

Asilomar Conference Center
Pacific Grove, California
December 14-18, 2005

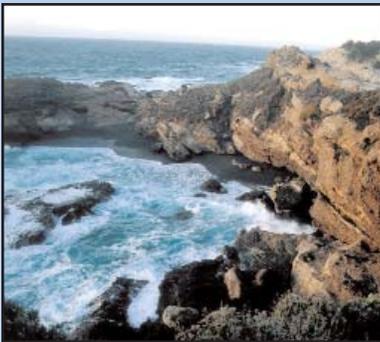


photo by Rao Chadaram

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REGENERATION RESEARCH NEWSLETTER

June 2005

Eleventh International Symposium on Neural Regeneration

The Eleventh International Symposium on Neural Regeneration will be held at the Asilomar Conference Center in Pacific Grove, California from December 14-18, 2005. The meeting will be co-sponsored by the US Department of Veterans Affairs, the Paralyzed Veterans of America, the National Institutes of Health (National Institute of Neurological Disorders and Stroke/Office of Rare Diseases), the Christopher Reeve Paralysis Foundation and the United Spinal Association. Additionally, a generous individual donation from the Ron Shapiro Charitable Trust helps fund the symposium.

The keynote speaker for this year's symposium will be Jerry Silver from Case Western Reserve University. Featured talks will be given by John Steeves from the University of British Columbia/International Collaboration on Repair Discoveries, Miguel Nicolelis from Duke University, Steven Goldman from The University of Rochester, Ed Wirth III from Geron Corporation, Jeff Lichtman from Harvard University and Paul Martin from The Ohio State University. Following the format of preceding neural regeneration symposia, the program is

divided into six sessions, which include: 1) Autonomic Dysfunctions and the Long-Term Effects on the Aging Spinal Cord-Injured Population, chaired by Kimberly Anderson; 2) Growth/Plasticity and Functional Outcome, chaired by Harry Goshgarian; 3) Intrinsic Mechanisms Underlying the Initiation of Nerve Regeneration, chaired by Larry Benowitz; 4) Increasing Inflammation is Beneficial for Neural Repair and Outcome (debate), chaired by Keith Crutcher; 5) Convergent Signaling Regulating Axon Growth, chaired by Marie Filbin; and 6) Emerging Topics, chaired by Michael Sofroniew. The speakers for each of these sessions and their titles are given in the program on the following pages.

The program for this year's symposium is included on page six. A registration form follows on page eight. A complete list of speakers and titles for each scheduled session is also available on the Neural Regeneration Website at www.vard.org/neural/neural.htm. Please see the Editor's Comments section later in this newsletter for additional information about the website.

[see SYMPOSIUM, page 4](#)

The Director's Chair

From the Office of the International Symposium on Neural Regeneration



Roger Madison

The International Neural Regeneration Symposia began in 1985, and have been held on a biennial basis since that time. The primary sponsor has been the Department of Veterans Affairs, with the NIH continuously co-sponsoring the symposia since 1987. In more recent years, generous support has also been given by the Paralyzed Veterans of America, the Christopher Reeve Paralysis Foundation and the United Spinal Association, all of whom co-sponsored the 1999, 2001 and 2003 symposia. The Ron Shapiro Charitable Trust also sponsors the event, as it did in 2003. The 2005 symposium will be the eleventh meeting in this series. The generous support of all of our sponsors is gratefully acknowledged.

The primary purpose of each symposium is to present current work in neural regeneration, especially in those areas of research in which there has been some notable recent progress or in which some particularly interesting issues have been raised. A secondary purpose

is to foster an atmosphere that is both stimulating and conducive to a free interchange of ideas among investigators, or between seasoned investigators and students. These International Neural Regeneration Symposia have become established, regularly occurring events with high attendance by both students as well as internationally recognized experts in the field of neural regeneration.

For those who are not familiar with the meeting format, the following material should help to paint a picture of the symposium. The International Symposium on Neural Regeneration has a single session format, including morning, late afternoon and evening presentations, with afternoons free to view posters, relax in pleasant natural surroundings, or have a quiet discussion with colleagues and/or students. This format has proven to be quite successful in terms of maximizing interactions among participants. During the previous ten symposia a great deal of interchange took place among scientists, among

scientists and students, and among scientists and clinicians.

The morning sessions each include an introductory overview by the session chairman (15 minutes) and four presentations (20-25 minutes each, followed by a five- to ten-minute question/discussion period). The two evening and one late afternoon sessions are similarly organized, except that there are three speakers per session. The major topics for each symposium are chosen for their timeliness, current interest, and recent progress. Also a factor is their novelty to the symposium, in the sense that these areas of research will not have been covered in depth in recent symposia. Session speakers are chosen on the basis of the contribution they can make to a session and the "cutting edge" quality of their work in a particular area. An attempt is made to balance the subject matter covered in a session.

SUPPORT FOR STUDENTS

The United Spinal Association (USA) has again provided funds for partial support of symposium attendance by graduate students, postdoctoral fellows or clinical residents in training. Applications for support should include the following: 1) a letter indicating the applicant's area(s) of scientific interest and what benefits he/she would expect to attain from attending the symposium, 2) a curriculum vitae or resume, and 3) a letter from the training director both in support of the applicant and verifying the applicant's training status. While presentation of a poster is not a require-

continued next page

ment for an award, a statement of intent to present a poster accompanied by a poster abstract will enhance an application.

Applications must be received by October 1, 2005 and should be sent to Dr. Madison at the same address as the Symposium Registration materials at the end of this newsletter. Applicants will be notified of the evaluating committee's decision before October 28. Women and minority students are especially invited and encouraged to apply.

NEW IN 2005

New for this year, an additional small group of presenters will be recognized with the "ISNR 2005 United Spinal Poster Award" for exemplary presentations. These awards will be chosen by planning board members who will review the presentations.

REGENERATION RESEARCH STAFF

ISNR Director
Roger Madison, Ph.D.

Editorial Assistant
Emily Dings

Photography Credits
Rao Chadaram, Ph.D.

Also for the first time this year, one program session will be held in debate format. Entitled "Increasing Inflammation is Beneficial for Neural Repair and Outcome," the session will be chaired by Keith Crutcher (University of Cincinnati). Three presenters will represent the "pro" side of the issue, while the "con" side will be argued by three others. The format will include a group presentation of each side's argument followed by a rebuttal period.

SYMPOSIUM 2007 SESSION PROPOSALS

We would encourage potential contributors to begin thinking now of ideas for a session for the Twelfth International Symposium on Neural Regeneration, which will be held at the Asilomar Conference Center in December, 2007. Session proposals are due by July 1, 2006 so they can be reviewed by the program planning committee at its meeting in late July or August of 2006. The program planning committee meets well in advance of the symposium in order to allow adequate time for applications for symposium support after a program has been generated. The format for a session proposal is also available from our office, and the format must be followed for a proposal to be duly considered.

SYMPOSIUM WEBSITE

Abstracts of the symposium proceedings including both oral and poster presentations will be published as a supplement to the *Journal of Rehabilitation Research and Development*, and will also be

ISNR 2005 Planning Committee Members

Marie Filbin (Hunter College, NY)

David Gardiner (University of California, Irvine, CA)

Jane Lebkowski (Geron Corporation, Menlo Park, CA)

Roger Madison (VAMC, Durham, Duke University, Durham, NC)

Michael Sofroniew (University of California, Los Angeles, CA)

John Steeves (University of British Columbia/ICORD)

Guests from co-sponsoring institutions

Vivian Beyda (United Spinal Association, Jackson Heights, NY)

Naomi Kleitman (NIH-NINDS, Bethesda, MD)

Patricia Dorn (VA, Rehabilitation Research and Development Service, Washington, D.C.)

available on the ISNR web site : www.vard.org/neural/neural.htm. The website contains basic information about the conference itself, registration, abstract submission, contacting ISNR and student travel awards. You will also find a list of scheduled guest speakers, a copy of the 2000-2003 Regeneration Research Newsletters, a photo gallery with pictures from prior symposia and previous conference information. There are also links to the ISNR sponsors: PVA, USA, NIH, CRPF, and the Shapiro Spinal Cord Research Foundation.

**POSTERS AND
ABSTRACTS**

Free communication will be presented in the form of posters. Two poster sessions have been scheduled, one on Thursday afternoon, December 15, and the other on Saturday afternoon, December 17. Symposium registrants are invited to submit poster abstracts, the deadline for which is September 15. An individual may be first author on only one poster, but a laboratory group may submit more than one abstract.

This year, all abstract submissions (both oral and poster) will be handled electronically via the website. Follow the instructions and forms on the website. If the number of abstract submissions exceeds available poster space, abstracts received after September 15 will not be considered. Please note that final ac-

ceptance of an abstract requires prior receipt of the registration form and fees. Therefore, if you plan to submit a poster abstract, you must also register for the meeting by September 15, 2005.

Two of the poster abstract submissions will be selected for short (15-minute) platform presentations during the last session, "Emerging Topics." There is a box to check on the submission form of the poster abstracts in order to be considered for a platform presentation. The two individuals from the poster abstract submissions that are selected for short platform presentations will be notified in writing by mid-October.

The two best poster presenters (students or postdoctoral fellows) will be awarded the Fredrick Seil ISNR Trainee Award. This award, which was inaugurated for ISNR 2003, is given in honor of Dr. Fredrick Seil, the first director and founder of the symposia series,

and symbolizes his long-term commitment to both the symposium itself and the students and fellows who attend these meetings. The winners will be chosen by two teams of planning board members who will review the poster presentations. The awardees will be recognized at the end of the symposium, during the symposium banquet dinner. The two awardees will have their names added to the Fredrick Seil Award Plaque, and will also each receive a check for \$250.

Similar to past symposia, talks are scheduled for morning, late afternoon and evening sessions, with afternoons free for viewing posters or for the multitude of activities available on the conference center grounds or in the surrounding area. The Asilomar Conference Center is a state of California facility located in Pacific Grove, just south of Monterey and about 100 miles south of San Francisco. Asilomar State Beach is across the road from the conference center and is inviting for pleasant walks or spectacular views of the coast.

Pacific Grove and its vicinity offer a rich array of additional attractions. Bus, trolley, boat and walking tours are available, and a car trip along 17 Mile Drive offers a view of the Lone Cypress and scenic coastline.

Whale-watching, otter spotting and touring the Monarch Butterfly Sanctuary are popular ways to take advantage of the area's wildlife, as are trips to the Monterey Bay Aquarium and the

To Submit an Abstract

Refer to the ISNR website at www.var.org/neural/neural.htm for instructions regarding poster abstract submissions. Multiple poster abstracts may be submitted; however, each abstract must have a different first author. Please indicate whether you would like to be considered for a 15 minute platform presentation. Final acceptance of submissions requires prior registration for the meeting.

The deadline for poster abstract submission is September 15, 2005. First authors of poster abstracts will be sent instructions for mounting their poster by Nov. 15, 2005. Poster boards are approximately 8 feet wide by 4 feet high. If you have questions, please write to us at the above address, call (919)286-0411, ext. 7691, fax (919) 286-6811, or send an email to rdm100@duke.edu.

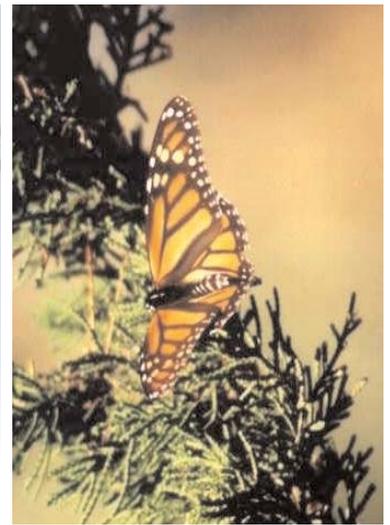
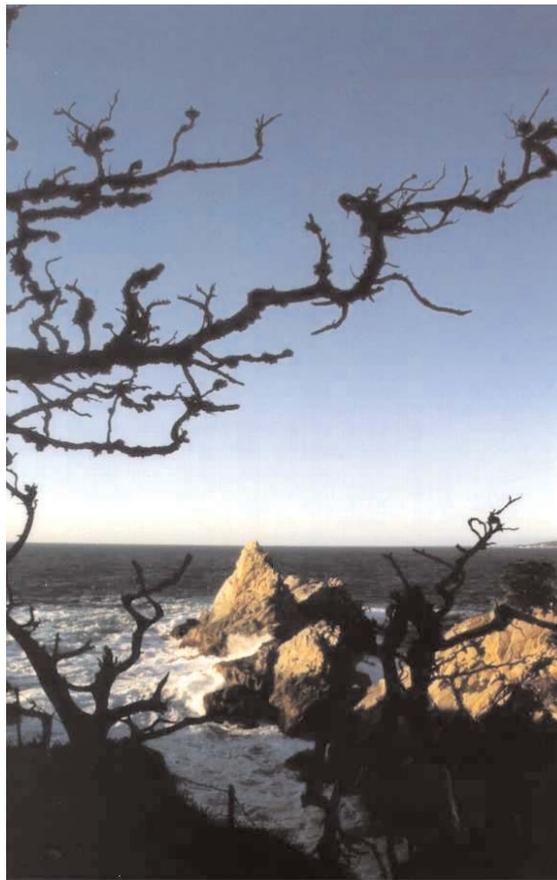
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Pacific Grove Museum of Natural History. The Monterey Peninsula's Point Pinos Lighthouse is the oldest, continuously operating lighthouse on the West Coast, and is open to the public. One can also trace John Steinbeck's dwellings and literary inspirations throughout the area, including the Steinbeck Family Cottage and Cannery Row.

The weather is generally warm and sunny in December, although evenings can be cold and rain is always possible. Dress at Asilomar is casual, and you should be aware that the main meeting room has no heat so bring some warm clothes just in case.

REGISTRATION

Space is limited at the conference center, and early registration is advised. Rooms and meals are on a package basis. Most rooms are for occupancy by two or more people and sharing arrangements are encouraged, which will reduce the cost per individual. Day use arrangements are possible, but these are on a fee basis, and also require registration. To register, please detach or photocopy the registration form in the newsletter (or download the form from the website) and fill in the appropriate information. Include a check drawn on a US bank or money order (purchase orders or credit cards cannot be accepted) for the appropriate registration fee(s) in US dollars made out to Regeneration



photos by Rao Chaderam

Pacific Grove offers scenic views and glimpses of native wildlife.

Research Symposium and mail it to the Office of the International Symposium on Neural Regeneration at the address below. Upon receipt of your registration form and fee, we will forward the forms and information for making your lodging arrangements directly with Asilomar. Please do not attempt to contact the conference center directly without having registered. The registration fee is \$100 for conference attendees, \$30 for graduate or post-doctoral students or residents in training (a letter from the program director verifying the training status is required for qualification for the student registration rate), and \$20 for accompanying persons not attending the symposium, but planning to participate in the

social activities, including the symposium banquet. Attendance at and participation in the symposium by minorities and women is invited and encouraged.



11th International Symposium on Neural Regeneration PROGRAM

Wednesday, December 14, 2005

3:00 PM Arrival of participants and check-in
Poster Session I set-up (pins provided)

6:00 PM DINNER

7:30 PM Welcome and Keynote Address
Jerry Silver, Case Western Reserve
University - Cleveland, OH, USA
"Regeneration beyond the glial scar"

7:30 PM John H. Martin
Columbia University - New York, NY, USA
"Bypassing spinal injury to promote
motor function"

8:00 PM John D. Houle
Drexel University College of
Medicine - Philadelphia, PA, USA
"Strategies to overcome astroglial barriers and
promote functional axonal regeneration after
spinal cord injury"

Thursday, December 15, 2005

Session One: 8:15AM

Autonomic Dysfunctions and the Long-Term Effects on the Aging Spinal Cord-Injured Population

8:15 AM Chair: Kimberly D. Anderson
University of California, Irvine, USA

8:30 AM Video - SCI patient speaking about daily
function

9:00 AM Michael D. Craggs
Royal National Orthopaedic Hospital
NHS Trust - Middlesex, England
"Repeated autonomic dysreflexia episodes
stimulated by bladder and bowel dysfunction:
Implications for the aging SCI population"

9:30 AM Stacy Elliott
University of British Columbia -
Vancouver, BC, Canada
"Autonomic dysreflexia with sexual activity:
Do the benefits outweigh the risks?"

10:00 AM Christopher Mathias
Imperial College of Science, Technology
and Medicine - London, England
"Hypotension and hypertension in SCI:
Short- and long-term implications"

10:30AM BREAK

11:00AM Featured Speaker
John Steeves
University of British Columbia/ICORD -
Vancouver, BC, Canada
"Guidelines for the conduct of SCI
clinical trials"

12:00 Noon LUNCH

1:00 PM Viewing: Poster Session I

5:00PM Featured Speaker
Miguel Nicolelis
Duke University - Durham, NC, USA
"Computing with neural ensembles"

Session Two: 7:15 PM

Growth/Plasticity and Functional Outcome

7:15 PM Chair: Harry Goshgarian
Wayne State University School of
Medicine - Detroit, MI, USA

8:30 PM Gwendolyn L. Kartje
Edward Hines, Jr. VA Hospital - Hines, IL, USA
"Recovery and structural plasticity after
stroke and Anti-Nogo antibody therapy
in adult and aged rats"

9:00 PM Blair Calancie
SUNY Upstate Medical University Syracuse, NY,
USA
"Neurophysiologic testing for predicting outcome
after acute SCI: Simple, well-tolerated, and accu-
rate...but is it useful?"

Friday, December 16, 2005

Session Three: 8:15AM

Convergent Signaling Regulating Axon Growth

8:15 AM Chair: Marie Filbin
Hunter College - New York, NY, USA

8:30 AM David Van Vactor
Harvard University - Cambridge, MA, USA
"Signaling mechanisms that control axon
guidance decisions"

9:00 AM Zhigang He
Harvard University - Cambridge, MA, USA
"Signaling mechanisms for myelin inhibitors"

9:30 AM Toshihide Yamashita
Chiba University, Japan
"Cell signaling cascades regulating axon
growth inhibition"

10:00 AM BREAK

10:30 AM Britta Eickholt
Kings College - London, England
"PI 3-kinase signaling controlling axonal
growth and guidance"

11:00 AM Featured Speaker
Steve Goldman
University of Rochester Medical Center -
Rochester, NY USA
"Isolation, induction and use of adult
human neural progenitor cells"

1:00 PM Poster Session I poster removal

11th International Symposium on Neural Regeneration PROGRAM

- | | | | |
|---------|--|----------|--|
| 1:30PM | Poster Session II set-up (pins provided) | 9:00 AM | Mike Fainzilber
Weizmann Institute of Science -
Rehovot, Israel
"Retrograde injury signaling in lesioned nerve" |
| 5:00PM | <u>Featured Speaker</u>
Ed Wirth III
Geron Corporation - Menlo Park,
California, USA
"Clinical trials in SCI: How can we link
imaging to functional outcome?" | 9:30 AM | Jeff Twiss
Al duPont Hospital for Children -
Wilmington, DE, USA
"Regulation of protein synthesis in
regenerating axons" |
| 6:00 PM | DINNER | 10:00 AM | Gennadij Raivich
University College London, England
"Switching regeneration and sprouting
on and off: Role of Jun and MEK" |
| 7:15PM | <u>Featured Speaker</u>
Jeff Lichtman
Harvard University - Cambridge, MA, USA
"Watching nerves grow and retract in
fluorescent mice" | 10:30 AM | BREAK |

Session Four: 8:15PM-9:45PM

DEBATE: Increasing Inflammation is Beneficial for Neural Repair and Outcome

- | | | | |
|-----------|--|----------|--|
| 8:15 PM | Chair: Keith A. Crutcher
University of Cincinnati Medical Center -
Cincinnati, OH, USA | 11:00 AM | <u>Featured Speaker</u>
Paul Martin
The Ohio State University - Columbus,
OH, USA
"New roles for glycosylation in neuro-
muscular development, regeneration and
disease" |
| Yes Group | Howard E. Gendelman
University of Nebraska Medical Center -
Omaha, NE, USA

Jonathan Kipnis
University of Nebraska Medical Center -
Omaha, NE, USA

J. Regino Perez-Polo
University of Texas Medical Branch -
Galveston, TX, USA | 12 Noon | LUNCH |
| No Group | Phillip G. Popovich
The Ohio State University -
Columbus, OH, USA

Lynne C. Weaver
Robarts Research Institute - London,
ON, Canada

V. Hugh Perry
University of Southampton, England | 1:00 PM | Viewing: Poster Session II |

Session Six: 4:15PM Emerging Topics

- | | | | |
|---------|--|---------|--|
| 4:15 PM | Chair: Michael Sofroniew
University of California - Los Angeles, CA, USA | 4:45 PM | Damien Pearse
University of Miami, FL, USA
"Gene transfer of constitutively-activated MEK or
ERK at the neuronal soma by adeno-associated
viral vectors to induce axonal regrowth across
Schwann cell bridges implanted into the com-
pletely transected rat thoracic spinal cord" |
| 4:30 PM | Candace Floyd
University of California - Davis, CA, USA
"17B-estradiol is neuroprotective in spinal cord
injury in post- and pre-menopausal rats" | 5:00 PM | Yimin Zou
University of Chicago, IL, USA
"Axon guidance cues along the rostral-caudal axis
of the spinal cord" |
| 5:30 PM | Molly Shoichet
University of Toronto, ON, Canada
"Neural tissue engineering and drug delivery
strategies for spinal cord injury repair" | 6:00 PM | BREAK |
| 6:30 PM | Symposium Banquet | | |

Saturday, December 17, 2005

Session Five: 8:15AM

Intrinsic Mechanisms Underlying the Initiation of Nerve Regeneration

- | | |
|---------|--|
| 8:15 AM | Chair: Larry Benowitz
Children's Hospital/Harvard Medical
School - Boston, MA, USA |
| 8:30 AM | Richard Ambron
Columbia University - New York, NY, USA
"Intrinsic kinase pathways regulate the
excitability of regenerating nociceptive
neurons following nerve trauma: Role in
chronic pain" |

Sunday, December 18, 2005

Departure of Participants

Symposium Registration Form

**Eleventh International Symposium on Neural Regeneration
December 14-18, 2005
Asilomar Conference Center, Pacific Grove, CA, USA**

Upon receipt of payment with this Registration Form,
you will be sent an Asilomar Housing Registration Form.

REGISTRATION FORM - ELEVENTH INTERNATIONAL SYMPOSIUM ON NEURAL REGENERATION

December 14-18, 2005 * Asilomar Conference Center * Pacific Grove, CA

Name: _____
Address: _____

Telephone: _____

Fax: _____ Email: _____

I plan to present a poster Yes No (Abstract Deadline is September 15, 2005)

Please enclose a check/money order made out to "Regeneration Research Symposium"
to cover the following:

Registration Fee (regular)	_____ \$100
Registration for accompanying person (not attending the conference)*	_____ \$20
Registration for a student, fellow or resident (with letter from training director)	_____ \$30
Please circle student status: Graduate Student Post-Doc M.D. Post-Doc Ph.D. Resident	_____ \$ Total

*Name of accompanying person

Sorry, credit cards or purchase orders are NOT accepted. Please send a check drawn on a US bank or money order in US dollars.

Please mail this form plus payment to:

**Roger Madison, Ph.D., Director
International Symposium on Neural Regeneration
VA Medical Center (Bldg. 16/Room 38)
508 Fulton Street
Durham, NC 27705**

Questions? Please call (919) 286-0411, ext. 7691, fax (919) 286-6811 or email rdm100@duke.edu