

AMERICAN SOCIETY FOR PERIPHERAL NERVE

Newsletter



Fall 2008

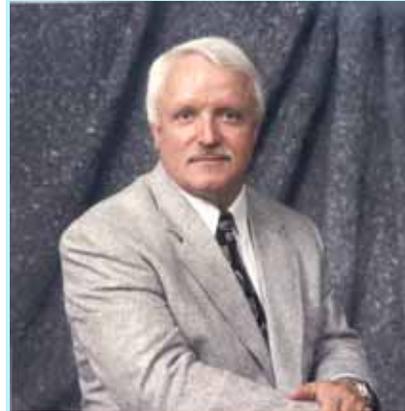
President's Message

Dear Colleagues,

Fall is upon us, and the ASPAN annual meeting at the Grand Wailea hotel on Maui in Hawaii is just around the corner. The recent melt down on Wall Street and the subprime mortgage crisis have created financial havoc, which will continue to have an effect on our medical practices and investments. Despite these adverse events the meeting registration is far ahead of last year and we appear to be headed for a record attendance. Please try to make your plans early to obtain the best airfares and take advantage of the negotiated hotel rates before the rooms are gone.

We were successful in obtaining a permanent seat on the ASPS/PSEF board, which will allow ASPAN to have a voice in ASPS affairs and more importantly help direct increased dollars toward clinical and basic science nerve research through PSEF.

The annual meeting program is in place with 59 papers accepted for presentation along with 13 posters. The ASPAN meeting will begin Friday afternoon with invited speaker Allen Belzberg, MD who will be presenting on Neuropathic Pain: From Bench to Bedside and Back Again. There will be two ASPAN sponsored instructional courses on Saturday morning during the AAHS/ASPAN/ASRM joint programming followed by panels on Crisis in Hand Trauma Coverage and Medical Diplomacy-Volunteering, Training and the Military. Invited speaker Wyndell Merritt, MD, FACS will present Where is the Pain in RSD/CRPS Patients: The Heart, the Head or the Hand? on Saturday afternoon. Sunday morning will start with six instructional courses, a joint panel with the ASRM on Failed Carpal & Cubital Tunnel Release



and Invited speaker Lawrence Rossi, Jr., MD, FAAP, DABMA who will discuss Acupuncture: History and its use in Treatment of Pain. We look forward to your participation.

Several companies have already agreed to sponsor events or portions of our annual meeting. Special thanks go to ASSI, Tornier, Synovis and Ascension Orthopedics for their financial support. We continue to solicit more corporate sponsors to help support our scientific program and meeting events.

Finally, as I discussed in the earlier newsletter, all ASPAN members need to make an effort to recruit new members, especially with the meeting in Hawaii. I have asked the membership committee to extend the application deadline to November 15, 2008, to accommodate active and candidate membership applications. To date we have about half the new member applications we need for a 10% yearly increase. Please make an effort to recruit one new member by November 15, 2008. See you in Hawaii.

Robert C. Russell, M.D.
President

From The Editor's Desk

Welcome to the fall issue of our newsletter. In this issue you will find more information about our 2009 annual meeting which will be held in the beautiful island of Maui in the Hawaiian Islands. The program is listed in the following pages. Please take a few minutes to review the meeting program.

I would still ask the members to send us feedback regarding the newsletter. I would encourage all of our members to contribute to the newsletter. This is our newsletter and should reflect the exciting

and diverse group that constitutes the ASPN membership.

Again, I would like to thank my friends and colleagues the associated editors Drs. Bindra, Dellon, Neumeister and Russell for their guidance and help. I am greatly indebted to Mrs. Alice Romano from the central office for her tireless effort and limitless dedication. Thank you, Alice.

Nash Naam, MD
drnaam@handdocs.com

REGISTRATION FOR THE ASPN 2009 ANNUAL MEETING IS NOW AVAILABLE ONLINE AT WWW.PERIPHERALNERVE.ORG

Invitation to Paradise!!

Aloha!!

Beautiful sceneries, fabulous weather, endless rainbows, lush surroundings, and spectacular sunrises and sunsets... That what would Maui promise to its visitors. Maui, an exotic island in the middle of the Pacific Ocean is waiting to welcome you to our ASPN annual meeting at the Grand Wailea Resort January 11-13, 2009. While most of the country will probably be in deep freeze, we will be enjoying the eternal sunshine of Maui's sunny beaches and the pleasant ocean breeze at the shores of this magnificent island...

The program's theme this year is Pain... There will be several lectures and instructional courses focused on

understanding, diagnosing and managing pain... The mix of instructional courses, symposia and scientific papers will tantalize your brain cells as the beautiful exotic flowers of Maui tantalize your senses... This unique combination of learning and having fun will enhance the enjoyment of both endeavors. The program committee with the help of our central office under the guidance of our president Bob Russell has worked very hard to create a balanced program that would educate, challenge and provoke out thoughts. I sincerely hope that you would join us in Maui. See you in Maui!!

Nash Naam, MD
Program Chair

Grand Wailea Resort Hotel & Spa



The Grand Wailea is conveniently located on the southern shores of Maui and offers a multitude of exceptional amenities. Rooms are available January 5-14, 2009 at a special group rate of \$330.00 per night (plus tax and resort fees) through November 1, 2008, or until our room block is sold out, whichever occurs first.

We encourage you to make your reservations as soon as possible to ensure your preferred dates and room type are available.

We look forward to seeing you there!

The daily resort fee includes:

- A flower Lei greeting and Mai Tai punch (non-alcoholic) upon arrival
- Unlimited local, toll-free, and credit card calls
- In room high speed internet service, coffee and nightly turndown service
- Unlimited use of Spa Grande's cardiovascular and strength training facilities
- Participation in sunrise power walks, aerobics, yoga, and conditioning classes
- Admission to twice-daily scuba clinics and water aerobics
- Use of the water features to include water slides, water elevator, whirlpools and rope swing
- Participation in scheduled Art and Garden tours featuring the works of Botero, Leger, Picasso and Warhol
- Use of self parking facilities
- Shuttle service to scheduled stops



ASPEN 2009 Program

Friday, January 9, 2009

9:00am – 11:00am

ASPEN Council Meeting

12:00pm – 12:10pm

Welcome



Robert C. Russell, MD, ASPN President



Nash Naam, MD, ASPN Program Chair

12:10pm – 1:15pm

Scientific Paper Session A

1:15pm – 2:15pm

Invited Speaker



Allan Belzberg, MD

Allan Belzberg, MD completed his undergraduate and graduate education at the University of British Columbia, moving to the University of Calgary for medical school. Internship was performed at McGill University and residency completed back at the University of Calgary. He went on to 2 years of post graduate training at Johns Hopkins Hospital as an R. Samuel McLaughlin Foundation scholar focusing on pain physiology.

Allan Belzberg is director of Peripheral Nerve Surgery at The Johns Hopkins Hospital and is an Associate Professor of Neurosurgery at the Johns Hopkins School of Medicine. His clinical practice attracts patients from around the world. His laboratory, funded by a DOD grant, is studying neuroma formation.

Neuropathic Pain: From Bench to Bedside and Back Again
Patients who suffer from neuropathic pain states can display a variety of rather bizarre pain behaviors including mechanical hyperalgesia outside the area of injury. Transnational research, moving back and forth from the laboratory and bedside, has fostered an evolution of hypotheses modeling how peripheral nerve injury can lead to neuropathic pain states. In getting to the current knowledge base, this lecture will also highlight the sometimes painful realities of hypothesis driven research.

2:15pm – 3:15pm

Panel : Chronic Pain Management

Wyndell Merritt, MD, Moderator

Allan Belzberg, MD

L. Andrew Koman, MD

Michael Neumeister, MD

Lawrence J. Rossi, MD

3:15pm – 3:45pm

Break with Exhibitors

3:45pm – 5:00pm

Scientific Paper Session B

Saturday, January 10, 2009

6:45am – 8:15am

Coffee

7:00am – 8:00am

AAHS/ASPN/ASRM Instructional Courses

201 Pedicled and Free Flap Reconstruction for Trauma and Tumors of the Upper Extremity

Amit Gupta, MD

Joseph Upton, MD

202 Current State of the Art Toe Transfers for Thumb and Finger Reconstruction

Gregory Buncke, MD

Neil F. Jones, MD

Fu Chan Wei, MD

203 Introduction to Acupuncture: Principles and Applications

This lecture will introduce the participant to the art and basic science of acupuncture. There will be opportunity to do hands on needling techniques of some common acupuncture points.

Larry Rossi, MD

204 Multiple Nerve Transfers for Control of Upper Extremity Myoelectric Prostheses (Targeted Reinnervation)

This course will describe sets of nerve transfers to aid high upper extremity amputees in the intuitive control of their myoelectric prostheses. The surgical procedures, illustrative cases, and outcomes will be presented.

Greg Dumanian, MD

205 Bridging the Nerve Gap

A nerve gap after injury or tumor is a vexing problem. The gap can be bridged by graft material or conduit. In addition, the gap can be bypassed by adjacent nerve transfer. The decision making process is complicated and this panel will specifically address this issue. The role of grafting, conduits, and transfers will be discussed in detail.

James Chang, MD

Susan MacKinnon, MD

Allen Van Beek, MD

206 **Brachial Plexus Surgery-What Works and What Does Not Work**

Brachial plexus reconstruction is a demanding procedure with the goal of maximizing arm function after regeneration. However, the number of viable axons may be limited and priority must be given downstream to achieve optimum outcome. In addition, nerve transfers from within the plexus and outside the plexus can increase available axons. This course will critically evaluate the role of neurolysis, nerve grafting, and nerve transfers in brachial plexus reconstruction.

Allen Bishop, MD

Howard Clarke, MD

Robert Spinner, MD

8:15am – 8:30am

AAHS/ASPN/ASRM President's Welcome



Scott H. Kozin, MD, AAHS President



Robert C. Russell, MD, ASPN President



Neil F. Jones, MD, ASRM President

8:30am – 9:30am

AAHS/ASPN/ASRM PANEL: Crisis In Hand Trauma Coverage

L. Scott Levin, MD, Moderator

Neil F. Jones, MD

E. Anne Ouellette, MD

William C. Pederson, MD

Luis Scheker, MD

Milan Stevanovich, MD

9:30am – 10:00am

Breakfast with Exhibitors

10:00am – 11:00am

AAHS/ASPN/ASRM PANEL: Medical Diplomacy-Volunteering, Training, and the Military

Volunteering is a method of medical diplomacy. Many hand surgeons volunteer their time to care for those in developing countries. In addition, our military provides humanitarian efforts across the globe. This panel will highlight those efforts and emphasize the care, the relationships, and the good will

established during these outreaches.
Miguel Pirela-Cruz, MD, Co-Moderator
Eric Hofmeister, MD, Co-Moderator
Nash Naam, MD
Eric Thompson, MD

11:00am – 12:00pm

AAHS/ASPN/ASRM Presidents Invited Lecturer



Graham Grumley, MD

Despite the pace of Globalization this young century, the poor remain in the dark shadow of health care—not able to see any advantage from our skills and developments. Sharing our knowledge and teaching our skills in developing countries multiplies our work, restores hope where the need is greatest and returns to us the true satisfaction of our healing profession. Dr. Grumley will give a talk based on his recent experiences in the developing world with small teams of Hand and Upper Limb Surgeons providing free care to the poor, with discussion about the opportunities, challenges and rewards.

12:00pm – 12:30pm

Break with Exhibitors

12:30pm – 1:00pm

ASPN Business Meeting/Lunch

1:00pm – 1:45pm

Invited Speaker



Wyndell Merritt, MD

Where is the Pain? in RSD/CRPS Patients: The Heart, the Head or the Hand?

The conundrum of RSD/CRPS remains unresolved, and brings into sharp focus our lack of understanding of the complex relationship between the central and peripheral nervous systems. No comprehensive hypothesis clearly explains the etiology, and no uniformly successful treatment method exists. All aspects are controversial; including nomenclature, diagnostic criteria, causation, best treatment, or even if the disorder exists! This presentation attempts to review some published beliefs, hypothesize an etiological mechanism, and propose rational clinical management principles (regardless of etiology) along with possible strategies to reduce development of RSD/CRPS. Wyndell H. Merritt, MD, FACS currently serves as Clinical Professor of Plastic Surgery, University of Virginia H.S., Charlottesville. Dr. Merritt is also a past president of the American Society for Peripheral Nerve.

1:45pm – 3:00pm
PM

Scientific Paper Session C
ASPN-ASRM Joint Reception

Supported by: 

Sunday, January 11, 2009

6:30am – 7:30am

Coffee with Exhibits

Supported by: 

7:00am – 8:00am

Instructional Courses

301 **Surgical Treatment Options for Chronic Headache**

Course will educate audience about indications for surgical treatment of chronic headaches, timing of surgery, type and option of surgeries to be considered and outcomes.

Ivica Ducic, MD

302 **Neuroma Management**

Trauma, neoplasm, surgical intervention and iatrogenic injury are some of the reasons for neuroma formation. A portion of these will become painful and resistant to therapy. We will explore the current understanding of how neuromas form, why they can be painful and what the treatment options are.

Allan Belzberg, MD

Gene Deune, MD

Michael Dorsi, MD

Stephen Russell, MD

303 **CRPS**

Wyndell Merritt, MD

304 **Engineering of Novel Peripheral Nerves: Are We making Any Progress**

Over the past 30 years, there has been a substantial amount of clinical and basic science research focused on developing new peripheral nerve conduits utilizing either biologic or synthetic materials. There have been many descriptions of various nerve substitutes being successfully used for reconstruction of 1-3 cm nerve gaps. However, are we making any substantial progress towards the development of a tissue engineered peripheral nerve substitute for reconstruction of long nerve gaps. Our panel of experts will share with us their clinical and basic science research efforts and provide their insight into our current state in peripheral nerve tissue engineering and provide for us their “best guess” of the future state.

Paul Cederna, MD

Gregory Borschel, MD

Rajiv Midha, MD

305 **Denervation Techniques for Painful Musculoskeletal Conditions of Neural Origin**
Diagnosis and treatment of "musculoskeletal" pain of neural origin, including partial joint denervation of the shoulder, elbow, wrist, knee and ankle.
A. Lee Dellon, MD

306 **Nerve Transfer**
We will discuss the use of intra and extra plexal nerve transfer, distal nerve transfers to restore upper extremity function after nerve injury.
Allan T. Bishop, MD
Robert J. Spinner, MD
Thomas Tung, MD

8:15am – 9:15am

ASRM/ASPN Panel: Failed Carpal Tunnel and Cubital Tunnel Surgery

Demonstrate surgical and non-surgical methods to treat patients who continue to have symptoms following carpal and cubital tunnel release.

Robert Russell, MD, Moderator

Neil Jones, MD
Susan Mackinnon, MD
Allen Van Beek, MD

9:15am – 9:45am

Breakfast with Exhibitors

9:45am – 11:00am

Scientific Paper Session D

11:00am – 11:45am

Invited Speaker



Larry Rossi, MD

Acupuncture: History and its use in Treatment of Pain

This lecture will present a brief overview of the history and “Westernization” of acupuncture. Basic scientific theory as it applies to pain management.

Lawrence J. Rossi Jr. M.D., FAAP, DABMA serves as Chief Department of Anesthesia at Hopedale Medical Complex in Hopedale, IL. His practice includes Anesthesia and Pain Management. Dr. Rossi a fellow of the American Academy of Pediatrics and a diplomat of the American Board of Medical Acupuncture and diplomat of the American Board of Anesthesiology.

11:45am – 1:00pm

Scientific Paper Session E

1:00pm – 1:15pm

Closing Remarks & Presentation of Awards

ASPEN Finance Committee

Members: Paul S. Cederna, Jonathan E. Isaacs, Bradon J. Wilhelmi, Robert C. Russell, Robert Spinner

The American Society for Peripheral Nerve remains strong financially and is anticipated to post a net profit of \$8000 for the 2008 fiscal year. The 2008 ASPN Annual Meeting brought in \$88,842 in gross revenue. The registration fees for our annual meeting generated \$59,900, with an estimated attendance of 135 people: \$32,330 was generated from people attending only the ASPN, \$5225 from AAHS/ASPN attendees, and \$12,195 from AAHS/ASPN/ASRM attendees. ASPN shared the revenue generated from Exhibitors based upon the number of meeting registrants in each of the societies. Our meeting registrants accounted for 17% of the total attendees between the ASPN, AAHS, and ASRM meetings. As a result, we received \$14,875 in revenue from Exhibitors. The ASPN also received \$8000 in donations during the 2008 fiscal year. The expenses for the ASPN

Annual meeting were \$70,429, yielding net revenue of approximately \$18,429 for the annual meeting.

In the current environment where scientific meeting attendance is reduced in many medical and surgical societies, the ASPN has been able to maintain a vibrant, engaged, and committed membership. Our affiliation with the AAHS and ASRM has continued to enhance our meeting attendance and helped to ensure our financial success in the future. The combined meeting format has also helped to minimize our administrative expenses in the organization, planning, and execution of our annual scientific meeting. We look forward to the continued success of the ASPN through active recruitment of new members, integrated program planning with the AAHS and ASRM, and planning of interesting, educational, and engaging scientific programs.

**Paul Cederna, MD
Chairman**

Website and Technical Exhibits Committee

Members: Paul S. Cederna, Keith E. Brandt, Ranjan Gupta, Robert C. Russell

Three years ago, the American Society for Peripheral Nerve developed their official ASPN website: www.peripheralnerve.org. The website was designed to have both public and private domains, with a security sign on to protect the members' only information. Over the past 3 years, the site has grown into an active, vibrant, and living website containing both static and dynamic information. The depth of content has been dramatically improved and the functionality has been enhanced. The following enhancements have been made during the past year:

- 1) Applicants for membership in ASPN are now able to review the membership criteria, download an application form, and apply for membership on line.
- 2) ASPN members are now able to pay their annual membership dues on line.
- 3) ASPN Newsletters are now available on line.
- 4) A listing of clinical and research fellowships with downloadable materials are now available on the ASPN website.
- 5) Online meeting registration and abstract submissions are now available.
- 6) The annual meeting programs are now available for viewing on the website.

It is exciting to see the progress the ASPN website has made in the short time span it has existed. As the functionality and content of the website has improved, so has its utilization. During the last 8 months, the ASPN

website has had over 74,000 hits with an average of 300 hits per day. We anticipate similar enhancements and improvements in the ASPN website over the next few years.

American Society for Reconstructive Transplantation

Composite Tissue Transplantation represents the next frontier in Reconstructive and Transplant Surgery and embodies the novel field of Reconstructive Transplant Surgery. Transplantation of an upper extremity, facial tissue or an abdominal wall intimately involves the collaborative effort of surgeons, transplant immunologists, organ procurement organizations and specialists in rehabilitation and psychology among others. Progress in experimental research as well as pioneering clinical efforts in the field around the world have demonstrated the potential of reconstructive transplantation and set the stage for its wider application in treatment of devastating injuries not amenable to conventional reconstruction. In the recent past, treatment protocols directed at minimization of long-term immunosuppression have been utilized successfully in solid organ transplantation. Outcome data from organ transplants strongly support the rationale for application of such protocols in reconstructive transplantation to reduce risk and improve the life enhancing benefits of such procedures.

The American Society for Reconstructive Transplantation (ASRT) was founded on July 9th, 2008. The primary mission of the ASRT is the advancement of education, science and practice of reconstructive transplantation. The underlying philosophy of the ASRT is to promote an inclusive membership and leadership and encourage an unrestricted collaboration with other societies, institutions, corporations and support groups that share a common goal of making reconstructive transplantation a routine therapeutic modality. The ASRT advocates high standards in clinical care, science and the ethical practice by providing information, training and educational material to surgeons, scientists and physicians.

Promoting or accelerating nerve regeneration after reconstructive transplant procedures is critical for optimal functional outcomes. The ASRT understands the need for further experimental research in this field and in this context proposes a formal affiliation with the ASPN. All members of the ASPN are cordially invited to join the American Society for Reconstructive Transplantation.

Research Grants

Seed grants are offered by ASPN and are available to young investigators interested in pursuing basic or clinical research related to peripheral nerve disorders. These grants are designed to support early-phase research that potentially will be incorporated into subsequent applications for extramural funding. One or more grants will be awarded each year. **The 2008 winner was Terence M. Myckatyn, M.D., from Washington University School of Medicine for his project “The Effects of Controlled Release GDNF on Motor Nerve Regeneration.”** Applications for next year’s funding cycle are due November 1, 2008 and will undergo peer-review by a research subcommittee. The winner (s) will be announced at the ASPN meeting in January 2009. Further information and applications are available on the ASPN website or through Alice Romano (aliceromano@isms.org).

Robert J. Spinner, MD
Research Grant Committee

Update from the ASPN Bylaws Committee

The 2007 ASPN Bylaws Committee Members were: Melanie Urbanchek, Chairperson; Paul Cederna, William Kuzon, Jr, Warren Schubert, and Gregory Evans, Ex-officio.

This committee proposed three amendments to the Bylaws portion of the ASPN Constitution and Bylaws. The proposed changes were circulated to the membership one month prior to the annual scientific meeting.

The ASPN Business Meeting was held on Sunday, Jan 13, 2008 at the Hyatt Regency Plaza, Beverly Hills, CA during the annual ASPN scientific meeting. The proposed amendments were approved during this meeting. The changes to the bylaws now say:

- A. *The Executive Council shall confer Senior Membership upon Active Members who have retired from active practice.*
- B. *Candidate membership status may be extended or granted while a candidate continues in training such as research or clinical fellowships.*
- C. *The ASPN Treasurer shall be Chairperson of the Grant Generating Committee.*

The committee also agreed that the ad hoc Grant Generating Committee should be added to the Bylaws as a standing committee. Though we considered bylaws which would have been more explicit, we decided the committee should determine how they would function.

GRANT GENERATING AND DISTRIBUTION COMMITTEE

Composition.

- A. *This Committee will consist of at least six (6) active members.*
- B. *The President shall name the additional members of the Committee.*
- C. *Members of the Committee may serve for more than one term.*

Duties.

- A. The Committee is charged with developing policy, exploring funding sources, and establishing a mechanism for requesting and evaluating grant applications.

The 2008 ASPN Bylaws Committee Members are: Melanie Urbanchek, Chairperson; Paul Cederna, William Kuzon, Jr, Warren Schubert, and Robert Russell, Ex-officio.

The committee has prepared another set of amendments which will be circulated soon. This year the Council asked that we streamline the membership process for moving candidate members to active status. The Bylaws Committee has removed the one published paper requirement for membership. We have also included those with interests in neural regeneration and/or peripheral nerve as meeting the qualification for Candidate Membership and as a quality for Active Members, Associate Members, and Honorary Members. Lastly, regarding payment of dues: we reduced the number of years one may be in arrears without a valid excuse. The time was reduced from three (3) to two (2) years before one loses his/her membership.

We are also considering ways to facilitate midyear changes to the Bylaws. If you have any suggestions please email us at melurban@umich.edu.

**Melanie Urbanchek, MD
Chairperson**

Time to talk

The 2008-year started with a great success as the annual meeting of the American Society of Peripheral Nerve made its mark in Los Angeles. Dr's. Winograd and Evans put together an outstanding program. Attending our meeting were Linda Philips, President of the Plastic Surgery Education Foundation, Rick D'Amico, President of the American Society of Plastic Surgery, and Paul Pomerantz, Executive Vice President of the American Society of Plastic Surgery. The purpose of their visit was to continue and reinforce the dialogue established 3 years ago by Scott Spear about enhancing the presence of "reconstruction" within the ASPS through a greater involvement of its sister societies, the ASPN, and the PSRC. The ASPS and PSEF recognize the importance of reconstruction as a part of the specialty of Plastic Surgery. The need to restore and elevate "reconstruction" within the ASPS/PSEF is apparent to its entire executive council. Dr's. Phillips and D'Amico's meeting with each of the societies in Los Angeles should be embraced as a sign of positive change. Their goal is to get word out to the members of the ASPN and PSRC that the ASPS/PSEF wants input into reformatting reconstruction and research within the ASPS and PSEF. Better terms instead of reformatting may actually be "restoring" or "resurrecting" reconstruction and research into the heart of our mother society. But despite the terminology, the fact remains that the ASPS and PSEF have a sincere interest in this champagne. Over the past 3 years, the Presidents of the ASPS and PSEF have traveled to our annual meetings to talk to the executive councils to discuss a greater involvement and active participation in the restructuring of the ASPS. Clearly, the ASPS and PSEF are reaching out to have us involved in the decision of determining our own fate within their (actually "our") societies. Reconstruction is extremely important for the survival of Plastic Surgery as a specialty. There is no question of that. To that end we, as members of the ASPN, should not reject the courtship of the

ASPS and PSEF, but rather embrace the chance to re-establish a more dynamic presence and improve the value to all members of these societies. Dr's. Phillips and D'Amico asked for our input into what it would take to fill the reconstructive and research void within the ASPS that has caused some resentment in the past amongst some society members. So what are our beefs? If we had a magic lantern, what wish would we have about our mother societies, the ASPS and PSEF? How should the ASPS annual meeting be formatted? How much of the annual meeting should be reconstruction and/or research? What about sponsored symposia and educational support? For that matter, what resources can and should be shared? Can we expect research funds/grants from the PSEF to support microsurgical and complex reconstruction projects? It appears that we have an opportunity to make some significant changes within the infrastructure of the ASPS and PSEF to resurrect reconstruction. It would seem prudent to jump at this chance. The efforts of the past 3 years should not be shunned. It seems we can help decide our own fate within the ASPS and PSEF. If the governance of the ASPS and PSEF drop the ball on this endeavor, shame on them. If we drop the ball, shame on us. As a part of their new strategic plan and resurgence of reconstruction and research, the ASPS and PSEF invited the leaders of all of the sister societies including the ASPN, PSRC, ASMS, ASAPS, AAHS, ASRM, the members of their reconstructive council, and other thought leaders from these groups, to express their concerns, give insight into the future, and formulate a framework for building a new infrastructure that fulfils the needs and missions of all parties interested in reconstruction and research. As members of the ASPN, we should have open discussions about our future, our relationships with other societies, and our desire to be reconstructive surgeons.

Michael Neumeister, MD, FRCSC, FACS

ASPN Time and Place Committee

Chairperson: Paul S. Cederna

Members: Paul S. Cederna, Howard M. Clarke, Ivica Ducic, Gregory R. D. Evans, Loree K. Kalliainen, Rajiv Midha, Gedge D. Rosen, Robert C. Russell, Robert Spinner, Thomas H.H. Tung

The American Society for Peripheral Nerve Time and Place Committee has continued to work with the AAHS and ASRM in selecting sites for our future meetings. We have discussed the option of holding a separate meeting in a separate location from the AAHS and ASRM. However, after careful deliberation, we are committed to maintaining our affiliation with the AAHS and ASRM for the purposes of holding a single combined meeting. With this approach, we are able to minimize expenses while maximizing the value of the meeting to our membership and meeting attendees. Each year we are able to enhance the level of integration of our three scientific programs and improve the qualities of our meetings on the combined day as well as throughout the remainder of the scientific programs. To achieve this goal, we have committed to the combined meeting format with AAHS and ASRM for the next 5 years. The following meeting locations and times have been finalized:

2009 Annual Meeting: January 9-11, 2009. Grand Wailea Resort, Maui, Hawaii

2010 Annual Meeting: January 8-10, 2010. Boca Raton Resort and Spa, Boca Raton, Florida

2011 Annual Meeting: January 14-16, 2011. Ritz Carlton Cancun, Cancun, Mexico

2012 Annual Meeting: January 13-15, 2012. Red Rock Casino and Spa, Las Vegas, Nevada

2013 Annual Meeting: January 11-13, 2013. Naples Grand Resort and Club, Naples, Florida

We look forward to the exciting upcoming meetings of the ASPN.

ASPN Membership

Membership in the ASPN provides surgeons and research scientists with an opportunity to network, updates on the latest research in neural regeneration, a biannual newsletter, seed grants for young investigators, volunteer leadership opportunities and a discount on ASPN scientific programs.

In addition, the ASPN has added a Candidate Membership category to encourage new and ongoing membership among our trainees and new researchers. Candidate Members may attend scientific meetings and social functions. They benefit from greatly reduced membership dues and scientific meeting registration fees. Candidate members may not hold office, serve on committees, or vote at the annual business meeting.

There are now six categories of membership available to meet any professional need (Founding, Active, Associate, Senior, Honorary and Candidate). Please direct your residents, colleagues and friends to www.peripheralnerve.org to begin the application process. The deadline for submission of membership applications has been extended to November 15th. Any questions regarding membership can be directed to the ASPN Central Office at 312-263-7150 or contact@peripheralnerve.org.

Howard M. Clarke, M.D., Ph.D., F.R.C.S.(C),
F.A.C.S., F.A.A.P

e-mail howard.clarke@utoronto.ca

Congratulations!!

OPRAH AND FRIENDS XM RADIO INTERVIEW Dr. Dellon

On July 26, A Lee Dellon, MD, PhD was interviewed by Dr Mehmet Oz on the Oprah and Friends satellite radio station. Dr Oz, a Cardiothoracic Surgeon interviewed Dr Dellon about the subjects contained within Dr Dellon's new book, PAIN SOLUTIONS, a book of hope for patients in pain. This book was written for patients and is available to download either as by individual chapters or by as the whole book. This is Dr Dellon's first internet book publication and it is available to patients on line at Dellon.com, from the home page. Dr. Oz asked questions about nerve decompression in the lower extremity for patients with nerve compression and neuropathy, about the diagnosis and treatment outcomes, and why Dr. Dellon calls "RSD" a "Really Stupid Diagnosis" . The table of contents for PAIN SOLUTIONS is:

PAIN Solutions

Lee Dellon, MD, PhD, FACS
Director of the Dellon Institutes for Peripheral Nerve Surgery®

TABLE OF CONTENTS

1. **Why Nerves Cause Pain**
Neuroma, Nerve Compression, Neuropathy
2. **Neuropathy related to Diabetes**
Chemotherapy, Arsenic, Leprosy, Idiopathic Neuropathy
3. **Joint Pain**
Wrist, Shoulder, Elbow, Knee, Ankle
4. **Groin Pain**
Hernia, Hysterectomy, C-Section, Endoscopy, Testicular Pain, Abdominoplasty, Cardiac Cath
5. **Thoracic Outlet Syndrome**
Winging It and the Brachial Plexus
6. **Morton's Neuroma is Not a Neuroma**
Have a Neurolysis instead of a Neurectomy
7. **RSD**
Rreally Stupid Diagnosis
8. **Phantom Pain**
We know where the Phantom lives
9. **Facial Pain**
Cosmetic Surgery, Trauma, Tumor
10. **Stimulators**
Spinal or Peripheral or Neither.
11. **Doctor Dellon**
"Why you, Why now?"

Announcement

Susan E. Mackinnon, MD was inducted and introduced as a member of the Class of 2007 Institute of Medicine of the National Academy of Sciences on October 13, 2008. This is one of the highest honors medical scientists in the United States can receive. Mackinnon was honored for her professional achievement in the health sciences, specifically for her contributions to the field of Peripheral Nerve Surgery.

Mackinnon is the Sydney M. Jr. and Robert H. Shoenberg Professor and chief of the Division of Plastic and Reconstructive Surgery at Washington University School of Medicine in St. Louis.

Drs. Fox and Brown receive grant

Co-principal investigators Ida K. Fox and Justin Brown are recipients of seed money from the Henry M. Jackson Foundation for the Advancement of Military Medicine to develop a multimedial website devoted to guiding military physicians on the treatment of peripheral nerve injuries. Dr. Fox is in the Division of Plastic and Reconstructive Surgery and Dr. Brown in the Department of Neurosurgery at Washington University.

Traumatic nerve injuries are a prominent component of many improvised explosive device-inflicted and other conflict related upper and lower extremity injuries. Although, great gains have been made in limb salvage, for optimal results sensation and motor function must be restored.

Dr. Fox and Dr. Brown completed fellowship training with Dr. Susan E. Mackinnon. She is chief of the Washington University Division of Plastic and Reconstructive Surgery and a pioneer in the treatment of peripheral nerve injuries. Under her tutelage, they were exposed to a variety of procedures to maximize function after various types of nerve injuries. The knowledge they were exposed to was vastly

different from that they learned during their previous training at highly regarded medical centers in the United States.

These issues as well as the time-sensitive nature of nerve injuries, gave impetus to the project. By creating a multimedia website specifically directed towards guiding physicians caring for these types of injuries, they hope to ultimately improve the outcomes of our military personnel. The site will provide a stepwise tutorial in the approach to the diagnosis and treatment of peripheral nerve injury and will include, amongst other information, videos of the most up-to-date surgical techniques and post-treatment rehabilitation.

Project collaborators include Mackinnon, Thomas H. Tung, M.D., assistant professor of plastic and reconstructive surgery also at Washington University; and Christine Novak, a physical therapist with the Wharton Head and Neck Centre in Toronto.

All will also be involved in an interactive collaborative forum to allow military physicians to discuss and problem solve particularly complex case examples.

The ASPN Council and 2009 Annual Meeting Program Committee would like to thank the exhibit sponsors of our meeting

A variety of commercial exhibits will be featured at the Annual Meeting, enabling attendees to learn about the technological advances pertaining to upper extremity surgery, neurosurgery and reconstructive microsurgery; and to meet key suppliers. Be sure to visit the exhibits listed below.

American Society for Plastic Surgeons
ASSI- Accurate Surgical
Aptis Medical
AxoGen Inc.
Biomet
Hand Rehabilitation Foundation
Hologic
Integra

Leica Microsystems
Marasco & Associates, Healthcare
Architects/Consultants
Mast Biosurgery
Medartis, Inc
MedLink USA, Inc.
Micrins Surgical NC
MMI
Novadaq
Orthoscan
Springer
Stryker Trauma & Extremities
Synovis Micro Companies Alliance
Synthes CMF
Tornier

What's New in Peripheral Nerve Surgery and Research

Toddler regains mobility after nerve transfers for catastrophic brachial plexus injury

Dr. Gregory Borschel hoped for dramatic results from the surgical repair of nerve paralysis in 19-month-old Ella Woodruff's left shoulder. But the plastic surgeon at St. Louis Children's Hospital and Washington University School of Medicine didn't expect to see them so quickly.

"My jaw dropped to the floor," says Borschel. "I really didn't expect to see any major movement until she was about four months post-op, so when we saw her putting her hand all the way over her head just a little over three months after her operation, we were floored."

Ella suffered a severe upper plexus injury during an automobile accident near her home town of Colfax, Illinois. She had no active movement of the shoulder three months after her injury.

Borschel, who specializes in brachial plexus injuries as well as facial paralysis, conducted two nerve transfers for Ella in late November 2007. First, he transferred the nerve to the medial head of the triceps muscle to the axillary nerve. Then he transferred the distal spinal accessory nerve to the suprascapular nerve.

"As far as I know Ella is one of the youngest patients to have that set of transfers done for this particular injury," says Borschel.

Borschel believes nerve transfers don't take as long to regenerate as a standard nerve graft, which would begin to show results around six months after surgical correction. Critical to a successful recovery, says Borschel, is fast action by the surgeon –

and the family. "Time is muscle. So the longer you wait, the worse the recovery."

Despite advice to 'wait it out' from their hometown medical team, Ella's family decided to bring Ella to St. Louis Children's Hospital to see Dr. Borschel three months after her injury.

"We weren't seeing any improvements whatsoever and we thought if we did absolutely nothing she would have a lifetime of disability," says Aaron Woodruff, Ella's father.

After extensive research, the Woodruffs contacted Dr. Borschel's multidisciplinary clinic specializing in peripheral nerve injuries in children.

"Dr. Borschel was listed as one of the best in the country in that area," says Jennifer Woodruff, Ella's mother. "We were confident he was capable of getting her as close to normal as possible."

Ella exceeded her family and her medical team's expectations. Not only is she completely back to normal, she recovered in half the time they'd given her.

"She's a miracle," says Aaron. "You wouldn't even know that she was in an accident."

The Pediatric Plastic Surgeons at St. Louis Children's Hospital provide care for a full spectrum of congenital and acquired deformities, including nerve graft and nerve transfer to repair peripheral nerve injuries and paralysis. St. Louis Children's Hospital has provided specialized care for children for more than 125 years. The hospital is affiliated with Washington University

School of Medicine, ranked the number four medical school in the country by US News & World Report. In 2007, Child magazine ranked St. Louis Children's Hospital among the 10 best children's hospitals in the country, and second in pulmonary medicine. In 2005, St. Louis Children's Hospital

received the Magnet designation from the American Nurses Credentialing Center, the nation's highest honor for nursing excellence. St. Louis Children's Hospital is a member of BJC HealthCare. For more information visit stlouischildrens.org.

Green Fluorescent Protein Transgenic Rat: A new model for peripheral nerve research

Alice Y. Tong, M.S., Amy M. Moore, M.D., Nancy Solowski, M.D., Ying Yan M.D., Ph.D., Susan E. Mackinnon, M.D., Gregory H. Borschel, M.D.

Introduction

Recent advances in molecular neurobiology have provided us with transgenic animals expressing genes encoding fluorescent proteins derived from the jellyfish to directly evaluate nerve regeneration. Although fluorescent mouse models exist, we have recently developed a novel transgenic rat model, in which the axons overexpress green fluorescent protein (GFP) under the control of the *Thy1* mouse promoter. As GFP expression can be viewed directly under fluorescent and confocal microscopy without any chemical intervention, this model allows direct visualization of nerve regeneration at both the axon level as well as at the neuromuscular junction. In this article we briefly describe our initial characterization of the GFP transgenic rat.

Method

A transgenic Sprague Dawley (SD) rat line over-expressing the GFP reporter gene under the control of the *Thy1* mouse promoter was developed with the help of genOway(Lyon, France). We have now created F2 generations with heterozygous GFP expression. PCR genotyping of the transgenic GFP rats yields an amplification product of 422bp using the primer pair BOR1-C1/BOR1-D1. An example of PCR genotyping of the F2 generation is illustrated in Figure 1.

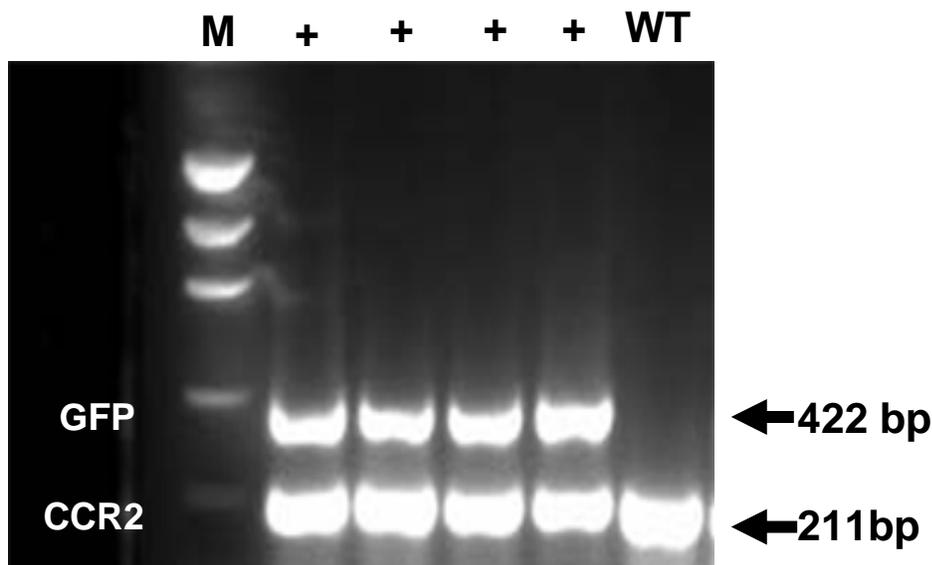


Figure 1. Example of PCR Genotyping of F2 Generation. PCR detects a transgenic GFP positive (+) band-422bp. Wild-type genomic DNA (WT) is used as a negative control. Rat CCR2 gene is an internal control band ~211 bp. M= Low DNA Mass-ladder.

Results - Confocal Microscopy

Green fluorescent protein(GFP) expression allows direct visualization of the sciatic nerve and the neuromuscular junctions of the extensor digitorum longus (EDL) muscle of the F2 generation GFP transgenic rats (adult) (Fig. 2). Special techniques were used to whole mount the thin EDL muscle without sectioning. Motor endplates were stained with rhodamine- α -bungarotoxin (α -BTX) and then images were taken with a 594 laser (Fig. 3B) and merged with the GFP images taken with a 488 laser(Fig. 3A), creating the yellow-orange colored of the motor endplates (Fig. 3C).

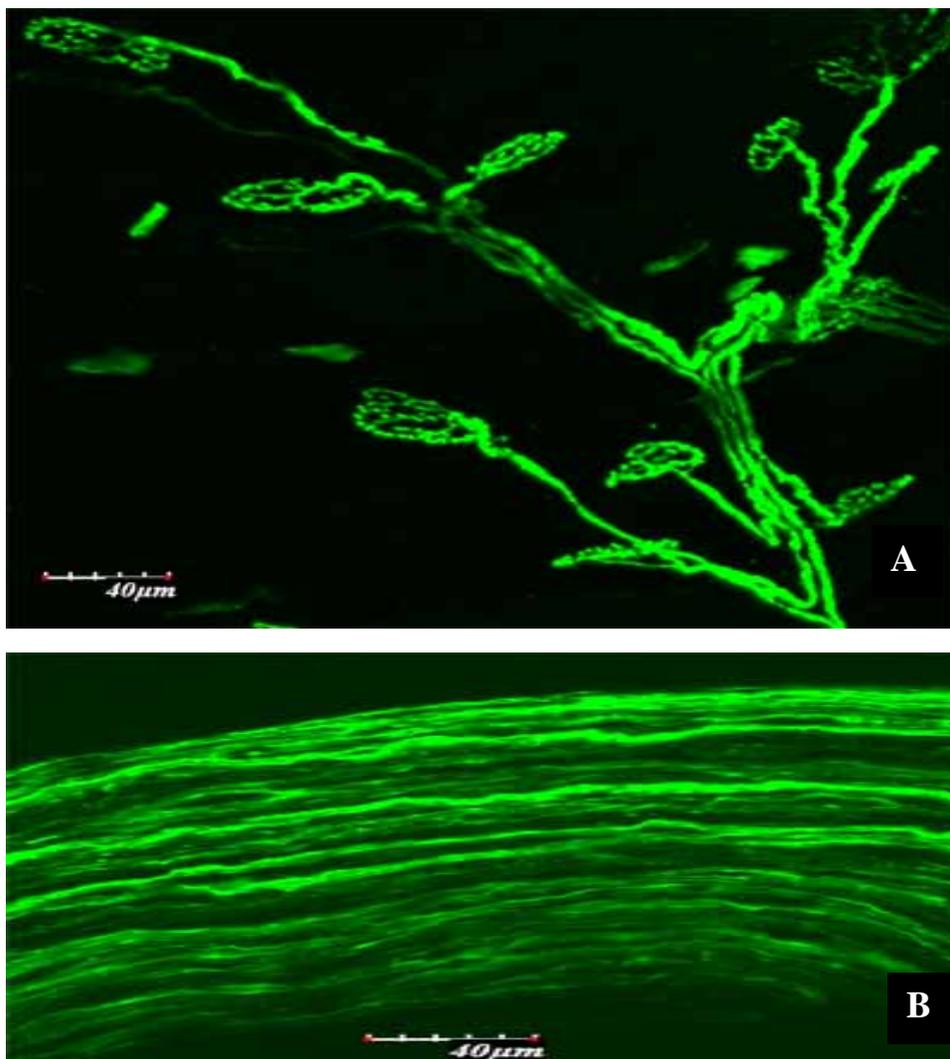


Figure 2: Transgenic GFP Rat –Confocal Microscopy with No Staining

(A) Whole mounting of the EDL muscle demonstrates multiple branches of a motor axon and the motor nerve terminals, shown in green.

(B) Whole mounting of the sciatic nerve demonstrates green axons.

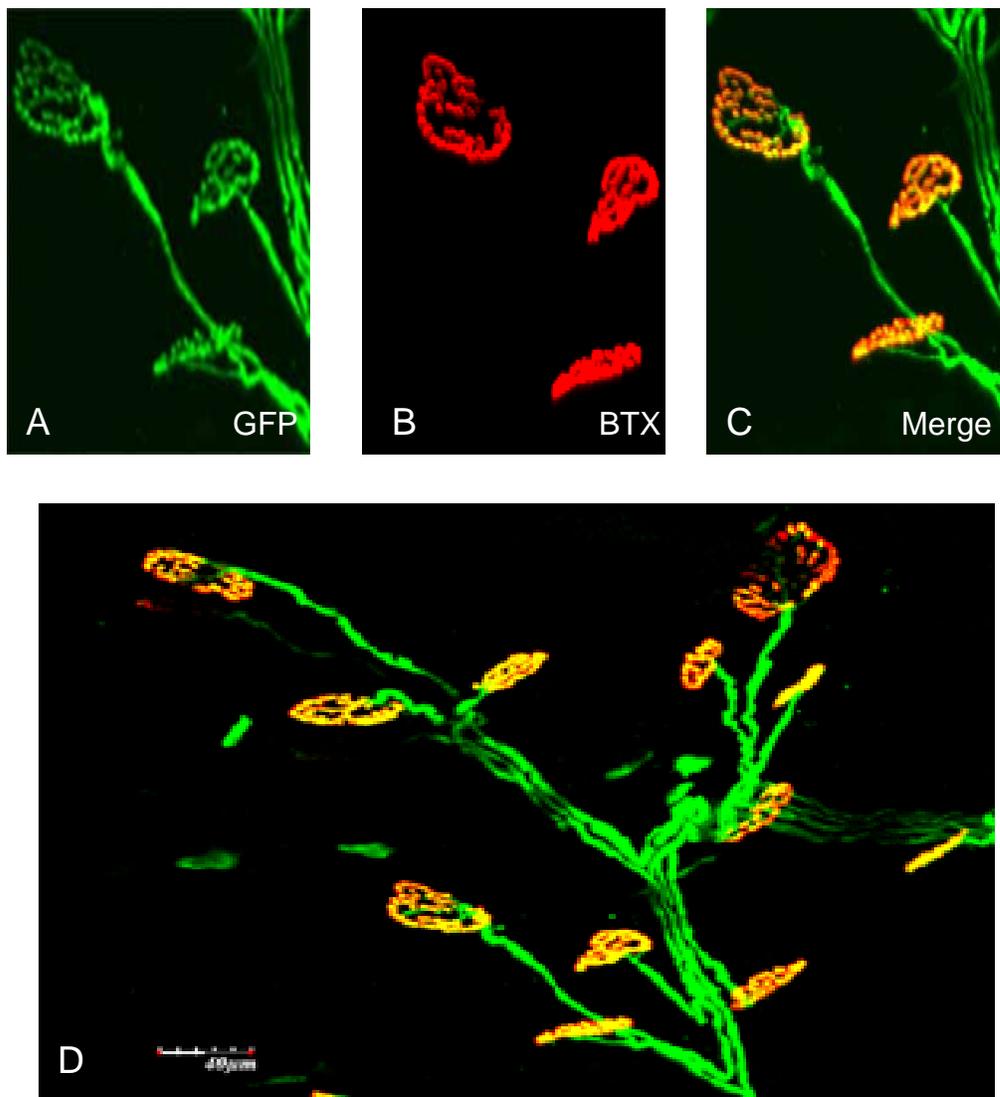


Fig. 3: Neuromuscular Junctions in a *GFP* Transgenic Rat

(A) GFP expression is visualized in two branches of a motor axon and the corresponding motor nerve terminals (B) To label post synaptic Acetylcholine receptors (AChRs), the EDL muscle was stained with rhodamine- α -bungarotoxin (α BTX) (C) Perfect apposition of pre- and postsynaptic images indicates that GFP expression extends to the nerve terminal.(D) Whole EDL muscle mounts demonstrate the motor axons coursing through the muscle, branching and terminating in neuromuscular junctions. All AChR-rich postsynaptic sites are apposed by GFP-positive nerve terminals, indicating that the motor neurons innervating this muscle express the GFP transgene.

Conclusion

The development of a transgenic GFP rat model allows direct visualization of nerve regeneration and assessment of neuromuscular junction reinnervation by muscle whole mounting – outcome measures not previously available in a rat model. Although further characterization studies are ongoing, these preliminary data give evidence of GFP expression in the rat axons and motor endplates. As a laboratory that focuses on traumatic peripheral nerve regeneration the development of this model is an exciting addition to our research efforts.

Reflections on Leprosy

By A. Lee Dellon

“And the leper in whom the plaque is, his clothes shall be rent, and his head bare, and he shall put a covering upon his upper lip, and shall cry, Unclean, unclean. All the days wherein the plaque shall be in him he shall be defiled; he is unclean; he shall dwell alone; without the camp shall his habitation be.”

Leviticus 13:45 and 46

Dr Paul Brand opened the Raymond M. Curtis Hand Center in Baltimore the year that I did my Hand Surgery Fellowship there in 1977. In 2002, as I read Dr Brand’s book, [Pain]“The Gift Nobody Wants” (Paul Brand and Phillip Yancy, 1997), I realized that his clinical investigative journey, concluding that peripheral nerves were the cause of the leprosy disability, was similar to my journey, concluding that much of the disability termed “diabetic peripheral neuropathy” was due to the presence of multiple nerve compressions. Would the surgical approaches I developed to restore sensation and prevent ulceration and amputation in diabetics with neuropathy *and* nerve compression be able to help patients with leprosy *and* nerve compression?

To evaluate this, I began work in Guayaquil, Ecuador. James Wilton, DPM, a Podiatric Foot and Ankle Surgeon, from Portsmouth, New Hampshire, had studied with me in Baltimore, and had been providing club foot care in Ecuador with the Perfect World Foundation. Wilton, joined by David Seiler, MBA, Director of Training for Sensory Management Services, LLC, in Baltimore, formed a team to evaluate about 40 people at the Father Damien house in

Guayaquil. Sister Annie directs that Father Damien house. The Father Damien House residents had received triple antibiotic therapy for their *mycobacterium leprae*, and were no longer contagious, although they still became progressively more disabled due to what is now understood to be their peripheral nerve problems. Seiler did neurosensory testing with the Pressure-Specified Sensory Device™, and Wilton identified nerve entrapments by a positive Tinel sign. Figure 1 shows two patients not chosen to be candidates for surgery while Figure 2 shows a patient chosen for nerve decompression by that team.

Then, in September of 2004, Dellon and Wilton, with the operating nurses and anesthesiology team that Wilton organized, went back and operated simultaneously on upper and lower extremities of 20 patients chosen by the first team. Using the multiple crush concept approach, in which the swollen peripheral nerves, containing the immunological battleground where *mycobacteria leprae* are destroyed by their host, form the first crush, a neurolysis was done for entrapments in the upper extremity at the wrist, forearm, and elbow, and in the lower extremity at the ankle and knee. Both motor function and sensory function improved in those patients with an early to moderate stage of nerve compression (Figure 3), and sensory function improved in those with the more advanced stages of disease a year later, when a second, independent team went to evaluate the outcomes of this approach.

Subsequent missions included surgeons Christopher T. Maloney Senior and Junior, Scott Nickerson, Charles Gaudet and

William (Jay) Ericson. To date, this volunteer group, called “Annie’s Angels Seacoast Medical Team”, has completed four surgical and five screening peripheral nerve missions. About 150 patients have had about 700 nerve surgeries. Figure 4 depicts the Dellon Institutes for Peripheral Nerve Surgery® logo on the Father Damien House, with Dr Wilton and Sister Annie Crididio, BVM, alongside.

For anyone interested in participating with this work, you may contact James

Wilton, DPM at jpwilton@gmail.com, 330 Borthwick Ave #112, Portsmouth NH, 03801, 603-430-8505.

In 2005, the Plastic Surgery Educational Foundation Award was given to the essay “BIBLICAL CURSE, MODERN MUTILATION: THE PLASTIC SURGEON’S ROLE IN LEPROSY in 2005.”

A. Lee Dellon, MD, PhD

Figure Legends

Figure 1.

A: Patient with bilateral irreducible claw deformity and intrinsic wasting in the upper extremities and toes amputations in the right foot, who has no two-point discrimination in the fingers and no Tinel signs at known sites of entrapment.

B: Patient with no two point discrimination in the fingers and no Tinel signs, who has already suffered burns with secondary healing in her job as a cook. Neither person was a candidate for nerve decompression.

A.



B.



Figure 2. Patient with positive Tinel signs over the median nerve in the carpal tunnel and the deep peroneal nerve over the dorsum of the foot, who still has some two point discrimination. She was a candidate for nerve decompression.



Figure 3. Patient one year after nerve decompression in the left upper extremity. This patient had bilaterally symmetrical degree of nerve compression prior to surgery. The improvement in the left side is obvious. For the ulnar nerve, not only was a submuscular transposition with musculofascial lengthening done, plus internal neurolysis, but also, at the wrist level, a neurolysis was done on the motor branch in Guyon's canal.



Figure 4. At the Father Damien House in Guayaquil, Ecuador, the Dellon Institutes for Peripheral Nerve Surgery® logo hangs as a reminder that there is hope for patients with nerve compression and leprosy. Dr. James Wilton and Sister Annie are with the logo.

