

## News Update

Spring 2012

### Latest Discoveries from the Trudeau Institute



New research from the laboratory of Dr. Elizabeth Leadbetter may lead to a whole new class of vaccines. Dr. Leadbetter's lab has discovered new properties of a potential vaccine adjuvant that suggest it could be useful for enhancing protection against a number of

different infections. This research appeared in *NATURE IMMUNOLOGY*.



The latest findings from the laboratory of Dr. Andrea Cooper may help in the ongoing fight against tuberculosis. Dr. Cooper's lab has discovered a connection between the development of new lymphoid tissue within the lung and protection against the

disease. The new data was published in the *JOURNAL OF IMMUNOLOGY*.



Dr. Stephen Smiley's laboratory has published a study in the scientific journal *INFECTION AND IMMUNITY* that supports a new approach to treating people sickened by *Listeria* and other sepsis-causing bacteria. *Listeria* can cause serious illness, especially among the

elderly, the very young and those with compromised immune systems. The bacteria can also cause significant complications in pregnant women, including miscarriage.



Dr. Marcia Blackman's lab studies how the human body controls gamma-herpesviruses, a class of viruses thought to cause a variety of cancers. These findings were published in the *JOURNAL OF IMMUNOLOGY*. Led by postdoctoral fellow Mike Freeman, the study

describes the role of white blood cells in controlling gamma-herpesvirus infections and has implications for the treatment and prevention of certain cancers.

## Scientific Advisory Board Meets with Trudeau Faculty

The Trudeau Institute Scientific Advisory Board (SAB) held its annual meeting this past October at the Institute's Saranac Lake campus. The two-day event included presentations from faculty members who provided an overview of their scientific programs and future plans. From these meetings, the SAB conducts its annual review of the Institute's science and discusses future directions, making recommendations to the Institute's administration and Board of Trustees.

The October meeting was the SAB's first since its chairman, Nobel laureate Dr. Ralph M. Steinman, succumbed to pancreatic cancer. Vincent A. Fischetti, Ph.D., who has served on the Scientific Advisory Board since its inception in 1997, was appointed SAB Chairman. Dr. Fischetti, a Trudeau trustee since 1993, currently heads the Laboratory of Bacterial Pathogenesis at Rockefeller University in New York.

### Trudeau Institute Scientific Advisory Board

#### **Vincent A. Fischetti, Ph.D., Chairman**

Professor and Chairman of the Laboratory of Bacterial Pathogenesis and Immunology, Rockefeller University

#### **Christine Biron, Ph.D.**

Esther Elizabeth Brintzenhoff Professor of Medical Science, Molecular Microbiology and Immunology Department, Brown University

#### **Maureen Howard, Ph.D.**

Vice President of Research, ChemoCentryx Inc.

#### **Eric G. Pamer, M.D.**

Chief of the Infectious Disease Service and Head of the Laboratory of Antimicrobial Immunity, Memorial Sloan-Kettering Cancer Center

#### **William E. Paul, M.D.**

Chief, Laboratory of Immunology, National Institute of Allergy and Infectious Diseases, National Institutes of Health

#### **Robert A. Seder, M.D.**

Chief, Cellular Immunology Section, The Vaccine Research Center, National Institute of Allergy and Infectious Diseases, National Institutes of Health

#### **F. Alan Sher, Ph.D.**

Chief, Laboratory of Parasitic Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health



**Front:** SAB members Vincent Fischetti, Alan Sher, Eric Pamer  
**Middle:** Liz Leadbetter, Larry Johnson, Mithilesh K. Jha, Laura Haynes  
**Back:** Markus Mohrs, Alexei Tumanov, Steve Smiley, Andrea Cooper

## World TB Day Marks 30th Anniversary

Commemorated every year on March 24, World TB Day was established in 1982 to mark the 100th anniversary of the discovery of the tuberculosis bacillus and to increase public awareness of TB, which remains an epidemic across much of the globe and is responsible for several million deaths each year, primarily in the developing world.

On March 24, 1882, German physician Robert Koch presented his groundbreaking lecture in Berlin on the cause of tuberculosis. At the time, the disease was raging through Europe and the Americas, killing one out of every seven people. Dr. Koch's discovery paved the way towards diagnosing and curing tuberculosis patients. In 1884, E. L. Trudeau received a complete handwritten translation of Dr. Koch's seminal paper as a Christmas gift. Convinced of Dr. Koch's logic and intrigued by the possibility of a cure, Dr. Trudeau was determined to learn how to stain and recognize the TB bacillus under a microscope in order to try Dr. Koch's experiments for himself.

Dr. Trudeau successfully replicated all of Dr. Koch's experiments and through his own research furthered the base of medical knowledge for the treatment of tuberculosis. In the process, Dr. Trudeau began to uncover some of the many mysteries of the immune system, which remains the focus of the Trudeau Institute's research today. Following in his footsteps, our scientists are working to better understand the immune system for the purpose of preventing and treating human disease.

## Trudeau Institute Launches Nonprofit Contract Research Organization

The Trudeau Institute has expanded the scope of its biomedical research by creating the Trudeau Institute Contract Research Organization (TICRO). In offering contract research services, the Institute will develop translational research partnerships with biotech and pharmaceutical companies to help bring new vaccines and therapeutics to patients more efficiently by reducing costs and standard delays.

Through TICRO, Trudeau's world-renowned scientists in the study of immunology and infectious disease (using animal models) will now offer their expertise and models to the biopharmaceutical industry and academic researchers by:

- Providing project-specific expertise
- Assisting clients with the design and execution of efficient studies with well-defined endpoints
- Helping to accelerate the drug development process

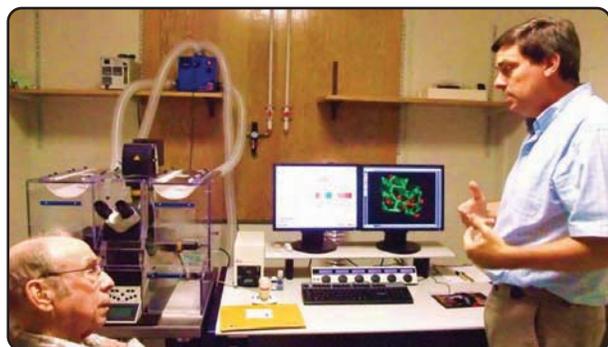
Dr. Dawn Jelley-Gibbs has been appointed TICRO's senior program manager and is working with the Institute's management team to develop and execute TICRO's scientific program.



*Dawn Jelley-Gibbs, Ph.D.*

## Dr. Charles W. McCutchen's Longstanding Commitment

Dr. Charles W. McCutchen of Bethesda, Maryland, recently contributed \$40,000 in unrestricted funds to the Trudeau Institute through The McCutchen Foundation, continuing a long tradition of generous support which began in the early 1990s.



*Dr. Charles W. McCutchen meets with Michael Tighe, the Trudeau Institute's Imaging and Histology Core Manager, in 2009 to discuss the need for confocal microscopy at the Institute.*

A retired physicist, Dr. McCutchen grew up in Princeton, New Jersey, and has been summering at his family's Lake Placid camp – purchased by his grandfather in 1894 – since he was a child. When in the area, Dr. McCutchen often meets with Trudeau scientists in their labs to discuss their current research.

The faculty and scientific staff of the Trudeau Institute are extremely grateful to Dr. McCutchen for his vision and extraordinary commitment to their research efforts.

### Visit the Institute's Website

For more detailed information about recent scientific discoveries, please visit our website at [trudeauinstitute.org](http://trudeauinstitute.org). Audible links to recent interviews with Trudeau scientists are accessible in the *News* section. If you would prefer to receive News Updates electronically, click on the e-newsletter sign-up box on the *Home* page.

Your support is always needed and appreciated. To make a secure online donation, go to the *Support Trudeau Institute* section and simply click on the "donate now" button. Thank you.

*Please direct your questions and comments to:*

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## Government Representatives Provide Support

The Trudeau Institute has been recognized by the State of New York through the efforts of the North Country Regional Economic Development Council. The Institute has been named to receive up to \$1.2 million to assist in the cost of modernization of its facilities.

Recent visits by New York State Senator Betty Little and U.S. Congressman Bill Owens, in addition to the valuable support garnered through their efforts, have been most appreciated.



*U.S. Congressman Bill Owens*



*N.Y. State Senator Betty Little*

*“Trudeau has a proud tradition of leadership in the community that is well known throughout the nation, and they contribute a great deal to the economic strength of the region. I look forward to continuing our close working relationship with Trudeau and their continued success as a world-class research facility in Saranac Lake.”*

*U.S. Congressman Bill Owens*



**Trudeau Institute immunologists are committed to making breakthrough research discoveries that will prevent and treat cancer, asthma, allergy, arthritis, colitis, multiple sclerosis, and infectious diseases, such as tuberculosis, influenza, and sepsis.**