

UTCSP eNews
April 15, 2002
Volume 3 Number 4

CONGRATULATIONS!

Congratulations to all members and trainee members of the UTCSP who were successful in the CIHR salary support awards program, the results of which were announced last week.

PAIN IN THE MEDIA

Science Proves The Benefit Of Going Ginger

By Sara Crowe (The University of Sydney News - 30 November 2001)

Thousands of years after first being used as a traditional herbal medicine in Asia, ginger has been scientifically proven to reduce inflammation and pain by researchers in the Faculty of Pharmacy.

Ginger has also been found to have properties that can lead to thinning of the blood, thereby preventing blood clots and heart attacks, said study leader Professor Basil Roufogalis, executive director of the Herbal Medicine Research and Education Centre (HMREC).

"Ginger has been widely used for many years as a spice in cooking and in traditional medicine to treat a variety of conditions. We decided through the centre to take a look at it according to modern scientific principles," Professor Roufogalis said.

The initial study found that compounds called gingerols were most likely the active ingredients. Researchers, in collaboration with the University of Melbourne, noticed a similarity between the structure of gingerols and capsaicin, the active ingredient of chili peppers and capsicum, and a known pain-killer.

"Coincidentally, a paper was published in Nature showing that capsaicin acts on a specific receptor in the body called the vanilloid receptor, which is important for mediating pathways of pain from the periphery, such as the finger tips, to the brain," Professor Roufogalis said.

The spice of life: Basil Roufogalis has found scientific evidence that ginger is effective in reducing inflammation and pain. Research funded by an ARC SPIRT grant with industry partner, Thursday Plantation Laboratories in Ballina, then revealed that gingerols also act on vanilloid receptors.

"That was very exciting because we then knew that the effect of gingerols on pain could occur through these pain receptors, just as with capsaicin," he said. A subsequent study on rats, in collaboration with the University of Queensland, found that ginger injected into the rats' stomach cavity enabled them to withstand a greater amount of heat applied to their tails.

"That showed gingerols could affect perception of pain," Professor Roufogalis said.

Further studies in test tubes showed that gingerols were effective in suppressing an important enzyme that induces inflammation, cyclooxygenase (or COX) 1 and 2.

"To our delight the gingerols inhibited COX-2 as well as COX-1," he said. COX-2 inhibitors are currently major drugs used to treat inflammation - at a high cost to the nation's health budget.

"Not only that, we found that gingerols have a property that the COX-2 inhibitors don't have. They prevent the aggregation or clumping of platelets and therefore have the potential to thin the blood, just like aspirin," he said. But they are only half as potent as aspirin, reducing the risk of dangerous bleeding.

"Thinning the blood is important in heart disease so ginger might have the added benefit of preventing blood clots and heart attacks. But this needs to be proven in human trials," Professor Roufogalis said.

The Sydney researchers have had two major papers on their work published so far this year. Professor Roufogalis said they were now seeking funding of around \$100,000 to conduct human trials using ginger to treat inflammation and pain. Patents have also been taken out on a process for extracting ginger, and on new chemical molecules derived from ginger which they have synthesized.

UPCOMING MEETINGS/SYMPOSIUMS/LECTURES/CONFERENCES:

MUPPUT – Multi-Professional Pain Group at the University of Toronto - 2002 Schedule:

April 25, 2002 – Dr. Alex Jadad, Director, Centre for Global eHealth Innovation, Canada Research Chair in e-Health Innovation, University of Toronto & UHN and **Dr. Kevin J. Leonard**, Co-Investigator, Program in eHealth Innovation, University of Toronto and UHN present “**E-Health: Implications for Pain Management and Research**”

May 16, 2002 – Dr. Peter Keir & Dr. Anne Moore, School of Kinesiology and Health Science, York University present “**Repetitive Strain Injury**”

*MUPPUT meetings are held at **5:30 p.m. to 6:30 p.m.** in **Room 3227 Medical Sciences Building (please note room change)**, 1 King's College Circle, University of Toronto. If you plan to attend or for further information, please contact **Lucy Gagliese** at: lgagliese@torhosp.toronto.on.ca*

Wasser Pain Management Centre – Education Rounds

April 17, 2002 – Dr. Andrew Moncarz will present “**Botulinum Toxin in the Treatment of Head and Neck Myalgia**”

April 24, 2002 – Dr. Scott Reuben, Director, Acute Pain Service, Department of Anesthesiology, Baystate Medical Centre, Springfield, MA will present “**Preemptive and Post Surgical Management of Pain**”

May 1, 2002 – Dr. John Edmeads will present “**Pathophysiology of Migraine**”

*Wasser Education Rounds are held at **12:00 noon to 1:00 p.m.** in **Room 1163, Wasser Pain Management Centre, Mount Sinai Hospital, 600 University Avenue.***

Back to the Future: 2002 Conference of the Canadian Pain Society (IASP Chapter)

Winnipeg, Manitoba

May 23-25

For further information, contact:

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Secretariat

Canadian Pain Society

50 Driveway

Ottawa, Ontario K2P 1E2

Tel: 613-234-0812

Fax: 613-234-9894

e-mail: sfranklin@can-nurses.ca

or visit the website at: <http://www.canadianpainsociety.ca>

13th Annual Meeting of the American Alliance of Cancer Pain Initiatives

Sponsored by the American Alliance of Cancer Pain Initiatives

Richmond, Virginia

June 13 – 15, 2002

For further information, contact:

AACPI

Tel: 608-265-4013

Internet: <http://www.aacpi.org>

Principles and Practice of Pain Medicine

Sponsored by Harvard Medical School Department of Continuing Education

Boston, Massachusetts

June 20 – 23, 2002

For further information, contact:

Harvard Medical School

Attention: Christine Mullaney

Education Specialist

Anaesthesia and Critical Care

Tel: 617-384-8600

Fax: 617-667-5013

e-mail: cmullan1@caregroup.harvard.edu

Internet: <http://www.harvard.edu/conted>

44th Annual Scientific Meeting of the American Headache Society

Sponsored by the American Headache Society

Seattle, Washington

June 21-23, 2002

For further information, contact:

AHS

19 Mantua Road

Mount Royal, NJ 08061

Tel: 856-423-3195

Fax: 856-423-0082

e-mail: ahshq@talley.com

Internet: <http://www.ahsnet.org>

13th World Congress of Occupational Therapists

Sponsored by the World Federation of Occupational Therapists and Swedish Association of Occupational Therapists

Stockholm, Sweden

June 23-28, 2002

For further information, contact:

Swedish Association of Occupational Therapists

Box 760

SE – 131 24 Nacka, Sweden

Tel: +46 8 466 24 48

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e-mail: wfot2002@akademikerhuset.se

Internet: <http://www.wfot2002.com>

GRANTS/AWARDS/FELLOWSHIPS – CALLS FOR APPLICATIONS/NOMINATIONS:

Toronto Rehabilitation Institute Student Scholarship Fund OSOTF Award

Applications are currently being accepted for the upcoming competition, with a deadline at the Office of the Associate Dean, Inter-Faculty & Graduate Affairs, Faculty of Medicine, of **May 1, 2002**

The Goal of establishing the Toronto Rehabilitation Institute Student Scholarship Fund is to further the development of the patient care, teaching and research mission and goals of the Toronto Rehabilitation Institute (TRI). This is an excellent opportunity for qualified graduate students in financial need enrolled at the University of Toronto who are either in training at TRI or at another suitable institution, and whose studies will further the strategic directions of the TRI.

Those who are interested are encouraged to take the time to visit <http://www.torontorehab.on.ca> to find out more about TRI.

For an application and guidelines, please contact **Sheila Wolfe** at the **Office of the Associate Dean, Graduate & Inter-Faculty Affairs, Faculty of Medicine, Room 2113, MSB, phone: 946-7317, e-mail: sheila.wolfe@utoronto.ca**

International Aspirin® Award 2001 - Young Researchers' Aspirin® Award (International)

Deadline for receipt of application: April 30, 2002 Sponsored by: Bayer AG

Eligibility: The age limit of the Young Researchers' Aspirin® Award in the year of candidature is 40.

Description: The objective of the Young Researcher' Aspirin® Award is to encourage scientific research into the mechanism of action and clinical use of acetyl salicylic acid, the active ingredient of Aspirin®. Scientists who have contributed to the knowledge of Aspirin® through original independent scientific research in the field of theoretical (experimental) and/or clinical medicine are invited to compete for the Award. The results of their work should have a direct effect on the knowledge of the use of Aspirin® and be based on a peer-reviewed publication, accepted and/or published. The publication should not be older than two years. Entries will be judged by an international scientific committee representing basic and clinical research. The age limit of the Young Researchers' Aspirin® Award in the year of candidature is 40. The Young Researcher' Aspirin® Award is valued at €10,000.

Request application documents as a hardcopy or a CD-Rom from: International Aspirin® Award, c/o Bayer AG, Consumer Care Business Group, Medical Dept., Dr. Gisela Latta, Building C 151, D-51368 Leverkusen, Germany. Fax: 49-214-30-55184; Email: gisela.latta.gl@bayer-ag.de. The application documents are also available on the internet at: <http://www.award.aspirin.com>

POSITIONS AVAILABLE:

Post-doctoral Fellowship Positions – Winston-Salem, NC

Dr. James Eisenach, Professor, Anesthesiology, Obstetric Anesthesia, Vice-Chair Research at Wake Forest University Baptist Medical Centre is looking to fill three post-doctoral fellowship positions which are available over the next year in his laboratory. He has two active large grants from the National Institutes of Health and just received funding of a major (\$1 million per year) collaborative Centre grant for the next five years from the National Institutes of Health. The positions are all related to spinal cord or afferent pharmacology of pain and plasticity in the presence of pain. One of the positions involves mostly molecular biology, the other mostly immunocytochemistry, and the third mostly intracellular calcium imaging of cells in culture. All of the positions also involve some behavioral pharmacology experiments.

These are two-year fellowships, but can be extended to three years. Consideration will be given to physician fellows without laboratory experience if there is partial funding from their home institution for the first six months to a year for the time of training in the lab. If you know of someone who may be interested in one of these positions, please contact James Eisenach at: eisenach@wfubmc.edu.

CORRECTION: In last month's edition of UTCSP e-News, Dr. Thuan Dao's name was not included in the membership list of the organizing committee for the UTCSP Interfaculty Educational Opportunity in Pain entitled *Pain: A Multidimensional Issue* which took place the week of March 18-22, 2002. We apologize for the omission and wish to take this opportunity to acknowledge Dr. Dao's significant contribution to the success of this initiative.

UTCSP eNews is a monthly newsletter published by the **University of Toronto Centre for the Study of Pain**

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