

Lisbon, October 9th 2018



FOSTER

*The Open Science training hub FOSTER
Plus - new resources and courses*

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**Fostering the practical implementation of
Open Science in Horizon 2020 and beyond**

(May 2017 - April 2019)

A large, stylized dandelion seed head is positioned in the bottom left corner of the slide, partially overlapping the text. It is rendered in a light orange or gold color, matching the main logo.

VISION

Building upon the previous FOSTER project, support individual researchers and research performing organisations to move beyond simply being aware of them to being able to apply Open Science (OS) approaches in their daily workflows.





Facilitating Open Science Training in
European Research

“Spread the seeds of Open Access and Open Science”



February 2014 to July 2016



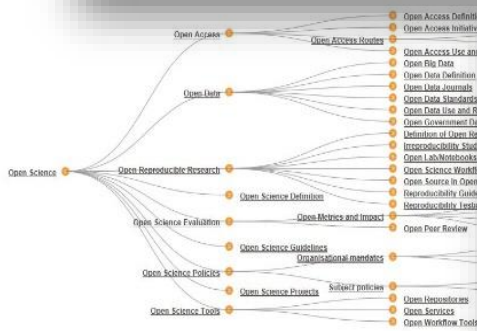


2000+ Training materials, categorized in the FOSTER Portal

Open Science Taxonomy

Learning Objectives for Target Groups/Stakeholders

TOPICS (following the Research Lifecycle)	CORE LEARNING ELEMENTS	LEARNING OBJECTIVES (as basis for a LEARNING PLAN)	STAKEHOLDER				
			Doctoral Students	Researchers	Research Project Managers	Knowledge Managers & Librarians	Funding Agencies
Open Science Definition	Define the concept of Open Science	Define relevance of OS tools to Reproducibility/Integrity of Research	o	o	o	o	o
		Identify OS tools for each step of the Research Lifecycle	o	o	o	o	o
		Apply OS concepts to your daily research processes	o	o			
		Discuss OS & Reproducibility role in Innovation & Economic Growth		o	o	o	o
Open Reproducible Research	Define relevance to Reproducibility	Identify OS tools for each step of the Research Lifecycle	o	o	o	o	o
		Define relevance of OS tools to Reproducibility/Integrity of Research	o	o	o	o	o
		Apply OS concepts to your daily research processes	o	o			
		Justify Openness as a Reproducibility Tool		o	o		
		Discuss OS role in Peer-Review Process		o	o		
		Discuss OS & Reproducibility role in Innovation &					



More than **100 face2face training events** in **28 countries** and **25 online courses**, totalling more than **6300 participants**

<http://fosteropenscience.eu>

Our vision






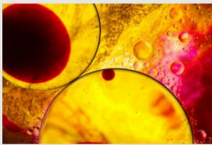


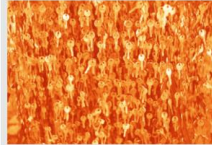

FOSTER portal is becoming an **Open Science training hub**:

It provides **training resources, infrastructure and trainer's materials** to support people seeking **to obtain knowledge or organize OS training** in their own institutions, in order **to build capacity** for the practical implementation of OS and promote a change in culture.

1

If you need training

Open Science Toolkit

<p>What is Open Science?</p> <p>This introductory module will help you to understand what open science is and why it is something you should care about.</p> 	<p>Best Practice</p> <p>This module introduces policies and other environmental factors that influence good practice in open research.</p> 	<p>Open Peer Review (OPR)</p> <p>This module will introduce you to OPR and let you know how you can get started with it.</p> 	<p>Data Protection and Ethics</p> <p>This module helps you to get to grips with responsible data sharing.</p> 	<p>Licensing</p> <p>This module helps you to find the best license for your open research outputs.</p> 
<p>Open Data</p> <p>In this module, you'll focus on which data you can share and how you can go about doing this most effectively.</p> 	<p>OSS and Workflows</p> <p>This module introduces Open Source Software (OSS) and workflows as an emerging but critical component of Open Science.</p> 	<p>Open Innovation</p> <p>This module will show you how Responsible Research and Innovation is accelerated through Open Science.</p> 	<p>Open Access Publishing</p> <p>This module will help you become skilled in Open Access publication in the wider context of Open Science.</p> 	<p>Preprints</p> <p>This module introduces the practice of sharing preprints and helps you to see how it can support your research.</p> 

www.fosteropenscience.eu/toolkit

Toolkit design

Ten new OS online courses addressing key OS topics:

- Enables researchers to put OS into practice: provides focused, practical and discipline specific examples to answer some of the burning questions researchers may have.
- Interactive content: videos, graphics, additional readings.
- Assessment through quizzes.
- Badge upon completion.

Open Peer Review module example

Open Peer Review

This module will introduce you to Open Peer Reviewing and let you know how you can get started with it.

Introduction

This module introduces you to open peer review (OPR), an emerging practice in Open Science.

Upon completing this module, you will:

- understand what OPR means and how it supports Open Science
- be aware of OPR workflows and which aspects of the review process are strongly needed in the peer review process.
- know how to write a constructive and responsible open peer review
- know about useful tools and services that can support you



OPR in three minutes

In this short video, Tony Ross-Hellauer introduces the concept of open peer review, a practice strongly needed in the peer review process.

What is Open Peer Review? Tony Ross-Hellauer



What does OPR mean?

Definition of OPR

Click the forward arrow to see more.



Transparent & accountable

Open peer review is an umbrella term for various alternative review methods that seek to make classical peer review more transparent and accountable (cf. Ross-Hellauer, 2016).

Quiz - Are you an Open Peer Reviewer?

Transparency can be added to peer review through:

Tick all that apply.

Accessible evaluation reports

Platforms that allow interaction

Revealed identities of reviewers

Submit

Show feedback

What are the benefits of open peer review?

Tick all that apply.

It is not biased

My results can be published more quickly

My review is a citable research output

Submit

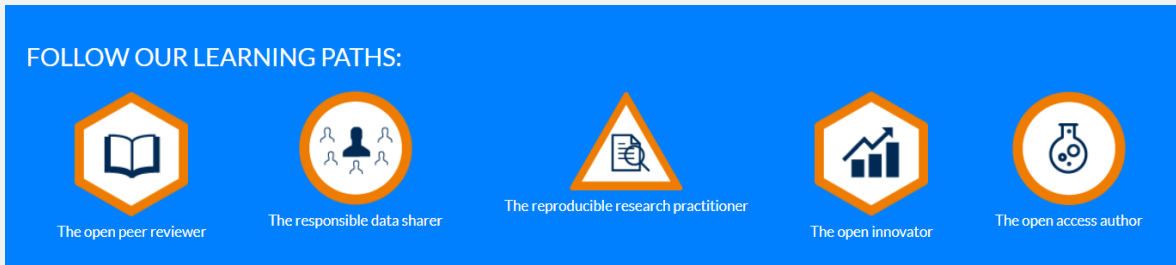
Show feedback

Specialisation pathways

Each *learning path* is a combination of several courses that lead to a certain specialism

2-4 hours of content

- The reproducible research practitioner
- The responsible data sharer
- The Open Access Author
- The open peer reviewer
- The open innovator



For more information, see www.fosteropenscience.eu/learning-paths



The responsible data sharer

Sharing data is great but you need to know what data you can share, with whom you can share, when to share, and how best to share. This pathway will equip you with the knowledge you need to make informed decisions about sharing your data responsibly.

Effort: 3-4 hours

Level: intermediate and advanced

The learning path will be completed by finishing the following courses:

- What is open science?
- Managing and sharing research data
- Data protection and ethics
- Open licensing



What is Open Science?



Managing and Sharing Research Data

Learning Management System

Learning Management System (LMS)

<https://lms.fosteropenscience.eu/moodle/>

infrastructure to conduct *elearning* courses (self-learning or moderated) courses and to upload or download materials for re-use.

- Possibility to incorporate toolkit courses as well as other resources
- Potential reuse and reshaping of the courses.

2

If you want to organize
training on your own

Open Science Training Handbook



- Book sprint: 1 week, 14 authors from 10 countries
- 200 pages written in 5 days
- Beta version available for comment for 15 days



Open Science Training Handbook



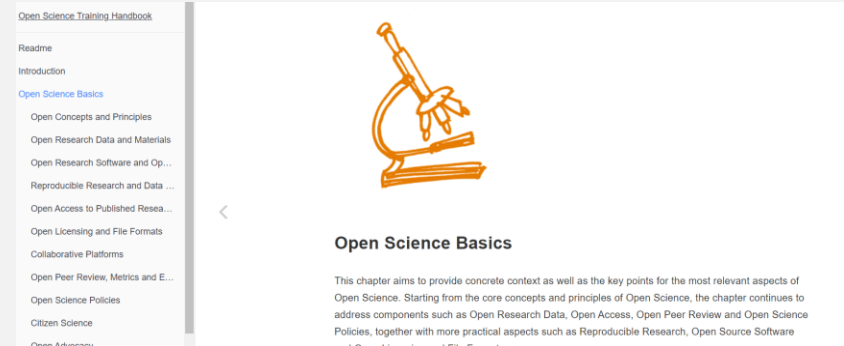
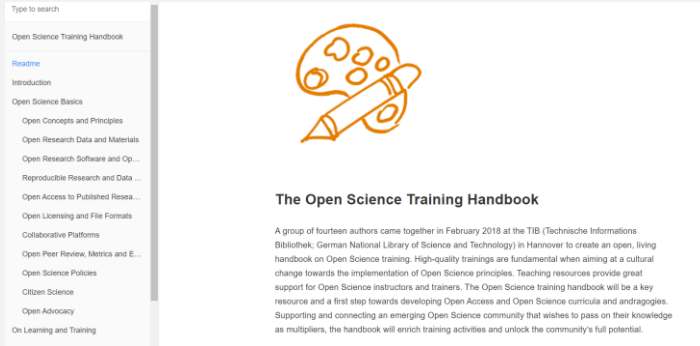
- Open Science Basics
 - Open Concepts & Principles
 - Open Research Data & Materials
 - Open Research Software & Open Source
 - Reproducible Research & Data Analysis
 - Open Access to Published Research Results
 - Open Licensing & File Formats
 - Collaborative Platforms
 - Open Peer Review, Metrics & Evaluation
 - Open Science Policies
 - Citizen Science
 - Open Advocacy
- Introduction
- On Learning & Training
- Organizational Aspects
- Examples & Practical Guidance
- Glossary
- References
- About the Authors & Facilitators

Open Science Training Handbook



- Available as GitBook and for download (PDF, epub, mobi)
- CC 0 licenced to maximize reuse
- Ongoing translations into Greek, Spanish and Portuguese

book.fosteropenscience.eu



<http://doi.org/10.5281/zenodo.1212538>

Recommendations for OS training

Good practice recommendations on OS training targeting researchers and multipliers - train-the-trainers approaches for research support staff and librarians:

- A selection of open science topics to include in your training activities;
- Useful tips on how to plan based on outcomes rather than objectives;
- Overview of types of training based on the audience size, funds available, duration of training and training levels;
- Organizational task checklist;
- Exercises and glossary;

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FOSTER, Facilitating Open Science in European Research

Recent uploads

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July 20, 2018 (v1) **Project deliverable** **Open Access** [View](#)

Recommendations on Open Science Training

by Iryna Kuchma; FOSTER Plus consortium;
Building on Open Science Training Handbook (available as gitbook at <https://book.fosteropenscience.eu/> and in the github repository at <https://github.com/Open-Science-Training-Handbook>), and on successes of over 40 online and face-to-face events that FOSTER organized in 2017-2018, this report provid

Uploaded on August 7, 2018

April 25, 2018 (v1) **Conference paper** **Open Access** [View](#)

The Open Science training handbook: Written by 14 international experts during the FOSTER Book Sprint

by Helene Brinken, Dr. Martin Mehlberg, Lambert Heller;
In February 2018, FOSTER Plus and TIB organized a book sprint in order to author an Open Science training handbook collaboratively. For one week, we brought together 14 experienced Open Science educators in Hanover to answer a number of questions: What works, what doesn't? How can you make the

Uploaded on June 11, 2018

March 28, 2018 (v1) **Project deliverable** **Open Access** [View](#)

Roadmap for Implementing Open Science Training Practices in Research Institutions

by Brinken, Helene, Jones, Sarah, Oudenhoven, Martine, Davidson, Joy;
In this policy briefing FOSTER outlines six practical actions to be implemented by research institutions to support a cultural change towards Open Science.

Uploaded on March 28, 2018

New upload

Want your upload to appear in this community?

- Click the button above to upload straight to this community.
- The community curator is notified, and will either accept or reject your upload (see community curation policy above).
- If your upload is rejected by the curator, it will still be available on Zenodo, just not in this community.

Community

FOSTER

FOSTER, Facilitating Open Science in European Research

The FOSTER portal is an e-learning platform that brings together the best training resources for those who need to know more about Open Science, or who need to develop strategies and skills for

<https://doi.org/10.5281/zenodo.1341023>

Trainer's corner

Advocacy Toolkit

- Factsheet about project
- Poster template
- Standard presentations
 - Why OS?, What is OS?, FOSTER Plus
- Advocacy stickers & moo cards
- Videos
- Reusable illustrations

<https://www.fosteropenscience.eu/trainers-materials>



FOSTER
Fostering the practical implementation of Open Science in Horizon 2020 and beyond

PHASE I 2014-16 **FOSTER** → **PHASE II 2017-19** **FOSTER Plus**

Results of the first project phase:

- Open Science training portal with more than 2,000 training materials
- Training activities reaching more than 6,300 persons:
 - 100 face-to-face courses in 28 countries
 - 25 online courses
- Definition of learning objectives for target groups
- Definition of an Open Science Taxonomy

The project aims at supporting European researchers in implementing Open Science principles in their daily workflows. Developing materials and activities, it will foster the Open Science training capacity.

Focus of project activities:

- discipline-specific needs
- support of practical implementation
- advanced-level training material

Specific activities and materials:

- Practical advice through Open Science toolkit
- Bootcamp and initiation of Open Science trainers network
- Handbook for Open Science Training

Project partners: Universidade do Minho, PT; Universität Göttingen, DE; Open University, UK; Stichting eZ-Lenex, NL; University of Edinburgh, UK; University of Glasgow, UK; Danmarks Tekniske Universitet, DK; Stichting LIBER, NL; Consejo Superior de Investigaciones Científicas (CSIC), ES; Leibniz Institut für Laborwissenschaften (GEMIS), DE; Centro de Regulación Genómica (CRG), ES

Project details: Acronym: FOSTER Plus; Duration: 01.05.2017 - 01.05.2019; www.fosteropenscience.eu; fosteropenscience; @fosteropenscience; foster@sub.uni-goettingen.de; Helene Brinken; Göttingen State and University Library

Associated partners: TVH Hannover, DARIAH-EU

FOSTER
spreads the seeds of Open Science... and makes Open Science flowers bloom!

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www.fosteropenscience.eu



3

Join our network!

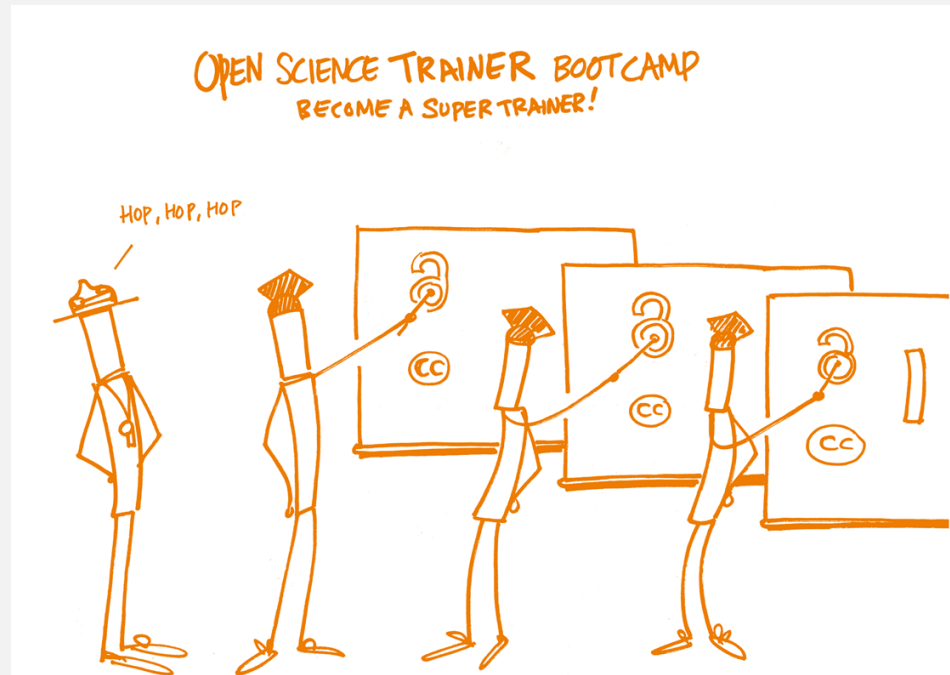
OS Trainer Bootcamp

32 participants from 16 countries (57 applications)

40% researchers, 60% project managers, librarians, research support staff, funders

From astronomy & bioinformatics to humanities & information science.

Every participant will deliver training event(s) from May 2018 to May 2019



Events and Trainers Directory

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Events

Map Search

Our trainers

- Jakub Szepiet
- Martin Connolly
- Sarah Jones
- Michał Staszczakowski

Upcoming events

- ESOF 2018: "Open Science in Action" sessions & side events**
Marie Curie Alumni Fellowship Regional, EC MSCA-DIAC & FOSTER (see Grigoriou & Fenech)
Marseille, France
09/07/2018 - 14/07/2018
- Open Science CLINIQUE for EURResearch (Switzerland)**
Veronique Sarrail (EURResearch) & Ivo Grigoriou (FOSTER)
Webinar
24/03/2018
- Open Science CLINIQUE for NCPs CARE**
Sanna Alaranta (NCP CARE Network) & Ivo Grigoriou (FOSTER)
online
19/04/2018 - 03/05/2018
- Open Science Trainer Bootcamp**
FOSTER
Barcelona
18/04/2018 - 20/04/2018
- Open Science Clinique, Barcelona**
Anna Rovira Fernandez (SPIC) & Ivo Grigoriou (FOSTER)
16/04/2018
- Role of Wikimedia in the era of Open Science**
CRIS, Wikimedia, FOSTER
Center for Genomic Regulation, Barcelona
16/04/2018

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Trainers directory

Are you planning an event in Open Science and looking for speakers? Take a look at the FOSTER Trainers Directory and find the right speaker for your events.

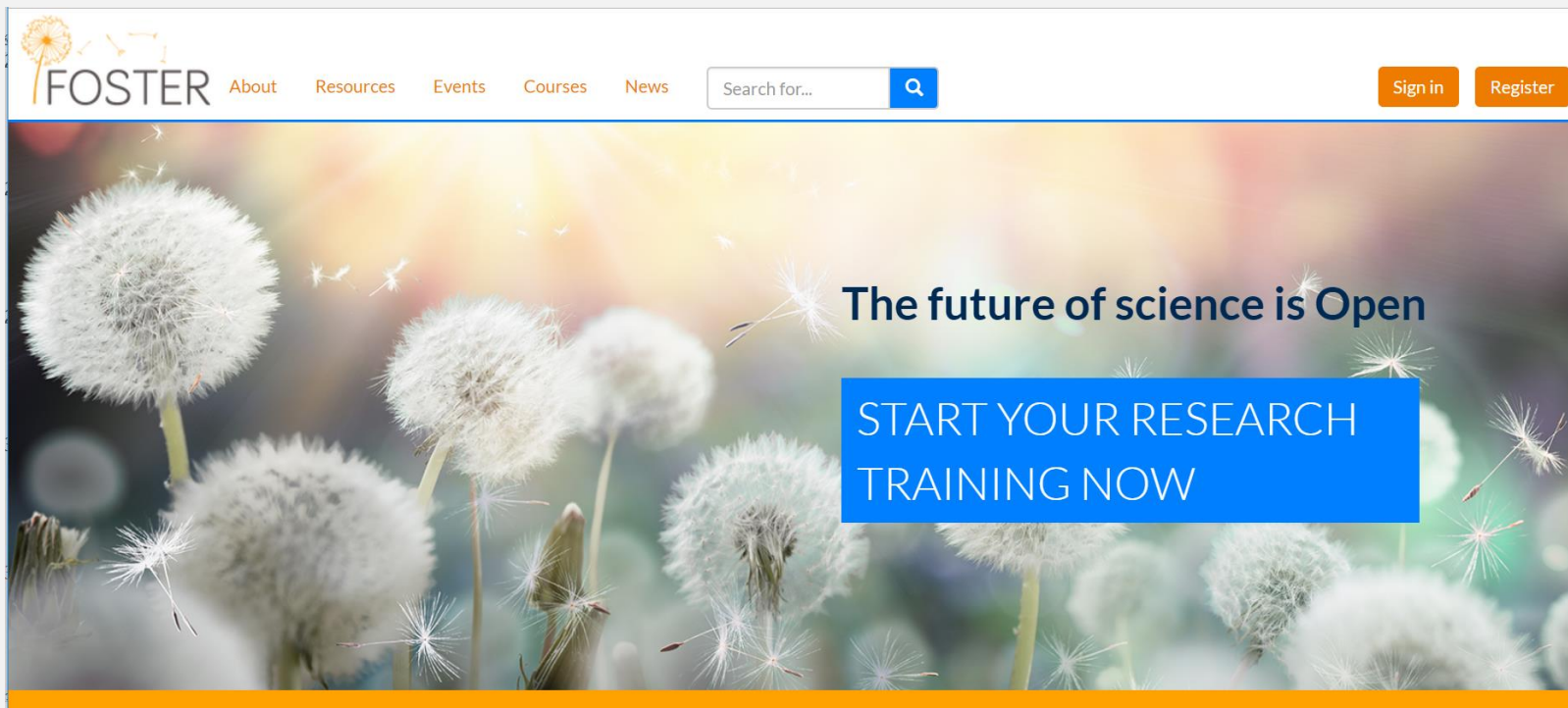
Filter on topic: Open Access (23) | Open Data (20) | Open Science (54) | Research Data Management (13) | Open Metrics and Impact (13) | Open Science Policies (24) | [34 more...](#)

Filter on audience: Researchers and Students (34) | Librarians and Repository managers (31) | PhD Students (28) | Policy makers and Funders (27) | [3 more...](#)

Filter on spoken language: English (EN) (20) | French (FR) (7) | German (DE) (6) | Spanish (ES) (6) | Polish (PL) (4) | Greek (EL) (1) | [7 more...](#)

- Eloy Rodrigues**
Languages: Portuguese (PT), English (EN), Spanish (ES)
Topics of interest: Open Science | Open Access | Open Data | Open Metrics and Impact | Intellectual Property Rights
Audience: Librarians and Repository managers | Researchers and Students | PhD Students | Policy makers and Funders | Project Managers
- Iryna Kuchma**
Languages: English (EN)
Topics of interest: Open Metrics and Impact | Research Data Management | Open Access | Open Data | Open Science Policies
Audience: Policy makers and Funders | Librarians and Repository managers | Researchers and Students | PhD Students
- Ivo Grigoriou**
Languages: English (EN), French (FR), Bulgarian (BG)
Topics of interest: Open Metrics and Impact | Open Science | Open Data | Open Access | Open Peer Review
Audience: Policy makers and Funders | Project Managers | Research Administration | PhD Students | Librarians and Repository managers
- José Carvalho**
Languages: Portuguese (PT), English (EN), Spanish (ES), French (FR)
Topics of interest: Open Science | Open Access | Funder policies
Audience: Librarians and Repository managers | Researchers and Students | Project Managers
- Nancy Pontila**
Languages: English (EN), Greek (EL)
Topics of interest: Open Science | Open Access | Open Access Reader | Open Access Definition | Data Accessibility | Gold Route | Green Route | Open Access Use and Reuse | Definition of Open Reproducible Research | Open Science Workflow | Open Reproducible Research | Open Science Policies | Open Science Tools | Organizational mandates | Open Science Guidelines | Open Metrics and Impact | Open Science Definition | Open Repositories | Open Services
Audience: Librarians and Repository managers | PhD Students | Policy makers and Funders | Project Managers | Research Administration | Researchers and Students
- Gwen Franck**
Languages: English (EN), French (FR), Dutch (NL)
Topics of interest: Open Science | Open Access | Intellectual Property Rights | Institutional policies | Open Access policies | Gold Route | Green Route | Open Science Policies
Audience: Policy makers and Funders | Librarians and Repository managers | Researchers and Students

Get involved...



The image shows a screenshot of the FOSTER website homepage. The top navigation bar includes the FOSTER logo (a dandelion with a molecular structure) and links for About, Resources, Events, Courses, and News. A search bar with a magnifying glass icon is also present. On the right side of the navigation bar, there are buttons for Sign in and Register. The main content area features a large background image of dandelions with seeds blowing in the wind. Overlaid on this image is the text "The future of science is Open" and a blue button that says "START YOUR RESEARCH TRAINING NOW".

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The future of science is Open

START YOUR RESEARCH TRAINING NOW

www.fosteropenscience.eu/