

# MIT-France Seed Fund Grantees 2006-2007

Total grants: 18 / Total award: \$170,750

## Architecture and Planning

### *From Technopole to Techno-Region*

Award: **\$12,000.00**

Collaboration  
between:

Zegras, Christopher  
Assistant Professor

Urban Studies and Planning

Maumi, Catherine  
Maitre-Assistant Associe

University of Grenoble  
Grenoble

## Engineering

### *Design of a Glucodialdose to Glucuronic Acid Converting Enzyme for Glucaric Acid Production in E. coli*

Award: **\$9,800.00**

Collaboration  
between:

Prather, Kristala Jones  
Assistant Professor

Chemical Engineering

Jaramillo, Alfonso  
Maitre de Conferences

École Polytechnique  
Palaiseau

## Engineering

### *Climate Variability and Malaria Transmission in Africa*

Award: **\$9,000.00**

Collaboration  
between:

Eltahir, Elfatih  
Professor

Earth System Initiative  
Civil and Environmental Engineering

Reiter, Paul  
Director

Pasteur Institute  
Paris

## Engineering

### *PLUTON*

Award: **\$12,500.00**

Collaboration  
between:

O'Reilly, Una-May  
Principal Research Scientist

Computer Science and Artificial Intelligence Lab

Schoenauer, Marc  
Senior Researcher

INRIA  
Orsay

## Engineering

### *Mapping and Scheduling for Multicore Processors*

Award: **\$9,400.00**

Collaboration  
between:

Amarasinghe, Saman  
Associate Professor

Computer Science and Artificial Intelligence  
EECS

Vivien, Frédéric  
INRIA junior researcher

École normale supérieure de Lyon  
Lyon

Engineering

***New Chemical Sensors based on Quantum Dot Structures***

Award: **\$15,000.00**

Collaboration  
between:

Palacios, Tomás  
Assistant Professor

Microsystems Technology Laboratories  
EECS

Mariette, Henri  
Directeur de Recherche DR2

Université Joseph Fourier - CNRS  
Grenoble

Engineering

***Energy flow and energy harvesting in nanoscale systems***

Award: **\$13,000.00**

Collaboration  
between:

Marzari, Nicola  
Associate Professor

Materials Science and Engineering

Mauri, Francesco  
Professor

Université Pierre et Marie Curie (Paris VI)  
Paris

Humanities, Arts and Social Sciences

***Presuppositions and Implications***

Award: **\$10,500.00**

Collaboration  
between:

Fox, Danny  
Associate Professor of Linguistics

Linguistics

Égré, Paul  
Chargé de recherches

CNRS  
Paris

Science

***Impact demagnetization of geological materials***

Award: **\$9,150.00**

Collaboration  
between:

Weiss, Benjamin  
Victor P. Starr Assistant Professor of Planetary

Paleomagnetism Lab  
Earth, Atmospheric, and Planetary Sciences

Gattacceca, Jerome  
Director of Research

CNRS  
Aix-en-Provence

Science

***Combinatorics and Geometry of Convex Polyhedra***

Award: **\$5,200.00**

Collaboration  
between:

Pak, Igor  
Associate Professor of Mathematics

Mathematics

Schlenker, Jean-Marc  
Professor

University Paul Sabatier-Toulouse  
Toulouse

Science

***Direct Numerical Simulation of Inhomogeneous Systems and Suspensions***

Award: **\$10,500.00**

Collaboration  
between:

Rosales, Rodolfo Ruben  
Professor

Lemaitre, Anael  
Researcher

Mathematics

Institut Navier  
Chamos sur Marne

Science

***Fluctuation induced interactions***

Award: **\$5,500.00**

Collaboration  
between:

Kardar, Mehran  
Professor

Emig, Thorsten  
Charge de Recherche (CR1)

Condensed Matter Theory  
Physics

University Paris Sud (Orsay)  
Orsay

Science

***Generalizing Geometry in String Theory***

Award: **\$10,000.00**

Collaboration  
between:

Taylor, Washington  
Professor

Minasian, Ruben  
Chargé de recherche de 1ère classe

LNS Center for Theoretical Physics  
Physics

CEA-Saclay  
Gif-sur-Yvette

Interdisciplinary

***Spin-transport with complex oxide materials***

Award: **\$7,500.00**

Collaboration  
between:

Moodera, Jagadeesh  
Senior Research Scientist

Bibes, Manuel  
Research Scientist

Francis Bitter Magnet Laboratory

CNRS  
Paris

Interdisciplinary

***Spin filtering studies for spintronic applications***

Award: **\$7,500.00**

Collaboration  
between:

Moodera, Jagadeesh  
Senior Research Scientist

Moussy, Jean-Baptiste  
Junior Research Scientist

Francis Bitter Magnet Laboratory

Commissariat à l'Energie Atomique (CEA) - Saclay  
Gif-sur-Yvette

Interdisciplinary

***ECLAIRS***

Award: **\$3,000.00**

Collaboration  
between:

Ricker, George  
Senior Research Scientist, Pricipal Investigator

Cordier, Bertrand  
Chief Payload Scientist

Center for Space Research (CRS)

Centre de l'Energie Atomique  
Saclay

Interdisciplinary

***Flash Pyrolysis of Biomass by Microwave-Generated Plasma***

Award: **\$9,400.00**

Collaboration  
between:

Hadidi, Kamal  
Senior Research Scientist  
  
PSFC Plasma Systems Division  
Plasma Science and Fusion Center

Fulcheri, Laurent  
Professor  
  
L'Ecole de Mines de Paris  
Paris

Interdisciplinary

***Radio Frequency Heating of Magnetically Confined Plasmas for Fusion Energy***

Award: **\$11,800.00**

Collaboration  
between:

Ram, Abhay  
Principal Research Scientist  
  
Plasma Science and Fusion Center

Peysson, Yves  
Research Scientist  
  
Commissariat a l'Energie Atomique  
Cadarache