Research and Exchange Opportunities in Mexico

Institute for Innovation and Technology Transfer
• Nuevo Leon’s Innovation System
  • Context:
    – Economic Data of Nuevo Leon
    – State Program in Science, Technology and Innovation 2010-2015
  • Programs for funding R&D, innovation and graduate scholarships
    – State programs
    – Federal Funds
• Population of 5 M (4% of Mexico)

• GDP 8% of Mexico

• GDP per capita USD $18 500 vs. avg. USD $8 500 USD Mexico

• 4 major Universities (ITESM, UANL, UDEM, UR)

• 93 colleges and universities

• More than 150 000 students at University level

• 15 000 students graduated per year in engineering & sciences careers

• USD $2 750 M FDI (20% of Mexico)
The State Program in Science, Technology and Innovation is based in six strategies:

**Strategy 1.** Developing **Human Resources** in Strategic Knowledge Sectors for Nuevo León

**Strategy 2.** **Promote innovation** in the strategic productive sectors

**Strategy 3.** Increase the **Scientific and Technological Infrastructure**

**Strategy 4.** **Promote the Basic and Applied Research** in strategic sectors of Nuevo Leon

**Strategy 5.** Promote **New Businesses based on Innovation**

**Strategy 6.** **Spread the impact of Science, Technology and innovation** on the economic and social development at entity level.

To support the State’s Innovation Ecosystem
Nuevo Leon’s Innovation Ecosystem

Strategic Framework
- Strategic Program in Science, Technology and Innovation 2010-2015

FOCUS ON:
- 10 Strategic Innovation Clusters
- 2009: Law for Fostering Knowledge & Technology Innovation
- General Council on STI, Institute for the Innovation and Tech Transfer, Consultative Citizens and Academic Committees, Industrial Clusters Associations

Legal Framework
- 1% of the State Investment Budget for STI
- 2009: Law for Fostering Knowledge & Technology Innovation

Institutional Framework
- Leader in FDI Attraction
- More than 93 colleges and Universities
- 2 International Airports
- More than 14 years with no industrial strikes
- GDP per capita double than national avg.

RESULTS
- New Products
- New Services
- New Technologies
- New Businesses
- Solutions to Problems of Public Interest

IMPACTS
- Competitiveness
- Productivity
- Value added
- Income
- Quality Jobs
- Entrepreneurial Culture
- Social Wellbeing

Favorable Environment
- Leader in FDI Attraction
- More than 93 colleges and Universities
- 2 International Airports
- More than 14 years with no industrial strikes
- GDP per capita double than national avg.

Capacity to develop talent
- Physical Infrastructure Capacity
- Capacity to Generate Knowledge
- Entrepreneurship Capacity

RESULTS
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10 Strategic clusters:
- IT & Software
- Automotive and autoparts
- Domestic Appliances
- Biotechnology
- Medical Services
- Agribusinesses
- Nanotechnology
- Aeronautics
- Multimedia and Creative Industries
- Sustainable Housing Development

Operation supported by private & public funds

Long Term Strategic Plan

Strategic agenda and specialized committees:
- Human Resources
- Investment & Growth
- Innovation

The R&D and innovation funds are tailored to make these clusters more competitive.
Nuevo Leon’s Innovation Ecosystem

• Scholarships in strategic areas:
  
  – Sustainability and renewable energy
  – Health sciences
  – Pharmaceutical
  – Biotechnology
  – Material sciences and Nanotechnology
  – Information Technology
  – Agriculture, beverage and food sciences
  – Electronics
  – Aeronautics
  – Security
  – Mechatronics, advanced manufacturing
  – Logistics and supply chains

• We are looking for new partners with the best programs in these areas
• There are 200 scholarships available per year for studying abroad at PhD and MSC level
• The candidates must comply with a letter of intent of a local company/institution to hire them at the end of their studies
We can facilitate contact with local universities to explore opportunities for joint dual degrees, student and professor exchanges, sabbaticals, etc.
Member of:

- IASP (International Association of Science Parks)
- AURP (Association of Universities Research Parks) Member

2012 - 2015:

- A total of 33 public and private research centers and 4 High-Tech Incubators
- USD $350 million accumulated investment
  - USD $100 million state & federal resources
  - USD $250 million are third-party resources
- 6,000 scientists, technicians and support personnel

A thriving innovation ecosystem open to foreign R&D centers from universities and private companies.
• 40 Ha land extension

• 20 new research centers

• A land investment of USD $11 millions

Next Steps:
• 20 new research centers
• Master Plan for 2 500 Ha adjacent to PIIT: Creative and Knowledge City
### Research and Technology Innovation Park, PIIT

**Universities**
- UANL (2)
- ITESM
- UT
- UDEM
- UNAM (3)
- ITNL
- Universidad Regiomontana

**Public Centers**
- IANL
- CINVESTAV (2)
- CIMAV
- CIDESI
- CIATEJ
- PROLEC - GE
- IIE
- CICESE
- CIMAT

**Private Research Centers**
- Motorola
- Pepsico - Gamesa
- Sigma Alimentos
- Monterrey IT Cluster/ LANIA
- PROLEC - GE
- VIAKABLE
- KATCON
- METALSA

**Incubators**
- Nanotechnology
- Biotechnology
- Information Technologies
- Alternative Energy (Conceptualization stage)

**Strategic areas:**
- Sustainable housing
- Nanotechnology
- Information Technologies
- Mechatronics and Robotics
- Health
- Adv. Manufacturing
- Renewable Energies
- Biotechnology

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MIX FUND CONACYT – NL 2001-2011
More than USD $185 millions of allocated funds in Science, Technology and innovation in the following modalities:
- Scientific research
- Technological development
- Training of human capital
- Infrastructure creation and strengthen
- Spread of science

A total of 47 calls for proposals and 218 projects approved

FEDERAL INNOVATION FUNDS

The funds may be used for international cooperation in projects and to establish dual degree programs
Nuevo Leon’s Innovation Ecosystem

NUEVO LEÓN’S FUND FOR INNOVATION (FONLIN)

– New products or services proposals based on scientific and technological innovation that are in a pre-commercial stage

– The economical support depends on the nature of the project and the availability of the fund

– Runtime 2 years maximum

– Concurrent funds CONACYT, I2T2, FUNTEC, IADB

– Angel Capital:
  • Monterrey Global Ventures

We are open for entrepreneurs that would like to establish their technology based companies in Nuevo Leon.
CONACyT’s Science and Technology Policy Mix of programs and instruments

<table>
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<tr>
<th>Basic Science</th>
<th>Applied Research</th>
<th>Technology Development</th>
<th>Business-Technology Integration</th>
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<tbody>
<tr>
<td>Ministry of Education CONACYT's Fund</td>
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<tr>
<td>- New knowledge generation</td>
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<td>- Human Capital Education (Postgraduate programs, young talents and postdoctoral grants)</td>
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<td>Sectorial and State Funds</td>
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<td>- Oriented to solve National Problems and priorities</td>
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<td>- New Product and Processes development (grants up to 50%)</td>
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<td>- Research infrastructure</td>
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<tr>
<td>International EU Fund</td>
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<tr>
<td>- Strengthening research networks</td>
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<tr>
<td>Incentives for research and innovation (INNOVAPYMES, PROINNOVA, INNOVATEC)</td>
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<tr>
<td>- Funds to promote linkages university- industry, private research centers</td>
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CONACyT's funds for:

1. Seed capital
2. Risk capital
3. Credit lines
4. Innovation Consortia
5. Patenting
6. Technology Transfer Units

- Private Investors
- Entrepreneurs
- Business Schools
- Business experts (Mentors)
- Innovation networks Public/Private alliances

New High Value Added Businesses
New Services and Products technology based

Pre-commercial Stage
Business Generation
Commercial

All of these programs have the component of international cooperation
All of the programs may allocate funds for the component of international cooperation, such as:

- Scholarships for PhD or Master
- Student exchange at graduate level
- Professor exchange
- Joint collaboration in R&D projects
- Sabbaticals
- Dual degree programs
- New international businesses
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