#### DIES-CONFERENCE STRENGTHENING UNIVERSITIES, ENHANCING CAPACITIES– HIGHER EDUCATION MANAGEMENT FOR DEVELOPMENT

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Working Group A: Capacity Development in the field of Research Management

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Creation of the Research Vice-Presidency in 1974 in order to

- Supervise
- Coordinate
- Promote

The Research Vice-Presidency comprises different units:

- Project management
- Fund raising and networking
- Quality management:
  - accreditation of lab tests and best lab practices
  - Indexation of scientific journals
  - Open access and open archives (repositories)
  - Creative Commons
  - PROINNOVA (Knowledge transfer and Innovation)

Promoting scientific research through:

- Special university-wide (competitive) funds to stimulate research
- Special (competitive) funds to promote research undertaken jointly by researchers from different UCR-campuses
- Complementary funds to support the process of reintegration of young scientists who study abroad
- Special funds to support emerging new areas of research and knowledge
- Complementary funds to create insitutional research programms (e.g. Neuroscience, Biofuels, etc.)
- Funds to support national and international networking (peerto-peer or university-to-university)

Promoting scientific research through:

- Investment in lab equipment
- •Subscription of full text data bases
- •Funds to support international visiting scholars
- •Funds to support attendance to international scientific meetings or extended research internships
- •Occasional support to publish scientific articles or books in international journals or publishing houses
- Special (competitive) funds for students (bachelor and master)

Promoting scientific research through:

•University-wide scholarships programm to promote international Ph.D.s (including bilateral agreements, e.g. ALECOSTA with DAAD). At present time, 209 UCR-faculty members doing Ph.D. abroad.

Internal and external evaluation of research centers

Internationalization of research

Promoting scientific research through:

 Incentives to individual researchers, such as annual Research Prize and Humboldt-Chair (research sabbatical)

•Workshops on proposal writing and writing of scientific papers

•Management of external funds through the University Research Foundation

#### Challenges:

- Critical mass and sustainability of research groups
  Training and hiring policies of young researchers
  Promoting interdisciplinary research endeavors (including cooperation between natural and social sciences)
- •Decreasing and deflating the bureaucratic load
- •Linking university research with industry
- •Strengthening research financing by national goverment
- •Enhancing international cooperation based on active participation and mutual benefits

#### Outlook:

UCR-Science Park:

- To create an interface between university research centers, potential entrepreneurs and already existing enterprises in order to facilitate the incubation of new knowledge-based enterprises constituted by students and faculty members.
- To coach university entrepreneurs through specialized training and accreditation of their skills for eventual bank admission as subjects of credit.

#### Outlook:

UCR-Science Park:

- To spill over knowledge between research centers and already incubated enterprises to improve their competitiveness and innovation potential.
- To facilitate basic infrastructure for knowledge-based start-ups originated by students, young graduates and faculty members.
- To expand the scope of the research and technological park to the Central American Region in order to provide this region with the necessary capacities to improve their quality of life and their competitiveness as knowledge-based economies.

#### THANK YOU

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