



Evolutionary Applications (2023/2024)

The research project

Types of research projects

Funding agencies and goals

Societal challenges



Project types

Research

Nature

- Theoretical ("basic") - generating knowledge
- Applied - finding strategies to solve specific research problems (technological, scientific)

Purpose

- Exploratory - preliminary research to establish hypotheses
- Descriptive - to define the characteristics of a phenomenon
- Explanatory - establish cause and effect relationships, generate generalisations

Type of data

- Qualitative - generally used in social sciences (interviews, questionnaires,...)
- Quantitative - uses mathematical, statistical and computer tools to measure observations



Project types

Research

Handling variables

- Experimental - replication of a phenomenon whose variables are manipulated in a controlled environment
- Non-experimental (observational) - observing a phenomenon in its natural environment

Type of inference

- Deductive - explaining reality through universal laws, starting from concrete premises
- Inductive - starts from observation of phenomena to obtain generalisations. Can develop new theories
- Hypothetico-deductive - starts from observation to generate hypotheses that lead by deduction to testable conclusions

Time

- Longitudinal - monitors groups or individuals over time
- Synchronous - compares groups and individuals observed at the same time



Project types

Research

Information sources

- Primary - generates data that is analysed
- Secondary - based on information available in publications (includes meta-analysis)

How data was collected

- Documentary - review of available sources of information (publications)
- Field - collecting information in the place where the phenomenon occurs
- Laboratory - takes place in a controlled environment that allows you to isolate variables of interest



Task

Search for

HFSP funding;

Beacon NSF;

Embrapa projetos;

Humbolt foundation;

Nestle foundation;

AFM-TELETHON;

Novartis grants;

Bill and Melinda Gates grants;

ERC Starting



Task

Review

HFSP funding;
Beacon NSF;
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Humbolt foundation;
Nestle foundation;
AFM-TELETHON;
Novartis grants;
Bill and Melinda Gates grants;
ERC Starting

What is the purpose?

Who can apply?



Task

Identify in the 2030 Agenda for Sustainable development

... goals of interest