



# MAXILLOFACIAL NEWS

American Society of Maxillofacial Surgeons

*Maxillofacial News*  
**Commemorative Edition Dedicated to:**  
**DANIEL MARCHAC**  
**FERNANDO ORTIZ MONASTERIO**  
**JOSEPH MURRAY**

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**WINTER 2013**

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Dr. Vasconez outlines his goals for the ASMS during the next year and his focus on membership and education.

### Editor's Corner

Dr. Arun Gosain presents this commemorative issue of the newsletter, dedicated to Daniel Marchac, Fernando Ortiz Monasterio and Joseph Murray

### Panel Discussion: Facial Reanimation

Dr. Jeffrey Marcus moderated a panel discussion with Drs. Gregory Borschel, Arun Gosain and Michael Klebuc. Part I of this discussion is included in this issue. Part II will appear in the Spring Issue.

### From the Education Committee

Dr. Peter Taub outlines the many educational offerings of the ASMS in 2013 and beyond, including new courses and publications.

### Case Study

Dr. Reza Jarrahy presents a case of a young patient presenting with cleft of the secondary palate, glossoptosis, and micrognathia.

### Book Review: *Marchak*

Dr. Devra Becker reviews this coffee table book, cataloging the work of famed jeweler Joseph Marchak, of whom Daniel Marchac is a direct descendent.

### ASMS President's Address

During the ASMS Annual Meeting in New Orleans, Dr. Bob Havlik provided a historical review of plastic surgery training and education and where the future of the specialty is headed in his address.

### Photos Highlights of the Annual Meeting

Check out the photos from the 2012 ASMS Annual Meeting in New Orleans.

### Job Positions Available

A new feature in the Newsletter and on the ASMS website, check out plastic surgery positions throughout the country.

## FROM THE PRESIDENT

I recently received a note from someone doing their craniofacial fellowship, sharing a picture of his grandfather when he was ASMS President over 35 years ago. I quickly reflected what an honor and a privilege it is now to serve as your ASMS President. This task is made easier by all the role models, past and present, who have served to make this a wonderful organization. I want to thank Bob Havlik and the ASMS Board for steering us this past year through some troubled waters and still providing progress and increased value to our members.



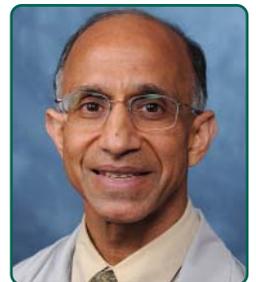
*Henry Vasconez, MD*

With the help of our Board and in particular Warren Schubert, Peter Taub, and Larry Hollier we welcomed the addition of another educational venue this year - the Advanced Course in Facial Restoration and Rejuvenation held at the new state-of-the-art facility at LSU in New Orleans. The course

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## Editor's Column: *Commemorative Edition dedicated to Drs. Marchac, Monasterio, and Murray*

The last two months have been a time of tremendous significance in the history of craniomaxillofacial surgery. We have seen the loss of three of our greatest pioneers in the field: Daniel Marchac, Fernando Ortiz Monasterio, and Joseph Murray. While the present edition of our Newsletter is dedicated as a Commemorative Edition, there is little that we as an organization can do to pay just tribute to the three surgeons



*Arun Gosain, MD,*

we are honoring. We felt it fitting to approach some of their closest colleagues to share memories of each to help us to better put their accomplishments in perspective. Ken Salyer was asked to share his thoughts about Dan Marchac and Linton Whitaker was asked to share his thoughts about Fernando Ortiz Monasterio. Mutaz Habal, one of Joe Murray's accomplished trainees, was asked to share some of his personal memories of Dr. Murray. All three graciously accepted our request, contributing to this edition both through their words and through numerous personal photographs of their colleagues. Upon reading these commemorations you will come to realize the tremendous breadth of interests that each of these men had.

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Editor's Corner

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They each came into craniofacial surgery before it was a recognized surgical subspecialty. It was largely through their pioneering efforts that the specialty came to be recognized as such. Yet it was the very diversity of interest that these men possessed that led to their pursuit of craniofacial surgery. Each was a broad-based surgeon before being labeled a plastic surgeon or a craniofacial surgeon. Dr. Murray has the distinction of being the only plastic surgeon to have won the Nobel Prize in medicine. However, this accomplishment came not from traditional venues in plastic surgery, but from his pioneering work with kidney transplantation. Transplantation remained a life-long passion for Dr. Murray, and his ongoing contributions to the field consisted of progress in immunosuppression, and work on allotransplantation of skin for burn victims. Perhaps Dr. Murray's passion for surgery is best conveyed in his last book:

*Surgery of the Soul: Reflections on a Curious Career* ( Science History Publications/USA, 2002). Dr. Murray reflects on the essential ingredients for a medical doctor: curiosity, imagination, and persistence. This curiosity led Dr. Murray to several unconventional practices in medicine relative to his era, leading, no doubt, to a series of difficulties in achieving the outcomes that he envisioned. However, for Dr. Murray, the inscription on his desk, "Difficulties are opportunities" accurately described the attitude with which he took on the challenges to which his medical curiosity led him. *Surgery of the Soul* also illustrates the passion that Dr. Murray had for the reconstruction of children with craniofacial deformities. In part due to Dr. Murray's worldwide recognition for his contributions to transplantation we often overlook the significant contributions that

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DANIEL MARCHAC

FERNANDO ORTIZ-MONASTERIO

JOSEPH E. MURRAY

Daniel Marchac, a true international giant in plastic surgery, died in Paris on October 15, 2012, due to lymphoma, which he battled for over a year. He was recognized as a



Daniel and Fernando Teaching, 2005

pioneer in craniofacial surgery in infancy, contributing significantly to our present techniques of remodeling in spite of Tessier's objection to early surgery. He published the first book on infant craniofacial surgery in 1982, and for his meritorious efforts in the advancement of surgery, was decorated in 2001 with the Chevalier de la Legion d'Honneur, the highest civilian honor in France.

Born December 3, 1936, Daniel spent his formative years in Paris. The practice of medicine in the Marchac family extended back several generations in Russia. Daniel himself completed medical school in 1960, after which he served in the French Navy. In 1961, Daniel met Paul Tessier at Hopital Foch, an encounter that made a lasting impression. Between 1962-1968, Daniel completed his general surgery and plastic surgery resi-

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With near disbelief by those who knew him, one of the most creative, accomplished, and charismatic individuals in the international world of Plastic Surgery, has left us. Few, if any in our field,

have been so revered, so honored, and so highly sought after. Fernando Ortiz Monasterio (FOM) was the international sophisticate, the total gentleman, the consummate intellectual and sportsman all at the same time.

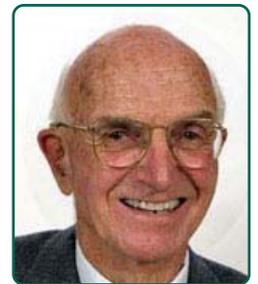
Born in Mexico City, later married to Leonor, the two of them were the epitome of elegance and international sophistication. They spoke multiple languages, understood and reveled in the worlds of fine food, wine, art, history, and family. Both were elegant and at the same time aristocratic and down to earth.

After graduating from medical school at the Universidad Nacional Autonoma de Mexico in 1945, Fernando completed a residency in general surgery at the Hospital General de Mexico in 1951. He then was a resident in plastic surgery at the University of Texas Medical Branch in Galveston under Truman Blocker for 2

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*The great master surgeon of two centuries, a scientist and an educator*

Difficulties are Opportunities .....JEM



The Thanksgiving holiday, filled with dinner and social hours and sporting events, is a tradition we Americans enjoy and cherish. It's something we all look forward to. It was not that different for the Murray Family in Wellesley Hills, just outside Boston. They all gathered around the dinner table, enjoyed the usual food, reminisced about the children and grandchildren's funny moments, and after dinner watched the New England Patriots win the football game. All cheers and enthusiasm; even the little ones, the grandchildren and the great grandchildren, with their parents looking at their dad in his chair with a big smile on his face - the center of the celebration, as if he knew something that the rest of the family did not.

He was always a visionary and just he may have known that the Lord was calling. Well, there in the midst of his family, a few hours later, a massive cerebro-

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**Marchac** (continued from previous page)



Daniel and wife Nina, Morocco, 1993

Converse, and three months with Tom Cronin.

Upon Daniel's return to Paris, he was appointed Chief of Clinic at the Hopital Saint Louis. It was here that he first described the modification of the Reiger flap for the correction of nasal deformities, which today is often referred to as the Marchac flap. In 1971, Daniel began his career in craniofacial surgery, performing his first intracranial remodeling procedures at Hopital Lariboisiere. In 1976, Daniel established the Craniofacial Unit at Hopital Necker-Enfants Malades with pediatric neurosurgeon, Dominique Renier, who would become his life-long friend and colleague.

Following a 1977 tour of the major craniofacial centers in the United States, Daniel became a member of the International Craniofacial Club (ICFC), along with Ian Jackson, Fernando Ortiz-Monasterio, Ian Munro, Kenneth Salyer, and Linton Whitaker. This group, founded in 1972, met annually, and, spontaneously much more frequently, to exchange ideas about craniofacial surgery. It continued to meet for the next 40 years, eventually leading to the concept of an international society for the serious study of craniofacial surgery. Daniel was thus a key, founding member of what came to be known as the International Society for Craniofacial Surgery (ISCFS). Its first meeting was held in La Napoule, France, with Tessier serving as the first president and Daniel as the meeting organizer and scientific program chairman.

At the same time Daniel was pioneering infant craniofacial surgery, he was also developing a busy practice in aesthetic surgery that dealt primarily with the face and breast. He published more than 160 scientific articles, 23 book chapters, and wrote or edited 5 books.

Over his 44 years of practice in plastic surgery, Daniel was instrumental in helping organize many important scientific societies. In 1974, he was founding member of the European Alpine Workshop, which served as a model for the establishment in 1990 of a similar organization in North America, the American Alpine Workshop in Plastic Surgery. Daniel became a Foreign Associate in 1993. In 1989, he was instrumental in the founding of the European Association of Plastic Surgery (EURAPS), which modeled its bylaws and membership requirements after

dencies under the direction of Professor Claude Dufourmentel, Dr. Daniel Morel, and Dr. Roger Mouly. In 1968, Daniel travelled to the USA on a year's fellowship, where he devoted six months to training under Ralph Millard, three months with John



ICFC at ISCFS, Australia 2005  
Marchac, FOM, Salyer, Whitaker

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**Monasterio** (continued from previous page)

years, an experience and person that influenced his thinking toward academic medicine, finishing there in 1954. That was followed by a hand fellowship at Northwestern University then by a head and neck cancer fellowship at Washington University, St. Louis, each for 6 months and subsequently a memorable short stay with Gustav Aufricht in New York.

Returning to Mexico City in 1955, Fernando was given a "magnificent opportunity" (to use his own words) at the Hospital General, a large institution receiving patients from all over the country. There he treated patients involving the entire spectrum of our field. Recognizing the possibilities, with one of the world's greatest flow of patients, he organized the Burn Unit at the National Medical Center, a multidisciplinary Cleft Palate Clinic, a Mobile Unit for treating patients with congenital anomalies, and ultimately the Craniofacial Anomalies Group, in 1969. By the late 1960s his focus had become facial cosmetic and reconstructive surgery.

Shortly after his return to Mexico FOM was made Chief of Plastic Surgery at the Hospital General and held that position from 1956-1977. From 1977 - 1984 he was Director of the Hospital General "Manuel Gea Gonzalez". He was the author of over 240 journal publications and 7 books, was visiting professor at multiple prestigious U.S medical centers and abroad, was made an honorary member of 14 plastic surgery societies, and had honorary degrees and other honors conferred upon him by centers in the U.S., Europe and Latin America. His list of invited talks and membership in Scientific Societies in the Americas and Europe, is extensive. Something that gave him great pride was in 2010 being awarded the honorary degree,

Doctor Honoris Causa at the Universidad Nacional Autonoma de Mexico,.

After getting to know Paul Tessier, Fernando became very involved in two organizations that were important in his life. He became a member of the International Craniofacial Club (ICFC), a group that met once or more annually for 40 years beginning in 1972, the last time being in June, 2012. That travel group with five other individuals, including Daniel Marchac, regularly exchanged ideas with each other about the developing field of craniofacial reconstruction. It had a major role in the subsequent formation of the International Society for Craniofacial Surgery, with FOM subsequently serving as president of this, the most prestigious



Photo courtesy of Alvera deLeon



This photo will also appear in PRS.

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**Murray** (continued from page 3)

vascular accident carried the great surgeon into coma. He was then carried, with his family surrounding him, to the Brigham & Women's Hospital, which he had always called his second home.

On the 27<sup>th</sup> of November, Doctor Joseph E. Murray, the giant surgeon in his field of plastic surgery, died at the Brigham in Boston surrounded by his family members, colleagues, and friends. It was that same institution where Dr. Murray had performed his first heroic operation in the world. His death marks the end of an era in surgery and the legacy he started almost six decades ago - when Dr. Murray, a master surgeon, craftsman, scientist, innovator, and educator, with a team of doctors at that same hospital, performed the first organ transplantation. That operative procedure was the first in the world that gave life and hope to so many, including that first young patient who was doomed to die of his disease. Later, Dr. Murray was the guest of that same patient at his home in Indianapolis where that first patient lived enjoying the gift of his life, his children, grandchildren, and great grandchildren. The reason for the visit from Dr. Murray was that the patient was celebrating his fiftieth gift of life birthday with his family, physicians and friends as a celebration of life. On his fiftieth transplant birthday, he was celebrating Dr. Murray and his team who gave him an extension of life by transplanting into his groin, the organ that replaced a failing one in a life threatening condition.

Always the question is asked - how such a great plastic surgeon as Dr. Murray got involved in kidney transplantation. Well, in those days, surgeons were surgeons who studied and understood all the aspects of the human body and its surgical diseases. Plastic surgeons were of this same mindset. This was before the era of fragmentation, slicing, pasting and splitting of selected surgery fields, as well as grabbing and encroaching on others by non-medicals. As a master surgeon during the Great War, he took care of patients in Valley Forge Hospital, outside Philadelphia. Through Dr. Brad Cannon, a close friend of Dr. Murray, I had the honor to be asked to take care of his old patients from the Great War who lived in Florida. He had followed them closely and emotionally. As always, I promised to do so, and I did. That gave me the chance to know more and understand Valley Forge Hospital and the influence it had on Dr. Murray's work and thinking, as well as its impetus on Dr. Murray. This helped to shape his vision and innovation as he took care of the burned patients. I got to know more and



JEM with Mrs. Murray, November 22, 2012, after Thanksgiving Dinner.

*Photo courtesy of Elena V. Nucifora*

to understand why Dr. Murray was interested in the transplantation of skin. Those interests eventually lead him to the study of organ transplantation with the pathologist at the Brigham, especially the rejection

phenomenon which was initially called infection.

However, when Sir Peter Medawar became a Nobel laureate for unraveling the secrets of transplant rejection, it became obvious that further work needed to be focused on overcoming the rejection with immune suppression and hoping to reach tolerance. What is more amenable to the science of rejection than the kidney? Dr. Murray, always a team worker, and the team of surgeons and non-surgeons he gathered were already in the forefront of organ transplant research with the experimental design and the delaying of the rejection chemically. They had experimental animals thriving well with organs transplanted from other species-specific donors. In a short time at the beginning, we learned that organ transplantation was capable of giving the gift of continuing life to almost a million people who would otherwise die of their disease. That is how plastic surgery innovations ended up participating and helping those patients. In Dr. Murray's words "We do surgery only to help the patients."

What an individual and what an honor for me to have worked under him. When I was a fellow under Dr. Murray, we had an emergency one night. I went to the airport and got a kidney that had been transported from Rochester and worked with Dr. Murray to transplant the kidney. What a great pleasure we all experienced the next morning when Dr. Murray, myself and the other members of the team watched the first few drops of urine drip through the catheter. This is a memory I still deeply treasure four decades later and value for both the donors and the life of the patients into whom the kidneys are transplanted.

At the same time my working on the skin allograft did not stop in the effort to help burn victims. What an era - a giant leap forward in medicine - and what a pleasure we learned from Dr. Murray to feel with the patients and their family. That was the number one Murray principle in patient care: the patients come first in the profession.

At the same institution, liver transplantation was pioneered, having the impetus from Dr. Murray's original pioneering teamwork. Additionally, many extensively burned patients were treated with the same scientific approach for the transplantation of skin in the same species-specific manner. This was another pioneering work from the same institution, seeking to chemically overcome the rejection in the hope of reaching tolerance.

The sequence of procedures was life-saving to the patients who would not otherwise have lived long with the diseases with which they were afflicted.

Dr. Murray was also interested in the quality of life for patients with acquired and congenital deformities, seeking ways to remove the stigmata that afflicted them. He had a passion about helping them and compassion in altering nature's effect on their physical development. With his innovations, vision, and thoughtfulness, he assembled a team of surgeons and non-surgeons to pioneer the craniofacial surgical procedures that were first used on patients with cancer and then for those with congenital deformities in the western hemisphere. Surgical work in and around the orbit started in the anatomy lab to understand the intricacies of the anatomical structures. This

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**Murray** (continued from previous page)

ended in the operating room where the intricacies of the anatomic studies were applied. I had the honor of being one of the young surgeons who worked on that aspect of discovery, from its beginning in the lab to its application in helping to correct abnormalities of the head and face of patients with acquired deformational or congenital deformities. Those components in the craniofacial region required core medical and support teams that collaborated with each other. At the same institution and at approximately the same time, multiple other innovations were performed. Dr. Murray and John Woods pioneered free tissue transfer that opened the field of composite tissue transplantation to help patients following cancer ablation and also opened the era of microsurgery. Those masterful maneuvers were initiated over four decades. I have since moved on to Florida, but Dr. Murray continued to share with me the letters of gratitude from the patients we worked on together. These letters reflected the appreciation from their families, and such personal progress as the degrees they received from their universities. Dr. Murray's source of energy and innovation was his supportive family and the love for his long time wife and his children. I had the honor to know his family through social interactions during visits at his home, which took place at the same place and same table over four decades.

Members of the editorial board of the *Journal of Craniofacial Surgery* decided almost half a decade ago to do a special tribute issue to the man who gave so much to the specialty he loved most: *plastic surgery*. We were planning the golden issue of the signature issue with contributions globally by his

friends, students, and Fellowes, as well as others that became a reality when Elof Eriksson and E.J. Caterson put their energy to the project and allowed us to move the issue from the drawing table to production. Unfortunately, Dr. Murray died before the special issue of the Journal could see the light, so we present his memory with the golden signature issue. On the day of completion we will present that issue to Mrs. Murray and to his beloved children. Mrs. Murray, his lifelong partner and the mother of his children will keep it in his special library. Dr. Murray, we treasure your support of the Journal, your comments on our continually developing specialty, as well as your written words. They were the energy that kept us working hard to achieve our goals. We also follow your main principle that we proceed with positive energy.

Doctor Murray, we will miss you. Your legacy is immortal and the principles you taught us in person or in your writing will be with us forever; we will pass it on to younger generations in surgery. Your encouraging words about the specialty you loved most as well as about the Journal of Craniofacial Surgery. The journal is dedicated to you as is expressed in the Journal's global contributions. We will treasure your words and keep them forever and hold them for the many young generations that will know you only by your impeccable reputation.

Mutaz B. Habal, MD, FRCS, FACS

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**Editor's Corner** (continued from page 2)

Dr. Murray made in parallel to and independent of his contemporary, Paul Tessier.

Drs. Marchac and Monasterio are more readily associated with the development of craniofacial surgery than is Dr. Murray. This may be in part due to Dr. Murray's overshadowing accomplishments in transplantation that led to his being awarded the Nobel Prize. The association of Drs. Marchac and Monasterio with the development of craniofacial surgery is also due to their close connections through the International Craniofacial Club (ICFC), a group of 6 surgeons who began meeting in 1972 and continued their close association for 40 years thereafter. This group gave rise to the International Society of Craniofacial Surgery in 1985. Four individuals from the ICFC, Drs. Marchac, Monasterio, Salyer, and Whitaker, referred to themselves as the "band of brothers." It is only fitting that two members of the band of brothers have written on their colleagues for this Newsletter. Through their insights we learn that Marchac first became known for developing local flaps for nasal reconstruction, and he was as well known for aesthetic and breast surgery as he was for craniofacial surgery. Dr. Monasterio trained in hand surgery, head and neck oncology, and facial aesthetic surgery, and pursued all aspects of plastic surgery including the development of one of the most active burn units in Mexico.

The spirit of intellectual curiosity and the innovations that it produced were fueled by mutual respect and collaboration between the members of the ICFC. We also learn that each of these men were masters in so many areas besides surgery. Dr. Monasterio was a member of the Mexican olympic sailing team and an avid skier. We also asked Devra Becker, a current ASMS member, to review a book about Daniel Marchac. The book, *Marchac*, reveals Dr. Marchac's skill and heritage as a jeweler.

Upon reflecting on the career development and diversity of interest which brought these three men into plastic surgery, one can only wonder whether current training pathways in plastic surgery will continue to produce creative giants of similar caliber. The present trend is to select plastic surgeons out of medical school, which obligates these candidates to begin their focus in plastic surgery early during their clinical clerkships in order to be competitive. While one can argue that those were different times when these men entered plastic surgery, one can only hope that the essential ingredients that Dr. Murray identified in a medical doctor have not changed with the times. Curiosity, imagination, and persistence, may the present issue help to renew some of these qualities in each of us.

## Panel Discussion: Facial Reanimation

Panel Moderator: Jeffrey Marcus, MD

Panelists: Gregory Borschel, MD, Arun Gosain, MD and Michael Klebuc, MD

**Jeff:** Thank you all for participating this evening. I would like to start out by asking, what proportion of your patients are pediatric and adult. For us, the proportion is about 50/50.

**Mike:** I would say about 20% of the patients I am seeing are pediatric. 80% would be adult patients.

**Arun:** Mine is all pediatric.

**Greg:** Yes, same for me – all pediatric.

**Jeff:** What do you think have been the biggest changes that have occurred within the last 10 years in facial paralysis surgery?

**Greg:** I think a better understanding of nerve transfers has been pretty important, and I think also our ability to understand the process of central plasticity. I think it has become increasingly important, not only to achieve better outcomes, but also to counsel our patients and families as far as what to expect. I would say that we have made some refinements in using free muscle transfers, through the work of Dr. Zuker and Dr. Manktelow and others. We have been able to avoid some of the problems that we may have seen more in the past, such as excessive bulk in the muscle, excessive pull, a pull that is maybe not in the right vector, getting a good fixation point, things like that.

**Jeff:** Arun, what are your thoughts on that?

**Arun:** I agree with those comments. The additional point is that given our improved understanding of cortical plasticity, there has been increased utilization of the nerve to the masseter to innervate the free muscle transfer. As a result, we are now less reluctant to seek alternatives to the cross-facial nerve graft, particularly when the contralateral facial nerve is weak and the patient has evidence of bilateral involvement of Mobius Syndrome. I feel that bilateral Mobius is a common presentation of the syndrome and therefore the contralateral facial nerve is not always the best motor donor for the side we are trying to reanimate. Ten years ago it seemed that we were much more reluctant to seek alternatives to the use of the cross-facial nerve graft than we are today.

**Jeff:** Mike, what do you think about as far as donor source for free muscle transfer? We have the cross-face nerve graft and the masseter branch of the trigeminal. Is there an age cutoff, or what is your decision-making tree as far as which nerve to use for the second-stage muscle transfer?

**Mike:** I like to present the patients both options. We sit down with them and go over the pluses and minuses of each technique. Clearly, the cross face nerve graft is the best way of achieving true spontaneity without training and I think emotionally mediated movement of the face is optimal if you can get it. Typically, in younger healthier patients, I try to steer them towards the cross-face nerve graft followed by a free gracilis muscle flap. However, when you see patients that have more medical co-morbidities and are past the age of 50, then we often look to the masseter as our motor nerve.

**Jeff:** Arun and Greg, have you had some experience with adult patients? Do you have a cutoff area in there?

**Greg:** No, I don't think there would be a hard and fast cutoff necessarily, but I think around age 50-60 range is about where I would be thinking predominantly about the motor nerve to the masseter over across face nerve graft.

**Arun:** My findings have been that when the nerve to the masseter is used in older patients, even though this nerve gets good results in terms of re-innervation, reeducation has been poor. So, I am less inclined to use the nerve to the masseter as a donor nerve in an older patient.

**Jeff:** (Editors comment: This choice of nerve source based on age is one that does not yet have consensus. Dr Gosain emphasizes the potential for re-education, and therefore uses the masseter nerve for younger patients, but not older patients. Others emphasize the power provided, and find that the masseter nerve over-powers in young patients, and cross-face grafts under-powers in older patients. In our practice, both are discussed, but the cross-face graft is generally used for children, and the masseter branch more frequently for adults.)

**Arun:** In the older patients I find reeducation and presumed cortical plasticity is much poorer than it is in the younger patient. In contrast, I have found younger patients (age 12 and below) to have very good potential for cortical plasticity and reeducation of the motor control of smiling.

**Jeff:** As far as strength, do you see a difference in terms of results between the two?

**Greg:** I think in my mind, there is no question about it. If you have a free muscle transfer that is innervated by the motor nerve to the masseter, it is going to have much greater excursion than one innervated with a cross-face nerve graft. Not to say that you can't achieve very nice results with a cross-face nerve graft, but when you measure it, it is less. The excursion is about maybe 7 millimeters, 8 millimeters, possibly 10 or 11 with a cross-face nerve graft, but routinely more like 15 or so with a motor-nerve to the masseter.

**Arun:** I have also found the nerve to the masseter to be a strong nerve. It has a shorter time for re-innervation than does a cross facial nerve graft, even though the free muscle transfer has already been delayed for at least 9 months until the cross facial nerve graft has regenerated. In addition, we often find that the nerve to the masseter is so strong that if the patient presented with bilateral involvement in which there was slight weakness on the contralateral side, the free muscle reinnervated by the nerve to the masseter overpowers the contralateral side. This makes re-education and possible use of biofeedback an important component of the rehabilitation period.

***We have the cross-face nerve graft and the masseter branch of the trigeminals there an age cutoff, or what is your decision-making tree as far as which nerve to use for the second-stage muscle transfer?***



**-Jeffrey Marcus, MD**

(continued on page 14)

The second part of this discussion will appear in the next issue of *Maxillofacial News*.

**Marchac** (continued from previous page)

the American Association of Plastic Surgeons (AAPS). Daniel became the first elected member of AAPS and in 1999 was honored by being made a Distinguished Fellow. He became the first Secretary General of EURAPS and served as its president, 1998-1999.

Daniel received many honors and awards throughout his career, particularly from his North American colleagues. In 2002, he was honored with the Maliniac Lectureship; in 2006, he was appointed International Society of Aesthetic Plastic Surgery Traveling Professor; and in 2007 he received from the American Society of Plastic Surgeons the Board of Trustees' Special Achievement Award.

For over 30 years, Daniel maintained a fellowship in both Craniofacial Surgery and Aesthetic Surgery, allowing young surgeons from North America and other parts of the world the opportunity to come to Paris and be exposed to this master surgeon, as well as to the cultural riches of Paris. Many of these former fellows have gone on to become excellent teachers themselves and leaders in all aspects of plastic surgery in their respective countries.

Daniel was appreciated for his kind and gentle manner and admired for his great surgical skill and ability. An ardent world traveller and a dedicated sportsman, he enjoyed skiing and sailing. Daniel possessed a very curious mind about everything around him and delighted in sharing this with his friends and family. Behind his soft spoken, quiet demeanor, characteristic smile, and ever-present optimism was a highly competitive, persistent pursuit of quality and excellence. He loved his family dearly and was so very proud of his four children and Nina, Mintz, his wife. Daniel's youngest son, Alexandre, a plastic surgeon, was able to spend six months with his father as a fellow prior to his father's death. Daniel will be sorely missed by the entire world of plastic surgery. He will be remembered as a beloved teacher, friend, colleague, and mentor who is no longer with us.

Kenneth E. Salyer, MD



Daniel and Fernando, lifetime friends



ICFC Mexico City, June, 2012: 40 years together

**Monasterio** (continued from previous page)

organization in the world of craniofacial surgery. Meanwhile, throughout these decades, all of us who were members of the ICFC looked at Fernando as our guiding spirit, and our wives at Leonor as an equally extraordinary person and role model.

The identifiable list of accomplishments gives some insight into Fernando's extraordinary energy, focus, and broad interests, but less into the spirit of this extraordinary person. His dynamic personality and compellingly precise manner of speaking were a magnet to all who encountered him. We listened when he spoke, in his fascinating manner, always with superb logic and insight. He was enthusiastic about speed in automobiles, sometimes terrifyingly so for those who rode with him, was an Olympic athlete as a member of the Mexican sailing team, a regular tennis player, an avid skier (straight downhill!) well into his 80s, and an enthusiastic fly fisherman. He also was an expert on the History of Medicine in Mexico, on Mexico in general, and on Plastic Surgery. When with him in Bologna, he described how Tagliacozzi communed with him on occasion at midnight in the main plaza, once taking some of us for a midnight stroll, where Tagliacozzi on that occasion failed to appear, possibly because of our presence, he opined. His interest and enthusiasm for archeology and for the



MAESTRO 1983

fine arts especially as they related to Mexico were real, and his knowledge was extensive. He was extremely interested in Latin artists such as Diego Rivera and Pablo Picasso, prompting along with Leonor, a spontaneous and special trip to New York for a Picasso exhibition there, just one example of several such adventures.

For so many of us it was an extraordinary privilege and honor to have had him with us for so many years. His likes, in its many magnificent manifestations, will not be seen again.

Linton A. Whitaker, MD

*EDITOR'S NOTE: Obituaries on Dr. Marchac and Dr. Monasterio will also be published in PRS in a forthcoming issue containing some of the same factual information and photos present in this Newsletter.*

## From the Education Committee

**Peter J. Taub, M.D., Chair**  
**Mount Sinai Medical Center, New York, New York**

The New Year will bring a superb line-up of courses designed to introduce students and residents to concepts in maxillofacial surgery and extend the knowledge of residents and attendings that build on advanced techniques in our specialty. The first basic course will be in Miami, hosted by past-ASMS President Seth Thaller. At the conclusion of the Miami course there will be an additional refresher course offered in cleft lip and palate surgery. The hands-on cadaver course at LSU Health Sciences Center is scheduled for March. That course will continue to offer participants the opportunity to learn from and watch experts perform the procedures that have made them internationally recognized. Participants will have the opportunity to expand their experience with injection techniques

and laser resurfacing. In conjunction with the American Society of Craniofacial Surgeons, the advanced course for fellows in Phoenix is again scheduled for the summer to highlight the major osteotomies used in reconstruction of the craniofacial skeleton. In the Fall, expectation's are high for the preconference symposium in Santa Monica after this year's successful symposium in New Orleans. For the ASMS Day during the meeting, numerous exciting educational panels and speakers will present challenges in maxillofacial surgery for both residents and attending surgeons alike.




**BASIC MAXILLOFACIAL PRINCIPLES AND TECHNIQUES**

January 25-26, 2013  
 University of Miami  
 Miami, Florida

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**CHALLENGES DELIVERING CLEFT SURGERY IN THE UNDERDEVELOPED WORLD: LESSONS LEARNED AND HOW TO AVOID MAKING NEW ERRORS**

January 27, 2013  
 University of Miami,  
 Leonard M. Miller School of Medicine  
 Miami, FL



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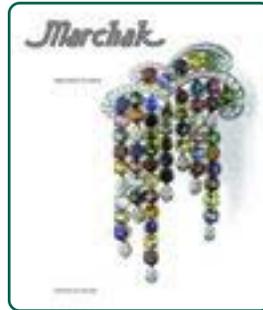
**Please visit the ASMS website at [www.maxface.org](http://www.maxface.org) for a complete listing of all upcoming courses and regular updates on all educational initiatives and activities.**

## Book Review: *Marchak*, by Marguerite De Cerval. Editions du Regard, Paris

*Devra Becker, MD, University Hospitals, Cleveland, Ohio*

“You may not know this about me,” Daniel Marchac said one afternoon during my time as his fellow, “but I’m not just a Plastic Surgeon. I’m also a jeweler.” Indeed, I had not known. As it turns out, Daniel Marchac is a direct descendent of the famed jeweler Joseph Marchak (his family changed the spelling of his Russian last name Marchak to the more francophone Marchac after World War II.) The Marchak House is renowned in its own right for creative and captivating jewelry; in recent years, Daniel had worked to revive the name. The book *Marchak* catalogues the history of the Marchak House, complete with pictures of jewelry as well as photos of clocks from the Marchak House, and family photos. Perhaps the book “*Marchak*” was not targeted to Plastic Surgeons, but the craniofacial surgeon familiar with Daniel Marchac’s surgical work will find that the book is captivating and provides a new insight on Daniel’s life and work.

The book is structured as a coffee table book. It is hardcover, and the thick paper is suited to the stunning photography of Marchak pieces. Though the pictures are not repeated, the text is—pages 7-91 recount the design principles and legacy of Daniel’s great-grandfather and the founder of the Marchak house in French, and pages 92-143 translates that text into English. Photographic captions are in both French and English throughout the book. The result is a book that one can skim, or read cover to cover.



Joseph Marchak was born in 1854 and began a jewelry apprenticeship at age 14. He opened the Marchak House in Kiev in 1878 at age 24. In his lifetime, he became known as the “Cartier of Kiev,” and was also known as a rival of Faberge. His son Alexander opened the Paris store on Rue de la Paix in 1920 after Joseph’s death, and the family’s subsequent emigration from Russia. Daniel Marchac since the beginning of this century has been involved in reviving the name. The Marchak House recently opened a new headquarters in Hotel Ukraina in Moscow.

The book features pictures of rings and necklaces made in the Marchak house, but it is the gem-based brooches that helped make the House famous, and those showcased in the book make it clear why. Though I am not an art historian, and not a critic of jewelry, the variations on the folium design, and the lituus present in many of the pieces combined with striking color combinations, form a collection that has many links to nature. Some of the pieces are whimsical, such as the Herisson brooch. The Serpent brooch, in which a serpent made of multicolored jewels wraps a pate de verre apple, communicates a biblical history. The book makes note of the fact that the Marchak House does not belong to a particular school, but draws design inspiration from many sources.

The text is less impressive than the pictures, but the pictures are accessible and when viewed in the context of the book, provide a sense of the collections.

## PSEN ([www.psenetwork.org](http://www.psenetwork.org)) wants YOU!

The Plastic Surgery Education Network (PSEN) was designed to be a valuable tool for plastic surgeons in all arenas of practice. But for it to truly serve everyone, it needs broad participation. The more plastic surgeons use it, the faster and more useful it will become to all. The new site has a Community section, which allows plastic surgeons to pose questions and suggestions to each other on clinical topics at their leisure, which should make for a valuable “watering hole” for all clinicians. This is an area that all plastic surgeons can contribute to at any time. But plastic surgeons can also contribute to the site’s other content areas.

The site’s main content is managed by Section Editors for each distinct topic area (Aesthetic, Breast, Hand/Peripheral Nerve, Patient Safety, Pediatric/Craniofacial, Reconstructive/Microsurgery and Special Topics). And each Section Editor has solicited a team of assistant editors to bring in new, fresh content to the site every month, whether in the form of literature reviews, case reports or videos.

The more people who contribute case reports and videos, the richer the site will be for everyone. Plastic surgeons who are interested in working with the PSEN editorial team to contribute content either occasionally, or more regularly as an assistant editor, are encouraged to contact online [education@plasticsurgery.org](mailto:education@plasticsurgery.org) and specify their areas of interest.



## From the President

(continued from page 1)

combines reconstructive and aesthetic facial techniques taught by experts, with a fresh cadaver paradigm and a limited number of participants. The course was sold out in 2012 and will be offered again in 2013 (Editor's Note: Please see the back page of this issue for details on the 2013 Advanced Course.).

Collaboration with other societies such as the American Society of Craniofacial Surgery has provided the ASMS and its selected faculty an opportunity to provide learning experiences to new craniofacial fellows along with the ASCFS. This summer in Phoenix, Stephen Beals, Kant Lin and others will be offering the new craniofacial fellows a "boot camp" experience into the field. We hope to continue and to expand these new educational settings, which augment the already popular and long running Basic Principles in Maxillofacial Techniques courses which are offered to residents in training in the summer and the winter. The next Basic Course will be offered January 25-26, 2013 in Miami, FL. Immediately following this course we will again offer "Challenges Delivering Cleft Surgery in the Underdeveloped World". This is an area that we personally want to highlight this year. This added educational seminar has been spearheaded through the efforts of Seth Thaller and Warren Schubert, both well known for their outreach work. This course is not intended to be a one day "How do I fix a cleft" for the uninitiated, but rather a frank discussion of the challenges encountered in providing cleft service in developing countries. Too often mission groups are plagued with difficult and counterproductive situations, although well intentioned. Sharing these experiences will do much to better assure more successful outreach efforts.

One of the areas during this coming year that we want to explore further is precisely in the area of global health and delivery. We are looking into establishing a course that will delve into these issues and hopefully provide solutions to problems in this field. This is an area that many of our members are actively involved and many want to get involved. A frank discussion of these issues is therefore important. Stay tuned.

The next annual meeting of ASMS in conjunction with ASPS and the PSF will be in San Diego, CA. This promises to be a great meeting with a fantastic venue. San Diego has so much to offer and it has been working very hard over the last 10-15 years to give its visitors a most memorable experience. Kant Lin and his Scientific Program Committee are working hard to set up the preconference symposium as well as the scientific program for cranio-maxillofacial free papers, and the ever popular ASMS Day. You will recall that we had an excellent scientific program this year in New Orleans that was coordinated by Warren Schubert and Peter Taub. The preconference symposium entitled "Successful Maxillofacial Surgery in your Practice" gave very practical points on how to expand your maxillo-

facial and soft tissue practice. ASMS Day was filled with several pearls, including a wonderful Converse Lecture by Linton Whitaker in which he compared the preparation of residents and plastic surgeons to the detailed process of wine making. You need good seed, terrific soil, and masters along the way in order to produce an excellent product. Our vintners are hard at work.

I am happy to be a witness to great advances in our newsletter, website, and our Education Committee. Arun Gosain continues to ably format and provide interesting and useful information in what you are reading at this moment. Anand Kumar with the help of many young surgeons such as Reza Jarrahy and John Mesa, are continuing to make the website more interactive and friendly. Initiating and renewing membership in ASMS has never been easier, online. Applications for our Research Awards (provided by generous support from Synthes) can also be done electronically. Similar access can be obtained for the CRANIO fellowship, supported by Doug Ousterhout and the Resident-Scholar Award. This last award, supported this year by OsteoMed, provides financial support for resi-

dents in training, interested in a career in craniomaxillofacial surgery, to attend our annual meeting. The website has included procedural videos and teaching segments on various topics in maxillofacial and cranio-maxillofacial surgery. An ASMS app that can easily go on your Smart phone is also being developed. A greater link with PSEN, which has taken the lead in didactic and educational material for our members, is well established. Our Education Committee, chaired by Frank Papay, is one of our most active and hard working committees. They have the task of keeping the high standards of our educational courses, looking for new venues and keeping them all relevant and solvent.

Finally, another area of active interest for this coming year will be to increase our membership. I am fully aware that this is almost like swimming against the current. In order to be successful salmon swimmers, we need to provide increased value to our members. We will continue to try to do this with your help and suggestions. We can also increase our membership by extending increased collaboration with our international colleagues. I understand that training is always an issue. However, there are excellent colleagues and innovators abroad that we need to learn from and work with in this heightened global society. We look forward to doing that this coming year.

Although ambitious we must shoot high in order to attain our goals. I thank you once again for the opportunity to serve you. I am always open to ideas, suggestions, constructive criticism and just simple conversation ([hcvasc@uky.edu](mailto:hcvasc@uky.edu)). Many of you have already offered ideas, comments and assistance and I am grateful for that. As this year comes to a close and some are looking at going off the "cliff", I simply want to wish you all a joyous season and a most prosperous New Year.

***Although ambitious we must shoot high in order to attain our goals. I thank you once again for the opportunity to serve you. I am always open to ideas, suggestions, constructive criticism and just simple conversation.***

## Positions Available

### University of Utah, Division of Plastic Surgery Salt Lake City, Utah

#### Craniofacial/Research Faculty Position

The Division of Plastic Surgery at the University of Utah anticipates an opening in July 2013 for a board eligible/board certified plastic surgeon with fellowship training in Craniofacial Surgery. The opening will be at the level of Assistant Professor in the Tenure Track. Strong interest in clinical and basic science research is required as 40-50% of the position is devoted to research with expectations for grants, publications and presentations. The candidate must also have demonstrable skills in delivering the highest level of patient care in an academic setting, training residents and teaching medical students. Please apply through University of Utah web site. The University of Utah is an OEA/AA employer. <https://utah.peopleadmin.com/postings/19742>.

Contact: W. Bradford Rockwell, MD, 801-581-8419 /[brad.rockwell@hsc.utah.edu](mailto:brad.rockwell@hsc.utah.edu)

### The University of North Carolina at Chapel Hill, Assistant Professor

The University of North Carolina at Chapel Hill is pleased to announce the hiring of a tenured faculty position at the level of Assistant Professor who will primarily care for children with a broad range of craniofacial anomalies, including cleft lip/palate, microtia, craniosynostosis, facial paralysis, facial lesions, and congenital hand anomalies. The candidate should have completed a plastic surgery residency and be board certified or pending board certification. Fellowship training in either Craniofacial Surgery or Pediatric Plastic Surgery is required. Anticipated start date is July 2013.

The University of North Carolina is an Equal Opportunity Employer.

Contact: John A. van Aalst: [john\\_vanaalst@med.unc.edu](mailto:john_vanaalst@med.unc.edu)

### Johns Hopkins University School of Medicine / Johns Hopkins Hospital, Baltimore, Maryland, Craniofacial Surgeon-Scientist

The Johns Hopkins School of Medicine, Department of Plastic and Reconstructive Surgery, is seeking a Craniofacial Surgeon-Scientist to join our full-time academic faculty. Minimum qualifications include fellowship training in craniofacial surgery, ABPS board certification/eligibility with a strong interest in patient care, teaching and research. Candidates with experience in all areas of pediatric plastic/craniofacial surgery and prior accomplishment in basic science or clinical research are encouraged to apply.

Contact: Qualified candidates may electronically submit CV and cover letter to: Richard Redett, M.D., [rredett@jhmi.edu](mailto:rredett@jhmi.edu)

### University of Michigan, Section of Plastic Surgery, Faculty opportunity in pediatric plastic surgery

The Section of Plastic Surgery at the University of Michigan is seeking a BC/BE plastic surgeon with fellowship training in pediatric/craniofacial plastic surgery to join our exceptional full-time academic faculty. This position presents an outstanding opportunity to join a busy clinical practice in a superb teaching and research environment. This individual will join two existing pediatric/craniofacial surgeons in the brand-new, 1,000,000 sq. ft. Mott Children's Hospital, which will open its doors November 2011. She/he will be included in the faculty of the ACGME-accredited integrated plastic surgery residency and craniofacial fellowship programs and should therefore have excellent clinical and teaching skills. Clinical responsibilities of the position include facial trauma call, care of patients with clefts and other congenital craniofacial anomalies, vascular anomalies/laser procedures, and general pediatric plastic surgery. Academic/scholarly productivity is also expected. Contact: Qualified candidates should send a letter of interest and CV to Steven R. Buchman, MD, via email: [sbuchman@umich.edu](mailto:sbuchman@umich.edu).

### University of California, Irvine, PGY IV Plastic Surgery Resident

The Aesthetic and Plastic Surgery Institute at The University of California, Irvine has been approved for an increase in their resident numbers by the ACGME. Consequently, we are looking to hire an additional resident into the PGY IV position. Candidates must have completed General Surgery, Otolaryngology, Orthopedic Surgery, Urology or Neurosurgery to be eligible for this position. Candidates would complete a 3 year training program in Plastic Surgery and be eligible to sit for their boards by ABPS. Interested candidates should send CV, 3 letters of recommendation, ABSITE or In-Service Examination Scores, USMLEs and a statement of interest: Daniel Jaffurs, MD, [djaffurs@uci.edu](mailto:djaffurs@uci.edu)

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**ASMS ADMINISTRATIVE OFFICES**

**500 Cummings Center, Suite 4550**

**Beverly, MA 01915**

**(978) 927-8330**

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## Case Study: Cleft of the Secondary Palate, Glossoptosis, and Micrognathia

*Reza Jarrahy, David Geffen School of Medicine at UCLA*

This patient was transferred to our institution during her first week of life for management of postnatal respiratory distress and failure to thrive. She was born as a product of a full-term pregnancy via normal spontaneous vaginal delivery to a G4P2 mother who received proper pre-natal care. The pregnancy was complicated by diabetes, which was managed by diet, and there were no delivery complications. There was no genetic evidence of syndromic association.

**FIGURE 1**



At birth the patient was noted to have a cleft of the secondary palate, glossoptosis, and micrognathia. (Figure 1) In the immediate postnatal period she was noted to have oxygen desaturation when in the supine position and when taking oral feeds. She was also observed to have apneic episodes when supine. She was placed in a prone position for maintenance of her airway patency and was started on gavage feedings. A 24-hour pH probe study failed to reveal significant gastroesophageal

*(continued on next page)*

**FIGURE 2**



### Post Your Open Positions in *Maxillofacial News*

The ASMS wishes to solicit postings for job openings for maxillofacial surgeons. As a service to individuals who are completing craniofacial fellowships or plastic surgery residencies, we plan to post open academic positions for craniomaxillofacial surgeons at no charge. We feel that this service is justified in keeping with the ASMS philosophy of enhancing the education and practice of maxillofacial surgery. This would enable individuals who are completing craniofacial fellowships to use the ASMS Newsletter as the primary source for academic job opportunities, since we will actively solicit all such positions from academic institutions.

We will also post any non-academic positions of interest for craniomaxillofacial surgeons at the fee structure outlined below:

- ♦ Job postings for craniomaxillofacial positions at institutions with plastic surgery residency or craniofacial surgery fellowship training programs - to be solicited by the Newsletter so as to insure a complete list and posted at no charge.
- ♦ Job postings for craniomaxillofacial positions not affiliated with a plastic surgery residency or craniofacial surgery fellowship will be posted at a fee of \$150 for ASMS members and \$250 for non-members of the ASMS.

**Please contact Lorraine O'Grady ([logrady@prri.com](mailto:logrady@prri.com)) with any positions for craniomaxillofacial surgeons.**

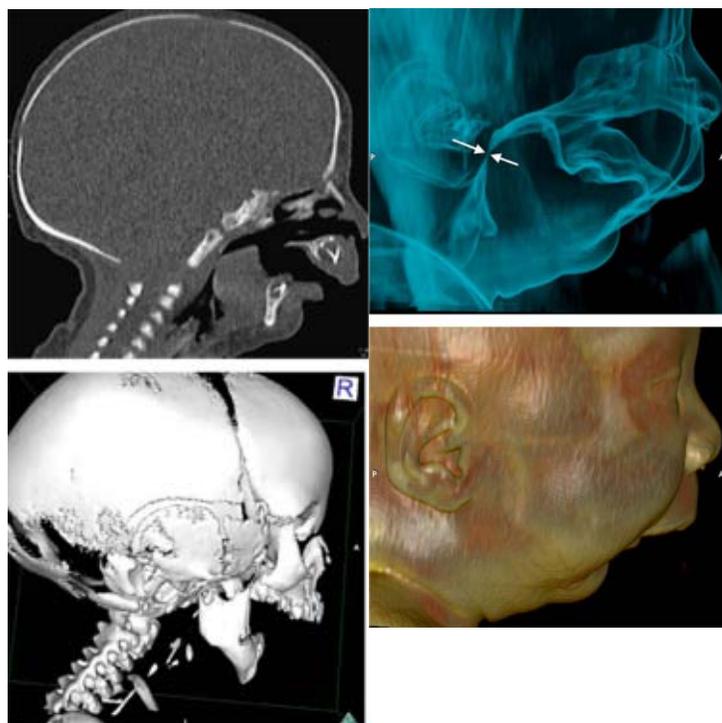
**Case Study: Cleft of the Secondary Palate** *(continued from previous page)*

reflux. A polysomnogram demonstrated severe obstructive sleep apnea. Triple endoscopy showed no evidence of choanal atresia nor any supraglottic or subglottic obstructive lesions. Computed tomography confirmed the clinical findings, including micrognathia, glossoptosis, and severe airway narrowing. (Figure 2)

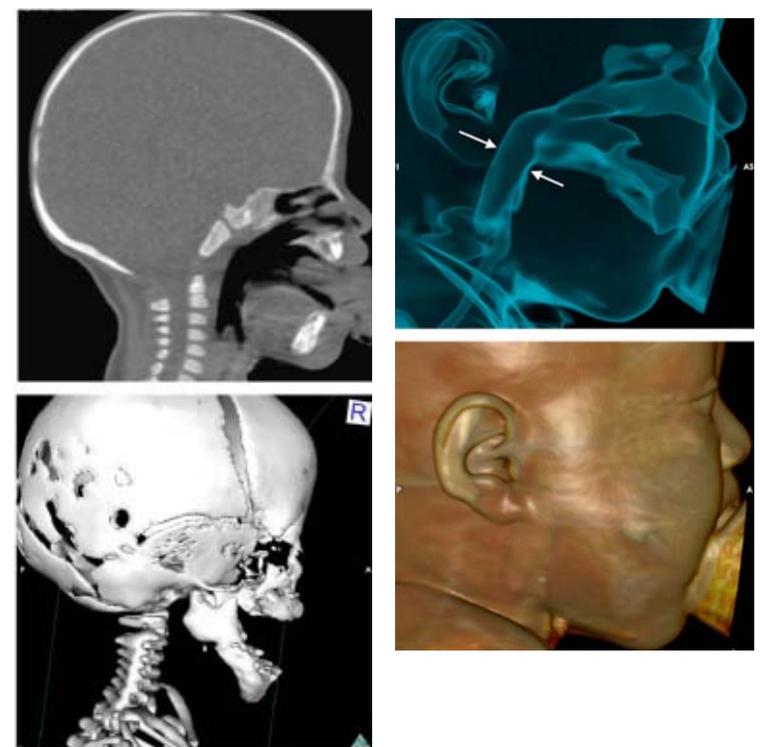
The patient was taken to the operating room where bilateral mandibular osteotomies were performed and bilateral mandibular distraction devices were placed. The devices were placed with a slight oblique vector. They were activated in the operating room to confirm the completeness of the osteotomies and movement of the mandible, then reset to neutral. (Figure 3) Following a latency period of 24 hours, we began activation at 0.5mm twice

daily. The mandible was advanced 22mm without incident and the devices were removed after an 8-week consolidation period. Following distraction the patient had no further witnessed episodes of apnea, was able to breathe comfortably in the supine position, and was able to take oral feeds uneventfully. Post-distraction CT scans showed lengthening of the mandible, resolution of the glossoptosis, increased oropharyngeal airway volume, and expansion of the soft tissue envelope commensurate to the skeletal lengthening. (Figure 4) Post-distraction endoscopy showed a widely patent airway relative to baseline. (Figure 5) The patient has had no obstructive symptoms two years following surgery. (Figure 6)

**FIGURE 3**



**FIGURE 4**



**FIGURE 5**



**FIGURE 6**



**Panel Discussion:** *(continued from page 7)*

**Mike:** That has been my experience also. The motor nerve to masseter nerve often creates significantly more excursion of the muscle flap and commisure than a cross face nerve graft. Again, although the motion created by the masseter nerve can become effortless or reflexive it has the downside of not having true spontaneity.

**Greg:** I know some groups have had so much hyperactivity in the gracilis muscle that has been innervated by the motor nerve to the masseter that they have had to actually use botox injections.

**Mike:** Have you ever seen that Greg? I have heard people talk about it, but I have never had that occur and I have talked to Ron Zuker about it and he said he hasn't seen it either.

**Greg:** No, I have not seen it myself. Tessa Hadlock says that she has seen it.

**Jeff:** The time to re-innervation can be defined as the time to first twitch when they see it in the mirror. I think we all agree that time to first twitch is shorter with the masseter nerve than with the cross facial graft. Does that fact influence your recommendations or decision?

**Arun:** I agree that the nerve to the masseter provides faster reinnervation of the free muscle transfer. If the cross facial nerve graft takes about 6 months for reinnervation following free muscle transfer, I find the nerve to the masseter will initiate reinnervation after about 4 months. This doesn't influence my decision as to which donor nerve to utilize, but I do counsel patients that they will have a longer delay for motor activity using the cross facial nerve graft. In an older patient, this may pose a problem because the increased reinnervation time could result in motor end plate degeneration and as a consequence a loss of strength in the free muscle transfer. Therefore, the choice of donor nerve may become more of a factor in the older patient.

**Jeff:** I find that it is difficult to find the age cutoff to when to switch. Can you comment on that?

**Mike:** Well, there are no hard and fast rules, and I think you really have to look at the patient's global health and their particular co-morbidities along with their age. Clearly you see people that are 70 years of age that look like they are 50 and you see people who are 50 with diabetes, hypertension, lupus, and other co-morbidities that look like they are 80. There is a significant amount of clinical judgment involved, but I think once you start hitting that 50 range, you need to begin thinking about the masseter as your choice of motor nerve.

**Jeff:** As far as other factors to influence that decision, in my own mind, one of the things that sways me a little but it is overall facial weight - heavy facial features. With heavy patients, I know I need a little more strength. Does that influence your all's decision?

**Greg:** To be honest, in the past it really hasn't, but maybe I should pay more attention to that. If I can just address the thing that you were

***This doesn't influence my decision as to which donor nerve to utilize, but I do counsel patients that they will have a longer delay for motor activity using the cross facial nerve graft.***



**-Arun Gosain, MD**

talking about before Jeff with maybe a patient who is around 60 years old or so. If you can offer them a 1 stage approach rather than a 2 stage, you know, there is an overall times savings there. So, that maybe a considerable advantage when somebody uses it around age 60 in trying to decide between these two procedures.

**Jeff:** The reason I asked is because there are some people out there now that are recommending or who are doing a 1 stage approach with masseter in all age groups, including children, which I don't personally agree with, although it has made me think a little bit about where that cutoff ought to be.

**Greg:** Conceivably, one could hypothesize that using the motor nerve to the masseter in very young age groups might be appropriate perhaps for somebody who is coming from great distance, or somebody who maybe only has maybe 1 opportunity to go to the operating room for whatever reason - financial, personal family, whatever. You could imagine that perhaps the central plasticity may be greater in those younger age groups, and so that may be appropriate.

**Jeff:** Moving on to the next subject. I would like to get each of your all's thoughts on what you think are the biggest current challenges. - what do you find most challenging in your practice, each of you? Let's start with Greg, then Arun, and then Michael.

**Greg:** I think one thing that is really hard to get is an appropriate insertion into the muscle. It seems like no matter how medial we try to make that insertion point at the muscle of the oral commissure, it is never quite perfect. I know we always have difficulty getting the insertion high enough or we are getting a little bit of a nasal labial crease, sort of by the alar base. We are never really quite able to achieve that, and I am not sure if you guys are. If you are, I am dying to know.

**Greg:** So, that is one thing. I think another thing that we still have problems with, even though we are pretty aggressive about thinning out the muscle and trying to get the muscle as small as we possibly can, we are still having problems with bulk in some patients.

**Mike:** I think in my practice, the thing that really is the most challenging is trying to reestablish blink and eye symmetry. The loss of eye closure is just such a tell-tale sign of facial paralysis. Many patients don't like gold eyelid weights, and trying to reestablish a natural blink to protect the eye is a real challenge.

**Greg:** I've had that problem to.

**Jeff:** Arun, what do you think?

**Arun:** So, I will just take three points here. I think the biggest challenge at least is education of patients and the referring physicians if this is a viable option. If that weren't such a challenge, I think these cases would be done much more frequently. That is something we all need to work on, and I think a conference like this is good because it will help to spread education on this topic. In terms of the technical

***It seems like no matter how medial we try to make that insertion point at the muscle of the oral commissure, it is never quite perfect.***



**-Gregory Borschel, MD**

*(continued on next page)*

**Panel Discussion:** *(continued from previous page)*

challenges, I agree that the vector of pull needed to create a natural nasolabial fold that mirrors the contralateral side in cases of unilateral paralysis is a very difficult thing to do. I am always open to refinement in this regard. In terms of the specific muscles, the ones that I have the most trouble with and which results in the most noticeable asymmetry are the depressors of the lower lip. When I see them in clinic, all of the babies cry more than they laugh. We have made great progress in reanimating the elevators of the lip because these are large muscles that are amenable to reconstruction with a free muscle transfer. However, we have been much less successful in reanimating the depressors of the lip such that they can mimic the contralateral side.

**Jeff:** Well, Arun, that is a really interesting point. So, what is your strategy for dealing with the lower lip depressors?

**Arun:** I have tried a number of procedures. We have tried static tightening using fascial slings, but this is adynamic. We have also used the digastric muscle as a pedicled muscle transfer. However, the digastric muscle is short and even if modified with a fascial extension, I have never really been happy with the outcome. Julia Terzis has written about the platysma transfer in this situation, turning the platysma over to try to simulate the contralateral side. I would like to hear your experiences with this procedure.

**Jeff:** Have any of the panelists had any experiences, good, bad, or otherwise with either the platysma to recreate depressors?

**Mike:** I have not had consistent results with those procedures, so now I usually perform a lower lip myectomy on the unaffected side. You can often achieve good symmetry and the patient satisfaction has been high.

**Jeff:** I have no direct experience myself with muscle transfers for lower lip depressors, and certainly through all of our associations with Ron Zuker, I think we have all been influenced with his view on the subject which basically is that dynamic transfers for lower lip depressors are not particularly effective. I think we all agree about the role of physical therapy and training after any of these surgeries and how important it is. In the same way that any person who does not like the appearance of their lower teeth can avoid showing their lower teeth when they smile, patients can also get pretty good at it on one side with or without Botox.

**Jeff:** Mike, could you comment a little bit about your experience thus far with nerve transfer and just where you think the potential is there. I think you have taken this to a point that is a little bit beyond what many of us have seen thus far.

**Mike:** One of my principle areas of interest has been re-inervating the mid-face and perioral mimetic muscles by transferring the motor nerve branch of the masseter to selected zygomatic and buccal branches of the facial nerve. We have been doing V-VII transfer for 10 years now and I think we have achieved some reasonable results. During the last 4 to 5 years the technique has evolved in a slightly different direction. We have been combining the masseter-to-facial nerve transfer with a series of cross face nerve grafts to try to import some spontaneity from the contralateral side. Essentially, we are trying to create a marriage between the power that you can achieve with the V-VII transfer and the spontaneity that you can get with a cross face nerve graft.

**Mike:** I have really made an effort to reach out to my neuro-surgery colleagues. You may be surprised how many neurosurgeons see patients with significant facial paralysis issues. If they know that there is a resource available to them in their community, they are often more than happy to refer those patients. Getting the word out to your neuro-

surgery colleagues in your community and state is one of the most important things you can do to grow your practice.

**Jeff:** What do you think the role is for regional muscle transfer at this point?

**Mike:** I recently participated on an ASRM panel with Fausto Vaterbo from Brazil. Fausto is a big advocate of the temporalis muscle transfer. He uses a McLaughlin style technique where the muscle insertion is released from the coronoid and connected to the commisure using a fascia lata graft. By doing that, you are harnessing the whole force of the muscle, and avoiding a depression in the temporal region or fullness at the zygomatic arch, which have been all been down sides of the Gillie's type of temporalis transfer. He is showing some very nice results using that technique with motion similar to what is achieved with a free gracilis muscle flap powered by the motor nerve to masseter. You also avoid the cheek fullness and bulk that can come along with a free muscle flap. I have started to use this technique in some patients where I would have previously used a free gracilis innervated by the masseter nerve and have been pretty pleased with the results.

**Jeff:** Arun and Greg? Anything?

**Greg:** I just wanted to say that the Vaterbo technique is a good one, and the technical of Daniel Labbe is very similar. I have seen some great results in their adult's series and I think this approach may hold promise in the pediatric as well in the future.

**Jeff:** It's one of these topics that comes up because many of our colleagues who read this may not have all of the technical nuances, equipment, so forth, technology, to be able to do microvascular techniques may wonder what they have to offer their patients. The question is often, what is the state of the art? What should they be getting? My own bias is for children, I think free muscle transfers is the gold standard. Would anybody like to weigh in on that?

**Greg:** Well, I would tend to agree. I do think that if you are using the free muscle, it gives you much more flexibility - where you can orient the muscle, where you can place it.....so I still tend to favor that.

**Arun:** I don't know if any group is really using the temporalis transfer in the pediatric population. I have certainly seen reports of its use in the adult population, but indications for such a transfer in the pediatric population is not clear.

**Mike:** Most of my experiences with the temporalis transfer is in the adult population but, it could be a reasonable alternative to a masseter, innervated free muscle flap in children, especially in bilateral cases. Free muscle flaps innervated by with cross face nerve grafts give the possibility of the spontaneity. So, in a young person with unilateral paralysis and good nerve regeneration potential, this still seems like it would be the preferable technique.

*I have really made an effort to reach out to my neurosurgery colleagues. You may be surprised how many neurosurgeons see patients with significant facial paralysis issues.*



**-Michael Klebuc, MD**

# ASMS HIGHLIGHTS FROM NEW ORLEANS



## ASMS President Robert Havlik Addresses Meeting Attendees in New Orleans *“We cannot simply rely on prior methods. It’s not possible.”*

*The following is an edited version of the Opening Ceremonies address of 2012 ASMS President Robert Havlik, MD.*

What is the thing that makes us different - different from the quote/unquote “cosmetic surgeons,” different from the dermatologists, different from the otolaryngologists?

What sets you apart as a plastic surgeon? Why can you reliably accomplish what others cannot? Inevitably, the answer that many, if not all, of you will come to is your training - the time that you have spent with your mentors in plastic surgery.

The individuals who cared about your progress, your development, your skill - the ones who made sure that you were coming along - the ones who said, “This is the way I solve this problem” and “this is the reason why.” Or “This is the way I put in this stitch and not this stitch.” In short, the mentors who were passionate about making sure you understand the importance of every detail.

It’s no wonder that the specialty has such a strong commitment to our proud and storied heritage - which has pioneered organ transplantation, myocutaneous flap surgery, microsurgery and replantation, and craniofacial surgery - a heritage that invests in new ways to solve unique problems — our history, our tradition, our training.

As someone who’s worked to help develop and refine plastic surgery training, going forward, I can assure you that our plastic surgery training process is truly the analogy of the political “third rail.” But it was a challenge that had to be met, no question. For we must understand that plastic surgery must constantly evolve and we must move forward.

When sociologists establish what characteristics separate a profession from a trade, two of the critical characteristics are the ability of a profession to set and control its fees, and the ability of a profession to define and control its specialized education and training.

I’m not sure how we’re doing on point No. 1 - controlling our fees - but as for No. 2, I believe the ability to control our training paradigm may be one of the biggest challenges we face as a specialty going forward. It’s crucial that we define and control the parameters and training for entry into our fabulous profession. Further, the solutions going forward will not be the same as in the past.

We cannot simply rely on prior methods. It’s not possible.

Plastic surgery education must engage the new technologies in which the assimilation of knowledge is accelerated and future surgeons can practice technique until perfection is attained.

Animation provides a powerful instruction tool that can demonstrate crucial steps in an operation. This static image (referencing the screen behind him), sent from my colleague Dr. Flores at Indiana University and his collaborators at New York University, demonstrates dips from an animation of orthognathic surgery. It doesn’t take much to see that this method is much more complete than a conventional textbook or atlas.

The more we practice something, the better we get, quite simply. In fact, when coupled with the right training, you’ve stumbled upon the secret to success.

I’m sorry to say, there’s no magic bullet. Success doesn’t come without hard work and plenty of practice. The best surgeons aren’t simply lucky or born that way. Talent plays a part, for sure, but anyone who tells you success will come without hard work and sacrifice is lying to you.

The advent of surgical simulation labs has been an exceptional adjunct to surgical education. Certainly, plastic surgeons have used these principles over the past two decades with microsurgical training labs.

Recently, the American Society of Maxillofacial Surgeons has partnered with its sister society, the American Society for Craniofacial Surgery, to offer a “boot camp” for new craniofacial Fellows at the renowned Barrow Neurosurgical Institute in Phoenix. It’s a chance for the Fellows to get their feet wet in a controlled environment focused on learning.

ASMS also has increased its number of “hands-on” course offerings to five per year, including the ASMS Facial Restoration and Aesthetic course offered right here in New Orleans.

Plastic surgery must harness the power of the web. We applaud the initiative and commitment of our sister society, ASPS, in the development of the Plastic Surgery Education Network, and have been proud to partner in this online educational initiative.

Just as learning for human beings never stops, our formal education no longer stops with residency. We must help active practitioners who continue to need new skills and every single one of us develop new needs over time.

Luckily, PRS Editor Rod Rohrich, MD, and his staff have done an outstanding job developing a journal that is truly cutting-edge and continues our education by enhancing our abilities to discover and learn in a way not even dreamed of a decade ago.

Over the past seven years, the ABPS has worked closely with plastic surgery societies to develop one of the most tightly integrated systems for ongoing medical education and maintenance of certification available in medicine. To ABPS Executive Director R. Barrett Noone, MD, and all those involved, plastic surgery owes you an incredible debt of gratitude.

In my view, we must move forward and be certain that plastic surgery is represented with training programs in the 45 of 135 medical schools where it currently doesn’t exist. It’s my contention here tonight that plastic surgery leads the way and provides an example for other specialties to follow with regards to education and training. Plastic surgery has the leadership in its current ranks and those still coming up, the history of innovation and creativity, and the expertise to excel in this undertaking.

We must not only utilize cutting-edge tools to accelerate learning, we must teach our trainees how to utilize these tools in the context of contemporary patient care.

It’s a great honor and a wonderful experience to serve as the president of the American Society of Maxillofacial Surgeons.

THE AMERICAN SOCIETY OF MAXILLOFACIAL SURGEONS



# ADVANCES IN FACIAL RESTORATION AND REJUVENATION

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