# **GENERAL RESEARCH PRINCIPLES**



## **INTRODUCTION**

Scientific research, technological and artistic development and participation in innovation processes are a fundamental part of the essence of the Universitat Politècnica de València (UPV). By promoting development in science and scientific knowledge, we are furthering the progress of humanity and helping to improve people's quality of life.

However, scientific progress should not be pursued at any cost; it should be achieved while adhering to the ethical principles that should govern good scientific practice. The basic principles that should be followed in all research conducted by and in the UPV are outlined below. These principles stem from the UPV code of ethics and form the basis for the new Scientific Integrity and Best Research Practices Policy.

These principles should serve as a guide, especially for anyone who is new to the exciting world of research. We should remember that it is necessary to bridge the gap between scientific and technological progress and human values and, regardless of the context of the research, there are certain boundaries that should never be crossed.

### **GENERAL RESEARCH PRINCIPLES**

Research should be conducted with the highest personal integrity and the utmost scientific rigour. Only then can it help to further scientific progress. Therefore, research should be guided by the following principles:

#### **RELIABILITY**

Research should be reliable and rigorous and it should be carried out by people who are competent to conduct the research. It should be based on a comprehensive review of the state of knowledge, with a suitable design, sampling and analysis, leaving no room for the misrepresentation, omission or fabrication of data.

#### **INTEGRITY**

Integrity is an essential element of the UPV's methodology and research should be conducted in an honest, upright manner, always acting in good faith. The general public interest should always be put before any private interests.

Thus, the pursuit of knowledge and solving society's problems should be the main aims of any research, which should be guided by the highest standards of scientific rigour, with research methods and practices being followed with clarity, impartiality, transparency and rationale.

Information should be disseminated in a transparent manner, with no omissions, accurately reflecting the observed truth and, insofar as is possible, from an open access perspective. You should avoid sensationalism when disseminating information and you should not prioritise career advancement over scientific progress. You should properly acknowledge the merits of every person involved in the research, avoiding plagiarism and self-plagiarism and acknowledging authorship in a responsible manner. Integrity should also be kept in mind when making commitments, by ensuring that they are fulfilled.

#### **IMPARTIALITY**

The results should be a direct and demonstrable consequence of the research process; avoid any interpretation that is guided by interests other than the pursuit of knowledge. Impartiality and objectivity should be essential criteria when assessing publications and applications for funding, and when evaluating CVs during staff recruitment processes. Impartiality should not be compromised by any conflicts of interest which, in any event, should be declared and, insofar as is possible, avoided.

#### **EQUALITY**

Respect for true equality between women and men, offering the same opportunities to all people irrespective of their gender, sexual orientation and gender identity, background, culture, age or any other personal status. The principle of equal treatment and non-discrimination should not only be applied to processes such as recruitment, it should also condition the scope and impact of any research that is conducted, ensuring that it benefits the whole of society.

#### **TRANSPARENCY**

The UPV reaffirms its commitment to good governance and accountability to the university community and society. Consequently, it is necessary to promote open access to research results and all associated publications. Furthermore, the criteria used and appraisals made for all recruitment, retention, promotion and incentive processes should be public, clear, objective and readily accessible.

#### RESPONSIBILITY

It is necessary to be accountable for any actions and decisions, by taking responsibility towards society and the environment. Therefore, competence and excellence should be promoted, in a continuous improvement process that maximises the quality of the research conducted. It is necessary to take responsibility for the research that is performed and the resulting publications. Effective financial management is required and should be accounted for, with complete transparency. Resources should be used responsibly, promoting efficiency and minimising the impact on the environment.

#### RESPECT

Respect for the dignity of all people should always guide the behaviour of anyone conducting research. Additionally, it should be possible to exercise autonomy when taking part in research and it should be ensured that the people participating in the research also exercise autonomy when making the voluntary and informed decision to take part in it, with special attention paid to vulnerable individuals. Personal privacy and the confidentiality of personal data should be respected. Each person should be treated in a way that is kind, friendly and respectful of their life skills and choices.

Any animals involved in research should also be respected. They should be replaced by other alternatives whenever possible, used as little as possible and the procedures used should be refined to cause as little pain, suffering and distress as possible. Cultural heritage and the environment should also be respected in any research where these are affected, promoting sustainable use that ensures that they are handed down to future generations.

You should be familiar with and abide by the rules applicable to every specific context in which research is conducted, always considering these to be the minimum requirements and, where possible, applying higher standards.