# CARDIOVASCULAR BIOMARKERS 2007 AND BEYOND

"FROM BENCHTOP TO BEDSIDE"



The Conference Center, Harvard Medical School, 77 Avenue Louis Pasteur, Boston, MA 02115

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# **PROGRAM**

MONDAY, October 1st ::::::		
8:00-8:30 Registration and Breakfast		
8:30-8:45	H.E. Pierre Vimont Ambassador of France to the US Welcome Address	
8:45-9:00	Dr. Eugene Braunwald (BWH, HMS, Boston, USA) Introductory Address	
9:00-9:30	Dr. Peter Libby (BWH, HMS, Boston, USA) Keynote Lecture "Pathophysiology of atherothrombosis"	
BIOMARKERS IN	PRIMARY PREVENTION	
9:40-10:00 10:10-10:30	Dr. Paul Ridker (BWH, HMS, Boston, USA) Atherothrombosis Dr. Xavier Jouven (Inserm, France) Sudden Cardiac Death	
40.40.44.40		
10:40-11:10	Coffee Break	
BIOMARKERS OF 11:10-11:30	HEART FAILURE  Dr. Richard Lee (BWH, HMS, Boston, USA) Markers of Mechanical Stress Pr. Faiez Zannad	
	(Inserm, Hôpital Central, France) Trials and treatment	
12:15-13:30	Lunch	
BIOMARKERS IN	SECONDARY PREVENTION	
13:30-13:50	<b>Dr. Marc Sabatine</b> (BWH, HMS, Boston, USA) Acute Coronary Syndromes	
14:00-14:20	Pr. Gilles Montalescot (Inserm, APHP, France) Platelet function	
14:30-14:50	<b>Dr. Alain Tedgui</b> (Inserm, France) PLA2s, Microparticles, and other Lipid- related markers	
BIOMARKER DISC	COVERY: GENOMICS/METABOLOMICS	
15:00-15:20	<b>Dr. Robert Gerszten</b> (MGH, HMS, Boston, USA) Metabolomics	
45-00 45-50	D. I Tool	

**Dr. Laurence Tiret** (Inserm, Paris, France)

Genomics

15:30-15:50

16:00-16:30	Coffee Break
	SION: PATHWAY FROM NICAL APPLICATION
16:30-17:00	Dr. Nader Rifai
	(CHMC, HMS, Boston, USA)
	Dr. Robert Gerszten
	(MGH, HMS, Boston, USA)
	Dr. Marc Sabatine
	(BWH, HMS, Boston, USA)
	Pr. Gilles Montalescot
	(Inserm, APHP, France)
	Pr. Faiez Zannad
	(Inserm, Hôpital Central, Nancy, France)
	Dr. David Morrow, Moderator
	(BWH, HMS, Boston, USA)
17:00-18:00	Cocktail Reception

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8:30-9:15	Breakfast	
9:15-9:30	<b>Pr. Christian Brechot</b> (Inserm, Paris, France) Welcome Address	
IMAGING 9:30-9:50	<b>Dr. Zahi Fayad</b> (Mount Sinai School of Medicine, USA) Imaging Atherosclerosis	
10:00-10:20	<b>Dr. Gilles Rioufol</b> (Inserm, Lyon, France) IVUS and the Vulnerable Plaque	
10:30-11:00	Coffee Break	
11:00-11:20	<b>Dr. Farouc Jaffer</b> (MGH, HMS, Boston, USA), Molecular Imaging	
11:30-11:50	<b>Dr. Eric Lancelot</b> (Guerbet Group, France) Developing Contrast for Molecular MRI	
12:00-12:15	Dr. Ziad Mallat (Inserm, Paris, France) Dr. David Morrow (BWH, HMS, Boston, USA),	

Departure

12:15

# The French American Innovation Day is organized yearly in Boston by the Office of Science and Technology of the French Embassy

This year, the program, chaired by Drs. David Morrow and Ziad Mallat, will provide an in depth discussion of established and emerging biomarkers as effective, non-invasive tools to enhance the detection and management of cardiovascular diseases. The appropriate contemporary clinical use of available biomarkers will be reviewed, as will the pathophysiologic insights, technologic advances, and development strategies quiding biomarker discovery. This program is designed to be of interest to cardiologists, internists, emergency physicians and researchers.

## **EDUCATIONAL OBJECTIVES**

After completing this activity, the participant should be better able to:

- · Identify the pathophysiologic basis for development and application of biomarkers of atherothrombosis and heart failure.
- · Explain the appropriate use of available biomarkers for use in diagnosis, risk assessment, and clinical decision-making in patients with ischemic heart disease and with heart failure.
- · Identify pathways and pitfalls for discovery of new biomarkers.
- · Describe novel applications of cardiovascular imaging.

### ACCREDITATION STATEMENT

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of Postgraduate Institute for Medicine (PIM), the Embassy of France and Inserm. PIM is accredited by the ACCME to provide continuing medical education for physicians.

## CREDIT DESIGNATION

Postgraduate Institute for Medicine designates this educational activity for a maximum of 8.75 AMA PRA Category 1 Credit(s)TM. Physicians should only claim credit commensurate with the extent of their participation in the activity.



# WELCOME ADDRESS

**H.E. Pierre** Vimont

Ambassador of France



> Ambassador Pierre VIMONT was appointed Ambassador of France to the United States by President Nicolas Sarkozy on August 1, 2007. Prior to his present appointment, Mr. Vimont was chief of staff to the minister of foreign affairs, a position he had held since 2002. He was previously ambassador and permanent representative of France to the European Union from 1999 to 2002. Pierre Vimont joined the Foreign Service in 1977. He was first posted to London where he was first secretary from 1978 to 1981. He then spent the next four years with the Press and Information Office at the Quai d'Orsay. From 1985 to 1986 he was seconded to the Institute for East-West Security in New York. Returning to Europe, he served as second counselor with the Permanent Representation of France to the European

Communities in Brussels (1986-1990), and was subsequently chief of staff to the minister delegate for European affairs from 1990 to 1993. He went on to serve as director for development and scientific, technical and educational cooperation and then for cultural, scientific and technical relations. He was deputy director general of the entire Cultural, Scientific and Technical Relations Department from 1996 to 1997 and then director of European Cooperation from 1997 to 1999. Born in 1949, Pierre Vimont holds a degree in law and is a graduate of the Institute of Political Studies and the National School of Administration (ENA). Ambassador Vimont is a chevalier of the National Order of Merit.

**Dr. Eugene Braunwald** 

(BWH, HMS Boston, MA)



> Dr.Eugene BRAUNWALD, M.D. is the Distinguished Hersey Professor of Medicine at Harvard Medical School and Chairman of the TIMI Study Group at the Brigham and Women's Hospital. Dr. Braunwald served as the first Chief of the Cardiology Branch of the National Heart, Lung and Blood Institute, founding Chairman of the Department of Medicine at the University of California, San Diego. From 1972 to 1996 he was Chairman of the Department of Medicine at the Brigham and Women's Hospital. Dr. Braunwald's first major paper was published in Circulation Research in July 1954, and he has been a major force in cardiology in the past half century. For the past 22 years, as Chairman of the TIMI Study Group, he and his colleagues have conducted studies which have changed practice guidelines and favorably

affected the lives of millions. Dr. Braunwald is an editor of Harrison's Principles of Internal Medicine, and the founding editor of Heart Disease, now in its 7th Edition, the most influential textbooks in their fields. Science Watch listed Dr. Braunwald as the most frequently cited author in Cardiology. Dr. Braunwald has received numerous honors including the Distinguished Scientist Award of the ACC, Research Achievement, and Herrick Awards of the AHA, and the Gold Medal of the European Society of Cardiology. Dr. Braunwald was the first cardiologist elected to the National Academy of Sciences of the United States.

# **WELCOME ADDRESS**

Pr. Christian
Brechot
(Inserm. Paris. France)



> Pr. Christian BRÉCHOT, has been appointed Executive Director of Inserm in February 2001. He is a specialist of liver diseases, especially B and C viral hepatitis. He has been director of an Inserm – Paris V University – Pasteur Institute research unit and head of the liver department at Necker Hospital in Paris. Cell biologist and hepatologist, he has contributed to the discovery of new therapeutic approaches for the treatment of hepatitis, of mechanisms involved in the onset of hepatitis B-and C-related liver cancer, to the understanding of cell cycle regulation as well as the impact of HBV and HCV genetic variability. Awardee of several scientific prizes (including that of the French Academy of Medicine, Jean Valade Award...) as well as civil honors (French national Legion of Honor),

Christian Bréchot has published over 300 papers, of which 85 with a citation index exceeding 50. He also ranked 4th in the ISI survey of the most cited authors concerning hepatitis C.



# KEYNOTE SPEAKER

**Dr. Peter Libby**(BWH, HMS,
Boston, USA)



> Dr. Peter LIBBY, M.D., is the Chief of Cardiovascular Medicine at the Brigham and Women's Hospital in Boston, Massachusetts. He also serves as the Mallinckrodt Professor of Medicine at Harvard Medical School. Dr. Libby directs the D.W. Reynolds Cardiovascular Clinical Research Center at Harvard. His current major research focus is the role of inflammation in vascular diseases such as atherosclerosis. Dr. Libby has received numerous awards and recognitions for his research accomplishments, including the 2006 Distinguished Scientist Award of the American College of Cardiology. His areas of clinical expertise include general and preventive cardiology.

An author and lecturer on cardiovascular medicine and atherosclerosis, Dr. Libby has published extensively in medical journals including *Circulation, Journal of Clinical Investigation, Proceedings of the National Academy of Sciences, New England Journal of Medicine,* and *Nature.* He is Editor-in-Chief of the coming edition of *Braunwald's Heart Disease*. Dr. Libby has also contributed the chapters on the pathogenesis, treatment, and prevention of atherosclerosis to Harrison's *Principles of Internal Medicine*. He has held numerous visiting professorships and has been selected to deliver over 50 named or keynote lectures throughout the world. In 2007, Dr. Libby will deliver the Mikamo Lecture at the Japanese Circulation Society, the Lichtlen Lecture in Davos, Switzerland, and the Chapman Lecture at Baylor College of Medicine in Houston, Texas.



# **SPEAKERS**

Dr. Zahi
Fayad
(University of
Pennsylvania, USA)



> Dr. Zahi A. FAYAD, Ph.D, FAHA, FACC. Dr. Fayad received his PhD from the University of Pennsylvania. He began his work in cardiovascular research at the Johns Hopkins University. Dr. Fayad is the founder and director of the Eva and Morris Feld Cardiovascular Imaging Research Laboratories and the director of the Translational and Molecular Imaging Institute at the Mount Sinai School of Medicine.

Dr. Fayad's current research is in the development of multimodality imaging to study cardiovascular disease. His recent focus has been on the noninvasive assessment of atherosclerosis. He holds several patents in the field of imaging. He is the principal investigator of three grants funded by the National Institutes of Health. He serves on

boards and committees of national and international organizations. Dr. Fayad is the author of more than 150 peer-reviewed publications, 40 book chapters, and over 400 meeting presentations.

Dr. Robert Gerszten (MGH, HMS, Boston, USA)



> Dr. Robert GERSZTEN is Director of Translational Research in the Cardiology Division at the Massachusetts General Hospital. He is also Associate Professor of Medicine at Harvard Medical School and a Senior Associate at the Broad Institute of Harvard and MIT. Dr. Gerszten's research efforts have focused on understanding the molecular basis of inflammation and wound healing in cardiovascular disease. Investigation in his group spans from the bench to the bedside. His laboratory has incorporated emerging proteomics and metabolomics technologies to help identify novel signals derived from leukocytes, endothelial cells, or from the myocardium. In ongoing translational studies, he applies these same methodologies directly to samples from well-phenotyped human

cohorts to identify candidate biomarkers. The research incorporates basic molecular and cell biology, chemistry and mass spectrometry, bioinformatics, and clinical investigation. He is chairman of the National Institutes of Health Clinical Proteomics Centers and also serves on the Cardiovascular Disease Steering Committee for the Human Proteome Organization.

Dr. Farouc Jaffer (MGH, HMS, Boston, USA)

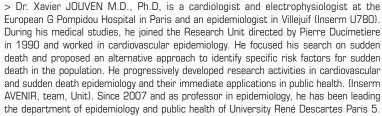


> Dr. Farouc JAFFER is the Director of Vascular Imaging in the Cardiovascular Molecular Imaging Program at Massachusetts General Hospital, Harvard Medical School. He is also an Attending Interventional Cardiologist at MGH. His laboratory is developing molecular imaging technology and solutions to understand the biology of atherosclerosis and thrombosis in vivo. A primary focus of the laboratory is the development of MRI, optical (fluorescence), and integrated nuclear—computed tomography (SPECT/CT, PET/CT) approaches to illuminate important molecular and cellular aspects of vascular disease, including protease activity, cellular inflammation, and transglutaminase activity. The laboratory works closely with the Center for Molecular Imaging Research, a world-renowned center for small animal imaging

and the synthesis of novel nanomaterials. In addition to investigating in vivo biology in genetically- or pharmacologically-altered mouse models of cardiovascular disease, his group is developing promising imaging agents for large animal translation using noninvasive MRI as well as novel catheter-based and noninvasive near infrared fluorescence (NIRF) technology. Successful imaging agents will be investigated in phase I/II clinical trials to evaluate their utility for diagnostic imaging and to provide surrogate endpoints for assessing novel pharmaceuticals.







He is currently secretary of the nucleus of epidemiology of the European Society of Cardiology.





> Dr. Eric LANCELOT is the manager of the Biology Research Department of GUERBET, a French company specialized in the research, development and production of contrast media for medical imaging. He is also the project manager of the cardiovascular research of the Group. Eric LANCELOT prepared a Ph.D. in pharmacology in Paris followed by post-doctoral studies in Boston, in the field of neurodegenerative diseases. He joined GUERBET in 1998 and is in charge of the biological screening of magnetic resonance imaging (MRI) agents in the field of atherosclerosis, cancer, Alzheimer's disease, multiple sclerosis and stroke. He is also the coordinator of the collaborative project ATHIM (atherothrombosis molecular imaging) which is sponsored by the Pole of Competitivity Medicen, France. This

project gathers academic and industrial partners for the synthesis, screening and selection of targeted contrast agents for vulnerable atherosclerotic plaque detection by MRI.



Dr. Richard Lee

(BWH, HMS, Boston, USA)



> Dr. Richard T. LEE is a graduate of Harvard College in Biochemical Sciences and Cornell University Medical College. Dr. Lee completed his residency and cardiology fellowship at Brigham and Women's Hospital and Harvard Medical School in Boston. He is an Associate Professor of Medicine at Harvard Medical School and in Health Sciences and Technology at MIT, and a lecturer in Biological Engineering at MIT. The Lee Laboratory uses emerging biotechnologies to discover and design new approaches to cardiovascular diseases. A central theme of the laboratory is that merging bioengineering and molecular biology approaches can yield novel approaches. Thus, members of the laboratory work at this interface using a broad variety of techniques in genomics, imaging, nanotechnology,

physiology, cell biology, and molecular biology. The Lee laboratory approach is to understand problems and design solutions in the laboratory and then demonstrate the effectiveness of these solutions in vivo. Current projects in the laboratory address myocardial regeneration, heart failure, diabetes and obesity.

Pr. Gilles Montalescot (Inserm, APHP, Paris, France)



> Pr. Gilles MONTALESCOT is Professor of Cardiology at Pitié-Salpétrière Hospital, Paris, France. He heads the Cardiac Care Unit at Pitié-Salpétrière Hospital and is the director of the Inserm research Unit U856 on Thrombosis. His current areas of research include coronary thrombosis from pathogenesis to therapeutics. Dr. Montalescot has been the principal investigator of several national or international randomized trials including the ADMIRAL, ARMADA, ALBION, STEEPLE, ABOARD and ARCHIPELAGO studies. He has been the chairman of the working group on Thrombosis of the French Society of Cardiology and a nucleus member of the Working Group on Thrombosis and Platelets of the European Society of Cardiology. He has served on several task force committees on antithrombotic

drugs and acute coronary syndromes. Dr. Montalescot has received several awards in his country including the J. Valade Prize from the Fondation de France and the J. Escalle award from the National Academy of Medicine. He is a member of the editorial board of the European Heart Journal and has published many peer-reviewed articles in journals such as The NEJM, JAMA, Circulation, ATVB and Circulation Research. He has also been invited to give numerous international lectures.

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Dr. David Morrow (BWH, HMS, Boston, USA)



> David A. MORROW, M.D., MPH is an Assistant Professor of Medicine at Harvard Medical School, in the Division of Cardiovascular Medicine at Brigham and Women's Hospital. Dr. Morrow is an active investigator in the TIMI Group at BWH with a research focus in risk stratification and the management of acute coronary syndromes. He was instrumental in development of the TIMI Biomarker Research Program. He sits on the National Academy of Clinical Biochemistry (NACB) Laboratory Medicine Practice Guidelines Committee on Biochemical Cardiac Markers for which he leads the clinical section on ACS. He is on the editorial boards of American Heart Journal, Circulation, Clinical Chemistry and the Journal of the American College of Cardiology, and he is a Continuing Medical Education Editor for

Circulation. He also serves on the Program Committee for the American Heart Association Council on Clinical Cardiology. In addition to being a frequent lecturer, Dr. Morrow has more than 100 original reports, reviews, editorials, book chapters and electronic publications in his areas of expertise. He is the editor of "Cardiovascular Biomarkers: Pathophysiology and Disease Management".

**Dr. Paul Ridker**(BWH, HMS,
Boston, USA)



> Dr. Paul RIDKER is Professor of Medicine at the Harvard Medical School and directs the Center for Cardiovascular Disease Prevention, a translational research unit at the Brigham and Women's Hospital in Boston which focuses on the molecular and genetic epidemiology of cardiovascular diseases. Dr. Ridker's primary research brings together classical tools of large-scale, population based epidemiology with emerging genetic and molecular techniques. Particular areas of interest involve molecular and genetic determinants of thrombosis, and inflammation with a focus on "predictive medicine", early diagnosis, and the underlying causes and prevention of ACS. Dr. Ridker directs an NHLBI-funded institutional National Research Service Award in CV epidemiology, and Co-Directs

the Leducq Center for Cardiovascular Research at BWH and Harvard Medical School. Dr. Ridker has been the recipient of Clinician Scientist and Established Investigator Awards from the American Heart Association. Time Magazine honored Dr. Ridker as one of America's Ten Best Researchers in Science and Medicine in 2001. Dr. Ridker is the author of over 290 original reports, 110 reviews and book chapters, and 3 textbooks related to cardiovascular medicine.

**Dr. Nader Rifai**(CHMC, HMS,
Boston, USA)



> Dr. Nader RIFAI, Ph.D., is a Professor of Pathology at Harvard Medical School and the Louis Joseph Gay-Lussac Chair in Laboratory Medicine and the Director of Clinical Chemistry at Children's Hospital in Boston. Dr. Rifai's major research interests have focused on the biochemical risk markers of coronary heart disease. He is the recipient of several scientific awards and has been an active member of several national and international professional societies. Dr. Rifai has recently been appointed the Editor-in-Chief of Clinical Chemistry, effective January 2008.



**Dr. Gilles** Rioufol (Inserm, Lyon, France)



> Dr. Gilles RIOUFOL studied medicine in Lyon, France, and graduated from the Lyon Faculty of Medicine. He received his M.D. in 1996 and a Ph.D. in preconditioning and myocardial protection from the Claude Bernard University of Lyon in 2000. He is both an Associate Professor in cardiology, specializing in interventional cardiology, and a researcher in the Inserm unit EMI-U 0226. His main center of interest is coronary atherothrombosis, with a focus on intravascular ultrasound imaging. He worked with Pr Gérard Finet to highlight the concept of pancoronary inflammation in acute coronary syndrome, and is now focusing on the concept of vulnerable plaque and the biomechanics of plaque rupture.

Dr. Marc Sabatine (BWH, HMS, Boston, USA)



> Dr. Marc S. SABATINE, M.D., MPH is an Investigator in the Thrombolysis in Myocardial Infarction (TIMI) Study Group, and an Assistant Professor of Medicine at Harvard Medical School, and the Cardiovascular Medicine Division at Brigham and Women's Hospital. Dr. Sabatine's primary research interest is in acute coronary syndromes. Dr. Sabatine also has a particular interest in biomarkers, genetic epidemiology, and proteomics for risk stratification. His research endeavors in those fields are supported by several grants from the National Institutes of Health and his involvement in the Donald W. Reynolds Cardiovascular Clinical Research Center on Atherosclerosis at Harvard Medical School. Dr. Sabatine has authored or coauthored over 60 original, peer-reviewed research articles

and more than 40 reviews, editorials, chapters, and books. Dr. Sabatine has been awarded the John Harvard Scholarship for Academic Achievement, a Howard Hughes Medical Institute Research Fellowship, the American College of Cardiology/Merck Adult Cardiology Fellowship, and the American College of Cardiology Young Investigator Award.

Dr. Alain Tedqui (Inserm, APHP

Paris, France)



> Dr. Alain TEDGUI obtained his Ph.D. thesis in Fluid Mechanics. After his post-doctoral fellowship at the Imperial College, London, he joined the French Institute of Health and Medical Research (Inserm) in 1983. He has been heading an Inserm laboratory at Paris Hospital Lariboisière from 2000 to 2004. His is currently the Scientific Coordinator of the first European Network of Excellence in the field of vascular biology and medicine, the European Vascular Genomics Network (EVGN). His current primary research is aimed at elucidating the role of apoptosis and inflammation in atherosclerosis. More recently, he bridged the interface between vascular biology and immunology in showing that a subset of immune cells, regulatory T cells, limits the development of atherosclerosis and can be used as a promising

anti-atherosclerotic strategy to curtail inflammation. He is the European Editor of Arteriosclerosis Thrombosis and Vascular Biology.

Dr. Laurence **Tiret** (Inserm, Paris, France)





> Dr. Laurence TIRET is Director of Research at the French Institute for Medical Research (Inserm). She received her Ph.D in Mathematical Statistics from Paris VI University in 1978. She later specialized in genetic epidemiology. Her main research interests concern the development of novel strategies and methods for analysis of the genetic component of complex diseases and their application to large epidemiological studies aimed at identifying susceptibility genes to common cardiovascular disorders. In collaboration with François Cambien, she has done pioneering work in the characterization of the sequence variability and the structure of linkage disequilibrium in human genes. She also pioneered research in the field of system genetics as exemplified by various studies of

inflammatory gene systems in atherothrombosis. Her research interest is now moving to genome-wide approaches aimed at discovering new pathophysiological mechanisms of disease using high-throughput DNA chips.

Pr. Faiez **Zannad** (Inserm, Hôpital Central

Nancy, France



> Pr. Faiez Zannad, M D, certified cardiologist (1979). MRC Research Fellowship, Oxford, UK (1981), UK. PhD in cardiovascular clinical pharmacology, Lyon 1986. Currently Professor of Therapeutics, head of the Division of Heart Failure and Hypertension, University hospital of Nancy, and Director of the Inserm Clinical Investigation Center (CIC), and of a research group at Inserm Unit U684 on Cardiac Fibrosis, Stiffness and cardiovascular risk. Coordinator of a Joint Research Program on transition from Hypertension to Heart Failure, in the EU funded Network of Excellence "InGeniousHyperCare". He has designed, conducted and published several major clinical trials. Dr. Zannad is, Vice-chairman of the ESC Working group on pharmacology and drug therapy, Board member of the ESC Heart

Failure Association and Chairman of the French Society of Hypertension. He is Co-Editor of Fundamental and Clinical Pharmacology, the journal of the European Federation of Pharmacological Societies (EPHAR).

#### • Embassy of France in the United States

The Office of Science and Technology of the Embassy of France is a multidisciplinary team of 35 faculty members, senior researchers and staff scientists under the leadership of a science counselor who reports directly to the Ambassador.

The Office is distributed between headquarters at the French Embassy in Washington, DC, and 5 satellites offices in the Boston (MA), Chicago, (IL), Houston, (TX), Los Angeles, (CA) and San Francisco (CA) consulates.

The role of the Office incorporates three strategic missions:

- To monitor advances in science and technology to stakeholders, decision makers and scientists.
- To establish and/or strengthen partnerships in science and technology.
- To promote exchanges of students, researchers and entrepreneurs.

Every year, the Office of Science and Technology develops programs in the following areas: information communication technologies, innovation and entrepreneurship, life sciences, nanotechnologies, agronomy, environment and sustainable development. The Office organizes major bilateral events such as an innovation day and several meeting events dedicated to science and technology, intended to foster S&T cooperation between the US and France.

The action of the Office of Science and Technology is strongly coordinated with other diplomatic offices, such as the Trade Department or the Cultural Services. This situation allows the Office for Science and Technology to efficiently handle the many economic and social implications of today's science and technology.

The Office of Science and Technology: your portal to the American and French webs of science.

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#### • Inserm

Inserm is the French national organization dedicated to biological, medical and public health research. It is fully committed to studying all human diseases, whether common or rare. For over 40 years, Inserm has been at the heart of major scientific and medical advances, addressing current public health issues and opening new perspectives in the biomedical field.

Inserm facilitates active interfacing between the major health research players, namely universities, hospitals and industry. Inserm ensures the continuum from basic to clinical, therapeutic and public health research through its commitment to basic research and its involvement in translational research. Inserm also plays a key role as an independent expert in public health to inform decision makers.

Worldwide collaboration is one of Inserm's top priorities. The Institute therefore nurtures strong links with the international scientific community (6,000 international collaborative projects, 150 European projects, 4 Inserm Units abroad and 20 International and European Associated Laboratories...)

Inserm's private subsidiary, Inserm-Transfert, is dedicated to technology transfer and supports the development of innovative results from Inserm laboratories into new therapeutic or diagnostic applications.

Inserm facilities involve 13,000 people, including 5,700 people directly employed by Inserm. The remaining staff is supported by other public research institutions, hospitals and universities. Inserm's facilities currently comprise:

- 340 Research Units, including 19 Research Centers, 80% of them located on university hospital premises
- 41 Clinical Research Centers which represent a total of 120 beds and 300 professionals entirely dedicated to clinical research
- 49 Centers for Biological Resources

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