



FRIS as a regional CRIS: challenges and opportunities

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WORK, ECONOMY
SCIENCE, INNOVATION &
SOCIAL ECONOMY

What is FRIS

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**WORK, ECONOMY
SCIENCE, INNOVATION &
SOCIAL ECONOMY**



FRIS

Researchportal.org

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(816948)
All results



(45567)
Researchers



(2346)
Organisations



(77102)
Projects



(680833)
Publications



(6610)
Patents



(768)
Infrastructure



(3722)
Datasets



Find expertise

New on the FRIS-portal: SDG-labels!

From now on, all projects and publications with a summary on the **FRIS-portaal** will be enriched with SDG labels. SDG stands for Sustainable Development Goals, 17 goals established by the United Nations in 2015 to work more effectively towards a bet-

Researcher in the spotlight



Success stories



What do wondrous fungi, purifying hemp and smart lenses have in common? There are in-

FRIS Objectives

OPEN- NESS

Accelerate the **chain from idea to innovation** by ensuring a better information flow between research institutes and innovative organisations

SIMPLI- CITY

- Simplifying **administration** through webservices
- Obtaining information directly from systems
- Requesting information just once, sharing and reusing it to get the most out of it

EFFECT- IVENESS

- To make the government, corporate and research **innovation strategy** more effective and efficient

TRANS- PARENCY

- To make research information **publicly** available so that everyone can use it freely

Dataproviders: research institutes and funders

2008

KU Leuven

UGent

UHasselt

VUB

UAntwerpen

INBO

ILVO

ITG

Plantentuin
Meise

KMDA

2018 <

KMSKA

VLIZ

Alamire

Begunstigden
van VLAIO-
financiering
(>30)

Waterbouw-
kundig Labo

FWO

Orpheus
Instituut

Onroerend
Erfgoed

Department
Environment

2022 <

Universities of
Applied
sciences & arts

Vlerick
Business School

Antwerp
Management
School

VIB

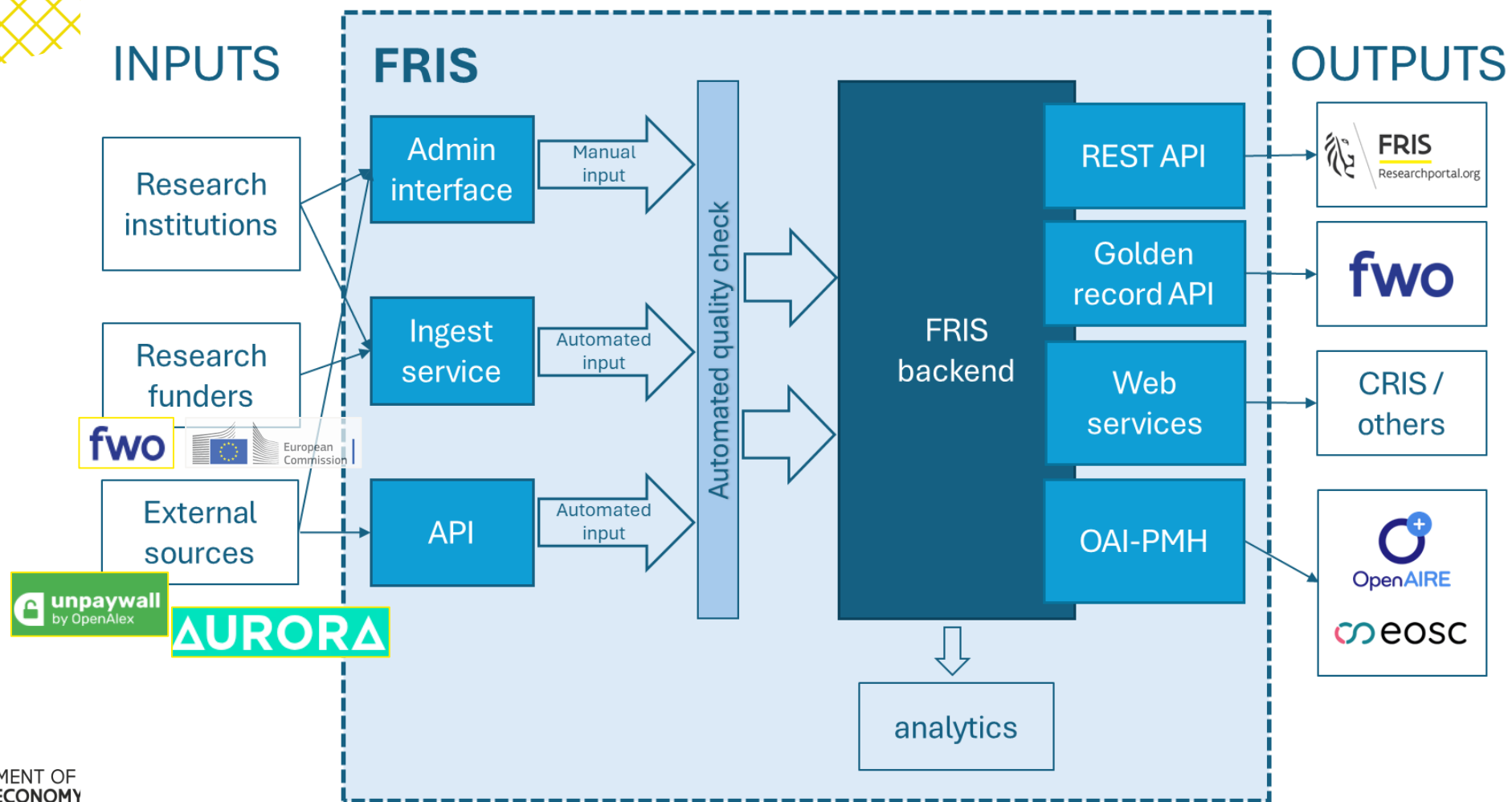
2024 <

imec

Flanders Make

VITO

FRIS architecture: high level



External sources

Unpaywall:



- Open access label
- Best open location

Sdg-labels:



- Aurora SDG-classifier

ROR:



- Future FOR: organisation database including ROR

Journal masterlist:



ecoom

- Referentials journal list including peer review label

Publicatie

The Concawe NO2 source apportionment viewer: A web-application to mitigate NO2 pollution from traffic and other sources



Tijdschriftbijdrage - Tijdschriftartikel

UNPAYWALL INFORMATIE



Project

SSPIRIT – From Seabed to SSpace: Identifying and quantifying plastic litter with Innovative remote sensing Technologies (SSPIRIT)

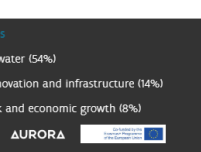


Overall goal: The goal of the project is to develop and test a comprehensive cost-effective plastic pollution in all compartments of the water column from the surface

SDG-LABEL BY AURORA



Top 3 SDG classifications
SDG14: Life below water (54%)
SDG9: Industry, Innovation and Infrastructure (14%)
SDG8: Decent work and economic growth (8%)
[Learn more](#)



FRIS-principles

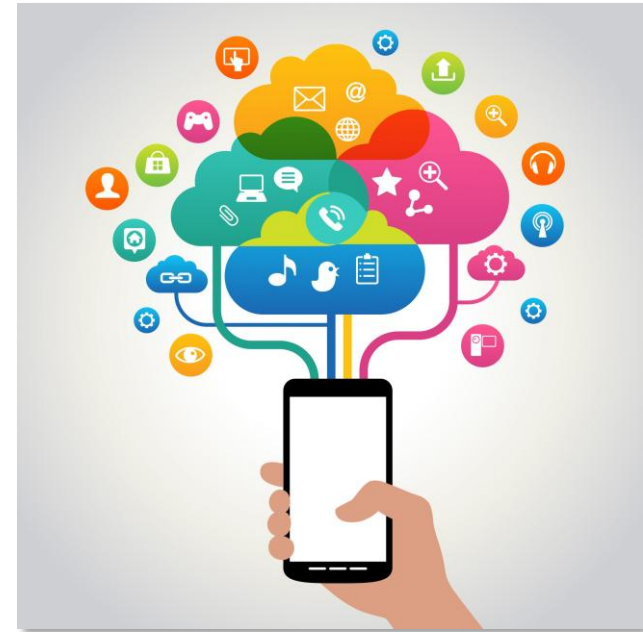
- Data ownership by the research institutes
- Contract with the research institutes, not the individual researcher
- No data manipulation, we do say yes to enrichment with info of referential providers e.g. Research funders, Unpaywall, ROR...
- Working in silo's (because of ownership)
- Linking of information through system of aliasing by PID's
- Future: golden record-visualization

FRIS use cases: few examples

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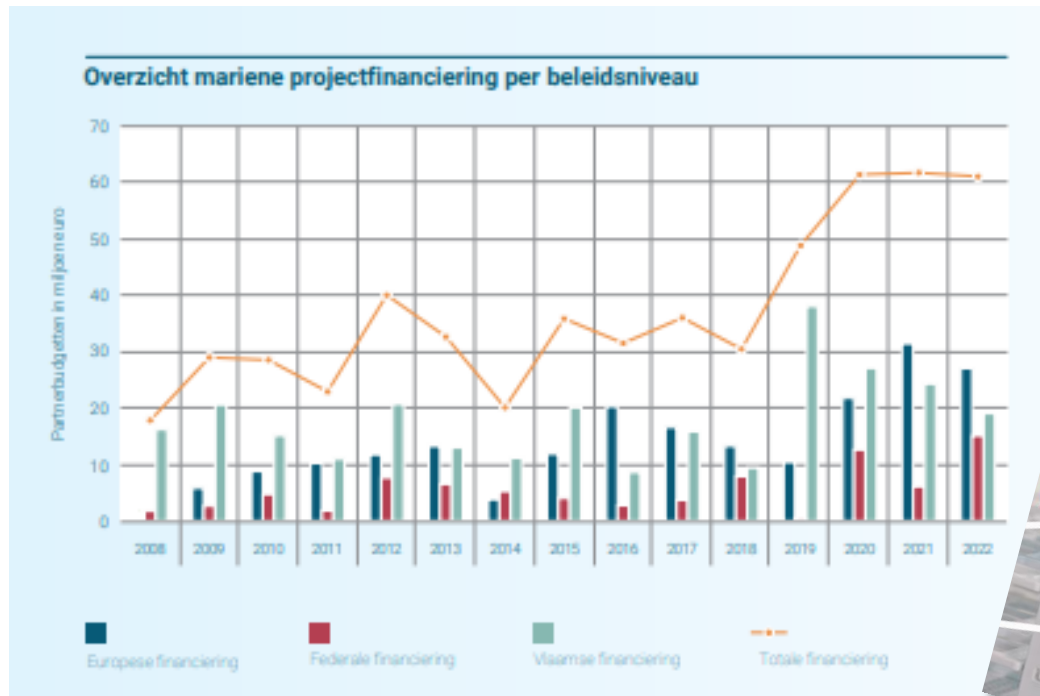
Data usage

- Portal visitors:
 - 254k users/year
 - Worldwide: focus on Belgium/Netherlands
 - Channels:
 - **Direct: 229k**
 - **Organic search: 14k**
 - **Referral: 9k**
- Policy monitoring/preparation:
 - Topics (eg OESO/Mariad | Zeecompendium | evaluation instruments)
 - Budget
 - Collaboration
- Reporting funds: FWO & other funds
- Open Science: KPI's / Evaluation



Monitoring research activities: publications and projects (I)

Eg. Info for the report “Zeecompendium” VLIZ



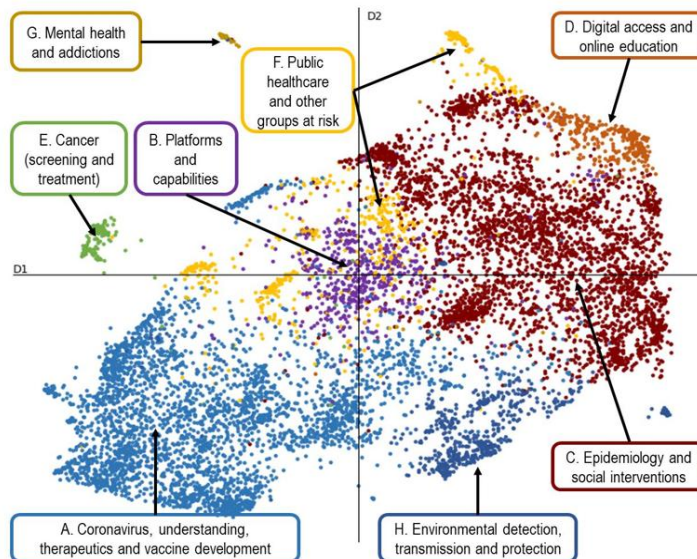
Monitoring research activities: publications and projects (II)

OESO-analyses (expertgroup MARIAD / CSTP):

Eg. Reorientation of government research funding towards Covid-19 during the pandemic

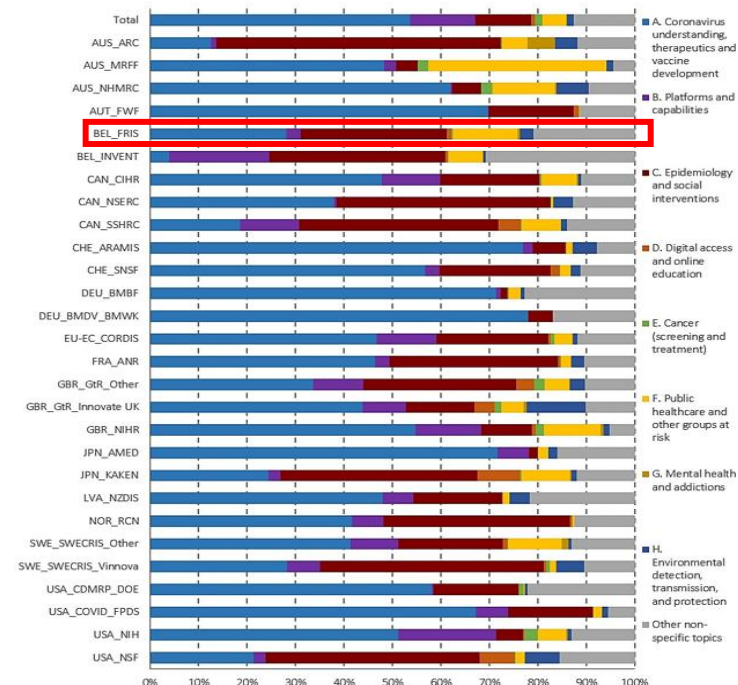
(<https://www.oecd.org/publications/measuring-governments-r-d-funding-response-to-covid-19-4889f5f2-en.htm>)

Figure 9. Visualisation of COVID-19 R&D projects and their dominant high-level topic clusters



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Figure 11. COVID-19 R&D funding by C8 clusters and funding agency/data source

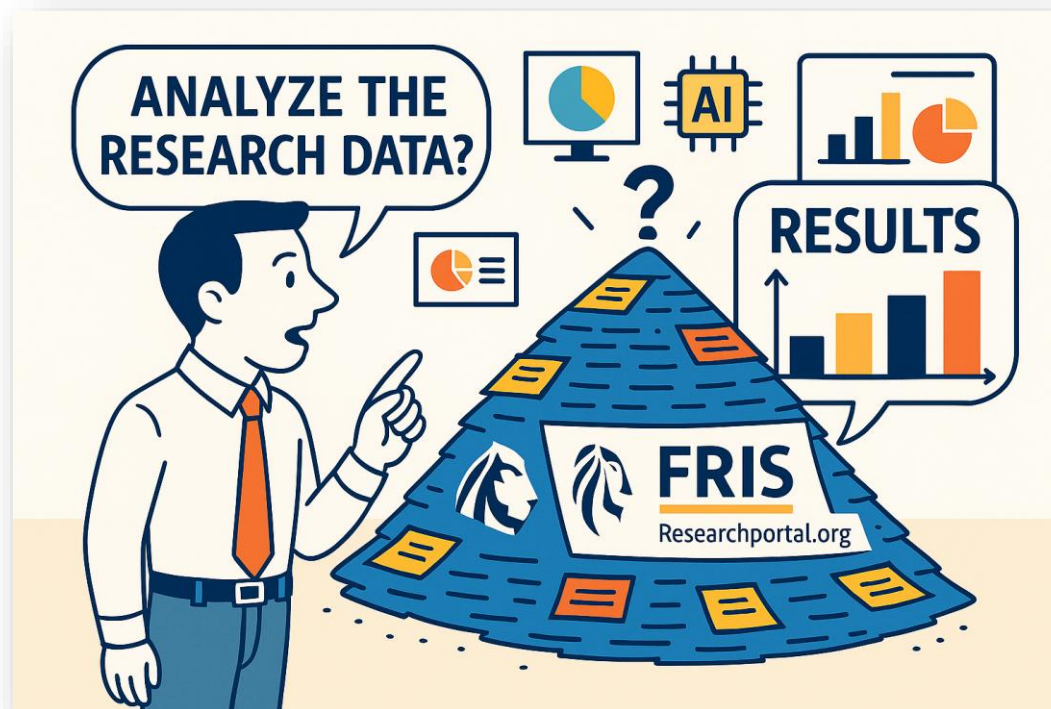


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Monitoring research activities: policy

Parliamentary & policy questions:

→Eg. critical raw materials, research cooperation with China, polar research, etc.



Less administrative burden for researchers

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Reporting research: VLAIO

VLAIO-reporting:

→VLAIO's collective research projects are reported via FRIS.

The screenshot shows a project page on the VLAIO website. The project title is 'Chemische Recyclage van stikstofhoudendepolymeren (MOT2: CHRONICLE (HBC.2022.0532))'. The page includes a description of the CHRONICLE project, its date (1 mrt. 2023 → Heden), keywords, and disciplines. It also features a section for 'SDG-LABEL VAN AURORA' with a pie chart showing the top 3 SDG classifications: SDG12 (57%), SDG9 (24%), and SDG15 (22%). The right sidebar contains buttons for 'RAPPORTEER EEN FOUT', 'Ziet u foute informatie? Contacteer ons!', 'GEFINANCIERD DOOR VLAIO', and 'ZOEK GELIJKAARDIGE PROJECTEN'.

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Project

Chemische Recyclage van stikstofhoudendepolymeren (MOT2: CHRONICLE (HBC.2022.0532))

CHRONICLE is een Catalist! Moonshot-project dat tot doel heeft een nieuwe, baanbrekende methode te ontwikkelen voor de chemische recyclage van harde polyurethaan (PU) en polyisocyanuraat (PIR) materialen. Door gebruik te maken van selectieve depolymerisatie via amino- en/of ammonolyse, zullen deze kunststofafvalstromen omgezet worden in waardevolle bouwstenen voor de productie van duurzamere materialen, om zo een hoge koolstofcirculariteit te garanderen. Het project omvat reactieontwikkeling, procesoptimalisatie, geavanceerde analytische karakterisering en modelgebaseerd ontwerp van het scheidings- en zuiveringsproces. Om de duurzaamheid van de nieuwe technologische route te waarborgen, staat in CHRONICLE het beheer van de waardeketen centraal, daarbij ondersteund door techno-economische en levenscyclusanalyses.

Datum: 1 mrt. 2023 → Heden

Trefwoorden: afval kunststoffen, Chemische recyclage, polyurethaan

Disciplines: Anorganische chemie, Fysische chemie, Duurzame chemie, Nanotechnologie, Scheidings- en membraantechnologie, Duurzaamheids- en milieutechniek, Materialenwetenschappen en -techniek, Polymere materialen, Toegepaste economie

Zie ook: [Chemische recyclage van stikstofhoudende polymeren \(CHRONICLE\)](#)

Zie ook: [Chemische recyclage van stikstofhoudende polymeren \(CHRONICLE\)](#)

SDG-LABEL VAN AURORA

Top 3 SDG classifications

- SDG12: Responsible consumption and production (57%)
- SDG9: Industry, innovation and infrastructure (24%)
- SDG15: Life in Land (22%)

[\[Learn more\]](#) AURORA

RAPPORTEER EEN FOUT

Ziet u foute informatie?
[Contacteer ons!](#)

GEFINANCIERD DOOR

VLAIO

ZOEK GELIJKAARDIGE PROJECTEN

- Qover afval kunststoffen
- Qover Chemische recyclage
- Qover polyurethaan
- Qover afval kunststoffen met financierder Agentschap Innoveren & Ondernemen
- Qover Chemische recyclage met financierder Agentschap Innoveren & Ondernemen
- Qover polyurethaan met financierder Agentschap Innoveren & Ondernemen



The Research Foundation – Flanders (FWO) stimulates and financially supports:

- fundamental scientific research
- strategic basic research
- clinical scientific research
- the purchase of large-scale and medium-scale research infrastructure
- the management of large computing capacity in Flanders

FWO supports fundamental and strategic basic research

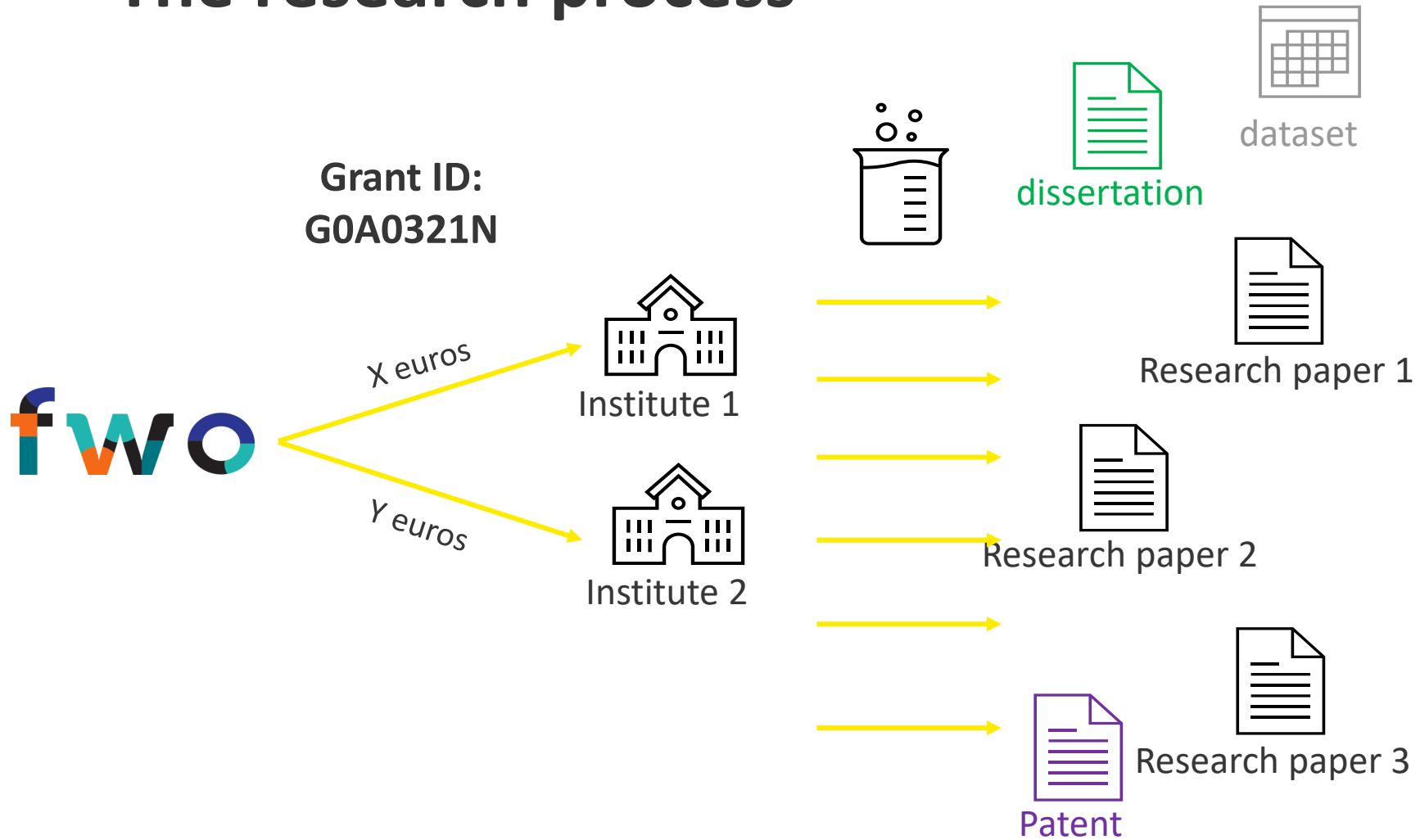
in Flanders

PhD fellowships	Postdoctoral fellowships
Research projects	Infrastructure

and international

International mobility	International contacts
International collaboration	European framework programme

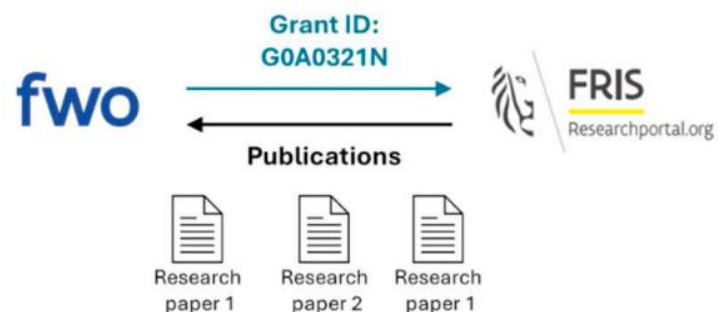
The research process



Reporting research: Research - Flanders (II)

FWO-reporting:

→FWO extracts from FRIS the publications linked to a project, and prefills this information in the FWO-reporting tool

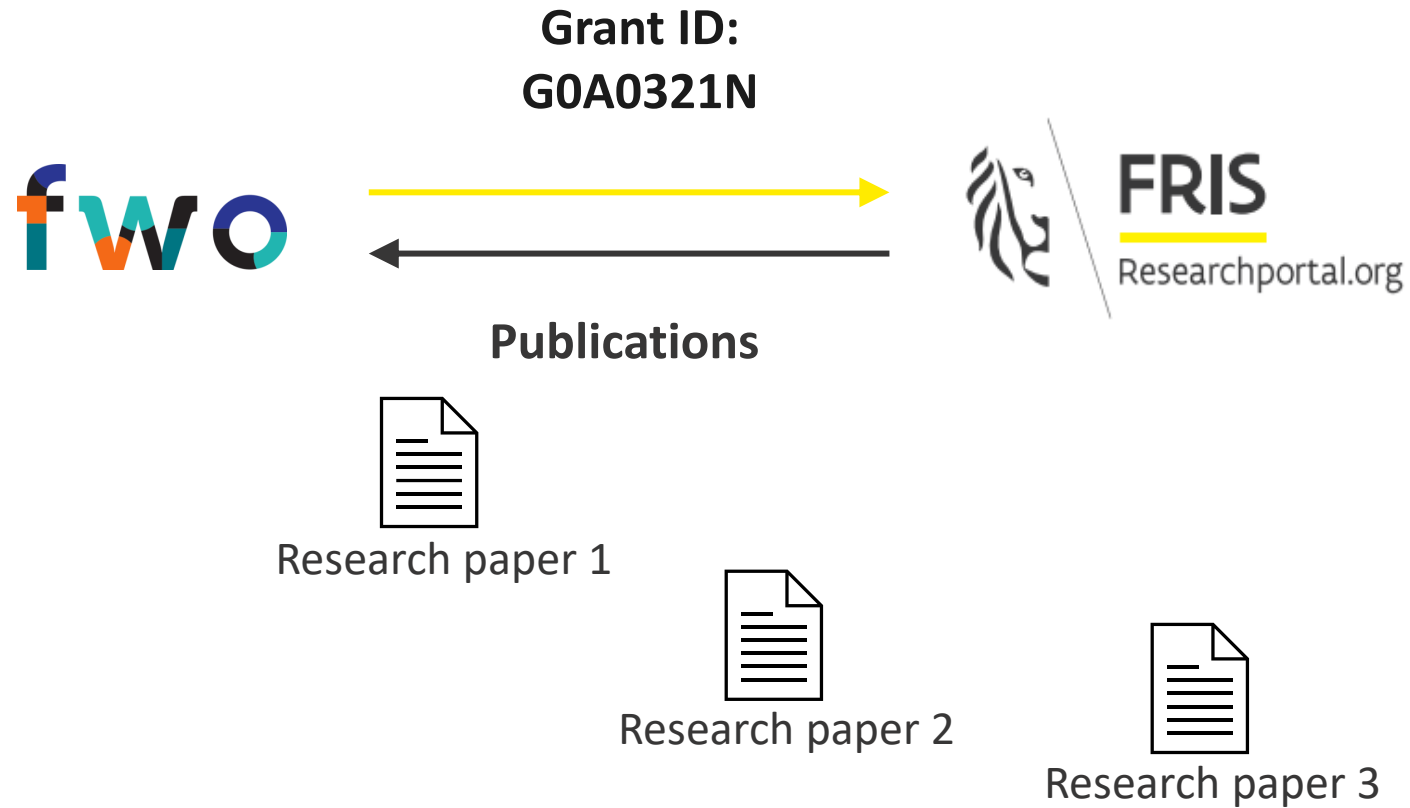


- Based on golden records of projects and publications
- In operation for A1-publications
- Will be extended to other publication types from 2026 onwards

Building golden records: step 1: projects



Retrieval from FRIS by FWO



FWO reporting tool – prefilled

Peer-reviewed scientific articles

Other publications

Published data

Other academic output

Peer-reviewed scientific articles *(optional)*

Please press the button 'retrieve publications' to generate a list with all your peer-reviewed articles in scientific journals (i.e. A1 articles) that are related to your FWO-funded research. Your publication list is composed of all your published articles (i.e. online and/or printed) that are available in the [FRIS](#) database. Only peer-reviewed journal articles that are correctly registered in the FRIS database will be considered by the FWO. To add articles to FRIS, make sure your publications are registered in your institution's repository and refer to the correct FWO project number. After registration of additional publications in FRIS, you can press the 'retrieve publications' button again to generate your newly updated publication list. Please take into account that synchronisation between your institution's repository, FRIS and FWO's reporting tool may take up to 1 week so make sure you register the articles timely. Peer-reviewed articles that are accepted but not yet published will not appear in your publication list. You may refer to these accepted publications in the scientific progress section of the report by including a reference in the description of the relevant goal.

If one or more referable datasets are available, please add them in the published data section.

 Retrieve publications

Bibliographical reference. ↑↓

Publication type. ↑↓

Specify the open access status for the publication.
↑↓

Detailed overview: the FWO-reporting tool

Peer-reviewed scientific articles

Other publications

Published data

Other academic output

Peer-reviewed scientific articles (optional)

Please press the button 'retrieve publications' to generate a list with all your peer-reviewed articles in scientific journals (i.e. A1 articles) that are related to your FWO-funded research. Your publication list is composed of all your published articles (i.e. online and/or printed) that are available in the [FRIS](#) database. Only peer-reviewed journal articles that are correctly registered in the FRIS database will be considered by the FWO. To add articles to FRIS, make sure your publications are registered in your institution's repository and refer to the correct FWO project number. After registration of additional publications in FRIS, you can press the 'retrieve publications' button again to generate your newly updated publication list. Please take into account that synchronisation between your institution's repository, FRIS and FWO's reporting tool may take up to 1 week so make sure you register the articles timely. Peer-reviewed articles that are accepted but not yet published will not appear in your publication list. You may refer to these accepted publications in the scientific progress section of the report by including a reference in the description of the relevant goal.

If one or more referable datasets are available, please add them in the published data section.

Retrieve publications

Bibliographical reference. ↑↓	Publication type. ↑↓	Specify the open access status for the publication. ↑↓		
Jessica Alber, Femke Bouwman, Jurre den Haan, Robert A Rissman, Lies De Groef, Maya Koronyo-Hamaoui, Imre Lengyel, Dietmar Rudolf Thal. (2024). Retina pathology as a target for biomarkers for Alzheimer's disease: Current status, ophthalmopathological background, challenges, and future directions. <i>Alzheimers & Dementia</i> . 20(1). https://doi.org/10.1002/alz.13529 .	A1	Open		
Sandra Oliveira Tomé, Grigoria Tsaka, Alicja Ronisz, Simona Ospitalieri, Klara Gawor, Luis Aragao Gomes, Markus Otto, Christine AF von Arnim, Philip Van Damme, Ludo Van Den Bosch, Estifanos Ghebremedhin, Celeste Laureyssen, Rik Vandenberghe, Frederic Rousseau, Joost Schymkowitz, Dietmar Rudolf Thal. (2023). TDP-43 pathology is associated with increased tau burdens and seeding. <i>Molecular neurodegeneration</i> . 18(1). https://doi.org/10.1186/s13024-023-00653-0 .	A1	Open		
Jimmy Beckers, Arun Kumar Tharkeshwar, Laura Fumagalli, Matilde Contardo, Evelien Van Schoor, Raheem Fazal, Dietmar Rudolf Thal, Siddharthan Chandran, Renzo Mancuso, Ludo Van Den Bosch, Philip Van Damme. (2023). A toxic gain-of-function mechanism in C9orf72 ALS impairs the autophagy-lysosome pathway in neurons. <i>Acta neuropathologica communications</i> . 11(1). https://doi.org/10.1186/s40478-023-01648-0 .	A1	Open		
Sriram Balusu, Katrien Horre, Nicola Thrupp, Katrien Craessaerts, An Snellinx, Lutgarde Serneels, Dries T'Syen, Iordana Chrysidou, Amaia M Arranz, Susanne Rianneke Sierksma, Joel Simren, Thomas K Karikari, Henrik Zetterberg, Wei-Ting Chen, Dietmar Rudolf Thal, Evgenia Salta, Mark Fiers, Bart De Strooper. (2023). MEG3 activates necroptosis in human neuron xenografts modeling Alzheimer's disease. <i>Science (New York, N.Y.)</i> . 381(6663): 1176 - +. https://doi.org/10.1126/science.abp9556 .	A1	Closed		
Matei Bolborea, Pauline Vercruysse, Tselmen Daria et al. (2023). Loss of hypothalamic MCH decreases food intake in amyotrophic lateral sclerosis. <i>Acta Neuropathologica</i> . 145(6): 773 - 791. https://doi.org/10.1007/s00401-023-02569-x .	A1	Open		
Jolien Schaevebeke, Sandra O Tome, Alicja Ronisz, Simona Ospitalieri, Christine AF von Arnim, Markus Otto, Rik Vandenberghe, Dietmar Rudolf Thal. (2023). Neuronal loss of the nucleus basalis of Meynert in primary progressive aphasia is associated with Alzheimer's disease neuropathological changes. <i>Alzheimers & Dementia</i> . 19(4): 1440 - 1451. https://doi.org/10.1002/alz.12794 .	A1	Open		
Peter T Nelson, Edward B Lee, Matthew D Cykowski et al. (2023). LATE-NC staging in routine neuropathologic diagnosis: an update. <i>Acta Neuropathologica</i> . 145(2). https://doi.org/10.1007/s00401-022-02524-2 .	A1	Open		
Sebastiaan Moonen, Marta Koper, Evelien Van Schoor, Jolien Schaevebeke, Rik Vandenberghe, Christine AF von Arnim, Thomas Tousseyn, Bart De Strooper, Dietmar Rudolf Thal. (2023). Pyroptosis in Alzheimer's disease: cell type-specific activation in microglia, astrocytes and neurons. <i>Acta neuropathologica</i> . 145(2): 175 - 195. https://doi.org/10.1007/s00401-022-02528-y .	A1	Open		
Dietmar Rudolf Thal, Klara Gawor. (2023). Cerebral amyloid angiopathy: Neuropathological diagnosis, link to Alzheimer's disease and impact on clinics. <i>Clinical Neuropathology</i> . 42(5). https://doi.org/10.5414/np301564 .	A1	Under embargo		
NURIA SUELVES, SHIRINE SALEKI, TASHA IBRAHIM, DEBORA PALOMARES, Sebastiaan Moonen, Marta Koper, Céline Vrancx, DEVKEE VADUKUL, NICOLAS PAPADOPOULOS, NIKENZA VICECONTE, ELOISE CLAUDE, RIK VANDENBERGHE, ARNIM CHRISTINE A VON, STEFAN CONSTANTINESCU, DIETMAR RUDOLF THAL, ANABELLE DECOTTIGNIES, PASCAL KIENLEN-CAMPARD. (2023). Senescence-related impairment of autophagy induces toxic intraneuronal amyloid-β accumulation in a mouse model of amyloid pathology. <i>Acta neuropathologica communications</i> . 11: 82.	A1	Open		

Benefits/lessons learned

- **Benefits for different stakeholders like researchers, RPO's, funder, FRIS:**

- Less administrative burden (enter once in institution repository and use as often as possible)
- Better quality as info is used for reporting
- More uniformity in data across institutions

- **Lessons learned:**

- Less flexibility in terms of:
 - Time (need to calculate time for the information flow from institute to FRIS to FWO)
 - Not be able to adjust info freely as a free text (correcting information needs to be done at the source)
- Not yet a reflex to link research output with projects, and therefore seems to be more time consuming
- further finetuning

Pilot: in close collaboration

- Key for success = collaboration
- Collaboration from impacted Research Performing Organisations (RPO's)
- Close collaboration with Research Foundation Flanders
- Guided by ECOOM



Next steps: challenges & opportunities

- AI as an opportunity:
 - Predicting links between project and publications:
 - Large Language Models
 - Expert center ECOOM -> less administrative burden for researchers and research institutions
 - Predicting keywords and disciplines (Flemish discipline code)
- Using the right pid-strategy: challenge for book contributions
 - Doi? Institutional URL?
 - Solutions?
 - Ideas?



Flanders
State of the Art

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