



The creation of the Flemish research discipline list, a huge step forward in harmonizing research information (systems)



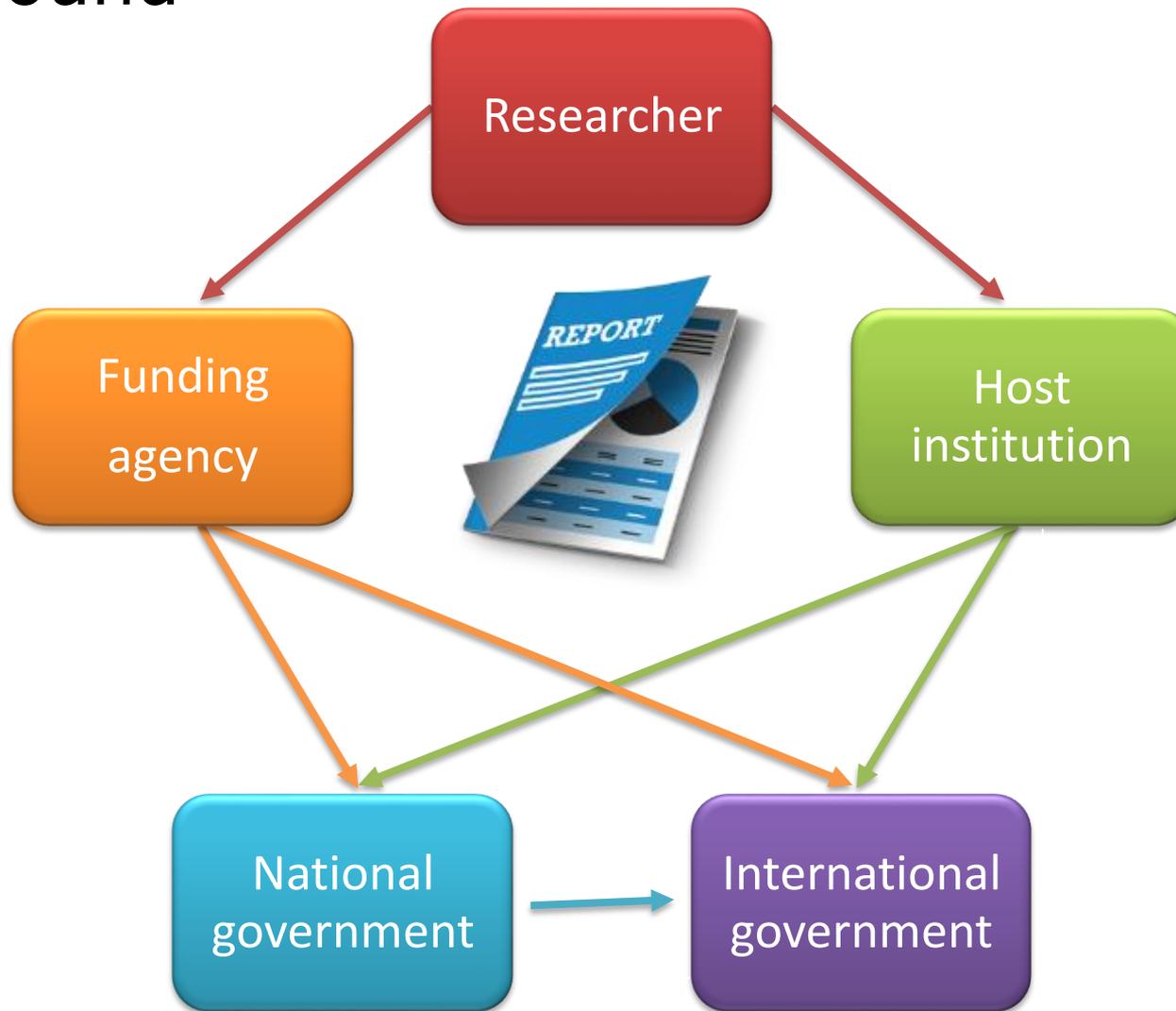
Sadia Vancauwenbergh & Hanne Poelmans

UHASSELT

KNOWLEDGE IN ACTION

ECOOM
Expertisecentrum O&O Monitoring

Background



Peters et al. 2011. *De vereenvoudiging van onderzoeksverslaggeving, een analysetraject uitgevoerd door de Vlaamse universiteiten en hogescholen en de VLIR, in opdracht van de Vlaamse Overheid (EWI).*



Find research...

Search



(426764)
All results



(75262)
Researchers



(2047)
Organisations



(29635)
Projects



(319820)
Publications



Find expertise

FRIS Research portal



Your window to research in Flanders

This preview version of the FRIS (Flanders Research Information Space) Research portal lets you try and test our first release and provide feedback to help us make it even better.

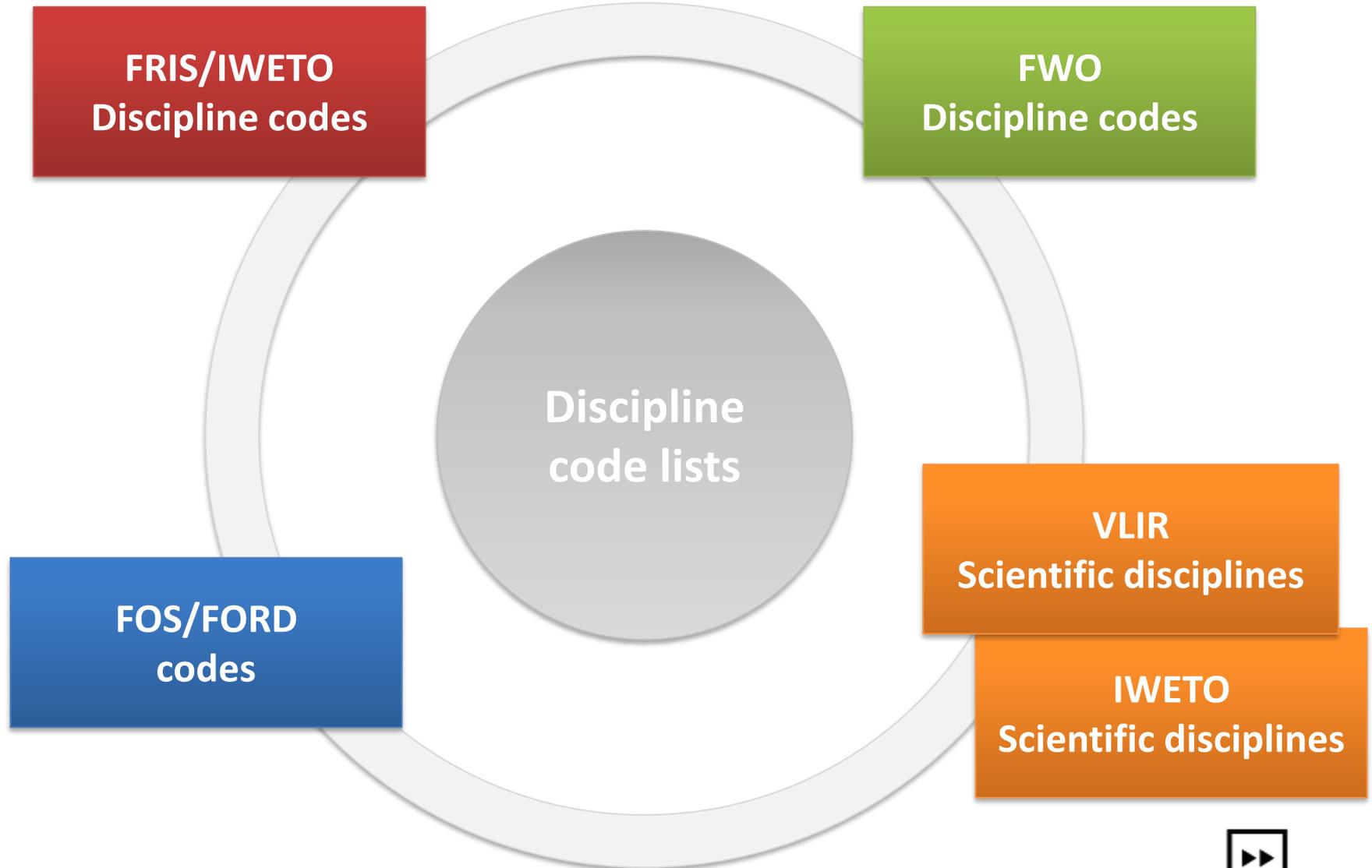
The FRIS Research portal brings a host of new features and changes, including a new search functionality that can be triggered from each page on our web-site, and an [expertfinder](#) where you can browse through a list of classifications to find an expert in your domain.

All information that you'll find was gathered through a direct integration with the systems of the [scientific institutions](#) in Flanders and we are proud to present their information on not only researchers, research groups and publicly funded projects, but also publications from 2008 onwards.

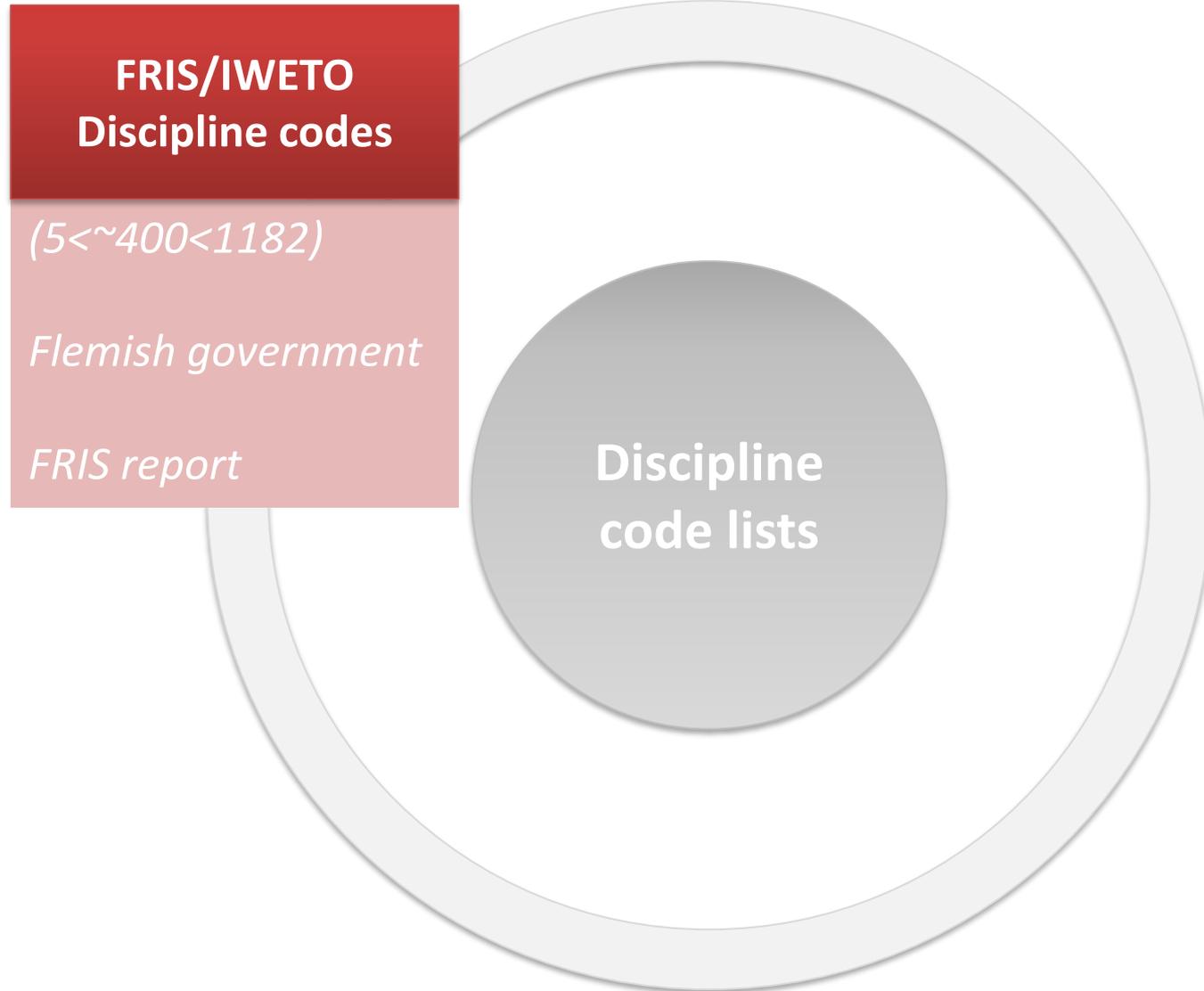
For a comprehensive look at our new search functionality so far, you may want to check out the [search requirements](#).

As a researcher at one of our Flemish institutions you can take part in shaping the portal by test-driving this release version and letting us know what you find. If and when you encounter an issue with regards to your projects or publications that needs addressing, report it to your institution directly by using our [form](#).

Classification governance: research disciplines



FRIS/IWETO discipline codes



Implementation – e.g. FRIS/IWETO codes

Find research... Search

(426764) All results (75262) Researchers **(2047) Organisations** (29635) Projects (319820) Publications Find expertise

Organisations

DOWNLOAD RESULT  

1 - 10 of 2047 results Sort by Name / Relevance 10 Items per page

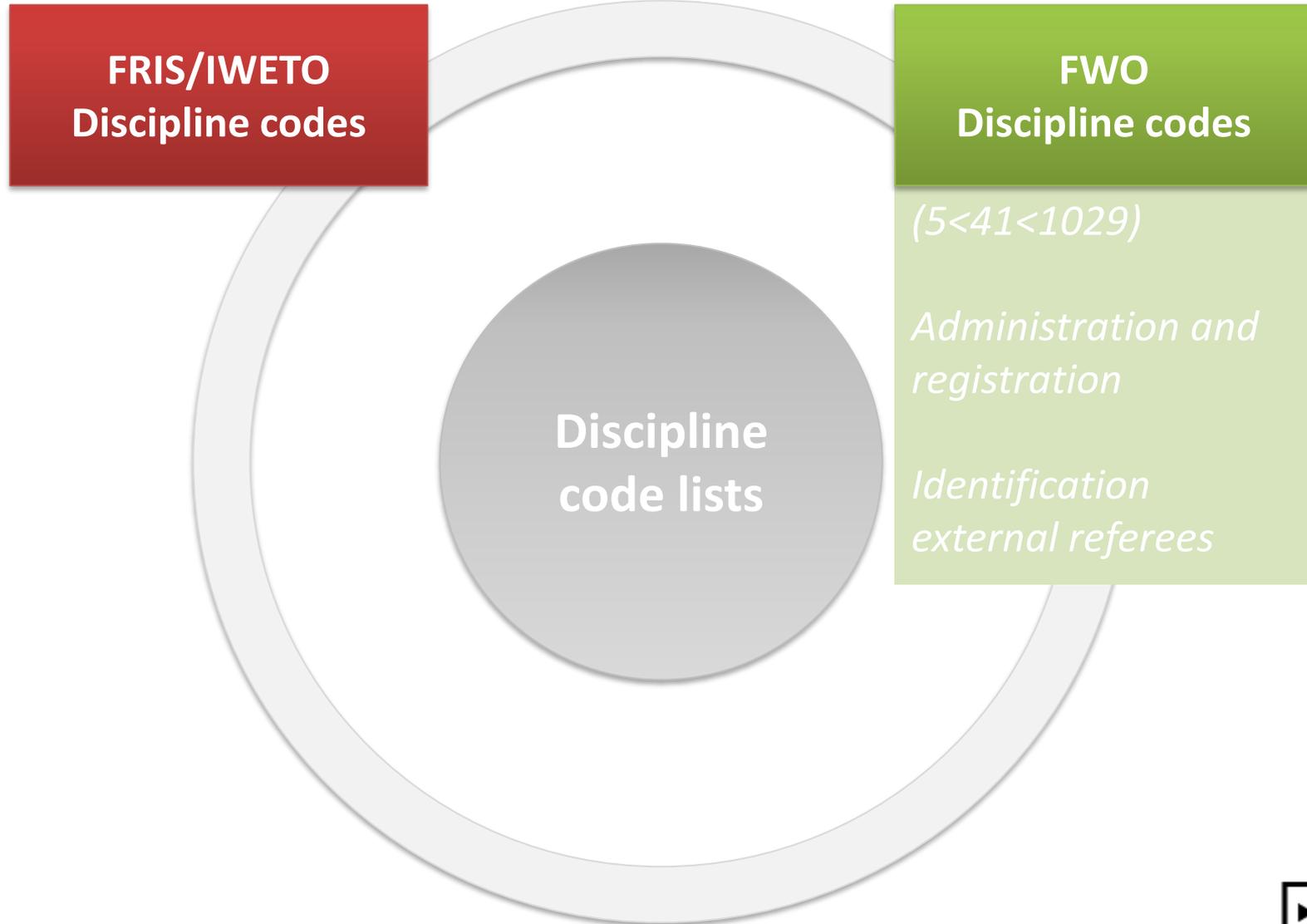
1 2 3 4 5 ... Next > Last >>

Abdominal Surgical Oncology KU Leuven
Responsible: [Baki Topal](#)
Abdominal Surgical Oncology
- Diagnostic and therapeutic animal models of liver metastasis and peritoneal carcinomatosis from colorectal cancer
- Detection of circulating cancer cells in colorectal, liver, and pancreatic cancer
- Gene-expression profiling and proteomic studies in pancreatic, liver, and biliary cancer
- Innovations in minimally invasive surgery for colorectal, liver, pancreas, and biliary cancer

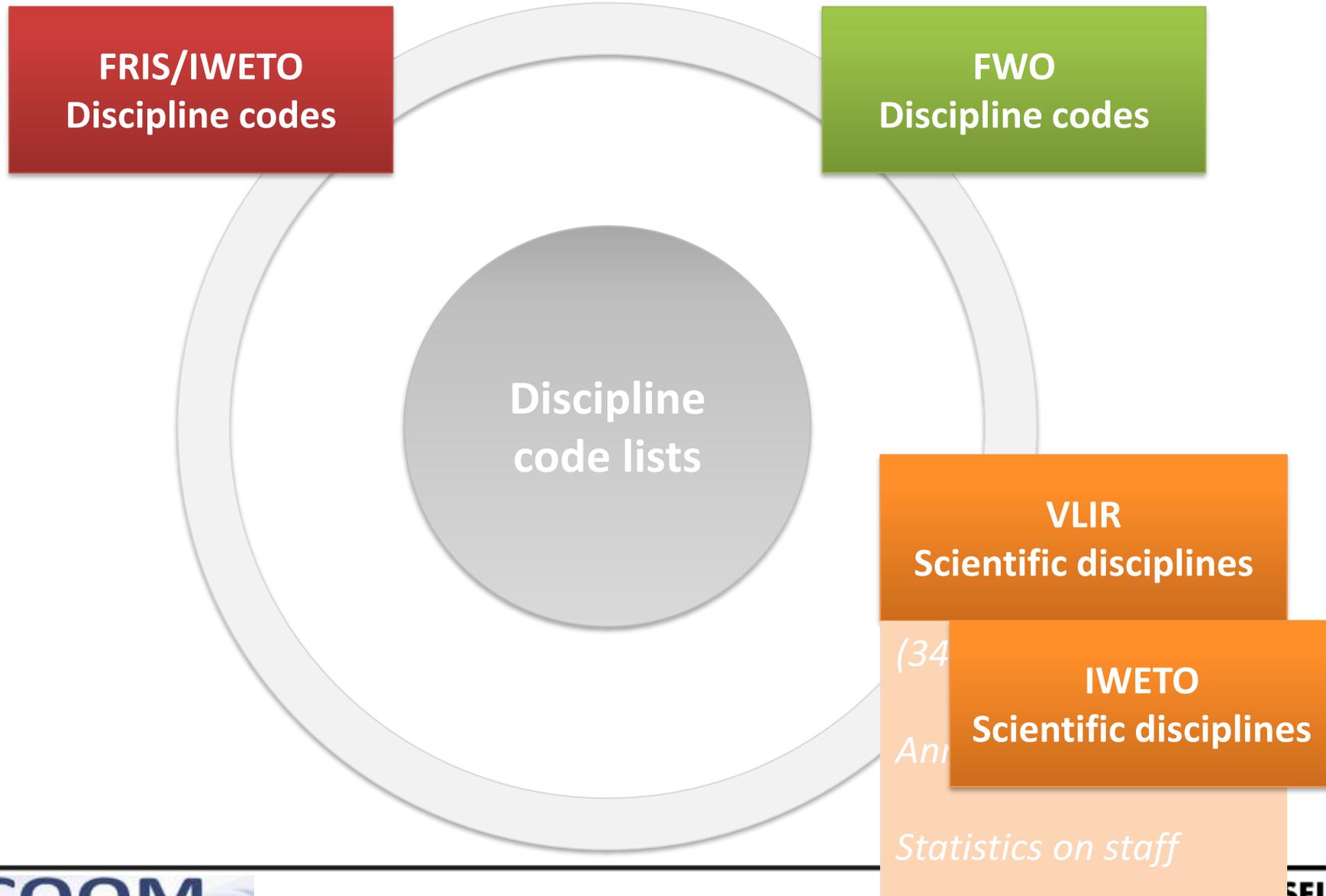
Academic Center for General Practice KU Leuven
Responsible: [Bert Aertgeerts](#)
The department's research is organized within four large programmes with significant interactions between them: development of instruments and outcome measurement, educational research, clinical epidemiology and health care organisation research. It focusses on a broad range of clinical situations, with care for the elderly and diagnostics as its corner-stones. 1. Instrument development and outcome research Together with 11 other institutes ...

- Disciplines**
- ▶ Biomedical Sciences (550)
 - ▶ Humanities (278)
 - ▶ Physical Sciences (285)
 - ▶ Social Sciences (518)
 - ▶ Technological Sciences (283)

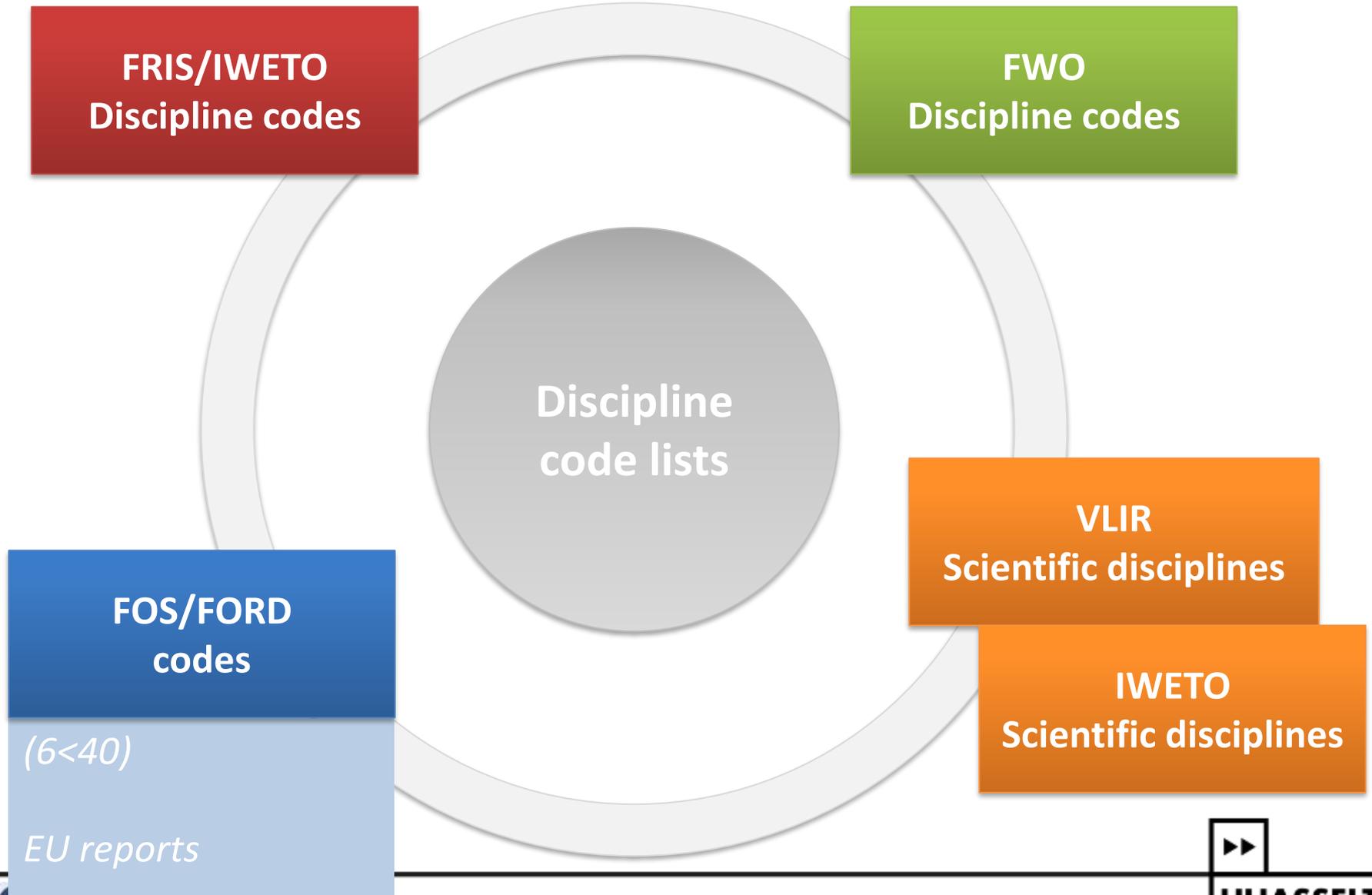
FWO discipline codes



VLIR scientific disciplines



FOS/FORD codes

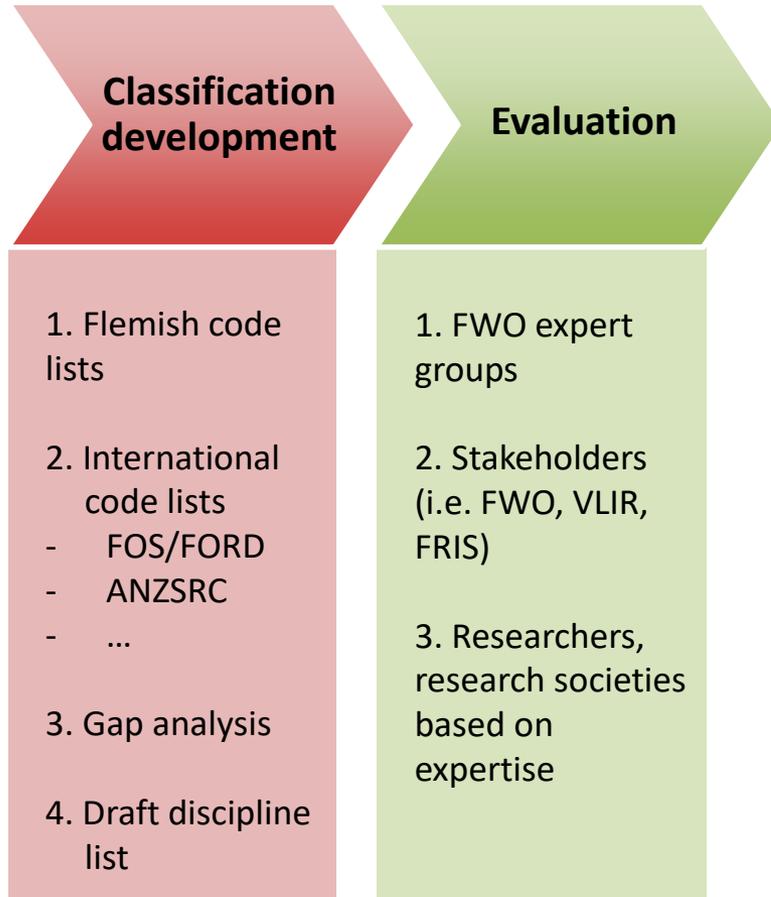


ECOOM-UH: uniformisation discipline code lists

Goals:

1. Creating a single Flemish classification for research disciplines that:
 1. covers all research in Flanders
 2. provides a semantic definition for all disciplines
 3. provides concordance maps to the most prevailing (inter)national classification systems
2. Implementation of the Flemish research discipline code list by Flemish agencies and stakeholders
3. Classification governance and quality control

Procedure



Flemish research discipline code list

- Specifications

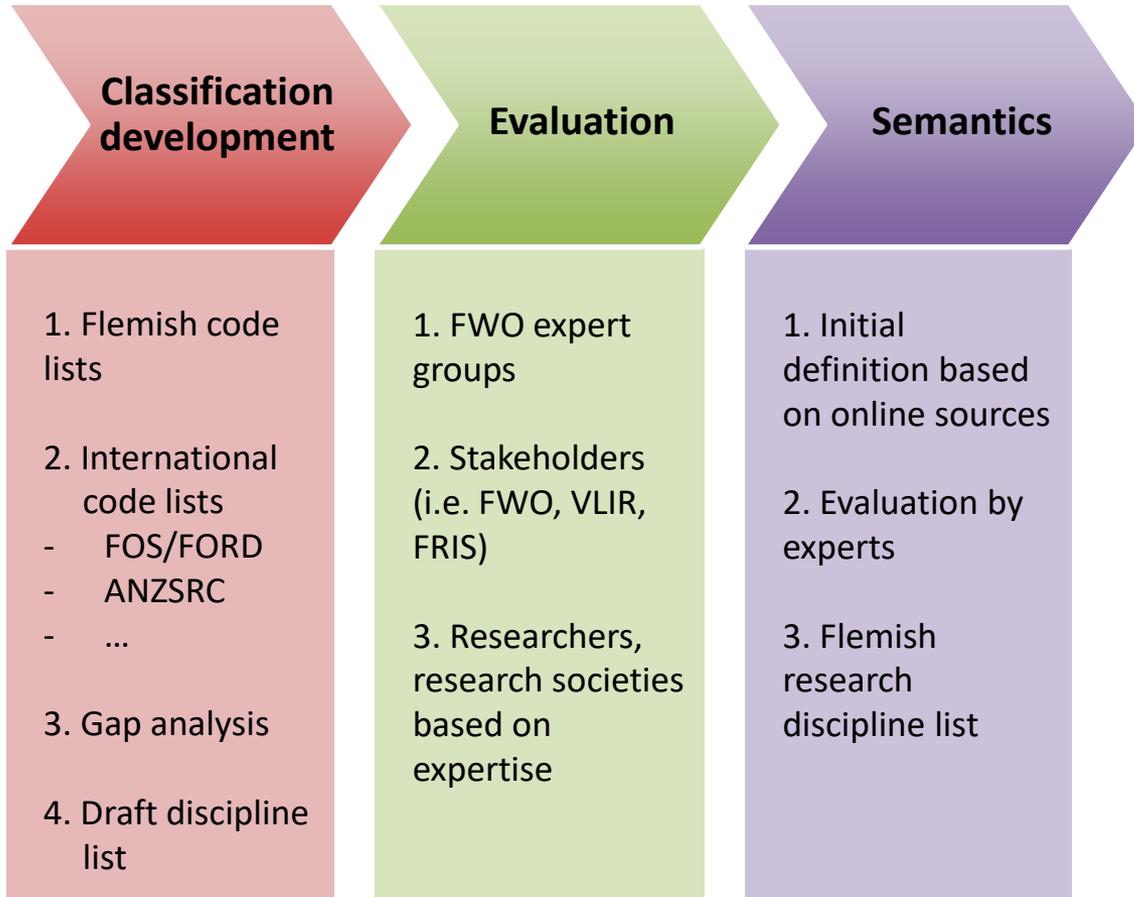
- 4 levels

- Level 1: 7 codes
 - Level 2: 42 codes
 - Level 3: 382 codes
 - Level 4: 2866 codes



Sector (Level 1)	Disciplinary Field L1	Disciplinary Subfield L2	Disciplinary Subfield L3
Interdisciplinary topics			
Architecture			
02 Engineering and technology	0201 Civil and building engineering	020101 Architectural engineering	02010100
02 Engineering and technology	0201 Civil and building engineering	020101 Architectural engineering	02010101 Structural design
02 Engineering and technology	0201 Civil and building engineering	020101 Architectural engineering	02010102 Structural optimisation
02 Engineering and technology	0201 Civil and building engineering	020101 Architectural engineering	02010103 Sustainable building
02 Engineering and technology	0201 Civil and building engineering	020101 Architectural engineering	02010199 Architectural engineering not elsewhere classified
02 Engineering and technology	0201 Civil and building engineering	020111 Urban and regional design, development and planning	02011100
02 Engineering and technology	0201 Civil and building engineering	020111 Urban and regional design, development and planning	02011101 Environmental and sustainable planning
02 Engineering and technology	0201 Civil and building engineering	020111 Urban and regional design, development and planning	02011102 Housing markets, development, management
02 Engineering and technology	0201 Civil and building engineering	020111 Urban and regional design, development and planning	02011103 Smart cities
02 Engineering and technology	0201 Civil and building engineering	020111 Urban and regional design, development and planning	02011104 Urban and regional design
02 Engineering and technology	0201 Civil and building engineering	020111 Urban and regional design, development and planning	02011105 Urban and regional development
02 Engineering and technology	0201 Civil and building engineering	020111 Urban and regional design, development and planning	02011106 Urban and regional planning policy, instruments and legislation
02 Engineering and technology	0201 Civil and building engineering	020111 Urban and regional design, development and planning	02011107 Urbanism and regional planning
02 Engineering and technology	0201 Civil and building engineering	020111 Urban and regional design, development and planning	02011199 Urban and regional design, development and planning not elsewhere classified
06 Humanities and the arts	0604 Arts	060403 Art studies and sciences	06040300
06 Humanities and the arts	0604 Arts	060403 Art studies and sciences	06040301 Architectural history and theory
06 Humanities and the arts	0604 Arts	060403 Art studies and sciences	06040304 Architectural design history and theory
06 Humanities and the arts	0604 Arts	060403 Art studies and sciences	06040311 Interior architecture history and theory
06 Humanities and the arts	0604 Arts	060403 Art studies and sciences	06040312 Landscape architecture history and theory
06 Humanities and the arts	0604 Arts	060403 Art studies and sciences	06040399 Art studies and sciences not elsewhere classified
06 Humanities and the arts	0604 Arts	060401 Architectural design	06040100
06 Humanities and the arts	0604 Arts	060401 Architectural design	06040101 Design innovation
06 Humanities and the arts	0604 Arts	060401 Architectural design	06040102 Design management
06 Humanities and the arts	0604 Arts	060401 Architectural design	06040103 Design practice
06 Humanities and the arts	0604 Arts	060401 Architectural design	06040104 Design research
06 Humanities and the arts	0604 Arts	060401 Architectural design	06040105 Digital and interaction design
06 Humanities and the arts	0604 Arts	060401 Architectural design	06040106 Inclusive design
06 Humanities and the arts	0604 Arts	060401 Architectural design	06040107 Sustainable design
06 Humanities and the arts	0604 Arts	060401 Architectural design	06040199 Architectural design not elsewhere classified

Procedure



Semantics

Interpretation variability

- Linguistic, thematic, situational context

Imagine an apple, a big apple

Semantics

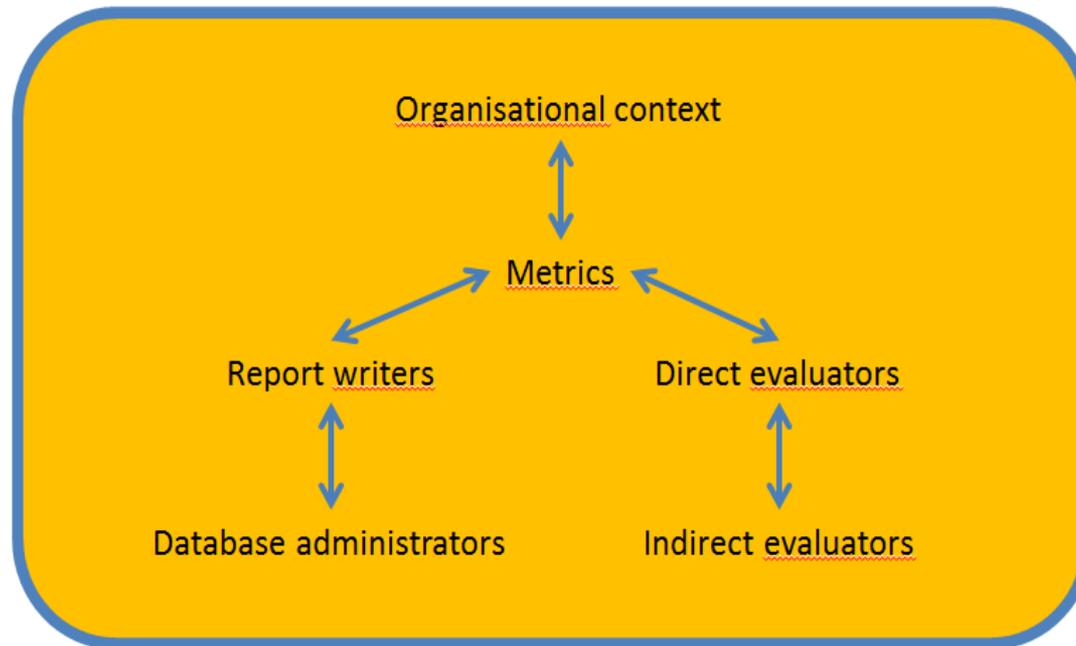
Interpretation variability

- Linguistic, thematic, situational context

Imagine

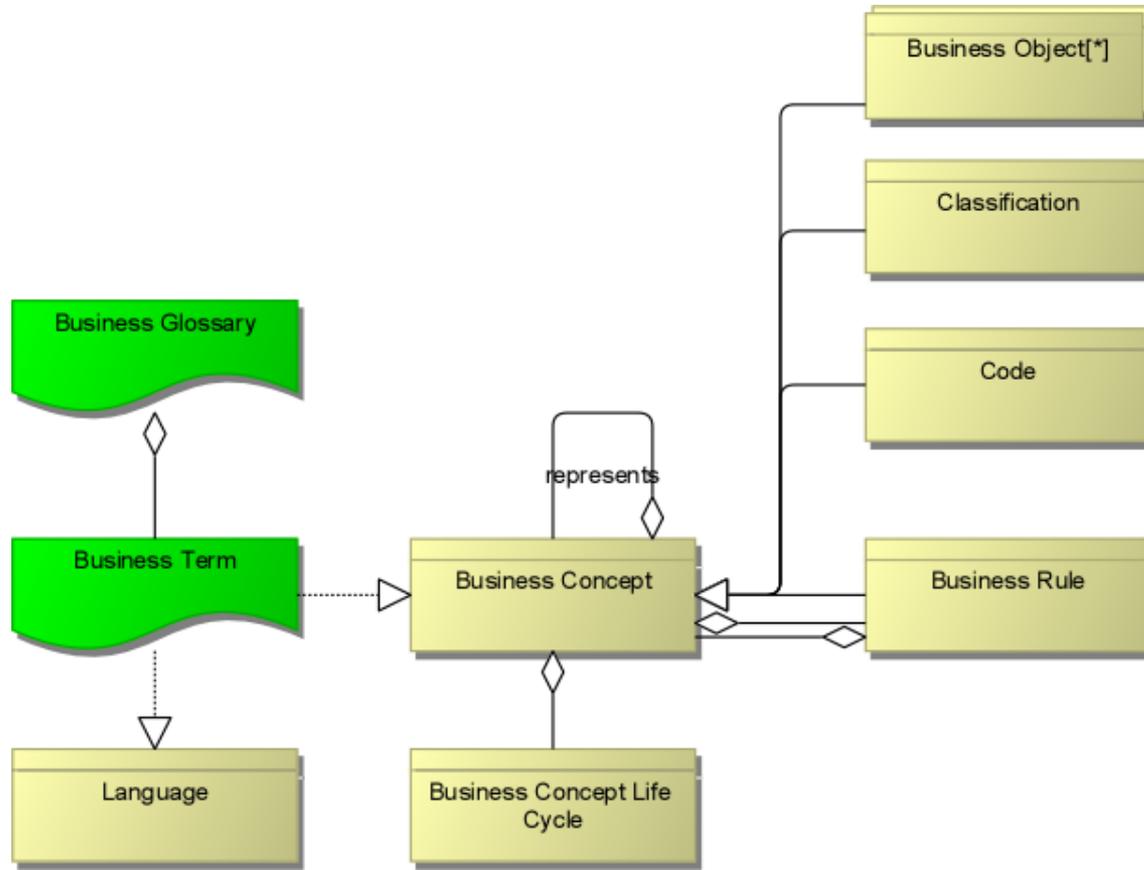


Semantic (mis)interpretation space

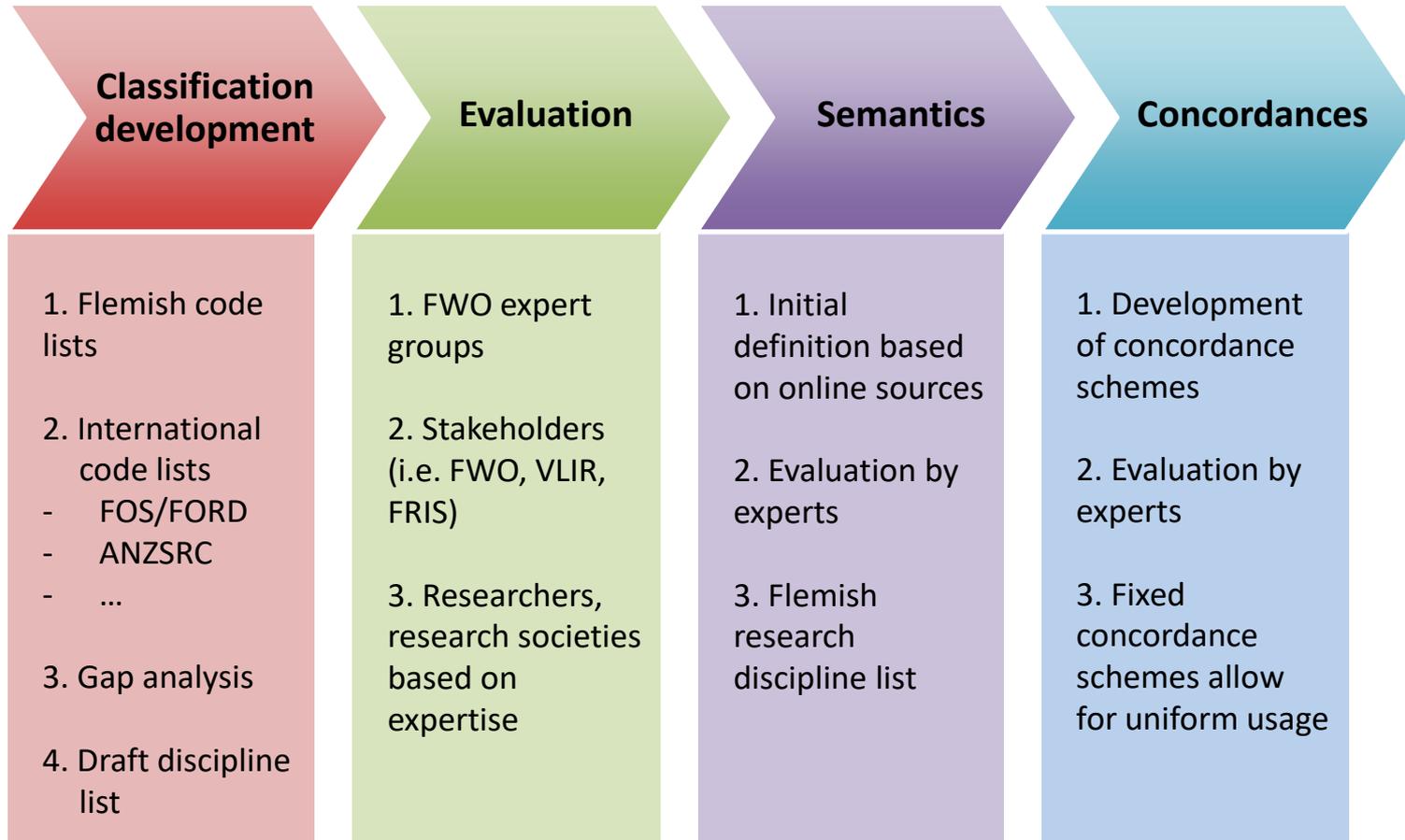


Methodology

From concept → term → definition → review → iterative cycles



Procedure



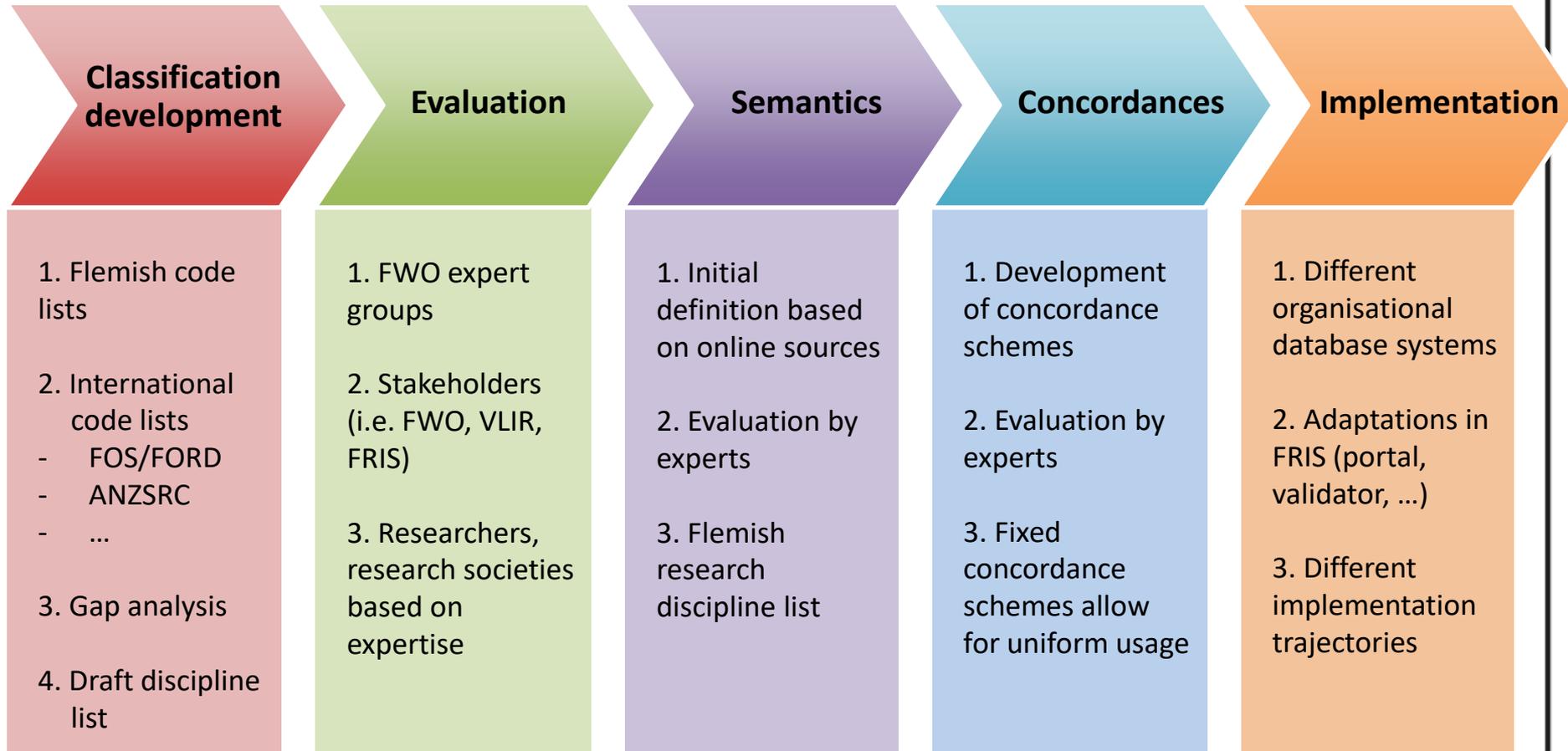
Concordances

- In general 1-1
- Some issues:
 - 1 new code → n old codes
 - N old codes → 1 new code

FRIS code	FRIS/IWETO	VLR code	VLR	Level 1	Level 2	Level 3	Level 4				
B110	Bioinformatics, medical informatics, bior	313	Biomedische wetenschappen (incl. biochemi	03	Medical and health sciences	0301	Basic science	030102	Bioinformatics and computational biolo	03010200	
B110	Bioinformatics, medical informatics, bior	313	Biomedische wetenschappen (incl. biochemi	03	Medical and health sciences	0301	Basic science	030102	Bioinformatics and computational biolo	03010201	Analysis of next-generation sequ
B110	Bioinformatics, medical informatics, bior	313	Biomedische wetenschappen (incl. biochemi	03	Medical and health sciences	0301	Basic science	030102	Bioinformatics and computational biolo	03010202	Bioinformatics data integration
B110	Bioinformatics, medical informatics, bior	313	Biomedische wetenschappen (incl. biochemi	03	Medical and health sciences	0301	Basic science	030102	Bioinformatics and computational biolo	03010203	Bioinformatics of disease
B110	Bioinformatics, medical informatics, bior	313	Biomedische wetenschappen (incl. biochemi	03	Medical and health sciences	0301	Basic science	030102	Bioinformatics and computational biolo	03010204	Computational biomodelling and
B110	Bioinformatics, medical informatics, bior	313	Biomedische wetenschappen (incl. biochemi	03	Medical and health sciences	0301	Basic science	030102	Bioinformatics and computational biolo	03010205	Computational evolutionary bio
B110	Bioinformatics, medical informatics, bior	313	Biomedische wetenschappen (incl. biochemi	03	Medical and health sciences	0301	Basic science	030102	Bioinformatics and computational biolo	03010206	Computational transcriptomics
B110	Bioinformatics, medical informatics, bior	313	Biomedische wetenschappen (incl. biochemi	03	Medical and health sciences	0301	Basic science	030102	Bioinformatics and computational biolo	03010207	Data visualisation and high-thro
B110	Bioinformatics, medical informatics, bior	313	Biomedische wetenschappen (incl. biochemi	03	Medical and health sciences	0301	Basic science	030102	Bioinformatics and computational biolo	03010208	Development of bioinformatics s
B110	Bioinformatics, medical informatics, bior	313	Biomedische wetenschappen (incl. biochemi	03	Medical and health sciences	0301	Basic science	030102	Bioinformatics and computational biolo	03010209	Ontologies, data curation and te
B110	Bioinformatics, medical informatics, bior	313	Biomedische wetenschappen (incl. biochemi	03	Medical and health sciences	0301	Basic science	030102	Bioinformatics and computational biolo	03010210	Single-cell data analysis
B110	Bioinformatics, medical informatics, bior	313	Biomedische wetenschappen (incl. biochemi	03	Medical and health sciences	0301	Basic science	030102	Bioinformatics and computational biolo	03010211	Structural bioinformatics and co
B110	Bioinformatics, medical informatics, bior	313	Biomedische wetenschappen (incl. biochemi	03	Medical and health sciences	0301	Basic science	030102	Bioinformatics and computational biolo	03010212	Synthetic biology
B110	Bioinformatics, medical informatics, bior	313	Biomedische wetenschappen (incl. biochemi	03	Medical and health sciences	0301	Basic science	030102	Bioinformatics and computational biolo	03010299	Bio-informatics and computatio
B115	Biomechanics, cybernetics	313	Biomedische wetenschappen (incl. biochemi	03	Medical and health sciences	0301	Basic science	030103	Biomechanics	03010300	
B115	Biomechanics, cybernetics	313	Biomedische wetenschappen (incl. biochemi	03	Medical and health sciences	0301	Basic science	030103	Biomechanics	03010301	Biomechanics
B115	Biomechanics, cybernetics	313	Biomedische wetenschappen (incl. biochemi	03	Medical and health sciences	0301	Basic science	030103	Biomechanics	03010302	Cybernetics
B115	Biomechanics, cybernetics	313	Biomedische wetenschappen (incl. biochemi	03	Medical and health sciences	0301	Basic science	030103	Biomechanics	03010399	Biomechanics not elsewhere cla
B002	Biophysics	313	Biomedische wetenschappen (incl. biochemi	03	Medical and health sciences	0301	Basic science	030104	Biophysics	03010400	
B002	Biophysics	313	Biomedische wetenschappen (incl. biochemi	03	Medical and health sciences	0301	Basic science	030104	Biophysics	03010401	Medical biophysics
B120	Molecular biophysics	313	Biomedische wetenschappen (incl. biochemi	03	Medical and health sciences	0301	Basic science	030104	Biophysics	03010402	Molecular biophysics
B002	Biophysics	313	Biomedische wetenschappen (incl. biochemi	03	Medical and health sciences	0301	Basic science	030104	Biophysics	03010403	Physiological biophysics
B002	Biophysics	313	Biomedische wetenschappen (incl. biochemi	03	Medical and health sciences	0301	Basic science	030104	Biophysics	03010499	Biophysics not elsewhere classi

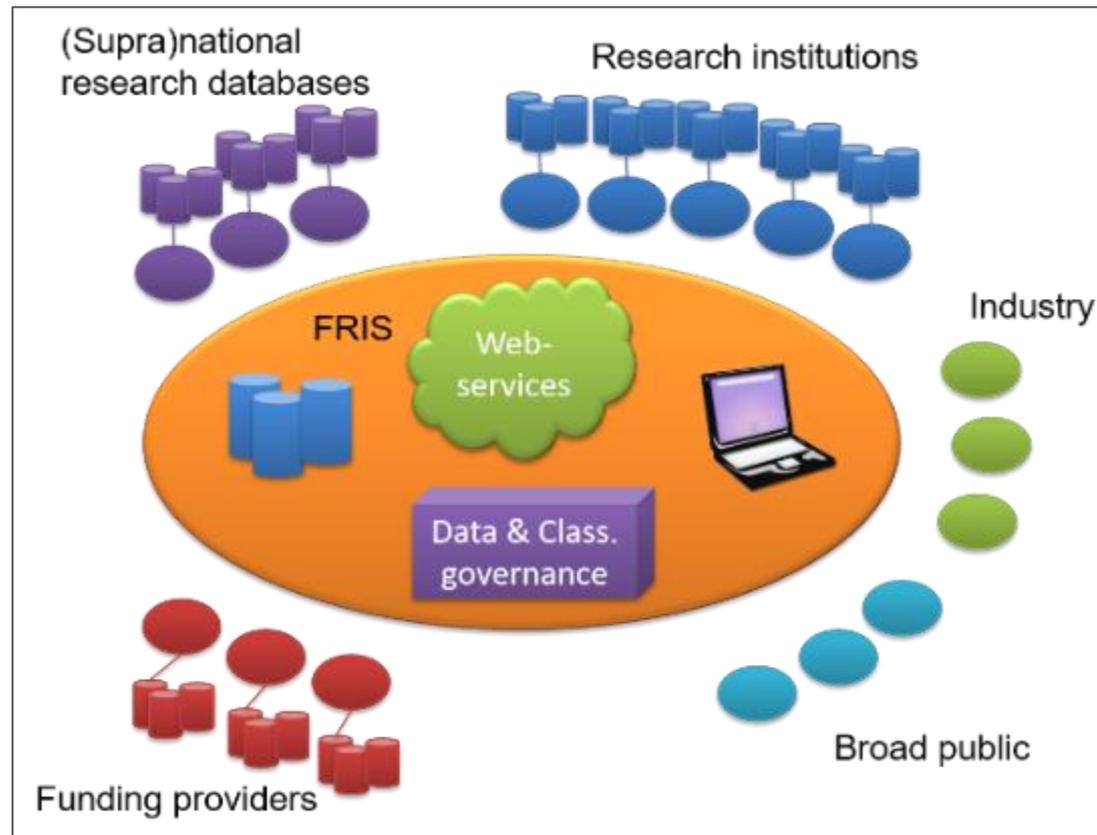


Procedure



Implementation

- Information providers: many database systems
- FRIS: validator, filters, search application





Funding

- Activities of International Cooperation (10)
- Activity supporting strategic priorities (10) of the federal government
- Activity to stimulate the use of and cooperation with The Belgian Co-ordinated Collections of Micro-organisms (BCCM) (18)

[Show more](#) ▼

Status

- current (9801)
- completed (19834)

Disciplines

- Biomedical Sciences (11871)
- Humanities (2938)
- Physical Sciences (6366)
- Social Sciences (6034)
- Technological Sciences (5511)

Duration

- more than 8 years (213)
- 6 - 8 years (294)
- 4 - 6 years (3612)

[Show more](#) ▼

Composites **KU Leuven**

[Wim Desmet](#)

Production Engineering, Machine Design and Automation (PMA) Section

Guided waves are recognized as one of the most promising techniques for Structural Health Monitoring (SHM), as they provide reliable, long-range and highly sensitive damage inspection capabilities. Progress in this field would be impactful to EU transportation, aerospace and offshore industries, where safety is crucial given the potential human, economic or environmental consequences of failures.

Despite some encouraging applications to ...

Development of an optimized integrated thin film silicon solar module (DOIT).

KU Leuven[Lino da Costa Pereira](#)[Institute for Nuclear and Radiation Physics](#)

This project aims at the development of an innovative silicon thin film solar module, exhibiting a stabilised active area efficiency of 11% on a substrate size of 30x30 cm². The device consists of an amorphous silicon/microcrystalline silicon tandem solar cell (micro morph cell) prepared on a low cost TCO coated glass substrate. In view of industrial production, a deposition rate of at least 4 angstrom/s will be achieved for the intrinsic ...

Yeast Bioreactor 2019: Network biology of stress responses and cell flocculation of *Saccharomyces cerevisiae* grown in a continious bioreactor in microgravity conditions **Ghent University**

[Bart Devreese](#)[Department of Biochemistry and microbiology](#)

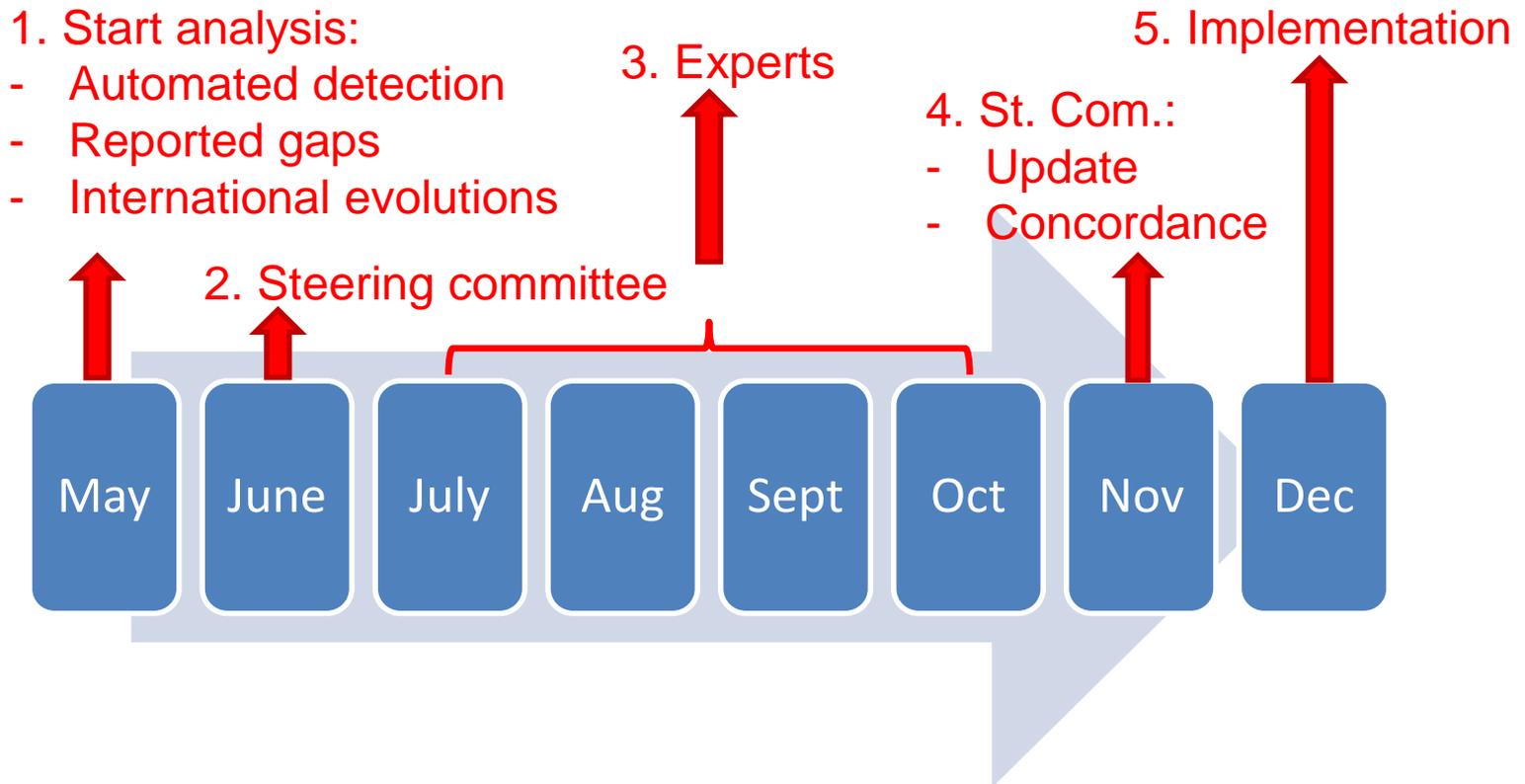
Yeast cultivations will be performed in a specifically designed continuous bioreactor. An integrative-experimental approach will be used to assess the effect of microgravity. Therefore, various omics technologies, i.e. fluxomics, transcriptomics, proteomics and genomics, and specific cell analysis methods will be used to analyse the samples. A network biology model for *S. cerevisiae* will be set-up to process the omics data. This will lead to ...

Uncovering Enteric GLIA-MACrophage communication in the intestinal homeostasis and inflammation. **KU Leuven**

[Guy Boeckxstaens](#)[Translational Research in Gastrointestinal Disorders](#)

Future developments – dynamic list

- Classification governance & quality control
 - Monitoring international trends
 - Registering/investigating missing disciplines
 - Text mining



ECOOM@uhasselt.be



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Hanne Poelmans
Hanne Vlietinck

Funded by:

Department of Economy, Sciences and
Innovation of the Flemish Government

FRIS-portal:

www.researchportal.be

FRIS-team:

Leen Van Campe (project leader)
Pascale Dengis
Cynthia De Ghellinck
Namik Akyel
Kris Maison