



Canadian Rheumatology Research Consortium

What if there was a group of accredited academic and community rheumatologists in Canada, experienced in clinical trials, ready to meet an expanded clinical trial market based on new technology?

WHAT IF THE GROUP COULD offer decreased start-up time, enhanced quality of data, and meet or exceed enrollment targets? What if the group was committed to building an ideal research infrastructure that could expedite ethics reviews and approvals, streamline contract review and approval, and contain costs?

A number of rheumatologists considered these questions and came to the conclusion that by forming such a group they could facilitate and enhance clinical research in rheumatology in Canada. They would provide better quality research, encourage site development and bring novel treatments to Canadian patients with arthritis disorders in a timely manner.

The pharmaceutical industry will see an improved clinical research landscape in Canada. The Canadian Rheumatology Research Consortium (CRRC) will



Jonathan Riley

Left to right: Dr. Hy Tannenbaum, Dr. Ed Keystone, Dr. Carter Thorne, members of the board of directors of the CRRC

provide a single point of contact that will give the industry the benefit of access to a large number of trialists, research expertise, a centralized database for investigators with site profile information, and a national clinical trial patient registry to expedite recruitment.

The innovative thinking of a group of leading Canadian rheumatologists resulted in the creation of the CRRC on February 27. The Consortium has 46 members across the country and is open for business. The initial focus of their work will be in rheumatoid arthritis.

Members of the Consortium are all members of the Canadian Rheumatology

Association. They are certified rheumatologists (Royal College of Physicians and Surgeons of Canada, College of Physicians of the Province of Quebec), holding a valid provincial license to practice medicine in Canada, and have participated in at least one clinical trial. Within three years, they will take an examination to be certified as competent clinical trialists. The examination will be offered on a regular cycle for the admission of new members.

For further information, contact Linda Bennett 416-586-5912 or lbennett@mtsinai.on.ca ■

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Dr. Jolanda Cibere's standardized knee exam crosses the border

DR. JOLANDA CIBERE'S WORK on the study "Imaging validated model for the early diagnosis of knee osteoarthritis (OA)" funded by the Canadian Arthritis Network and the Canadian Institutes for Health Research, led her to develop the "Knee examination standardization" study. The early diagnosis study developed a clinical tool to diagnose osteoarthritis of the knee at an early stage. It uses MRI, x-ray, biomarkers, clinical assessment and questionnaires to do a comprehensive assessment of patients with knee pain.

A graduate of the University of Saskatchewan Medical School, Dr. Cibere trained in Rheumatology at the University of British Columbia and is currently a PhD student there in Health Care and Epidemiology. She does research at the Arthritis Research Centre of Canada in Vancouver and has a rheumatology practice as well. Dr. Cibere was drawn to rheumatology because "it is very interesting and there are gaps in knowledge – there is a lot of potential for research in this field."

The study to develop a tool for early diagnosis raised a question. Is it possible to examine a knee reliably for osteoarthritis? The signs and techniques of a knee exam vary and until Dr. Cibere's study, little work had been done to assess them for reliability and to determine whether standardization would yield the same result regardless of which rheumatologist conducted the test.

Dr. Cibere developed a multi-part standardized knee examination for OA in an international collaboration with: Dr. Nicholas Bellamy of the University of Queensland, Australia, a Canadian epidemiologist and rheumatologist,

who is a world-renowned expert on OA and standardization; Dr. Paul Peloso, a Canadian epidemiologist and rheumatologist at the University of Iowa in the U.S.; University of British Columbia rheumatologists Dr. Andrew Chalmers, Dr. Simon Huang and Dr. John Esdaile, who is the Scientific Director of the Arthritis Research Centre of Canada. She describes the study as "very fruitful" and presented the results at an Osteoarthritis Research Society International (OARSI) meeting in Sydney, Australia.

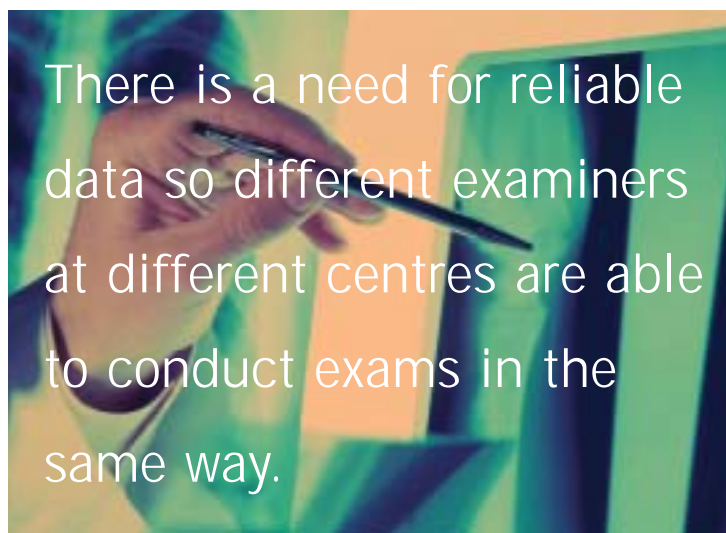
of disease onset and progression. Such markers would facilitate the development of disease modifying drugs for treatment of OA and lead to the improvement of public health.

A meeting with Dr. Bellamy, who is a member at large of OARSI, put Dr. Lester in touch with Dr. Cibere. There were two issues to be resolved before the NIH could consider using the standardized knee exam. "Which part of the knee exam would be most useful and could we train non-rheumatologists to carry out the exams, reproducibly and with confidence?" Dr. Lester asked.

Dr. Cibere developed the exam for rheumatologists, but, in the OA Initiative, other medical personnel such as nurse coordinators will be screening patients. Dr. Cibere modified the description of the exam so that someone who is not a rheumatologist can learn how to do it. According to Dr. Lester, now "someone not familiar with knee exams could learn how do it from

beginning to end."

Dr. Kent Kwok, a rheumatologist, is the principal investigator of the University of Pittsburgh OA Initiative clinical centre. He explained, "The OA Initiative will be examining 5,000 individuals who either have early knee OA or are expected to develop it. There is a need for reliable data so different examiners at different centres are able to conduct exams in the same way. They also have to be sure the same examiner always gets the same results." The timing of Dr. Cibere's presentation of her study was very fortunate for the OA Initiative because they will be able to use her standardized knee exam when they begin to enroll patients later this year. ■



This was exciting news for Dr. Gayle Lester, Health Science Administrator in the Musculoskeletal Diseases Branch of the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) in the U.S. and the project officer responsible for research on clinical osteoarthritis.

NIAMS has recently established the Osteoarthritis Initiative, in which the National Institutes of Health (NIH) and pharmaceutical companies will collaborate to develop a public repository of OA patient data, radiological and magnetic resonance images, and biological specimens. These resources will be made available to scientists for discovery and testing biochemical and imaging markers

Investigators of cartilage destruction embrace the CAN philosophy

Integrated. Transdisciplinary. Collaborative. Linking. Networking. Cutting-edge.

THESE ARE THE defining characteristics of the research climate fostered by the Canadian Arthritis Network. These are also the words that were used recently by the Network's Scientific and Medical Advisory Committee to describe the project headed by Dr. John



Left to right: Dr. Solmaz Suhebjam, a post-doctoral fellow working on the project and Dr. John Mort

Mort of the Joint Diseases Laboratory at the Shriners Hospital for Children and Associate Professor in the Faculty of Medicine at McGill University in Montreal.

The degradation of articular cartilage is one of the long-term irreversible consequences of arthritis. Previous studies have indicated that metalloproteinases may be responsible for joint degeneration but there is no evidence that any specific enzyme is the causative agent.

Dr. Mort's project will take a novel approach by using naturally occurring inhibitors as the index of protease action. He explained: "Destruction of cartilage depends on an imbalance between the levels of proteolytic enzymes and their inhibitors. We are studying mice that have been genetically modified to modulate the levels of active protease and inhibitor. This is allowing us to determine the contribution of different enzymes in joint destruction."

The project involves a collaboration of people in diverse fields. Dr. Mort specializes in biochemical studies on the role of proteases in cartilage degradation. Dr. Rama Khokha, Senior Scientist at the Ontario Cancer Institute and Associate Professor in the Faculty of Medicine at the University of Toronto is a world-renowned cancer scientist who

works with genetically modified mice. Dr. Mike Buschmann, Associate Professor at École Polytechnique in Montreal, will contribute biomechanical testing of the tiny mouse joints. Dr. Robin Poole of the Shriners Hospital for Children and Professor in the Faculty of Medicine at McGill University was involved in the development of the transgenic mice, created by Wyeth-Ayerst Research, which express active MMP13 under the control of the type II collagen promoter. Dr. Helen Burt, Professor in the Faculty of Pharmaceutical Sciences at the University of British Columbia, has been developing an intra-articular drug delivery system for arthritis and will work on the proof-of-principle studies of a therapeutic agent.

Dr. Jane Aubin, the Network's Co-Scientific Director describes this project as "an excellent example of how leading scientists working in different disciplines and in different institutions can form a new collaborative team to do great science. The project has high potential to discover a technology that can be transferred to industry. It will certainly offer graduate students or post-doctoral fellows who work on the project a unique opportunity to acquire high-level knowledge and skills." ■

International Association of Inflammation Societies

The 6th World Congress on Inflammation, under the auspices of the International Association of Inflammation Societies (IAIS), will be held for the first time in Canada, August 2-6 in Vancouver. The Canadian Arthritis Network (CAN) is the Canadian representative on the IAIS and Dr. Robin Poole, CAN's Co-Scientific Director, is the Congress President.

The Congress presents a great networking opportunity for academics and the pharmaceutical industry. Network members are speaking on the program and CAN is organizing a workshop on matrix metalloproteinases.

Topics include:

- Biomarkers and imaging in inflammatory diseases
- Classic animal models of inflammation
- Genetic models of inflammation for *in vivo* drug discovery
- Late breaking clinical data on new anti-inflammatory drugs
- Neurogenic inflammation and pain
- New aspects of COX-2 inhibition
- The latest therapies for rheumatoid arthritis

Deadline for Advance Registration

April 11, 2003

For further information on the program and registration, please visit the Web site at www.inflammation2003.com ■



Dr. Tineke Meijers nominated for prestigious national award



EACH YEAR 40 outstanding young Canadians who are under 40 are honoured with an award from Canada's Top 40 Under 40™.

Dr. Tineke Meijers has been nominated for the 2002 award for her professional accomplishments and the leadership she has demonstrated with the Canadian

Arthritis Network.

The award is made to talented individuals who have shown vision and leadership, innovation and achievement and have made an impact in their field. It introduces the young leaders to the established business community and promotes them as role models for young Canadians.

Dr. Meijers, as CAN's Executive Director, Research and Development,

leads the day-to-day scientific operations of the Network. With a background in science and research as well as experience in the pharmaceutical industry and drug development, she has championed a multidisciplinary research philosophy and has helped to recruit some of Canada's brightest young researchers. She has energetically worked to establish the Network as a major force in the field of arthritis research. ■

NET Grants for Osteoarthritis

FOR MANY PEOPLE, OLD AGE means painful joints, limited movement and severe pain. Seven out of 10 Canadians over the age of 60 have osteoarthritis and with the aging of the population it will affect more people. The Canadian Institute for Health Information recently released some statistics that show a 34 per cent increase in the number of total hip and knee

replacements between 1995 and 2001. There was a 90 per cent increase in the number of total knee replacements performed on people under 55.

\$5.5 million is available for OA research in the New Emerging Team (NET) program

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The Canadian Arthritis Network (CAN), the Institute for Musculoskeletal Health and Arthritis (IMHA), and The Arthritis Society recognized the urgency of finding the cause and a cure for osteoarthritis a year ago. They organized the Osteoarthritis (OA) Consensus Conference in March 2002 that brought together leading researchers, consumers, and the pharmaceutical industry, government and international partners, to identify areas where research would be most valuable.

Research priority areas were subse-

quently identified by the stakeholders who attended the Consensus Conference and subsequently the OA workshop held in conjunction with the CAN Annual Conference in September 2002. The list also takes into account the discussions that took place at a meeting for the Canadian Arthritis Plan in November 2002 and the results of a survey by the Canadian Arthritis Patient Alliance.

The stakeholders agreed the following questions should be answered to define the disease and improve the care of OA patients, while identifying its causes and cures.

- 1. What are the causes and treatments of pain and fatigue in OA and what is its relationship to outcomes of OA treatment?**
- 2. What are the risk factors/causes of OA and how effective are OA treatments?**
- 3. What are the best models, markers and tools for evaluation of OA and what are the most effective models of OA care?**
- 4. What are the best prevention strategies for OA?**
- 5. What are the new targets for OA treatment?**

CAN and IMHA have collaborated to make \$5.5 million available for research as the New Emerging Team (NET) pro-

gram grants in the area of osteoarthritis. These grants are expected to build research capacity in OA, build new research teams, and to give researchers a building block for applying for research funding in the future. This initiative is an attractive opportunity for partnership with industry, government, and not-for-profit associations involved in arthritis research.

CAN will fund programs totaling \$500,000 per annum for a total of \$2.5 million over five years on any of the priorities. CAN funding is available only to CAN members. IMHA will fund two programs valued at up to \$300,000 per annum for up to five years. One IMHA grant will be for research on the causes of pain and fatigue and one will be for any of the other priority areas.

The key dates are:

June 2, 2003

Deadline for application for funding.

July 1, 2003

Deadline for submission of full proposals.

November 2003

Notification of decisions.

Anticipated start date.

Further information can be found on the following Web sites:

www.arthritisnetwork.ca

www.cihr-irsc.gc.ca/services/funding/opportunities/institutes/2003/rfa_net_grants_osteoarthritis_e.shtml ■

CTBR, A member of the Inveresk Research Group

The Canadian Arthritis Network (CAN) has entered into a unique partnership with CTBR Bio-Research Inc. a Montreal-based contract research organization.

THROUGH CTBR, PHARMACEUTICAL and biotechnology companies will have unprecedented access to high quality preclinical services and innovative research techniques in the bone research area.

Founded as Bio-Research Laboratories in 1965, the company became CTBR in 1996. In 2001 CTBR became a member of the Inveresk Research Group, a

leading expertise available through both organisations.”

With Canadian facilities that now cover more than 300,000 square feet, CTBR offers substantial resources for a wide range of studies. Preclinical safety and efficacy studies are available for:

- analytical chemistry and bioanalysis
- bone research
- cardiovascular profiling

staff and well-equipped facilities, models of arthritis can be explored in detail. Extensive bioassays can also be conducted to assess hormones, specialized enzymes, and various aspects of immune function.

Chris Nelson, CAN's president and CEO said, "CAN scientists have developed innovative animal models in their research laboratories but they are not



NASDAQ listed company with 2,300 staff in 12 different countries.

CTBR and Inveresk Research are operating as sister companies but are centrally managed through the Group Executive Board. CTBR has an active expansion program in Montreal where two new buildings were completed last year. The new facilities came on stream last December.

Michael F. Ankcorn, president & CEO, CTBR, commented: "CTBR has a long history of being a leading service provider for the preclinical assessment of novel medicines to treat osteoporosis. More recently, this has led CTBR into the areas of osteoarthritis and rheumatoid arthritis and an exciting collaboration with the Canadian Arthritis Network will enable clients to access the

- clinical laboratories
- drug metabolism and pharmacokinetics
- experimental biology
- general toxicology
- immunochemistry
- immunology
- infusion pharmacology and neurotoxicology
- inhalation toxicology
- mass spectrometry
- pathology
- quality assurance
- reproductive toxicology
- safety pharmacology

CTBR's procedures and techniques are compliant with the internationally recognized standards of Good Laboratory Practice, which will help CAN researchers design their work accordingly. With extensive animal care capabilities, surgical

usually equipped for large scale studies required for product development. CTBR has the expertise and the facilities to conduct those studies in a timely way and can offer more types of investigation. Working together, the scientists and CTBR both benefit. The revenues gained from the transfers support further research and CTBR gains not only the models but access to a body of experts they can consult to offer better services to industry."

CAN is available to supplement CTBR's services to its clientele, providing them with access to knowledge and expertise in arthritis research across Canada. For more information about CTBR, please visit the company's Web site at www.ctbr.com ■

Dr. Robin Poole wins Carol Nachman Prize for 2003



DR. ROBIN POOLE, CAN'S Co-Scientific Director, is the co-winner of the Carol Nachman Prize for 2003 for outstanding innovative research in rheumatology, to be awarded in Wiesbaden, Germany at a ceremony in May of this year. The Prize is shared with Dr. Paul Plotz, Chief, Arthritis and Rheumatism Branch of the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) of the U.S.

Dr. Poole pioneered the study of damage in arthritis to the collagen fibrillar network (types II, IX, and XI

collagen) of the extracellular matrix that endows cartilage with its tensile properties. The work that is honoured with the award includes two recent studies planned and conducted by Dr. Poole on the pathobiology of articular cartilage degeneration in osteoarthritis.

One study identified a peptide of type II collagen that induces a cleavage of type II collagen in human articular cartilage and the role of MMP-13. The other study shows that chondrocyte derived interleukin-1 (IL-1) and tumour necrosis factor α (TNF α) are involved in matrix degradation of human osteoarthritis cartilage. This suggests that blocking the activities of the peptide or either or both of the cytokines may be a useful therapeutic strategy in the management of osteoarthritis. ■

Senator Pat Carney appointed to board of directors



THE HONOURABLE PAT CARNEY, P.C. has been appointed to the Canadian Arthritis Network's board of directors. Senator Carney, who suffers from arthritis, began working with The Arthritis Society in 1989 and is a founding member of the Arthritis Research Centre in Vancouver.

Sydney Jackson, chair of the board, said, "Senator Carney brings proof and experience of successful advocacy to the Canadian Arthritis Network as well as her energy and insight. She will make a significant contribution to the governance of the Network and will help further its goal of creating a world free of arthritis through research and development."

Senator Carney was appointed to the Senate of Canada in 1990 after serving as federal minister of energy, mines and resources, international trade and president of the Treasury Board. Prior to her election to the House of Commons in 1980, Senator Carney had a career in journalism and economic consulting. ■



CANADIAN ARTHRITIS NETWORK | LE RÉSEAU CANADIEN DE L'ARTHRITE

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President and CEO

Robin Poole, PhD, D.Sc.
Co-Scientific Director

Johnathan Riley, MHA
Director of Information, Research and Analysis

Canadian Arthritis Network
250 Dundas Street West
Suite 402
Toronto ON M5T 2Z5
Tel: 416-586-4770
Fax: 416-586-8395
E-mail: can@arthritisnetwork.ca
www.arthritisnetwork.ca

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