Institut Mines-Télécom

SCIENTIFIC INTEGRITY AT LTCI LAB

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- **Research Integrity** = set of rules to follow, in a scientific context, to guarantee a fair and rigorous research
  - Counter-examples : Plagiarism, Results enhancement
- **Research Ethics** = set of rules to follow to take into account the scientific advances and their consequences on the society in a research program
  - Counter-examples : Stem cells, Personal data, Animal experimentation
- **Professional code of ethics (in French Déontologie)** = set of principles and rules that manage and guide a professional activity. These standards are those that determine the minimum duties required of professionals in the performance of their activity.
  - Examples : Professional code of ethics of physicians, Professional code of ethics of lawyers

Research integrity ≈ Déontologie de la recherche = Professional code of ethics of research

Why are we concerned?

- Several scandals in the field of research (O. Voinnet, C. Jassus, A. Peyroche, A. Derambarsch, B. Bihain, J. Lehrer, …) all over the world
- The European Charter for Researchers(2005)
- The Singapore statement on research integrity (2010)
- The European code of conduct for research integrity (ESF-ALLEA, 2011)
- Charte nationale de déontologie de la Recherche (2015) : ➔ Rapport Corvol (2016) ➔ Circulaire Mandon (2017)
- Décret n° 2021-1572 du 3 décembre 2021 on compliance with the requirements of scientific integrity by public establishments contributing to the public research service and foundations recognised as being of public utility whose main activity is public research

- ➔ One public establishment = One Scientific Referent Officer (in French RIS)
  - IMT = 1 RIS IMT
  - Schools of IMT = 1 delegated RIS {RIS + delegate RIS} = RIS IMT Network

Every single research fellow

The Scientific Collectivity : exemplarity and conduct

- **Seniors**
- **Education**
- **Context**

The Head of the public establishment = the legal guarantor

- **For the environment**
- **For the education**
- **For the establishment of a transparent referral system**
- **For the nomination of a Scientific Integrity Officer (RIS)**

- **Ensure the fair, anonymous and transparent investigation of allegations of misconduct by proposing an organisation for handling allegations within the institution**
- **Coordinate awareness raising and promote training of research actors**
- **Steering a prevention policy within the institution**
- **Participate in national and international efforts to advance the practice of scientific integrity (Réseau national Resint)**

Intranet documentation : (https://mintel.imt.fr/voir.php?id=5022)

How to report possible misconduct and challenge the RIS

- Official documents
- Recommendations, guidelines and charters of French and foreign public bodies (CNRS, INSERM, …)
- Formations for doctoral candidates and research fellows
- Documentation on misconducts: inventory, definitions, legal framework, …
- Toolboxes to help in detecting misconducts
- and …. References of known existing tools to efficiently help misconducts !

Establishing the RIS-IMT Network:

- IMT-Nord Europe : « Jean-Luc WOJKIEWICZ »
- IMT-Atlantique : « Pierre COINTE »
- Mines d'Albi : « Paul GABORIT »

Some misconducts

- About publications
  - To buy a ready-made publication: Paper Mills
  - Falsification of research results
    - Omission or selection of results
    - Image and graphics post-processing
    - Uncorrect use of statistical tests
    - Biased selection of references
    - Biased selection of data
  - Plagiarism
  - Authorship and paper signature : *Ghost author*, *Guest Author*, *Phantom Author*
  - *Salami Slicing,* duplication of publications
- Conflict of interest in evaluations: articles, juries, recruitments, projects
- Non preservation of experimental data
- Abuse of power
- Diversion of resources (personnel, credits, etc.)

Who is an author?

- The author took a significant part in the work presented
- AND the author agrees with every term of the publication
- AND the author is informed of the deposit of this publication and approves this deposit

Possible roles for an author

- Conceptualisation,
- Methodology,
- Software development,
- Validation,
- Formal analysis,
- Investigation,
- Ressources,
- Data management ,
- Writing the paper (first draft),
- Writing the paper (review and editing),
- Results visualisation and presentation,
- Supervision,
- Project management,
- Fundraising