

Assessed exercise 02
49th CIDTEC

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1 Overview

The “*Congreso de Investigación y Desarrollo*” of *Tecnológico de Monterrey* is evolving towards a new investigation model to match the goals set by the National Schools, the Strategic Approach Research Groups, and the Research Professor Model.

Tecnológico de Monterrey has a commitment to research, which constitutes an institutional priority whose objective is to: a) contribute significantly to the academic quality of the teaching-learning process; b) convert scientific and technological knowledge into innovative solutions that benefit society; and c) Transform, through the generation and transfer of knowledge, to the communities in the economic, political and social matters.

The “*Congreso de Investigación y Desarrollo*” provided the means to present the research developed by teachers and students in the following subjects:

- Public politics
- Education, Humanities and Social Sciences
- Medicine
- Mechatronics
- Biotechnology
- Information Technology, Electronics and Communications
- Sustainable technologies
- Business

On the other hand, “*Congreso de Investigación y Desarrollo*” allowed professors, executives, researchers, master’s, professional and preparatory students to actively participate in several events such as:

- Conferences/lectures
- Panels
- *Rómulo Garza* 2018 Awards
- Project Presentations
- Focus-Groups Parallel-Sessions
- Talks
- Networking
- Instructor-Student Workshops

Tecnológico de Monterrey outstanding leaders participated in the event within the research areas which have been identified as *strategic focus areas*. In addition, 42 Strategic Approach Research Groups with consolidated research lines and outstanding scientific and technological production were present at the event.¹

¹ “49° CONGRESO DE INVESTIGACIÓN Y DESARROLLO”, 2019.

2 Collection summaries

2.1 Panel: The Future of Entrepreneurship

(Carsrud, Austin, & Pichardo, 2019)

Participants	Alan L. Carsrud, James E. Austin, and Alexei Pichardo
Place	<i>Sala Plenaria, Centro de Congresos</i>
Schedule	Wednesday 30 Jan 2019, 09:30 – 11:00 hrs

Table 1: [Overview] The Future of Entrepreneurship

2.2 Conferencia magistral: El papel de la educación superior en México de cara al futuro que se avecina

(Graue, 2019)

Participant	Dr. Enrique Graue
Place	<i>Sala Plenaria, Centro de Congresos</i>
Schedule	Wednesday 30 Jan 2019, 13:30 – 14:30 hrs

Table 2: [Overview] El papel de la educación superior en México de cara al futuro que se avecina

2.3 Conferencia magistral: Creating Top Research-Intensive Universities

(Andersson, 2019)

Participant	Profesor Bertil Andersson
Place	<i>Sala Plenaria, Centro de Congreso</i>
Schedule	Wednesday 30 Jan 2019, 14:30 – 15:30 hrs

Table 3: [Overview] Creating Top Research-Intensive Universities

“We need a top-down approach”

When articles are written, in regards on what we can do to evolve our *university system*, they are focused very much on the individual actions we take, for instance: the introduction of new technologies (or offer English-only courses) and these are things we should be doing. However, considering that we are end-point users in a complex network, a more effective way of our way of teaching is to tackle the network interactions from the top-down; and that requires a *governance for change* as stated by Andersson.

3 Key Takeaways

During the *49 Congreso de Investigación y Desarrollo*, the current direction which research and investigation are taking were presented. For four days, the *Tecnológico de Monterrey* exposed six trends:

- 1.
- 2.
3. *Open-access* is one of the tendencies that the researches are facing. This trend refers to the free consumption of academic, scientific and cultural content. Vladimir Burgos (libraries national director of *Tecnológico de Monterrey*), stated that a group of researchers predicted that by 2040, all scientific research will be open.
- 4.
5. Another trend is cooperation between people from different universities, countries and areas of study. During the event, national and international researchers from various universities and companies played a roll within, and some of them are working together in their research. For instance, *Tecnológico de Monterrey* and *UNAM* are working together for educational research and innovation purposes.
- 6.

2) LAZOS DE COOPERACIÓN

Otra de las tendencias es la cooperación entre personas de diferentes universidades, países e incluso áreas de estudio.

El Congreso de Investigación contó con la participación de investigadores nacionales e internacionales de diversas universidades y empresas, e incluso algunos ya trabajan en conjunto desarrollando sus investigaciones.

Un ejemplo es la cooperación entre el Tecnológico de Monterrey y la UNAM, quienes han trabajado juntos en investigación e innovación educativa, enfrentando diversos problemas sociales como el rezago educativo en México

3) TENDENCIAS TECNOLÓGICAS

Durante el evento se presentaron diversos proyectos encaminados a mejorar la salud y la calidad de vida de las personas, haciendo uso de innovación tecnológica, como la nanotecnología y modificación genética, entre otras.

Por ejemplo, diversas empresas y universidades dentro y fuera de México han desarrollado productos que contaminan menos y que sustituyen materiales como el unicel y el azúcar, entre otros.

De igual manera, existen diversos proyectos que buscan hacer uso de moléculas existentes como la del aguacate o probióticos, para transformarlas en sustancias alimenticias y farmacéuticas que sirvan como tratamiento de enfermedades.

4) EL RETO DEL FINANCIAMIENTO

Enrique Graue, rector de la UNAM, mencionó que el financiamiento para la investigación en México ha decrecido durante el gobierno actual y que el apoyo de las empresas es bajo.

Asimismo, la Dra. Carmen Hernández Brenes, quien trabaja en el desarrollo de productos farmacéuticos derivados del aguacate, mencionó que los investigadores deben buscar el financiamiento de empresas privadas ante esta situación.

5) EMPRENDIMIENTO SOCIAL

Otra de las tendencias de investigación es el de desarrollar proyectos que buscan reducir las necesidades en el mundo, enfocados en el aspecto social y no en el económico.

James Austin, cofundador de la Social Enterprise Initiative de la Escuela de Negocios de Harvard, afirmó que este es un nicho que será muy importante en los próximos años.

6) EL CUIDADO DEL PLANETA

Otra de las tendencias expuestas fue el cuidado del medio ambiente y la reducción de la contaminación.

Algunos de los aspectos que se están investigando son relacionados con el cuidado del agua, la producción limpia de energía y la reducción de los desechos.

References

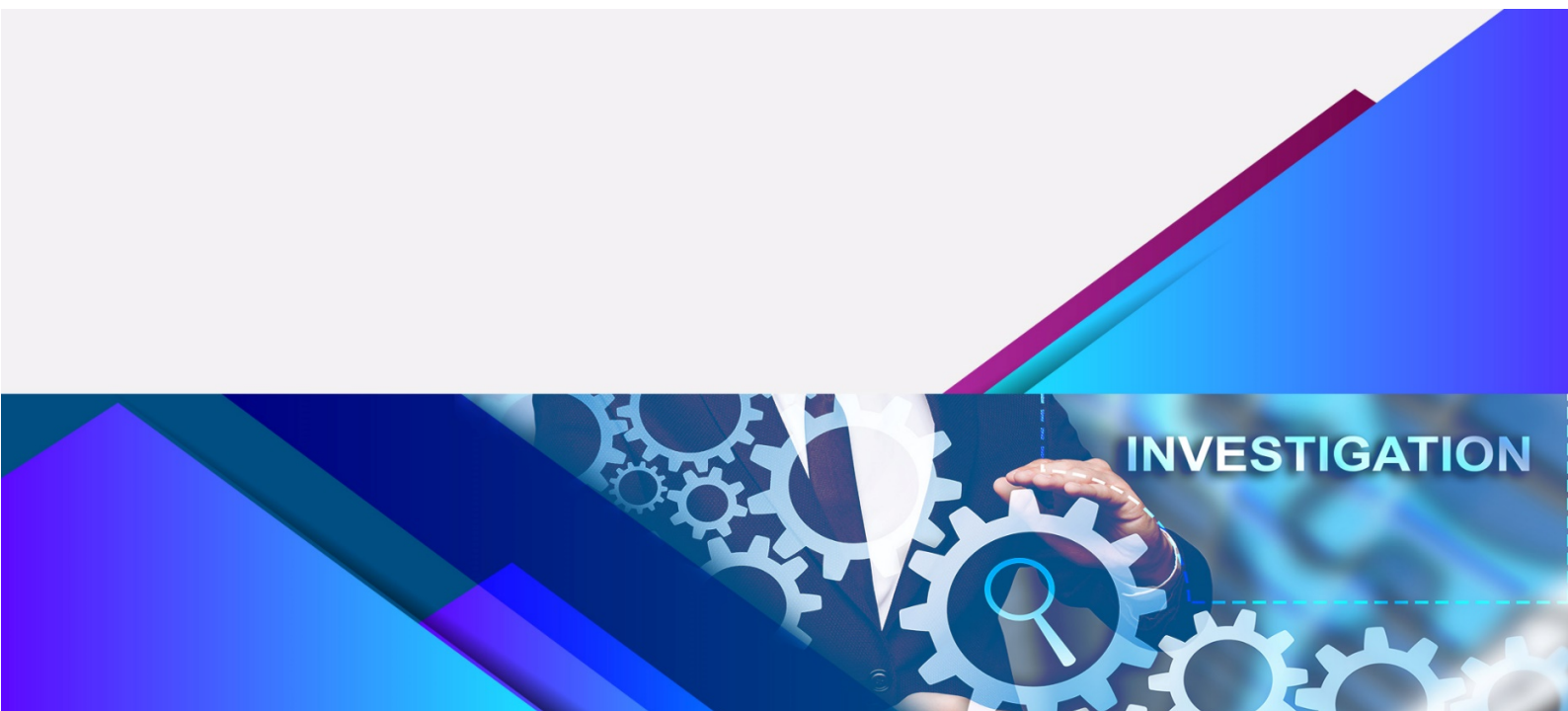
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A Assessment Instructions

[Refer to the next page]

Research Methodologies and Innovation

**Assessed Exercise No. 2: 49th Congress
of Research & Development at Tec**



Learning Strategy: Attendance to a Conference

Resources: Word processor or any type setting system.

Due date: February 12, 2019. 11:59PM.

Credits: 5 points, 5% of final grade.

In this assessed assignment, we ask you to participate in a few activities, part of the 49th Congress of Research & Development at Tecnológico de Monterrey (<http://congresodeinvestigacion.tec.mx/>), to be held from January 29 – February 1, 2019 at Centro de Congresos, in Monterrey.

"The Congress of Research and Development is a forum, organised by Tecnológico de Monterrey, in order both to disseminate the most recent research findings of our Schools and students, and to acknowledge the scientific, economic and social impact of our research development activities", said doctor Francisco Cantú, former Head of Research at the Vice-Chancellor office for Research and Graduate Studies in Tecnológico de Monterrey.

The congress programme consists of seminars, workshops, panels, parallel sessions, exhibits, and invited talks, which we advise attending.

Instructions:

1. Browse <http://congresodeinvestigacion.tec.mx/>, and then follow instructions as needed to get yourself enrolled to the congress; provide a copy of your registration or badge.
2. Visit the congress programme.
3. Organise your time so that you attend at least three events.
4. For every activity you attend, write down a one-page summary outlining the most relevant information that was presented.
5. Provide a discussion including your own thoughts and conclusions about the congress in general.
6. Deliver the assignment through Blackboard the assigned date in a PDF file with a cover. The file's name has to be MII-Homework02-XXXXXXX, where the X's represent your student matriculation number.