

Sceiba, a project developed in the Flemish university development cooperation programme VLIR-UOS

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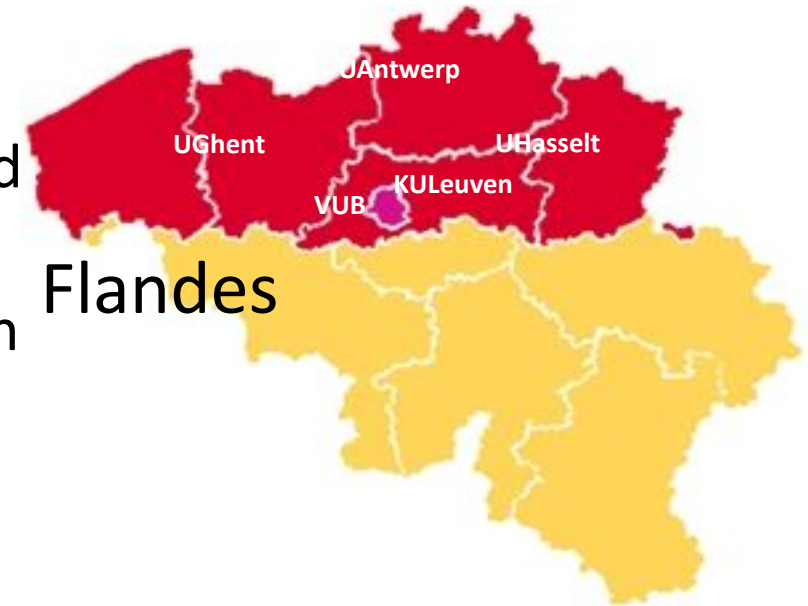
Overview

- **The Flemish international university cooperation**
- **The Sceiba project:** Improving quality control and monitoring of scientific research results at national and institutional level - introduction

VLIR-UOS:

Flemish international university cooperation

- Founded by VLIR (Flemish University Organization).
- Supports the cooperation program between universities and university colleges in Flanders and partners in the South.
- With the main objective of strengthening research in the South.
- Main themes: global and local challenges, environment, health, agriculture, innovation, community, gender equality.
- <http://www.vliruos.be/>



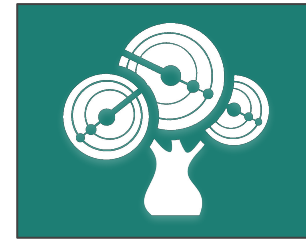
VLIR-UOS Projects

- IUC: International University Cooperation
 - Long-term projects (6+6 years) with a university in the South. 24 active programs. Ex. [Universidad Catolica Boliviana](#), [Arba Minch](#), [UNALM](#)
 - With a focus on research : > 20 to 25 PhD by project.
- Network:
 - Long-term programs (6+6 years) within the framework of the VLIR-UOS country strategy, led by a university that has carried out an IUC. Ex. Ecuador, Ethiopië, Cuba, ...
- Other project types: TEAM, Joint, South Initiatives, International training programs
 - Ex. JOINT: Cooperation with various partner organizations in the South (Africa, Asia, Latin America and Caribbean). Ex. Sceiba.
- Scholarships

VLIR-UOS in the world and in Latin America

- 17 partner countries
- 258 active projects
- In Latin America
 - Peru: 15 projects
 - Ecuador: 28 projects
 - Bolivia: 12 projects
 - Cuba: 22 projects
- Call information is available at:
https://www.vliruos.be/en/call_types/1566





VLIR-UOS –JOINT Project

Sceiba

**Improving quality control and monitoring of scientific research
output on national and institutional level**

2019-2022

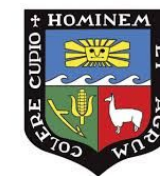
Cooperation between universities in Cuba, Peru and Flanders (Belgium)



Cuba



Flandes



Peru



Origin of the project

- Network Cuba (VLIR-UOS)
 - Strengthening the role of ICTs in Cuban universities for the development of society
 - ELINF: Management and access to scientific and educational information on the network as an example for Cuban universities.
 - Partner universities: UCLV, Un. Pinar del Rio, UCI, Un. Camaguey, Un. Holguin
- Tocatoro project
 - A national Cuban project to contribute to the continuous improvement, access and visibility of Cuban scientific journals.
 - Partner organizations: Un.Pinar del Rio ,Un. La Habana, CITMA, MES

Origin of the project

- Associated universities in Peru
 - Universidad Nacional Agraria La Molina (UNALM) which finalized an IUC Project in 2020
 - Universidad San Ignacio de Loyola (USIL), a private university: with a team of bibliometricians
- The Peruvian partners contributed their experience in research evaluation, specifically in bibliometrics.

Some background information

- The Cuban context presents two negative trends. The **growth in the number of scientific publications between 1996 and 2014 was lower**, compared to that of many Latin American countries. The second represents **the progressive reduction of patent applications during the 2009-2015 stage**. All this despite the fact that in the same period there are more people dedicated to scientific research.
- In the case of Peru, there is a demand from **CONCYTEC to implement research quality monitoring systems in universities** to ensure that research in the country is aligned with national needs and that the results are focused on solving society's problems.

Main objectives of the project

- Results (specific objectives):
 - **Strengthening of methods for evaluation and monitoring of research results** (specifically scientific publications) at the national and institutional levels.
 - Integration of research evaluation methodologies in the **international context**.
- General objective:
 - **Improve the quality of scientific publications** as part of research output.

Other objectives of the project

- Contribute to the development of **workflows** and **standards** in the evaluation of scientific publications at national and institutional levels.
- Focus on **data collection** and **management methodologies**, **metadata standards**, **science measurement** and **bibliometric approaches**.
- Adapt the bibliometric approach to the **publication culture** and **local situation** in Cuba and Peru.

Project approach

- **It started in the Cuban context**, where the universities of Havana and Pinar del Rio work in close collaboration with the Ministries of Higher Education (MES) and Research (CITMA).
- **The Peruvian partners** bring their expertise in research evaluation and apply the policies, methodologies and tools developed by the project by adapting them to their situation.
- **The Belgian partners** bring their expertise in research management, with a strong focus on scientific publications, and evaluation at national and university level.

Sceiba: Evaluation system of scientific publications

Policies

Guidelines

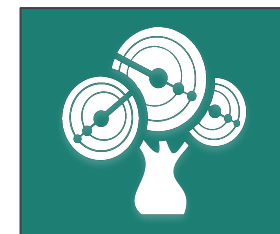
Tools and
services

Course

Sceiba is setting up a centralized open system to facilitate the monitoring and evaluation of scientific publications.

Sceiba Project: Policies and Guidelines

- To contribute to the improvement of the quality of scientific publications produced by institutions attached to the Ministry of Higher Education of Cuba / Ministry of Education of Peru
- To generate relevant, timely and reliable information that contributes to the development of national strategies to promote scientific research in the country; which must be in tune with the current characteristics of the scientific communication system, the principles and practices of Open Science, Open Access and Open Research Data.



Sceiba evaluation: adapted to the local context

Criteria of evaluation (Total 10)

- Visibility (Total 6 criteria: 3 basic and 3 complementary)
 - Basic: indexing, accessibility, interoperability
 - Complementary: openness, internationalization, presence and dissemination on general and academic social networks
- Academic Impact: (Total 4 criteria: 2 basic and 2 complementary)
 - Basic: Citation (citations and H index) and positioning in rankings
 - Complementary: Impact on general and academic social networks.

Sceiba evaluation: adapted to the local context

E.g. Evaluation of scientific journals:
Criterion visibility

Visibility	High	Medium	Low	Source for Sceiba
<u>Basic criterion:</u> Indexing (Included in indexing and summary system)	Indexed in at least two specialized or multidisciplinary indexing and abstract databases, one of them being Scopus or a specialized database / citation index of Web of Science.. Endorsed by more than one journal evaluation system, one of them being DOAJ.	Registered in at least one specialized or multidisciplinary summary and indexing database or DOAJ.	Not registered and / or indexed in any regional or international indexing and summary system	MIAR Directory of Journals by MES

SCEIBA platform: Invenio based system

collect

Application for management of Primary Sources

Application for linking Controlled Vocabularies (SKOS) and Sceiba

Harvesters:
OAI-PMH
MIAR
Issn.org

transform

Link all the collected data into a single record

Enrichment using controlled vocabularies

Validation using authorized sources

store

Create a SQL database for long term store and query using persistent identifiers

Create an index for text based querying

expose

Publish an API-REST endpoint for search

OAI-PMH interface

Web applications:

- Directory of Journals
- Search app

Organizations Identification

<https://organizaciones.sceiba.cu>

Data model and Data



Objective:

Enabling connections between organization records in various systems.

Features:

- The ability to link with other organisations identifiers (cross-referencing)
- Common and uniform metadata set
- Facility to correct, manage, and cross-reference data, including synchronization with other systems
- Use of public data from authority sources (ONEI, GRID)

Use cases

- Facilities to normalize and disambiguate proper names of research organizations

Product Roadmap

- Feed other organization identifier systems like GRID to increase the number of Cuban organisation related to research and scientific publications, with international persistent ID.
- Self-update by organizations to improve the content curation of metadata
- Supporting ways for humans and machines to interact with the registry

Persons Identification

<https://personas.sceiba.cu>

ORCID
Model



Objective:

Enabling connections between researchers records in various systems.

Features:

- The ability to link with other person identifiers (cross-referencing)
- Common and uniform metadata set
- Facility to correct, manage, and cross-reference data, including synchronization with other systems (VIVO or others)
- Feed public ORCID records for individuals.

Use cases

- Facilities to normalize and disambiguate proper names of researchers
- Authentication in different systems

Product Roadmap

- Self-update by researchers to improve the content curation of metadata
- Supporting ways for humans and machines to interact with the registry
- Functionality to feed ORCID registries in order to implement a national ORCID Hub, if membership feed can be paid by some Cuban agency.

Vocabularies

<https://vocabularios.sceiba.cu>

SKOS data model

VocBench

Skosmos

Controlled vocabularies

- The use of controlled vocabularies is a key element for interoperability, increasing visibility and enabling evaluation of research outputs, researchers and organizations.
- Similarly as in identification of persons and organizations, there is also a need for a system that can be used by all Sceiba components and independently by third parties.
- We proposed to use the SKOS data model, an international standard for vocabularies widely accepted.

Evaluations



Triple Store

Objective:

Enabling monitoring and custom evaluations for Cuban scientific publications

Features:

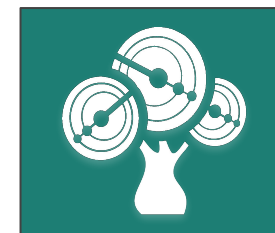
- Establishing a framework to analyse the network formed by scientific publications, organization and persons
- User interface for visualization
- Implementation of forms of evaluation established by official agencies

Product Roadmap

- Feed a graph storage with the data collected by the core.
- Develop the basic evaluation methods
- Developing of user interfaces and visualizations
- Mechanisms to implement, at user request, other forms of evaluations.

Improvement of the quality of scientific publications: Sceiba Course

- The most effective and sustainable way to improve the quality of scientific publications is through the development of the following competencies
- Characteristics of the Sceiba course:
 - Reusable educational resources
 - Adaptable to different scenarios
 - Registration is not mandatory
 - Assignments with peer feedback
 - Automatic evaluation with feedback
 - Free digital certificate and badge
 - CC-BY 4.0



Sceiba

Curso

Investigar, publicar y
difundir

¿Cómo y dónde hacerlo?



Contenidos

- **Módulo I:** Introducción al proceso de comunicación científica.
- **Módulo II:** Bases de datos y calidad de revistas científicas
- **Módulo III:** Calidad de los libros científicos
- **Módulo IV:** Proceso de selección y publicación en una revista científica
- **Módulo V:** Promoción y visibilidad de la publicaciones científicas
- **Módulo VI:** Seguimiento a los indicadores de visibilidad e impacto de las publicaciones científicas



Sceiba Virtual Space

Área personal / Cursos

Gestionar cursos

Navegación



▼ Área personal

- 🏠 Inicio del sitio
- > Páginas del sitio
- ▼ Mis cursos
 - > Publicación científica

■ Cursos

Administración



> Administración del sitio

Ajustes de búsqueda



Buscar cursos



▼ Colapsar todo

▸ Miscellaneous

▼ Publicaciones científicas

🔍 Investigar, publicar y difundir: ¿Cómo y dónde hacerlo?



▼ Acceso abierto

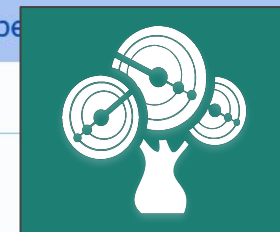
🔍 Open Access Curricula for Researchers and Librarians



🔍 Introducción al acceso abierto para bibliotecarios

Crear un nuevo curso

Cursos por publicación



Sceiba