



## **Innocampus Program 2010 Call**

# **CEI UAM+CSIC 2010 Proposal Executive Summary**

*Leading Madrid North*

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## 1. CEI UAM+CSIC'S FIRST YEAR

### 1.1 An overview of the UAM+CSIC CEI Project

The Strategic Plan submitted jointly by the Universidad Autónoma de Madrid (UAM) and the Consejo Superior de Investigaciones Científicas (CSIC) for their CEI UAM+CSIC project aims to develop six major strategic lines:

1. To strengthen the CEI UAM+CSIC's strategic research areas and their international visibility.
2. To improve teaching quality and to adapt undergraduate and graduate studies to the EHEA.
3. To attract International Talent.
4. To articulate and develop a powerful innovation and transference network.
5. To transform its Campus into a true University City.
6. To advance towards a Regional Campus.

For this the Strategic Plan considers three aggregation levels. The first is the academic-research aggregation of the UAM and CSIC, plus the IMDEA Institutes in Nanoscience and Food Science and, eventually, other leading research institutions. The second is the technology transfer and innovation aggregation with the Parque Científico de Madrid (PCM), the four business associations of the CEI environment (ACENOMA, AICA, ASEYACOVI and FEMAN) and thirty large companies. Finally, a third regional aggregation will enhance and enlarge the already active and successful ongoing collaboration with the CEI's surrounding city councils and other institutions.

### 1.2 First steps in 2010

The CEI UAM+CSIC project will receive an eleven million euro loan under an agreement with the Consejería de Educación of the Comunidad de Madrid. About five million Euros are being invested in 2010, mostly on campus infrastructure projects, which will be complemented with new funding from the CEI's proposal to the Additional Funding subprogram of the 2010 Campus de Excelencia call of the Ministerio de Educación (see below). On the other hand, about six million Euros will be invested in 2011 and 2012 in a series of research and innovation actions embedded in a major ongoing effort to build in the Cantoblanco Campus new cutting edge facilities such as the buildings of the Mathematics and Theoretical Physics institutes, the IMDEA Nanoscience, the Centro de Investigación en Alimentos (CIAL) and the PCM's Centro de Laboratorios de Apoyo a la I+D (CLAID) and Bioincubadora.

One of the main goals of the UAM+CSIC CEI project is to achieve a bigger coordination and integration among both institutions, going beyond the shared governance of the five joint UAM-CSIC research Institutes. In fact, the CEI initiative defines a larger framework where UAM and CSIC will have driving roles but where other entities will also participate. Because of this, the UAM and CSIC are contemplating the opportunity to set up a specific body to define, promote and follow the main actions and programs of the CEI project. This body would also be in charge of communication strategy and will eventually serve as the formal integration point for other organizations also involved in the CEI project.

On the other hand, at this moment the UAM Campuses, particularly the Cantoblanco Campus, host buildings and facilities from four different institutions (UAM, CSIC, PCM and Comunidad de Madrid) with concrete and sometimes highly specialized physical requirements. This has led to the establishment of a working group that will be eventually be the kernel of a body for the coordinated management of the Campus' infrastructure and physical elements that have a common use.

### 1.3 The CEI UAM+CSIC proposal in the 2010 Campus de Excelencia call

In the year 2010 the CEI UAM+CSIC will concentrate its research and innovation funding proposal in the Innocampus call and put other CEI development activities in its proposal to the 2010 Campus de Excelencia call of the Ministerio de Educación, where six major undertakings are considered. Two of them, the Plaza Mayor (Main Square) building and the Strategic Campus Planning deal with physical infrastructures, while the extension of the Institutional Web Portal and the start of the Electronic Administration implantation will advance the e-Campus concept. A new, third electrical connection will be built, mostly to serve the Campus' five new research buildings mentioned above. Finally, the Communication Plan will strengthen the international character of the CEI UAM+CSIC.

These actions will require that UAM invests 27,85 million Euros over three years, of which 10,24 million have been requested for funding in the 2010 Ministerio de Educación call.

## 2. THE INNOCAMPUS PROPOSAL

### 2.1 Main Goals

As it has been mentioned, the CEI UAM+CSIC 2010 Innocampus proposal concentrates all research and innovation actions, with four main goals

- To improve the UAM's general purpose research infrastructure through the Supercomputation Node and the Research Labs upgrade actions.
- To advance in the UAM+CSIC Technological Platform concept, where new high level research equipment is installed and run in a centralized way, is open to the CEI's leading research groups and even outside ones, and is managed under an efficiency and sustainability financial outlook.
- To contribute to the new infrastructures being built in the Campus such as the state-of-the-art Nanoscience facilities or the CIAL food science center.
- To facilitate the transfer of the CEI-generated technology to its economic hinterland and to foster innovation by the companies there, particularly SMEs.

While physical equipment actions dominate the 2010 Innocampus proposal, it must be pointed out that they are complemented by two human capital actions funded by the 2009 CEI call under the agreement recently signed with the Consejería de Educación of the Comunidad de Madrid. These are:

- To establish a number of master and PhD scholarships as well as predoctoral contracts to strengthen a selected series of high quality Masters and PhD programs taught in English and with an international visibility.
- To initiate the recruitment of high quality scientists under specific contracts complemented with grants for the start-up of corresponding research groups.

These actions, to be carried out in 2011 and 2012, have a total budget above two million Euros.

### 2.2 Concrete actions

The 2010 Innocampus proposal has five research infrastructure actions and a sixth innovation initiative:

- 1. The implementation of Science/Technology Platforms in Cytometry, Confocal Microscopy, Electron Microscopy, Animal Models, and the Production of Recombinant Proteins and Antibodies.**

The Science/Technology Platforms will function as research support units with a centralized management, equipped with the latest technology, staffed with highly specialized personnel and managed under an efficiency and sustainability framework. They complement the already launched Genomics platform and the ones in Proteomics and Metabolomics to be funded under CEI UAM+CSIC 2009 call.

**2. The implementation of Science/Technology platforms in Food Science.**

They will be promoted under the Centro de Investigación en Alimentos (CIAL), a joint UAM-CSIC Food Research Center and a key element in one of the strategic lines of the CEI UAM+CSIC, the development of a Food Science Campus.

**3. The equipment of the Nanofabrication Center.**

The nanofabrication center to be built in the new Nanoscience Institute of Advanced Studies (IMDEA) is a cutting edge equipment for Nanoscience and Materials Science, an area that represents one of the CEI UAM+CSIC strongest commitments in the pursuit of international excellence.

**4. The improvement of laboratories and research infrastructure in priority areas of the CEI UAM+CSIC.**

The UAM has a long standing strategy for the regular update of the labs of its many highly competitive research groups, a policy to be markedly strengthened with the launching of the CEI UAM+CSIC project.

**5. The upgrade of the CEI UAM+CSIC Supercomputation Node.**

This will complement an ongoing major upgrade of the physical infrastructures of the Centro de Computación Científica so that it may better meet the growing demands for high performance computation and become a node affiliated to the Red Española de Supercomputación.

**6. The out-projection of the CEI UAM+CSIC Transfer channel.**

Last March the UAM and the four major business associations of Madrid North have established the Asociación para el Fomento de la Innovación en Madrid Norte and created its Oficina de Innovación to work in the midst of the companies that demand innovative products and services and link them with the CEI UAM+CSIC's transference channel.

These actions are to serve two other important overall goals. The first one is the implementation of the **Inter-institutional Service for the Characterization of Advanced Materials**, a new service center under joint UAM/CSIC management in this strategic area of research and innovation. The second one is to update the **SIDI** and the **SEGAINVEX** services, both being mainstays of UAM's support of its research activity. The ISO 9001 certified SIDI labs focus on the structural, morphological and compositional characterization of materials of all kinds, from metals to biologically active materials, while SEGAINVEX provides essential support in the areas of electronics, mechanics, and glass, and in the development of new scientific instruments.

### 3. BUDGET SUMMARY

#### Action budgets

Action	Budget Estimate	Other funding	Funding from Innocampus 2010
Platform "Advanced Technologies for the Generation and Characterization of Animal Models" (INNOTEC)	3.795.000	1.590.500	2.204.500
Platform of Food Innovation (NOVALINDUS)	2.023.475	1.228.475	795.000
Centre of Nanofabrication	7.000.000	6.500.000	500.000
Supercomputation Node	1.948.000	1.285.000	663.000
Improvement of laboratories and research infrastructures in priority areas of the CEI UAM+CSIC	3.851.000	2.037.000	1.814.000
Association for the Promotion of Innovation	255.000	150.000	105.000
	<b>18.872.475</b>	<b>12.790.975</b>	<b>6.081.500</b>

#### Type of Expenses (as defined in the Call)

	2010	2011	Total
Scientific and technical equipment	4.272.475	4.804.000	9.076.475
Buildings and other basic infrastructure	3.265.000	6.196.000	9.461.000
Outsourcing required for Project execution	30.000	120.000	150.000
Other expenses	100.000	85.000	185.000
<b>Total</b>	<b>7.667.475</b>	<b>11.205.000</b>	<b>18.872.475</b>

**Funding Sources**

	<b>2010</b>	<b>2011</b>	<b>Total</b>
CEI UAM+CSIC funding	<b>3.027.000</b>	<b>3.253.000</b>	6.280.000
Other funding sources	<b>1.300.000</b>	<b>3.145.000</b>	4.445.000
Funding from other CEI calls	<b>1.657.475</b>	<b>410.000</b>	2.067.475
Funding from Innocampus 2010	<b>1.683.000</b>	<b>4.397.000</b>	6.080.000
<b>Total</b>	<b>7.667.475</b>	<b>11.205.000</b>	<b>18.872.475</b>