## The Inter-American Encounter in Research Integrity:

#### Research Misconduct and Academic Policies in Mexico's Universities

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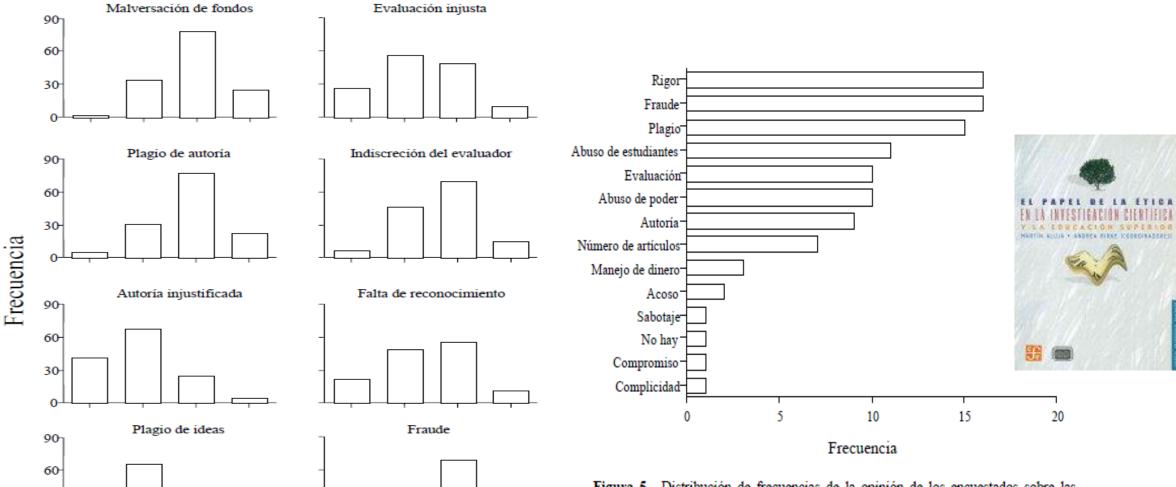
## "Inter-American Encounter on Research Integrity"

ORI conference grant # 1 ORIIR160022-01-00, PI Sergio Litewka, MD, MPH University of Miami, Institute for Bioethics and Health Policy, in collaboration with the Autonomous National University of Mexico (UNAM)'s Institute for Biomedical Research

### **Specific Aims:**

- To characterize the types and perceived prevalence of misconduct in Mexico's academic research environment
- To develop a framework for institutional policies and procedures to prevent and respond to misconduct and questionable practices in research, particularly in international collaboration
- To build a multi-disciplinary network of academic researchers, educators, and administrators actively engaged in new approaches to promoting integrity and preventing misconduct in universities across Mexico

## Perceived Problems in the Mexican Scientific Community (2004)



NS

R

30

 $\mathbf{MF}$ 

F

R

NS

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F

Figura 5. Distribución de frecuencias de la opinión de los encuestados sobre las faltas éticas que perciben como más frecuentes en la comunidad científica de México.

## "El que no transa no avanza": La ciencia mexicana en el espejo

César Domínguez Pérez-Tejada & Rogelio Macías-Ordóñez

Capítulo en libro: El Papel de la Ética en la Investigación Científica y la Educación Superior, pp. 133 – 153, M. Aluja & A. Birke (editores), Academia Mexicana de Ciencias, México D.F., 2003.

"You can't get ahead if you don't cheat": Mexican Science in the Mirror ...In this work we analyze the perception of Mexican scientists about the ethical performance of their colleagues, and how being trained abroad may affect these perception. We conducted a poll in 18 research institutions throughout the country. Results indicate that education abroad has no important effect on researchers' perception of unethical behavior in within Mexican science. However, the poll also shows a high perceived incidence of unethical behavior. We discuss the value of this instrument to estimate the reality, as well as shortand mid-term mechanisms to address the problem.

Keywords: Ethics, graduate studies, science, prestige, corruption, Mexico.



Under US policy, any foreign institution that applies for or receives Public Health Service (PHS) funding for research or research training – including as a collaborator with or training site for a US project – must certify that they have an administrative process for investigating and reporting misconduct in research that involves that PHS funding.

However, Mexico, like many low- and middle-income countries, has *no* formal definition of research misconduct upon which institutions or funders can base consistent administrative processes when irregularities occur.

## Scientific Misconduct Allegations in Mexico

Mexico has had misconduct scandals, including allegations of misconduct in PHSfunded research. In 2012, for example, two microbiology researchers at the Institute of Biotechnology (IBt) of the internationally renowned Universidad Nacional Autónoma de México (UNAM), were found to have manipulated images in 11 published articles on research supported in part by PHS. A specially-convened external review committee concluded that there was no "fraud" because the authors' conclusions were not affected by the manipulations, but the committee did find changes in two papers that it called "inappropriate and categorically reprehensible". The researchers were initially demoted from leadership positions and forbidden from having graduate students for three years. When the university's ombudsman found irregularities in the investigation and review process, he voided the remainder of the punishment. Very public debate about this case prompted calls for UNAM to develop institutional policy on the investigation and adjudication of misconduct.

# Predisposing Factors to Scientific Dishonesty in Developing Countries

- Little to no formal instruction in research integrity, late onset of research ethics education
- Few formal policies and subsequent difficulties in establishing clear lines between acceptable and unacceptable research practice
- Lack of clear institutional norms and procedures for dealing with allegations of research misconduct
- Most visible publications are in English
- Lack of adequate mentoring
- Social environment

We convened a planning committee of faculty and administrators from multiple universities and surveyed them on their perceptions of institutional approaches to promoting research integrity and preventing misconduct.

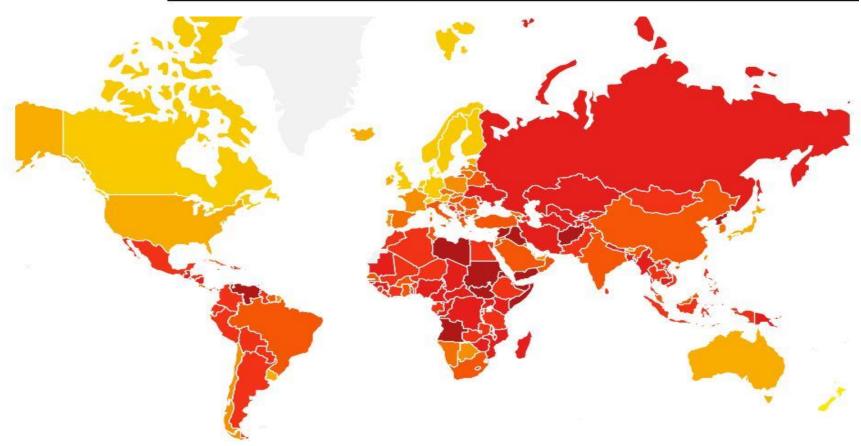
- REDCap Survey; open for 3 weeks, invitations sent to academic leaders, managers of funding organizations, National Bioethics Commission and a CRO
- IRB approval at University of Miami and University of Texas Southwestern
- Same questions as Ana et al. (2013)
- 20 respondents with a disproportionate sample from UNAM due to its size and breadth of programs
- Reviewed at a planning meeting to set topics for the conference

## Talking Points UNAM Planning Meeting – March 3, 2017

- No correlation between theoretical approach, norms and regulations on research integrity and reality
  - Persecution of whistleblowers (whistleblowing is not socially accepted)
  - Process for handling research misconduct allegations is not well defined
  - Misconduct sanctions are established by an "Honor Committee". Offices or departments cannot penalize wrongdoing
- Public policies do not address research misconduct
- Educational programs on research integrity are rare and not coordinated
- Authorship disputes and plagiarism are evident; investigation of fabrication, falsification, and conflicts of interest is rarely observed
- Culture of permissibility
  - Habit and habituation



## **CORRUPTION PERCEPTIONS INDEX 2016**





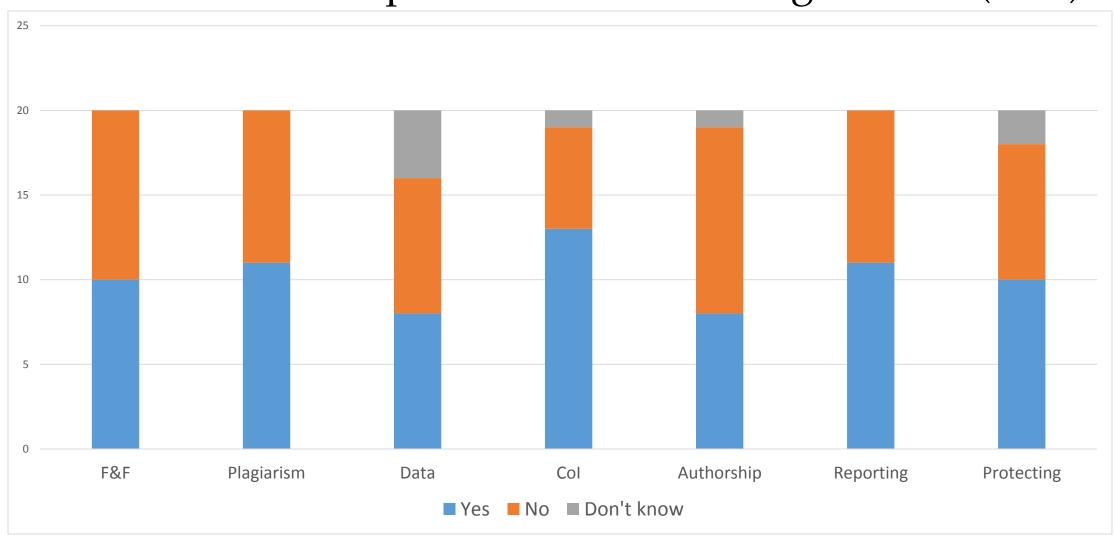
# Research Misconduct and Academic Policies in Mexico's Universities

## Survey Analysis

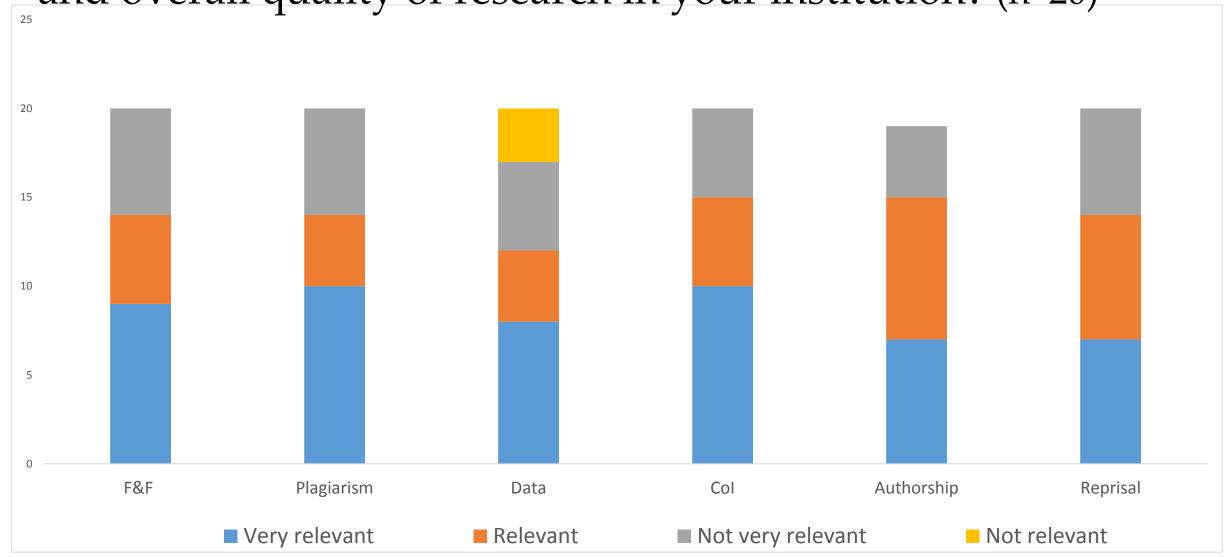
#### Elizabeth Heitman PhD

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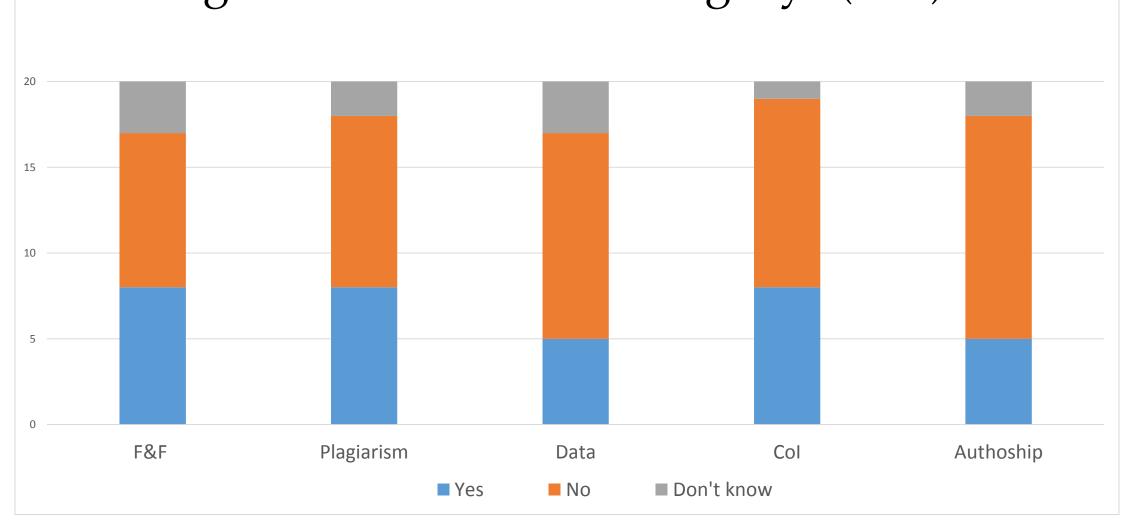
## Does your institution have a defined and effective mechanism that responds to the following issues ? (n=20)



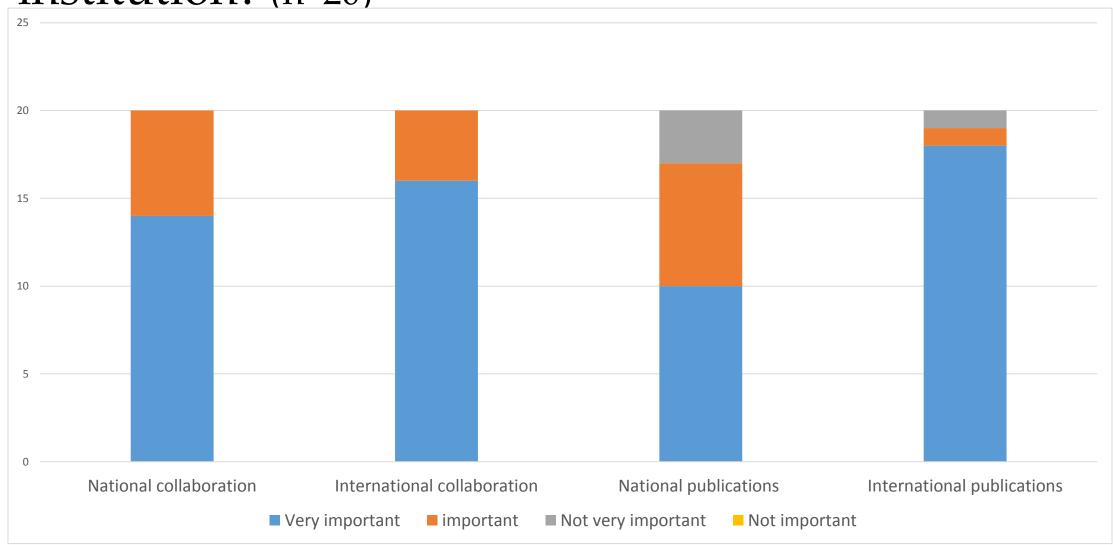
Do you think the following issues are relevant to the integrity and overall quality of research in your institution? (n=20)



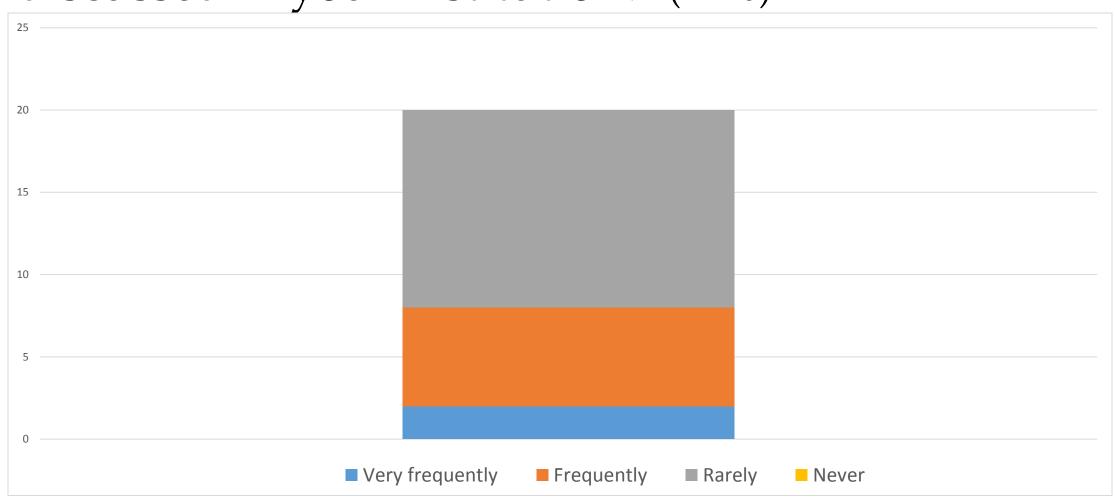
Are there courses or other formal educational activities in your institution that address the following issues in research integrity? (n=20)



How important are the following activities in your institution? (n=20)



# How often are topics related to research integrity discussed in your institution? (n=20)



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#### Integridad Científica y Política

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Auditorio "Alfonso Escobar Izquierdo" Instituto de Investigaciones Biomédicas, Sede del Tercer Circuito Exterior de Ciudad Universitaria, Ciudad de México Mayo 3 de 2017

10:00-10:10 - Palabras de Bienvenida

**Dra. Patricia Ostrosky Shejet**, Directora del Instituto de Investigaciones Biomédicas Universidad Nacional Autónoma de México

10:10- 10:20 - Palabras de la Comisión Nacional de Bioética

**Dr. Manuel Ruiz de Chavez**, Presidente Comisión Nacional de Bioética, CONBIOETICA

10:20: 10:30 - Introducción de la Actividad

**Dr. Sergio Litewka**, Director Programas Internacionales del Instituto de Ética y Políticas de Salud de la Universidad de Miami

10:30-11:00 - Integridad científica en la UNAM: Nuestra Experiencia

**Dra. Patricia Ostrosky Shejet**, Directora del Instituto de Investigaciones Biomédicas Universidad Nacional Autónoma de México

11:00- 11:30 - El Sistema Nacional de Investigadores del CONACYT Contexto y Experiencias con Casos de Deshonestidad Académica

Dr. Luis Godínez, Consejo Nacional de Ciencia y Tecnología; CONACYT

11:30-12:00 - Ética de la Investigación y su Relación con la Integridad Científica El Papel de los Comités de Ética en Investigación

Mtra. Erika Salinas de la Torre, CONBIOETICA

UNIVERSITY OF MIAMI
MILLER SCHOOL OF MEDICINE
INSTITUTE FOR BIOETHICS



#### 14:00- 14:30 - Análisis de Resultados de la Encuesta sobre la Existencia de Herramientas para Promover la Integridad Científica en el Ámbito Académico

**Dra. Elizabeth Heitman**, Program in Ethics in Science and Medicine, University of Texas Southwestern Medical Center

#### 14:30- 15:00 - El Principio de Precaución y el Bien Común en Investigaciones Científicas

Martha Tarasco, Universidad Anáhuac

#### 15:00-15:15 - Descanso

15:15-17:45 - Panel:

Transparencia y Responsabilidad en la Actividad Científica: Una Responsabilidad Compartida

Coordinan Dra. Elizabeth Heitman y Dr. Sergio Litewka

Gobernanza, Políticas Públicas e Integridad Científica

**Dr. Bernardo Garcia Camino**, Universidad Nacional Autónoma de Querétaro

Del Código Ético del Instituto de Investigaciones Biomédicas, hacia un Código Ético para el Posgrado de la UNAM

Dr. Juan Pedro Laclette, Universidad Nacional Autónoma de México

Políticas Institucionales sobre Conflictos de Interés Financiero y de Compromiso

Dr. Sergio Litewka, Universidad de Miami

Abordaje Educativo para Promover la Integridad Científica, la Experiencia de la Universidad Anáhuac

Dr. Samuel Weingerz Mehl, Universidad Anáhuac

Enseñanza de la ética a nivel de posgrado: El Ejemplo del Instituto de Neurobiología, UNAM

Dr. Michael Jeziorski, Universidad Nacional Autónoma de México

17:45- 18:00 - Conclusiones

## Conclusions

- As in many low and middle income countries, scientific misconduct is not well defined (with the possible exception of plagiarism).
- The National Commission for Science and Technology (CONACyT) has investigated few cases of alleged misconduct over the past 15 years.
- The National Bioethics Commission (CONBIOETICA) published a general textbook (2016) on of research integrity, with funding from CONACyT.
- There is an increasing trend among universities and funders towards systematizing processes for handling allegations of misconduct.
- One deliverable for this activity will be a draft policy framework applicable to academic research institutions across Mexico that will be responsive to the increasingly collaborative and global nature of academic research.





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#### **Encuentro Interamericano**

#### "INTEGRIDAD Y POLÍTICA CIENTÍFICA"

Un problema de interés global

#### Coordinadores

Sergio Litewka Elizabeth Heitman Juan Pedro Laclette Patricia Ostrosky

#### El 3 de mayo 2017 de 10:00 a 18:00 hrs

Auditorio "Alfonso Escobar Izquierdo"

Instituto de Investigaciones Biomédicas Sede Tercer Circuito Exterior Ciudad Universitaria

**VER PROGRAMA**