organisms. Local wound care coupled with broad spectrum antibiotics are advised until the status of the wounds improves before the initiation of a long and complex microsurgical reconstructive course.

In addition to our surgical activity, our mission at the heart of the American University of Beirut Medical Center in particular, and towards our beloved country in general, is to supply the upcoming generations of plastic surgeons with the essential skills and expertise to become excellent microvascular surgeons. This is why we have initiated a Microsurgical training course at the Faculty of Medicine at our institution. The aim of this course is to teach the basic techniques of the vascular microsurgical suture in addition to the different vascular anastomotic types. We are also planning to start an advanced course that will deal with the difficult situations encountered in microsurgery and that will teach the residents the microvascular sutures if faced with challenging problems (incongruent vessels), in addition to free microvascular transfers on rats. With these small steps that we have taken, we have

## *Microsurgery in the Cedars Land – Lebanon continued from page 8*

installed the building blocks on which a successful hand and microsurgical program will be built. Nevertheless, a lot of work still has to be done in the field of brachial plexus in both adults and infants, and the surgical treatment of the congenital hand. A regional upper extremity and hand allotransplantation program is also missing and has to be founded. All these actions should be completed in the near future to be able to offer the best standard of care to both

Lebanese and foreign patients presenting with these types of injuries.

The journey is long and our steps are dismal. Nevertheless, our hopes are high, aiming to establish a tertiary care and referral unit capable of assimilating the load of patients with complex injuries in this part of the world engaged in never ending war. ■

## **Microsurgery and Reconstructive Transplantation in the USA!**



The American Society for Reconstructive Microsurgery had a highly attended and stimulating annual meeting in January 2012. In addition to its comprehensive program format, the meeting addressed the very controversial issues surrounding innovative surgery vs. experimentation and the ethical boundaries that separate these two approaches to surgical problem solving. Attendees gained insight as to the ethical guidelines for innovative surgery and these will be forthcoming in an ASRM "White Paper." In one breakout panel, the future of microsurgery was addressed and discussion ensued on how best to train the next generation of microsurgeons. The ASRM has implemented and endorsed the Microsurgery Fellowship Match over the past three years, and the program has enjoyed great success in assisting our budding young microsurgeons in identifying bonafide training opportunities as well as participation in a fair and well-organized selection process. The American Society for Reconstructive Transplantation held a conjoint session with ASRM at the Annual Meeting to provide members an update on reconstructive Composite Tissue Allotransplantation (CTA) and funding, CTA regulation, and the current status of the International CTA Databank Registry.



Next on the agenda of Microsurgery and Reconstructive Transplantation education in the United States will be the ASRT Biennial meeting in November 15-17, 2012 in Chicago presided by L. Scott, Levin, MD. Under the guidance of its president, Michael Neumeister, MD, The American Society for Reconstructive Microsurgery will hold its Annual Meeting in January 12-15, 2013 in Naples, Florida. The ASRM Program Committee has incorporated

panels and courses that bring the latest in technology to the forefront. The US has its fingers on the future pulse of reconstructive microsurgery and is working to recruit and engage young microsurgeons, and further advance the science and regulation of reconstructive transplantation.

**ASRM Leadership:** Michael M. Neumeister, MD, President; Joseph Serletti, MD, President- Elect; Allen T. Bishop, MD, Vice President; Elisabeth Beahm, MD, Secretary; Charles E. Butler, MD, Treasurer; Keith E. Brandt, MD, Immediate Past President; Joseph Disa, MD, Senior Member at Large; Lawrence Gottlieb, MD, Senior Member at Large; Michael Klebuc, MD, Junior Member at Large; Joan E. Lipa, MD, Junior Member at Large; A. Lee Dellon, MD, Historian; Liza Wu, MD, Young Microsurgeon Group Representative

**ASRT Leadership:** L. Scott Levin, MD, FAC, President; Maria Siemionow, MD, PhD, President-Elect; W. P. Andrew Lee, MD, Treasurer; Suzanne Ildstad, MD, Secretary; Warren Breidenbach, MD, Board Member; Sue McDiarmid, MD, Board Member; Angus Thomson, MD, PhD, Board Member; Stefan Schneeberger, MD, Past President ■

## Meeting Previews



Robert L. Walton, M.D., F.A.C.S.

It was nearly four years ago that I petitioned for and was elected to Host the 2013 WSRM meeting in Chicago. The meeting seemed so far off at the time – it was just an imaginary item in the mental portfolio. In those first days and weeks, we forged a theme for the meeting, “Achieving Normal in Complex Reconstruction”. The intent was to incite and

challenge world microsurgeons to begin thinking about this idea of ‘Normal’ and bring to the Chicago Congress their thoughts and experiences in approximating the ideal. And from there evolved a meeting Agenda that critically addresses where we are collectively in Complex Reconstruction and what endpoints we and our patients wish to define and accept as “Normal”. It is truly amazing the rapidity in which time has passed. In the following interim, much hard work has been invested in securing venues and coordinating meeting schedules and topics to satisfy our mission. We are now nearing our ‘one-year to lift-off’ mark and the meeting is taking its final shape - promising to be outstanding in every respect.



Cloud Gate, Millennium Park

Visitors to Chicago will find the city to be most welcoming in July with innumerable indoor and outdoor venues to see, partake, and enjoy. The Fairmont Hotel, our meeting headquarters, is strategically located on the Chicago River at the head of the Magnificent Mile, a Haven for shopping and restaurants. Immediately to the South of the hotel is Millennium Park with open-air concerts and direct connections to the Chicago Art Institute. Further South one will find Grant Park, the Shedd Aquarium

and the Field Museum of Natural History. The Chicago Lakeshore is a stone's throw from the Fairmont with a walk and bike path extending both North and South of Navy Pier for 10 miles in each direction. Architectural tours of the city are available by boat on the Chicago River or along the Lake Michigan front. In July, Major league baseball will be in full swing in Chicago offering visitors the opportunity to partake in the Chicago Cubs or the Chicago White Sox baseball games.

### The Scientific Programs

The WSRM meeting will be preceded by an ASRM Day that is being hosted by Dr. Michael Neumeister on Thursday July 11, 2013. The morning sessions of the ASRM Day will be devoted to the presentation of live surgery videos with surgeon-audience participation and dialogue. In the afternoon, panels and lectures covering cutting edge topics will be presented.

The Opening Ceremonies of the 2013 WSRM Meeting will be held at the Fairmont Hotel shortly following the end of the ASRM Day Program on July 11. Immediately following the Opening Ceremonies, guests will enjoy a cocktail reception.

The meeting program will commence on Friday July 12, 2013. In a series of panels, the morning sessions will address obstacles to achieving ‘Normal’ in reconstructive surgery and overview advances in the basic science of Microsurgical Reconstruction. The morning session will be capped-off with an invited lecture by President-Elect, Dr. Scott Levin “The History of Complex Reconstruction”. The afternoon sessions will be devoted to peer reviewed paper presentations in Concurrent Sessions on Head & Neck Reconstruction, Breast Reconstruction, and Hand/ Extremity Reconstruction. The afternoon Scientific Session will conclude with a Panel on “Achieving Normal in Motor Restoration”. This and subsequent panels will focus on technical details and practical tips for achieving optimal results in complex reconstruction.

Following the day's Scientific Program sessions, a Cocktail reception will be held for participants to observe and partake in a Competition: “Best NORMAL result in a Complex Reconstruction” Hosted by Dr. Larry Gottlieb. The prize for the winner of this competition will be announced in January 2013. If you are interested in submitting a case for this competition, please sign up online at the WSRM website.



On Saturday, July 13, 2013 Instructional courses will precede the formal scientific program. The morning scientific session will include a panel on Composite tissue Allotransplantation. This panel will address recent Advances, Technical, Immunologic, and aesthetic pitfalls in CTA, CTA in children, and Unsolved Problems in CTA. Following the CTA panel, Professor Panayiotis Zavos, (Univ. Kentucky), will present an invited lecture: "Cloning in Reconstructive Surgery: Fantasy vs. Reality?". The morning session will end with the President's lecture by Dr. Kazuteru Doi. The afternoon sessions will consist of Concurrent Peer-Review Paper Sessions on Bone, Nerve, and Muscle. The afternoon session will end with back-to-back panels on Achieving Normal in Sensibility Restoration, and New Flaps in Microsurgical Reconstruction. On Saturday Evening, attendees will be treated to a Gala Dinner and Dance at the Field Museum of Natural History where they will have unrestricted access to all of the exhibits and a close-up intro to "Sue", Chicago's own Tyrannosaurus Rex.

On Sunday, July 14, 2013 the day will begin with Instructional Course sessions. A panel will address Alternatives to Autologous Reconstruction: Anaplastology and Robotic solutions in Complex Reconstruction with special Presentations by Drs. David Reisberg of the Department of Anaplastology at the University of Illinois Chicago,

and Dr. Todd Kuiken of the Rehabilitation Institute of Chicago. The morning session will conclude with a panel on Tissue Engineering in Complex Reconstruction. Following the WSRM Business Meeting, Concurrent Scientific Sessions will be held on Spinal Cord and Brachial Plexus Injury, Microsurgery Treatment of Lymphedema, and Mandible and Maxilla Reconstruction.

The Scientific Program will complete with a Panel: 'Group Consensus on Achieving Normal in Complex Reconstruction'. The attendees will participate in an open forum to debate specific questions regarding our achievements to date in Complex Reconstruction and to register opinions and consensus on the efficacy and utility of various current and future technologies and procedures utilized in reconstructive surgery.

### **The Closing Ceremonies will conclude the 2013 WSRM Congress.**

As you can see, the 2013 WSRM Congress promises to be an intellectually stimulating, provocative meeting certain to provide an educational experience that challenges tradition and stimulates a new way of thinking about the problems we solve – 'the winds of change'.

I am especially indebted to my American microsurgical colleagues and local hosts, David Chang, Michael Neumeister, Scott Levin, and Larry Gottlieb for their invaluable advice and assistance in preparing for this meeting. Similarly, I thank Krista Greco and Caitlin Carnes for their expert assistance in meeting planning.

On behalf of President Doi, the WSRM Council, and our Scientific Program Committee, I look forward to welcoming you to Chicago, the "Windy City".

Robert L. Walton, M.D., F.A.C.S.  
Program Committee Chairman  
WSRM World Congress 2013



## Meeting Previews - *continued from pg 11*

### **Invitation to WSRM 2015**

The microsurgeons of India are very grateful to the international community for giving the opportunity to host the 2015 congress. Please mark the dates 19th to 22nd March 2015 in your calendar to come to Mumbai for a very memorable experience. The local committee chaired by Prof Ashok Gupta and Dr Amresh Balsarsing are taking all efforts to make it an event to remember. The scientific committee will be chaired by Dr Raja Sabapathy.

There is a plan to conduct a Pre congress Perforator Flap course on 17th and 18th March 2012. Incredible India is waiting to welcome you.

### **Details of the programs and courses organized by the Romanian Society for Reconstructive Microsurgery (RSRM)**

According with the decision of the WSRM Council from April 11, 2012, starting with 2012 the training program of the RSRM is endorsed by WSRM.

#### **LOCATION**

The training center is located in Timisoara, Romania, at the Pius Branzeu Center for Laparoscopic Surgery and Microsurgery, Victor Babes University of Medicine and Pharmacy.

#### **ACCREDITATION**

The training program attains since 2004, the EBOPRAS (European Board for Plastic, Reconstructive and Aesthetic Surgery) accreditation and endorsement from EMRA (European Microsurgical Research Association).

#### **TYPES OF COURSES**

This program started in 1998 and contains several individual platforms for training as follows:

##### **1. Basic Microsurgery:**

- Course objectives: learning basic microsurgery on ex-vivo (1 and 1/2 days - chicken leg) and in-vivo models (2 days - rat):
- Course duration: 3 and 1/2 days long; 2 practical sessions/day/4 hours each
- Number of participants: limited to 15 people
- Trainer: trainee ratio: 1:3
- Official language: English
- Theoretical sessions: 1 hour - each morning
- 1-3 trainers from abroad in each course
- Periodicity: organized 2 times/year in March and October

##### **Basic Microsurgery continued:**

- Number of courses until present time (October 1998 - April 2012): 30
- Number of surgeons trained: >700
- Trainee country of residence: all around Europe (RO, IT, GR, UK, HU, AU, D, ES, SE, FI, TR, BG, SRB)
- Evaluation: continuous evaluation throughout the course (by direct observation), evaluation questionnaire at the end of the course (self & course evaluation)

##### **2. Advanced Microsurgery:**

- Course objectives: refining microsurgical skills, learning advanced microsurgical models (e.g. organ transplantation, free flap transfer - rat):
- Course duration: minimum of 5 days (program tailored to each participant needs), maximum 12 days
- Trainer: trainee ratio: 1:1
- Number of participants: limited to 5 people
- Official language: English
- Theoretical sessions: each day at the end of the practical sessions
- Periodicity: organized all year round
- Number of courses until present time (October 1998 - April 2012): 40
- Number of surgeons trained: >100
- Trainee country of residence: all around Europe (RO, IT, GR, UK, HU, AU, D, ES, SE, FI, TR, BG, SRB)
- Evaluation: continuous evaluation throughout the course (by direct observation), evaluation questionnaire at the end of the course (self & course evaluation)

##### **3. Flap Dissection**

- Course objectives: learning basic principles for flap harvesting in live tissue - anesthetized pigs, several flap models performed (e.g. radial forearm, latissimus dorsi, fibula, gracilis, rectus abdominis, buttock, DSEAP - deep superior epigastric perforator flap, etc):
- Course duration: 3 days, 2 practical sessions/day/4 hours each
- Trainer: trainee ratio: 1:2
- 1-3 trainers from abroad in each course
- Number of participants: limited to 10 people, 2 participants/operating table
- Official language: English
- Theoretical sessions: each day in the morning
- Periodicity: once a year in April
- Number of courses until present time (October 1998 - April 2012): 12

## Meeting Previews - continued from pg 12

### **Flap Dissection continued:**

- Number of surgeons trained: 120
- Trainee country of residence: all around Europe (RO, IT, GR, UK, HU, AU, D, ES, SE, FI, TR, BG, SRB), USA and Indonesia
- Evaluation: continuous evaluation throughout the course (by direct observation), evaluation questionnaire at the end of the course (self & course evaluation)

### **INTERNATIONAL FACULTY WHO HONORED US**

Yelena Akelina (New York, USA), Alexandros Beris (Ioannina, GR), Mihaly Boros (Szeged, HU), Vaughan Bowen (Stanford, USA), Bruno Battiston (Torino, I), Naci Celik (Istanbul, TR), Andreas Eisenschenk (Berlin, D), Max Geishauser (Munich, D), Achileas Kepenekidis (Athens, GR), Sinisa Kojic (Belgrad, YU), Vasilis Kostopoulos (Ioannina, GR), Ilias Kotsovoulos (Ioannina, GR), William C. Lineaweaver (Jackson, USA), George Madellos (Ioannina, GR), Hanno Millesi (Vienna, A), Ali Mojallal (Lyon, F), Andrea Ortensi (Florence, I), Aurelio Portincasa (Foggia, I), Amado Ruiz-Razura (Houston, USA), Janos Aurel Simonka (Szeged, HU), Andrea Szabo (Szeged, HU), Teo Tiew (East Grinstead, UK), Pierluigi Tos (Torino, I), Marios Vekris (Ioannina, GR), Feng Zhang (Jackson, USA), Milomir Ninkovic (Munchen, D), Marios Vekris (Ioannina, GR), Roberto Adani (Verona, I), Apostolos Papalois (Athens, GR), Katherine Vlastou (Athens, Greece), Efstratios Lykoudis (Athens, GR), Harald Beck (Vienna, A), Stefano Geuna (Torino, I), Robert Hierner (Essen, D)

### **For more details, please access**

[http://www.umft.ro/pius\\_branzeu\\_center/index.html](http://www.umft.ro/pius_branzeu_center/index.html), or contact:

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## Interesting Cases

### **A safe method to select a superficial inguinal node group for total breast reconstruction with DIEP flap and lymphatic nodes transfer.**

Lasso JM, MD, PhD; Goñi E, MD

Lymphedema is a chronic debilitating disease affecting a considerable part of the population that results from impairment of the lymphatic system. This is prevalent in patients subjected to radiotherapy and axillary node dissection after breast oncologic surgery and in many cases it is still a complication that does not receive a long term solution.

Since Professor Koshima<sup>(1,2,3,4)</sup> introduced the term supermicrosurgery in the 1990s, surgery of lymphedema has been renewed in the actual era. Among these new treatments two different techniques are accepted: lymph node transfer and lymphovenous anastomosis. Nevertheless while these microsurgical techniques have a place today in the treatment of peripheral lymphedema, and can be the therapy of choice in patients who are not sufficiently responsive to nonsurgical treatment, some authors still think that there is a minimal reduction in volume of lymphedema following supermicrosurgical techniques<sup>(5)</sup>. These ones conclude that non-operative treatment and elastic stockings are still preferred by most patients with lymphedema, especially in early stages with few irreversible changes. In fact we consider that both procedures must be complementary in our practice<sup>(6)</sup>.

Interestingly lymph node transfer is getting popularity in the treatment of lymphedema. It is known that each lymph node has afferent lymphatic vessels that transport lymph to it and an efferent system that drains fluid toward the thoracic duct. These nodes are very small in size but they are normally well vascularized, forming groups of lymph nodes and peri-lymphatic fat flaps that present vascular inflow and outflow. It should be possible to transfer this tissue into a swollen limb in which there is a reduced lymph discharge.

Due to its size, when doing lymph node transplantation, large arteries and veins must be dissected, to be sure that we can perform transplantation of groups of nodes as a single vascularized functional system. Vascularized groin lymph nodes have been transferred to the axilla after postmastectomy lymphedema<sup>(7,8)</sup> and indeed some authors stated that it is the most physiological method to restore the afferent lymphatic pathways and deliver the lymph load to the deep venous system<sup>(9,10)</sup>; otherwise some authors published that lymphedema in upper limb can improve after breast reconstruction with latissimus dorsi flap<sup>(11)</sup>.

## Interesting Cases

Lack of coordination among arterial inflow, venous outflow, and osmotic forces acting withing the tissues, may contribute to the development of lymphedema but interestingly, it has been published that cutaneous collateral lymphatic channels are important in rerouting lymph along a dermal pathway in the swollen limb<sup>(12,13)</sup>.

As capillary angiogenesis has been demonstrated in lymphedema and also lymphangiogenesis in postmastectomy patients, we can speculate that vascularized lymph nodes transfer promotes long-term lymphangiogenesis that improves lymphatic clearance of the deep lymphatic drainage acting as a lymphatic pump<sup>(14,15)</sup>, in relation to the robust regenerative capacity of the lymphatic vessels<sup>(16)</sup>. Therefore restoration of lymph nodes function requires establishment of adequate perfusion<sup>(17)</sup>.

In our center, lymph node transfer is being used with success, but also groups of lymph nodes associated to DIEP (deep inferior epigastric perforator) flaps are dissected simultaneously to perform a total breast reconstruction. Maintenance of the blood supply to the lymph nodes group is necessary for its survival and function and this is provided by a second vascular pedicle for the transferred lymph nodes.

When performing DIEP flap dissection the nodular groups can be dissected in the superficial circumflex iliac (SCIA) group or in the superficial inferior epigastric (SIEA) group. Lately our preference is to make the lymphatic nodes transfer from the perivascular fat of the SIEA system where the distal vessels stump can be divided and the vessels and lymph nodes are isolated on the pedicle. The SIEA vessels are easily found and a segment of fat with the vessels containing at least one large node is captured. Dissection is simple and safe, and the nodular group runs through a tunnel, over the inguinal ligament.

To be sure that we are locating the superficial group of lymphatic nodes that belong to the SIEA system we proceed to make an infiltration in the subcutaneous skin of the lateral wall of the abdomen with indocyanine green (ICG).

Indocyanine green is a soluble dye, that when illuminated by a near-infrared light, emits fluorescence that is not trapped by the skin. A special device (PDE; Hamamatsu Photonics, Hamamatsu, Japan) provides the emission of the near-infrared light and the reception of the fluorescence.

This method can be used safely for lymphatic mapping and SLN biopsy without allergic reactions or local toxicity. The detection rate is comparable to that of the standard technique using a combination of radioisotope scanning and blue dye staining.

It is important to identify the superficial venous system of the SIEA using the previously mentioned device, before the infiltration of ICG. Once the veins are marked we proceed to infiltrate 1 cc of the dye green, trying to avoid the puncture into the superficial veins. The injection of ICG must be done under the skin following the line of the external lateral aspect of the rectus abdominis muscle of the selected region, where it crosses the line of the upper border of the designed DIEP flap.

We shall avoid extravasation of the dye when retiring the needle. A second injection with 0.5 cc of ICG can be done on the corner of the homolateral design of the DIEP flap a few seconds after the first one.

Transcutaneous real-time lymphography for detection of the SIEA lymph node after injection of ICG is an easy procedure, being similar to the sentinel node detection for lymphadenectomies. After injection of the ICG the lymphatic vessels are clearly identified and the sentinel nodes are displayed. Then, the end of the lymphatic vessels with the SLN is marked on the skin for dissection (Figures 2 and 3).



Figure 1: ICG marking two lymph nodes.



Figure 2: Dissection of the lymph nodes groups.

When performing lymph nodes dissection, we sometimes included a part of skin for monitoring the vascularization of the nodular group.

The inguinal region is the favorite anatomical area to harvest vascularized lymph nodes. However, its vascular anatomy presents numerous variations that have been associated to flap failure<sup>(8)</sup>. Groin lymph nodes are classified into deep and superficial groups and Acland, Cormack and Lamberty stated that the superficial branch of the circumflex iliac artery is the main supply of the lymph nodes in the groin<sup>(18,19)</sup>. It seems that the lymph from the abdominal wall is drained from the nodes located along the superior circumflex iliac vessels<sup>(7)</sup>.

In other cases, the superficial inferior epigastric artery or the ascending branch of the superficial external pudendal artery can represent the dominant pedicle, running through the lymph nodes. SIEA and SIEV have nodes that are depicted and isolated with adjacent perivascular soft tissue including a lymph node. A small part of them can be removed with a vascular leash for microlymphatic reconstruction and a low risk of disruption of the groin drainage. This is an advantage when removing these ones for upper limb lymphedema, but also the easy access to them. This is reinforced by the concept of perforator flaps, that allowed the harvest of a groin flap based on the superficial branch of the SCIA<sup>(8)</sup>. In our experience nodes depending on SIEA system can be easily dissected and does not interfere in the lymphatic draining of the inferior limb. For this reason we prefer to identify this group of nodes in our surgical protocol.

### Conclusions

Transfer of vascularized inguinal lymph nodes based on the SIEA group is a surgical option to take into account in the treatment of limb lymphedema. Intraoperative angiographic imaging with ICG makes this flap more reliable and detection of these superficial nodes affords safer outcomes in the patients.

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## Membership Update

### Active Applicants

Ashraf Mohammed Abdelaziz, MD	Egypt	Ahmad El Sayed Semaya, MD	Egypt
Aditya Aggarwal, MD	India	Raphael Sinna, MD, PhD	France
Jovito G. Angeles, MD	United States	Roman Skoracki, MD	United States
Christopher E. Attinger, MD	United States	Pierluigi Tos, MD	Italy
Alessio Baccarani, MD	Italy	Jose Maria Lasso Vazquez, MD, PhD	Spain
Elisabeth Beahm, MD, FACS	United States		
Bruno Battiston, MD	Italy		
Keith Brandt, MD, FACS	United States		
Mark W. Clemens, MD	United States		
Oommen George, MD	Malaysia		
Lucian Jiga, MD	Romania		
Rakesh Kumar Khazanchi, MD	India		
Xusong Luo, MD	China		
Eldon Mah, MD	Australia		
Nobuhisa Matsumura, MD	Japan		
Javier Lopez Mendoza, MD	Mexico		
Keiichi Muramatsu, MD	Japan		
Sotetsu Sakamoto, MD	Japan		
Michael Sauerbier, MD, PhD	Germany		

### Candidate Applicants

Mohammed Attallah Alharbi, MD	France
Nizar Assaf, MD	France
Peter N. Broer, MD	United States
Yuki Fujihara, MD	Japan
Makoto Fukuda, MD	Japan
Tomas Kemppny, MD, PhD	Czech Republic
Lorenz Larcher, MD	Italy
Mauricio Jose Mendieta, MD	Nicaragua
Takehiko Takagi, MD	Japan
Neil Tanna, MD	United States
Ian E. Valerio, MD	United States

## Membership News

### WSRM Committee Roster 2011-2013

This is official notification to the membership of the members that have been appointed to serve in the standard committees of the WSRM. Please help us applaud those members that have volunteered their time to serve on a committee to better the organization.

#### Scientific Program Committee

Robert L. Walton, MD, Chairman, USA  
Ex-Officio: Kazuteru Doi, MD, Japan

#### Membership Committee

L. Scott Levin, MD, Chairman, USA  
Giorgio DeSantis, MD, Italy  
Amresh Baliarsing, MD, India  
Michael Miller, MD, USA  
David Chiu, MD, USA

#### Nominating Committee

Panayotis Soucacos, MD, Chairman, Greece  
Fuminori Kanaya, MD, Japan  
Erkki Tukiainen, MD, Finland  
Alexandru Georgescu, MD, Romania  
Milan Stevanovic, MD, USA

#### Constitution and Bylaws Committee

Milan Stevanovic, MD, Chairman, USA  
Catherine Vlastou, MD, Greece  
Sang-Hyun Woo, MD, Korea  
Marco Innocenti, MD, Italy  
Lawrence Gottlieb, MD, USA

#### Ad Hoc Education Committee

Catherine Vlastou, MD, Greece

#### Ad Hoc Industry Relations Committee

Panayotis Soucacos, MD, Greece

#### Ad Hoc Forward Planning Committee

Panayotis Soucacos, MD, Chairperson, Greece

## WSRM Membership Benefits

### **Utilizing your membership to its fullest!**

In today's cyber communication ability, economy and the world wide community endeavors utilizing websites and social media is very important. The WSRM web site has been built to function as a networking outlet and organization communication tool. As a member you have access to the discussion boards, online membership roster, upcoming meeting information, official WSRM newsletter and the ability to pay your membership dues on line. You do not have to log in to pay your dues.

### **What is the benefit of being a member of the WSRM?**

In addition to the cyber benefits noted above each member receives reduced registration rates at the society meetings, volunteer leadership opportunities, liaison with multiple organizations, network with worldwide reconstructive surgeons and all dues paying members will receive a one year subscription to the e-online *Journal of Reconstructive Microsurgery*. To continue to receive these benefits and assist the organization and growing these benefits in the future, please keep your dues up to date.

As with all organizations you as a member are very important to us and we want to be sure we are able

to communicate with you effectively. Validating the membership roster is a continual process. Please take a moment and go to [http://wsrm.net/images/website\\_roster\\_08.pdf](http://wsrm.net/images/website_roster_08.pdf) to view your contact information posted on the membership roster. If this information is incorrect, please send the revised information to [jessicareynertson@isms.org](mailto:jessicareynertson@isms.org). We appreciate you taking the time to do this.

### **Know someone who wants to become a member?**

The application process is simple and applications can be obtained online and submitted via email, mail or fax to the Central Office. The ability to download a membership application to provide to you colleague is available and the WSRM is now doing continual enrollment. New members no longer have to wait two years to become a member of the organization.

**The 2012 *Journal of Reconstructive Microsurgery* subscriptions for WSRM dues paying members is proudly supported by Synovis, MCA**



Micro Companies Alliance, Inc.

## Executive Council

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## Society Portrait

### NEWS FROM THE ROMANIAN SOCIETY FOR RECONSTRUCTIVE MICROSURGERY (RSRM)

**Alexandru V. Georgescu, Lucian P. Jiga**

Romanian Society for Reconstructive Microsurgery (RSRM) was founded in 1992, and counts today over 20 years of activity.

Presently the directory board is represented by:

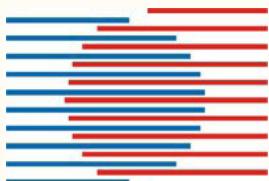
President: Lucian Jiga

Past President: Alexandru V. Georgescu

Treasurer: Sorin Barac

Secretary: George Dindelegan

Hystorian: Stefan Luchian



Romanian Society for Reconstructive Microsurgery

RSRM is internationally represented by:

Alexandru Georgescu – European Representant in the WSRM Council

Alexandru Georgescu – Romanian Country Liaison to WSRM

Alexandru Georgescu – member in the Nominating Committee of WSRM

Alexandru Georgescu – Secretary General of the European Federation of Societies for Microsurgery (EFSM)

Lucian Jiga - delegate of the RSRM to EFSM

The society has 56 active members of which one 55 Romanians and 1 Turkish physician.

Since 2010, RSRM has developed and implemented a number of new programs aimed to facilitate communication between its members and enable their access to qualitative postgraduate microsurgical training.

#### These projects were:

1. Development of a new interactive website, where RSRM members are provided through individual accounts with: services for online payment of dues, up-to-date informations regarding meetings calendar, video-collections of a wide array of presentations focusing on different microsurgical topics and an interactive study group divided on specific pathology, which plays as a "compass" for young microsurgeons in difficult clinical decision making. For more information please access our website at [www.srmr.org](http://www.srmr.org).
2. Implementation of a training fellowship which awards 1000 EUR once a year, one motivated physician able to prove his talent and dedication to microsurgery. Awarding this fellowship was possible through the a partnership between RSRM and S&T AG and is named *The Werner Spingler Microsurgery Fellowship*, to honor Mr. Werner Spingler, co-founder of S&T AG, manufacturer of the first microinstruments worldwide and alongside with Robert Acland, Harry Buncke and Viktor Meyer one of the "founding" fathers of microsurgery. For more information please access <http://www.srmr.org/burse-de-training-in-microchirurgie.php>

3. Further development of the RSRM Postgraduate Training Program in Reconstructive Microsurgery, which was founded in 1998 and has gathered over 50 courses and 600 participants from all over the world. Presently, this program is accredited by EBOPRAS (European Board for Plastic Reconstructive and Aesthetic Surgery) and endorsed by EMRA (European Microsurgical Research Association) and WSRM. The program offers basic and advanced microsurgery as well as flap harvesting courses in living tissue. Starting with November 2012, perforator flap dissection courses will round-up the training possibilities within this program. The 1st perforator dissection course on living tissue will be hosted in Timisoara, at the Pius Branczeu Center for Laparoscopic Surgery and Microsurgery , during November 15-16, 2012. As co-directors of this course we will have the pleasure to welcome Dr. Andrea Spano (Istituto dei Tumori, Milan, Italy) and Dr. Marco Pignatti (Modena University Medical Center, Italy).

In June 2011, the RSRM organized a Pre WSRM Congress before the main ESRM Congress in Helsinki, under the chairmanship of Alexandru Georgescu. There were more than one hundred participants from all over the world, and the scientific program was very well appreciated.

Between July 12-14, 2012 RSRM will be the host of an international joined Congress: 11th Congress of the International Society for Experimental Microsurgery, 10th Congress of the RSRM, 9th Congress of the Romanian Society for Surgery of the Hand, 2nd Congress of the CompasX Association, which will be held in Timisoara, Romania.

## International Microsurgery Centers

This column is to serve as a resource to young surgeons, especially those in underdeveloped countries, who have few chances to practice reconstructive microsurgery. All members of the WSRM are welcome to introduce their centers and societies for young prospective candidates. Please submit material to Ms. Krista Greco at [kristagreco@isms.org](mailto:kristagreco@isms.org)

### Ogori Daiichi General Hospital Clinical Fellowship in Hand, Microsurgery and Brachial Plexus Reconstruction

Ogori Daiichi General Hospital (ODGH) in Yamaguchi Prefecture, Japan, offers a great opportunity for further training in hand, microsurgery and brachial plexus reconstruction through their clinical fellowship program under the supervision of Dr. Kazuteru Doi. The fellow actively participates in all the surgeries, which include at least one major brachial plexus case per week and a variety of hand surgery cases at least twice a week. Brachial plexus cases range from various nerve transfers to the famed double free muscle transfer developed by Dr. Doi himself. Hand surgery cases range from acute trauma to various reconstructive procedures for degenerative and post-traumatic hand conditions. There is also ample exposure to other microsurgical reconstructive procedures for the lower extremity as well as for the other areas of the upper limb other than brachial plexus related cases.

One striking aspect of the fellowship in ODGH is the dynamic way of thinking as they constantly devise ways to improve their techniques as well as well-established techniques in the field of orthopedics and microvascular surgery. They also provide an environment that is conducive for their patients and enables good outcomes in terms of functional results. All these are made possible by a dedicated surgical and rehabilitation team.

Foreign fellows may have reservations about coming to Japan, particularly the language and cultural differences. Speaking from experience, having no background whatsoever of the Japanese language, this would not be much of a problem as Dr. Doi as well as the other doctors are able to speak English. It may take two weeks to a month for one to adjust to the new environment, but the people here are more than willing to help. Accommodation as well as a living allowance will also be provided so the fellow need not worry about these matters. Lastly, this is an opportunity, even for just a short period, to become part of the team that has published numerous papers and pioneered in the field of brachial plexus surgery. That alone is honor enough to choose the fellowship in ODGH.



Tristram D. Montales, MD

[Ogori Daiichi General Hospital Guideline for Fellowship Applicants](#)

## Mark Your Calendar

### Future WSRM Congresses



2013 WSRM World Congress  
July 12-14, 2013  
Chicago, Illinois, USA  
[www.wsrm2013.org](http://www.wsrm2013.org)

2015 WSRM World Congress  
March, 2015  
Mumbai, India

2017 WSRM World Congress  
Summer, 2017  
Seoul, Korea

2019 WSRM World Congress  
Summer, 2019  
Shanghai, China

#### **Global Meetings\***

\*The posting of these meetings does not define the WSRM as a sponsor or endorser.

Asian Pacific Federation of Societies for Reconstructive Microsurgery Inaugural Conference  
October 7-9, 2012  
Singapore  
[www.apfsmr2012.com](http://www.apfsmr2012.com)

American Society for Reconstructive Transplantation  
3rd Biennial Meeting  
November 15-17, 2012  
Chicago, Illinois, USA  
[www.a-s-r-t.com](http://www.a-s-r-t.com)

1st Lebanese Hand & Reconstructive Surgery Conference  
November 17-18, 2012  
Beirut, Lebanon  
[www.lspras.com](http://www.lspras.com)

American Society for Reconstructive Microsurgery  
January 12-15, 2013  
Naples, Florida, USA  
[www.microsurg.org](http://www.microsurg.org)

IPRAS  
February 24 - March 1, 2013  
Santiago, Chile  
Maria.petsa@zita-congress.gr

## World Society for Reconstructive Microsurgery

Volume 3

Spring /Summer 2012

#### Purpose

The object of the Society shall be to stimulate and advance knowledge of the science and art of Microsurgery and thereby improve and elevate the standards of practice in this field of surgical endeavor. The Society shall be the highest medium of recognition in the field of Microsurgery as evident by superior attainment and by contribution to its advancement. It shall provide an international forum for the exchange of ideas and the dissemination of innovative techniques.

**Kazuteru Doi, MD**  
President

**Kazuteru Doi, MD**  
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The WSRM Newsletter is published two times yearly for members of WSRM, a non-profit organization. Subscriptions are included in the annual membership dues. All correspondence, address changes, and newsfor upcoming events should be addressed to:

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## World Society for Reconstructive Microsurgery

### World Congress 2013



**Chicago, Illinois, USA**  
**July 12 – 14, 2013**