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Dear Colleague,

We are delighted to announce that our Institution (Atomic Energy Commission, CEA) is launching a major project called "*NeuroSpin*".

The aim of *NeuroSpin* will be to push as far as possible the current limits of Nuclear Magnetic Resonance imaging and spectroscopy to study the central nervous system, from mice to humans. Benefiting from CEA know-how in the conception of magnets and NMR technology, this technical platform will be equipped with outstanding MRI/MRS equipment and related tools and an advanced computer platform. At this stage a feasibility study is underway for an ensemble of four MRI/MRS systems including:

- a 3T and a 11.7T wide bore MR scanners for clinical studies,
- a 11.7T system for anaesthetized and awake monkey studies,
- a 17T small bore system for rodent studies.

NeuroSpin will house a fully equipped clinical suit with beds and test/examination rooms (neuropsychology, electrophysiology, pharmacology) to accommodate protocols involving normal volunteers and patients. The center will also be equipped with an animal care facility designed for rodents (transgenic mice) and trained primates, as well as several laboratories (electronics, chemistry, biology, histology,...).

Located in Saint-Aubin, within the CEA center of Saclay near Paris, this imaging platform will be unique in Europe. It will offer exceptional resources to the international scientific community with a strong multidisciplinary environment (mathematics, physics, computer sciences, signal and image processing, neurosciences,

neuropsychology, neurology, brain development, molecular imaging, functional genomics,...).

Large office spaces will be provided to accommodate external teams. Indeed, beside resident researcher teams, technicians and support teams, *NeuroSpin* has been conceived as an *open, shared facility* designed to welcome international teams of researchers on a temporary basis (weeks to months), giving them the opportunity to carry out their own studies. This concept, which has been in use for years in the physics community (accelerators, synchrotrons,...), has proven very successful, allowing teams to share expensive or rare equipment they could not afford on an individual basis.

Although the opening of NeuroSpin is scheduled for 2006, we are already collecting *letters of intention* from renown international teams. These letters will help us to fine tune and secure the facility in terms of office spaces and equipment before final completion. Acceptation and scheduling of the projects will be under the supervision of an International Scientific Advisory Board.

Your world renown reputation in the field has led to consider that your team could be interested by this opportunity. We are, therefore, inviting you to submit such a letter of intention (2 to 4 pages) indicating:

- name and references of the laboratory/institution,
- name of the researchers involved indicating how many would need to be physically present at *NeuroSpin*,
- short description of the project,
- rationale for using very high field systems,
- expected duration of the project,
- special needs for equipment,
- literature references.

We welcome projects aimed either at methodological developments (MRI/MRS physics, instrumentation, image processing, neuronal modeling, molecular imaging,...) or neuroscience applications (normal human volunteers or patients, animal models involving non human primates or rodents, neural modeling, biological effects of magnetic fields,...).

In order to finalize our plans we would appreciate receiving your letter as soon as possible.

We sincerely hope that you will be interested in this outstanding project and we would be honored by your future participation.



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