

AMERICAN SOCIETY FOR PERIPHERAL NERVE

Newsletter



Spring 2004

President's Message

Hello everyone. This is Steven McCabe writing to share my excitement about the upcoming ASPAN meeting in Florida. We are strategically positioned between the AAHS and the ASRM meeting to allow you to spend a weekend in Florida or to combine your attendance at the ASPAN meeting with one or both of the other meetings.

Please join us and share your research findings with other investigators interested in the peripheral nerve. As you know our abstract deadline is timed to let you submit your latest findings. Howard Clarke from Toronto, the Program Chair, is coordinating what should be an interesting program. It is up to you to make it great. I encourage you to send in your abstracts for presentation.

There are several important characteristics of the ASPAN I would like to share with you. Over the past several years we have linked ourselves to a combined annual meeting with the AAHS and the ASRM. This has worked out well, however the executive is aware that we must watch the cost of participation, as many graduate students, residents, and other non-surgeon researchers enjoy our meeting. Currently we have a shared revenue and expense agreement with the AAHS and the ASRM. The financial success of our meeting depends on registration and on exhibitors. It is not possible to overstate the importance of visiting the exhibitors.

We have an administration contract with the Illinois State Medical Society and are well represented and managed by Krista Greco. This year our organizations have jointly hired an agency, SAVVY, to promote our events. This is a trial to determine if we can develop more sponsorship with the idea of lowering the cost to the registrants.

Participation in the organization is the key feature to its success and to your enjoyment of membership. The annual meeting is our main event. Show up, present a paper, participate in discussion, visit with your colleagues, buy something from the exhibits. Have a great time in Florida!

Steven McCabe, MD

President



Annual Meeting Update – January 2004



As Program Chairman for the 2004 ASPAN meeting held in Palm Springs, California, I wish to thank everyone who contributed to a successful and exciting meeting. Our relationship with the AAHS and ASRM continues to be successful and productive as

the combined program began the weekend's events. A joint panel entitled "Novel Approaches to Nerve Reconstruction in the Upper Extremity" featured perspectives from well-recognized orthopedic and plastic surgeons. The 2004 joint Presidents' Lecture featured John McDonald from Washington University who discussed his philosophy on the management of spine-injured patients including Christopher Reeve, new techniques of nerve transfer and reconstruction in these patients, and experimental advances including the use of stem cells. Presentation of the best nerve papers submitted to each society concluded the combined program and included excellent clinical and basic science research.

The highlights of the ASPAN scientific program included a lecture given by Mandayam Srinivasan from MIT, also known as "the touch doctor," about the biomechanics and neurophysiology of touch sensation and applications to prosthetic rehabilitation. Jeff Lichtman also gave an excellent presentation with amazing cutting-

edge 3-dimensional and video images of the developmental biology of the peripheral nerve and the neuromuscular junction using fluorescent protein-labeled neurons of transgenic mice developed at Washington University. The panel presentations included an up-to-date discussion on the efficacy of termino-lateral neurotomy for motor recovery, and the latest in free functional muscle transfers. The courses were well-attended and continue to provide expert instruction and advice in a more interactive setting.

The most significant component remains the participation and attendance by our members and guests. A record number of high-quality abstracts were received for this meeting. The participation in our annual meeting continues to grow to make it a leading forum for the advancement of the latest techniques and the exchange of ideas in peripheral nerve biology and surgery. We can look forward to an exciting meeting next year in beautiful Sanibel Island, Florida and an outstanding program being put together by our President Steve McCabe and Program Chairman Howard Clarke. With your continued help and involvement, we can keep on expanding the scope and impact of our society in our combined efforts with the AAHS and ASRM.

Thomas H Tung, MD

ASPAN 2004 Program Chairman

Future Meeting Update – January 2005, Sanibel Island, Florida

I am pleased to be able to extend a warm invitation to the members of the ASPN and their guests to join us at the Sanibel Harbor Resort and Spa for the 14th Annual Meeting of the Society. We are planning a lively and stimulating program, which will offer an opportunity for scientists and clinicians to meet and exchange ideas.

The meeting will be held on Saturday and Sunday, January 15th and 16th, 2005. Saturday morning will feature a combined program with the American Association for Hand Surgery and the American Society for Reconstructive Microsurgery. Saturday afternoon and all day Sunday will be devoted to our own sessions. Instructional courses will be available early each morning.

Members and guests are encouraged to submit abstracts on projects in progress. This allows us to enjoy the most current program material and to discuss and direct ideas from an early stage. Abstract submission will be accomplished on line at http://aahs_asrm_aspn.confex.com/oasys_new/2005/ and must be completed by July 1, 2004. The Sanibel Harbor Resort and Spa is located at Punta Rassa where the Caloosahatchee River meets the Gulf of Mexico. After being destroyed in a 1906 fire, the Inn was rebuilt as a Victorian-style pavilion with a cupola and two wings of rooms that overlook the water. The waters off Punta Rassa continue to be known as the world's best site for tarpon fishing. Facilities include six outdoor pools, bayside beach, spa & fitness centre, tennis complex, fishing pier, yacht & catamaran cruises and the Kids' Klub.

The Resort offers shuttle transportation to selected Sanibel area attractions as well as their own boat, the Sanibel Harbor Sun Princess, which offers beach tours, wildlife and dolphin cruises and back water fishing cruises. The hotel is located on the mainland at the base of the causeway to Sanibel Island. Sanibel Island is known for its beaches, shelling and fishing. Other activities on the island include biking, deep sea fishing, snorkeling and the Old Towne Sanibel. The resort itself is situated 19 miles from the Southwest Florida International Airport (RSW) in Fort Myers.

I look forward to seeing you at the Annual Meeting at Sanibel and anticipate an exciting program..

Howard M. Clarke, M.D., Ph.D., F.R.C.S.(C)
Chairman of the Program Committee



What's New in Peripheral Nerve Research

PERIPHERAL NERVE RESEARCH LABORATORY: Nerve Allotransplantation for Traumatic Nerve Injury
(Susan E. Mackinnon, M.D., Director)

Research Overview:

Injury to major peripheral nerves can result in significant and permanent functional deficits. The use of allogeneic nerve graft material avoids donor site morbidities that are associated with harvesting nerve autograft and offers a limitless source of nerve graft material to reconstruct large, multiple, and complex injuries. The overall goal of our research is to promote regeneration across nerve allografts. Toward this end we have investigated graft pre-treatment by cold preservation, injection with cultured autologous Schwann cells, donor specific immune unresponsiveness and the use of various immunosuppressive agents.

Recently, we have focused on the use of cultured autologous Schwann cells in combination with cold preservation pre-treatment of allografts to reduce antigenicity and augment allograft regrowth. This regimen is being tested over a long nerve gap in both a primate and a mini-swine model. Early results show that Schwann cell augmentation of cold preserved allografts yields nerve regeneration comparable to autograft.

We also have other projects underway that explore the field of peripheral nerve regeneration more broadly: One project explores nerve gap repair with pure motor versus sensory cable grafts and the resultant effect on nerve regeneration. Preliminary data based on quantitative histomorphometry shows that pure sensory nerve grafts show inferior regenerative results to both motor and mixed nerves.

Another project examines the optimal timing for the administration of tacrolimus (FK506) in nerve injury. Initial results from this study reveal that preloading tacrolimus 3 days prior to nerve injury yields neuroregeneration significantly superior to doses administered at the time of surgery.

Experimental Subjects: mice, rats, mini-swine, non-human primates

Methods: Techniques used in this laboratory include microneurosurgical transplantation and repair. Outcomes are assessed by measurement of wet muscle mass and performance of walking track analysis. Immunologic methods used to assess reactivity include; mixed lymphocyte assay, flow cytometry and the enzyme-linked immunospot (ELISPOT) assay. Histologic outcomes include are assessed with the use of light microscopy to quantify nerve regeneration through the use of histomorphometric indices and electron microscopy for ultrastructural examination of injury and regeneration.

Funding Sources:

- National Institute of Health
- Plastic Surgery Education Foundation
- American Society for Surgery of the Hand
- Barnes-Jewish Hospital Foundation

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The ASPN Council and the 2004 Annual Meeting Program and Technical Exhibits Committees would like to thank the following companies for their support and participation

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ASPN CALL FOR ABSTRACTS

DEADLINE JULY 1, 2004

THE ABSTRACT SUBMISSION DEADLINE FOR THE AMERICAN SOCIETY FOR PERIPHERAL NERVE IS JULY 1, 2004. PLEASE SPREAD THE WORD AND ENCOURAGE YOUR COLLEAGUES TO SUBMIT AN ABSTRACT.

FOR MORE INFORMATION GO TO:

http://aahs_asrm_aspn.confex.com/oasys_new/2005

CONGRATULATIONS!!!!!! THE AWARDS GO TO.....

This year, the Program Committee gave awards at the Annual Meeting in Palm Springs for the Best Resident Research Presentation and Best Resident Short Presentation.

The Resident Short Presentation award recipient was Gregory H. Borschel, MD, from the University of Michigan Medical School, for his work entitled, "Contractile Tissue Engineered Skeletal Muscle Incorporating A Vascular Pedicle."

The recipient of the Best Resident Research Presentation award was Michael Brenner, MD from Washington University School of Medicine in St. Louis for his work entitled, "Effect of Schwann Cells and Donor Antigen on Regeneration Across Long Nerve Allografts".



Michael Brenner, MD



Gregory H. Borschel, MD

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Recruit a Member

Do you know anybody who wants to join a growing society and contribute to the clinical and research development in the area of peripheral nerve surgery? Recruit and sponsor an associate to become a member of the American Society for Peripheral Nerve. You may obtain applications by contacting the Central Office at 312-263-7150 or greco@isms.org.

Applications are due October 1, 2004