



Deliverable D6.5

Public Dissemination

Editor:	Stuart MacLachlan – Lucideon Limited
Deliverable nature:	Other (O) – Website, Patent Filing
Dissemination level: (Confidentiality)	Public (PU)
Contractual delivery date:	March 2016
Actual delivery date:	November 2016
Suggested readers:	Large audience
Version:	1.1
Total number of pages:	23
Keywords:	Marie Skłodowska Curie Programme, Antibacterial, Materials, Website

Abstract

HyMedPoly is developing drug-free antibacterial hybrid biopolymers for medical applications. To achieve a high impact with the target audiences, HyMedPoly is making a major effort to communicate its results and provide comprehensive information about the project to a wide audience through a website, www.hymedpoly.eu, newsletters and outreach activities.

Disclaimer

This document contains material, which is the copyright of certain HyMedPoly consortium parties, and may not be reproduced or copied without permission.

This report is classed as PU Public

This project has received funding from the European Union's Seventh Programme for research, technological development and demonstration under grant agreement n° 604251

Impressum

[Full project title]	Drug-Free Antibacterial Hybrid Biopolymers for Medical Applications
[Short project title]	HyMedPoly
[Number and title of work-package]	WP6 Management
[Number and title of task]	Task 6.5 Managing and Supporting the Network Web Page and Newsletters
[Document title]	Public Dissemination
[Editor: Name, company]	Stuart MacLachlan, Lucideon Limited
[Work-package leader: Name, company]	Stuart MacLachlan, Lucideon Limited

Copyright notice

© 2016 Participants in project HyMedPoly

Executive Summary

HyMedPoly is developing drug-free antibacterial hybrid biopolymers for medical applications. To achieve a high impact with the target audiences, HyMedPoly is making a major effort to communicate its results and provide comprehensive information about the project to a wide audience through a website, www.hymedpoly.eu, newsletters and outreach activities.

The website has two portals. In addition to the open access portal, a second portal is only for the consortium members and gives access to project documents.

The structure of the public pages of the website is:

- “Home”, which introduces the project
- “About”, which describes the project’s aims, approach and partners
- “Events”, which provides details of HyMedPoly organised workshops and associated information
- “News”, which reports on HyMedPoly activities
- “Publication”, which enables download of the HyMedPoly newsletters, press releases and “Public” deliverables once approved
- “Contacts”, which enables contact with project staff.

In addition, a secure online platform was setup on the website for the recruitment of the Early Stage Researcher.

The HyMedPoly website has been visited 4,568 times between July 2015 and October 2016. The most visited pages have been related to the open positions. The pages related to news, events and publications are popular. Future website development will focus on maintaining the topicality and content of these pages.

Although the individual projects are at a relatively early stage, the research groups have started to present their work and participate in outreach activities primarily at biomaterials related events.

No patent filing has started currently, but a clear approach to evaluating and securing Intellectual Property has been agreed by the project group.

List of Authors

Company	Author	Contribution
Lucideon Limited	Stuart MacLachlan	Author
Eurescom	Maria Barros	Web Data and Contributing Author

Table of Contents		Page
Executive Summary		3
List of Authors		4
1	Introduction	6
2	Public Dissemination	7
3	Website Structure	8
4	Web Platform to recruit the Early Stage Researchers	14
5	Website Statistics	16
6	Other Public Dissemination Activities	18
7	Patent Filing	20
Appendix 1 – The HyMedPoly Project Group and Research Projects		21

1 Introduction

This report outlines the structure and use of the website developed for the HyMedPoly project, “Drug-Free Antibacterial Hybrid Biopolymers for Medical Applications”. It also outlines early outreach activities and the approach to patent filing.

Infection has become one of the toughest problems in the medical world. As bacteria become more resistant to drugs, there are fewer effective antibiotics to fight against pathogens.

HyMedPoly aims to develop new therapies based on biomedical polymers and inorganic materials. 9 universities and companies from across Europe are creating a cohort of 15 European Industrial Doctorates to synthesise new biopolymers with added antibacterial functionality and develop functionalised bioactive ceramics and glasses that can act as active agents to kill bacteria and prevent their growth.

The new material systems from HyMedPoly are aimed at applications such as wound care, implants and bio film prevention.

Appendix 1 gives more details of the project group and the research projects supported.

2 Public Dissemination

To achieve a high impact with the target audiences, HyMedPoly is making a major effort to communicate its results and provide comprehensive information about the project to a wide audience including the academic community, potential business partners and the general public.

As the main vehicle for achieving this objective, a website, www.hymedpoly.eu, was launched early in the project, July 2016 (Project Month 7). This public website is the central reference point for HyMedPoly dissemination activities and ensures that anyone interested in the project's goal of developing drug-free antimicrobial materials can access information about activities and public results.

HyMedPoly is also producing regular newsletters outlining project activities as a further dissemination activity. The newsletter is authored by the Early Stage Researcher cohort and is downloadable from the website.

Thirdly, the project groups are undertaking outreach activities to disseminate the results of their work and the project in general.

All of the information released through the various activities is reviewed by the project group to ensure that protection of Intellectual Property is not compromised. There are clear mechanisms for both reviewing and protecting results. At this relatively early stage no patents have been filed.

The following sections describe the public communication activities and approach to patent filing in more detail.

3 Website Structure

The website intends to be dynamic and always updated with news, new content and information. It has two portals. In addition to the open access portal, a second portal gives access only to the consortium members to download reports generated during the course of the project and further serve as a focal point for disseminating specific aspects of the developed technology.

The structure of the public pages is presented in the following sections.

3.1 Home

The main field of the home page gives links to news from the project. In the right column the newest news and events are presented.

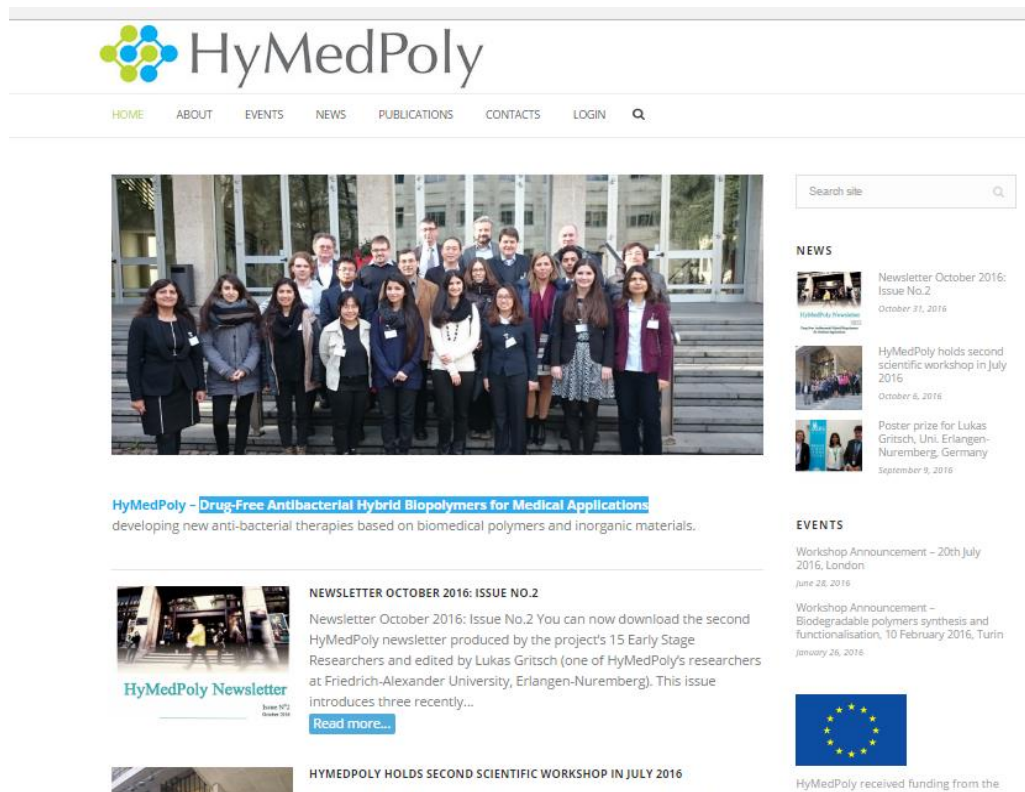


Figure 1 The Home Page

3.2 About

The about pages outline the aims of the project and then links to two further pages detailing the approach adopted and the partners participating in HyMedPoly.



Figure 2 The About Page

3.3 Events

Events organised by HyMedPoly are publicised and reported through this page. Two Open Scientific Workshops were organised in 2016. In addition to publicising the event, delegates were able to enrol in the meetings through these pages. After the workshops had been held, the event announcements are left live on the page, but edited to provide links to the report on the workshop and any presentations that can be downloaded.

The screenshot shows the HyMedPoly website's Events page. At the top, there is a navigation menu with links for HOME, ABOUT, EVENTS, NEWS, PUBLICATIONS, CONTACTS, LOGIN, and a search icon. Below the navigation is a large 'EVENTS' header. The main content area displays two workshop announcements in a grid. The first announcement is for a workshop on July 20th, 2016, in London, titled 'HyMedPoly's to Hold Second Open Science Workshop: "Biomaterials and cells interaction - new concepts of drug-free antibacterial therapies"'. The second announcement is for a workshop on February 10th, 2016, in Turin, titled 'Biodegradable polymers synthesis and functionalisation'. To the right of the announcements is a 'NEWS' section with a search bar and three news items, including a newsletter issue and a poster prize. Below the news is an 'EVENTS' section listing the two workshop announcements.

Figure 3 The Events Page

3.4 News

The news page reports on HyMedPoly related activities, for example;

- Reports of the Open Scientific Workshop with links to download presentations
- Publicising the issue of a new issue of the newsletter and again enabling download
- News of project partners participation in conferences

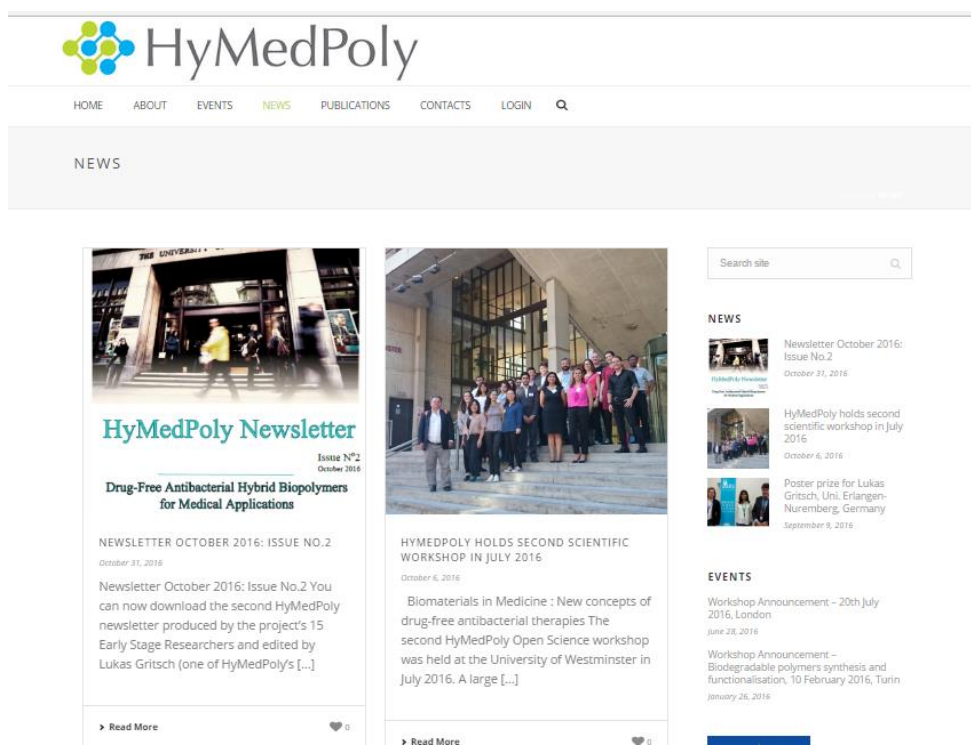


Figure 4 The News Page

3.5 Publication

The Publication pages provide access to documents and publicity items under three categories;

- Newsletters
- Press Releases
- Deliverables (The project deliverables classed as “Public” are listed here and will be available for download once approved.)

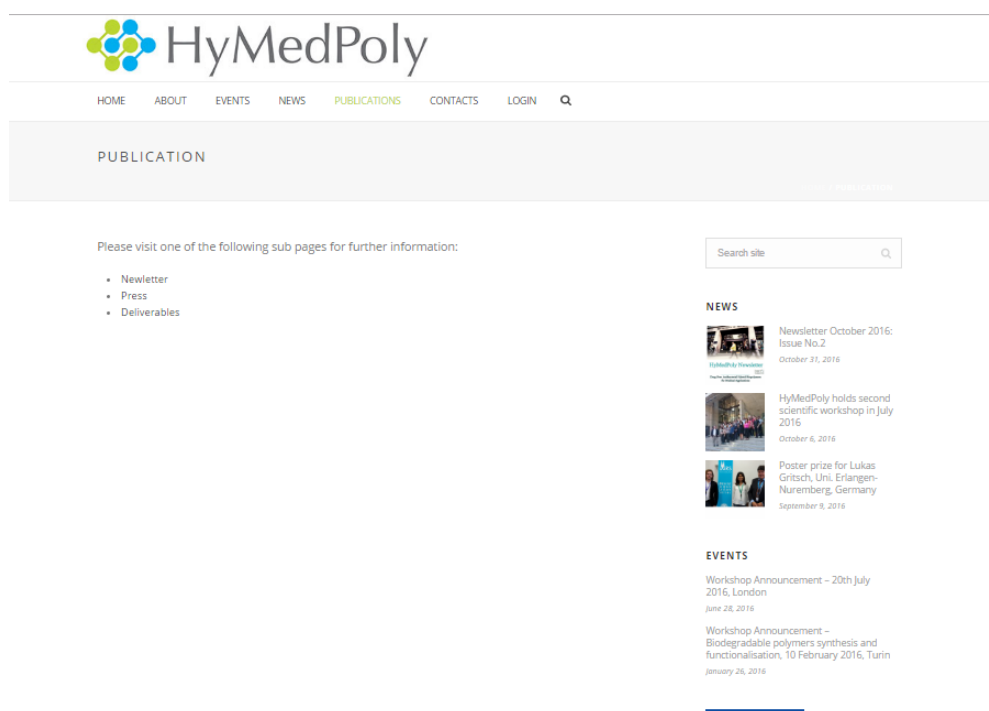


Figure 5 The Publication Page

3.6 Contacts

The Contacts page provides details of the Project Co-ordinator and the Scientific Co-ordinator.

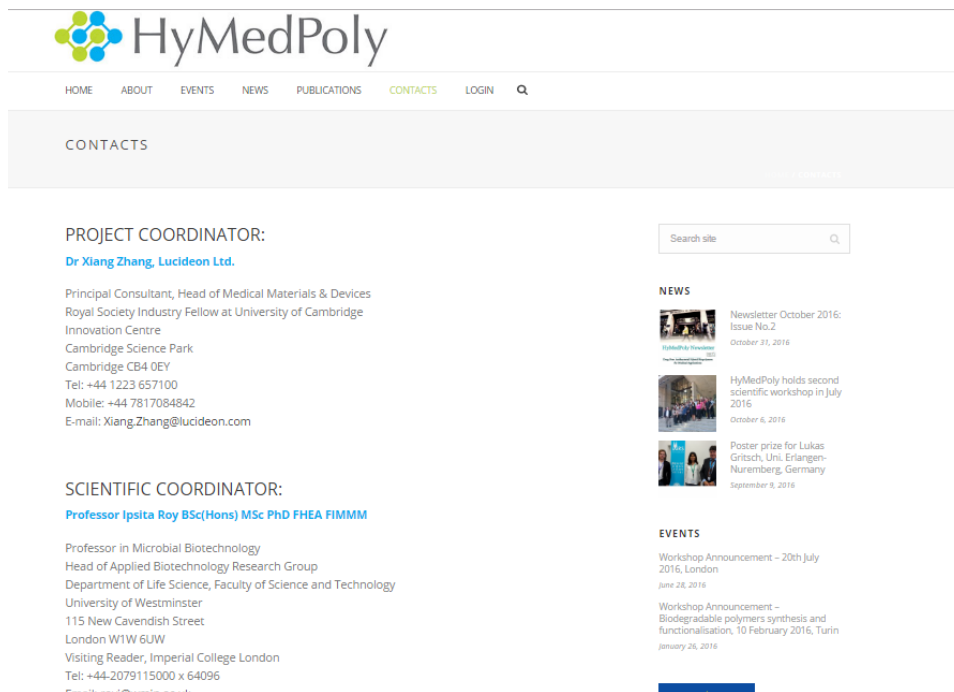


Figure 6 The Contacts Page

4 Web Platform to recruit the Early Stage Researchers

In addition to publicising project activities, a secure online platform was setup for the ESR positions applications, <https://hymedpoly.eu/open-positions/>, as shown in Figures 7 and 8, which outlined the required information needed from applicants and enabled them to apply on-line.

The ESR positions were advertised widely and for at least 30 days directing applicants to the project website. .

OPEN POSITIONS

The HyMedPoly project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 643050 for European Industrial Doctorate and has currently open positions for 15 young PhD researchers to create and implement new strategies for drug-free antibacterial hybrid biopolymers for medical applications.

THE POSITIONS WILL COMPLY WITH THE FOLLOWING CONDITIONS:

1. Recruitment by the beneficiary under an employment contract (or other direct contract with equivalent benefits, including social security coverage) or — if not otherwise possible under national law — under a fixed amount fellowship agreement with minimum social security coverage;
2. Be employed for 3 years;
3. Be employed full-time;
4. Be working exclusively for the action.

THE RECRUITED RESEARCHERS MUST COMPLY WITH THE FOLLOWING CONDITIONS:

1. Not have resided or carried out their main activity (work, studies, etc.) in the country where the research training activities take place for more than 12 months in the 3 years immediately prior to the recruitment date;
2. In case the beneficiary is an international European interest organisation or international organisation: not have spent with the beneficiary more than 12 months in the 3 years immediately prior to the recruitment date;
3. Be at the date of recruitment an 'early stage researcher' (i.e. in the first four years of his/her research career and not have a doctoral degree).

FELLOWSHIP GROSS AMOUNT:

- living allowance (3110 €/month, country correction factor to be applied)
- mobility and family allowance (600 or 1100 €/month depending on the researcher's family situation)

APPLICATION PROCEDURE:

The Application must use the form below for input. The ESRs position descriptions can be downloaded [here](#). Applications must include:

1. Application letter detailing the reasons for applying
2. CV (summarizing education, positions and academic work – scientific publications)
3. A 1-page Personal Statement outlining your research interests, research experience, academic achievements and career ambitions.
4. Copies of educational certificates and transcript of records
5. Details of internationally recognized language qualifications achieved
6. List of publications and academic work that the applicant wishes to be considered by the evaluation committee
7. Names and contact details of 2-3 references (name, relation to candidate, e-mail and telephone number). One or more letters of reference may be included

• All documents should be in English.
• Maximum 3 positions can be applied for. (3 applications needed then)
• All mandatory items are marked by *

Figure 7 The Webpage to apply to the Open Positions

APPLICATION FORM

First Name *

Last Name *

Your Email *

Your Country *

Afghanistan	▼
-------------	---

Select one of the ESR number *

---	▼
-----	---

Application letter detailing the reasons for applying
(only PDF/Zip files accepted of maximum size 1MB)

No file selected.

CV (summarizing education, positions and academic work - scientific publications)
(only PDF/Zip files accepted of maximum size 1MB)

No file selected.

A 1-page Personal Statement outlining your research interests, research experience, academic achievements and career ambitions.
(only PDF/Zip files accepted of maximum size 1MB)

No file selected.

Copies of educational certificates and transcript of records
(only PDF/Zip files accepted of maximum size 2MB)

No file selected.

Details of internationally recognized language qualifications achieved
(only PDF/Zip files accepted of maximum size 1MB)

No file selected.

List of publications and academic work that the applicant wishes to be considered by the evaluation committee
(only PDF/Zip files accepted of maximum size 1MB)

No file selected.

Names and contact details of 2-3 references (name, relation to candidate, e-mail and telephone number). One or more letters of reference may be included
(only PDF/Zip files accepted of maximum size 1MB)

No file selected.

All provided data are valid and you accept all terms and conditions

Figure 8 The Webform to apply for the Open Positions

5 Website Statistics

The HyMedPoly website was visited 4,568 times between July 2015 and October 2016. One Visit/Session is defined as a summary of user interactions (e.g. single page views) recorded for a given time period (not longer than 4 hours).

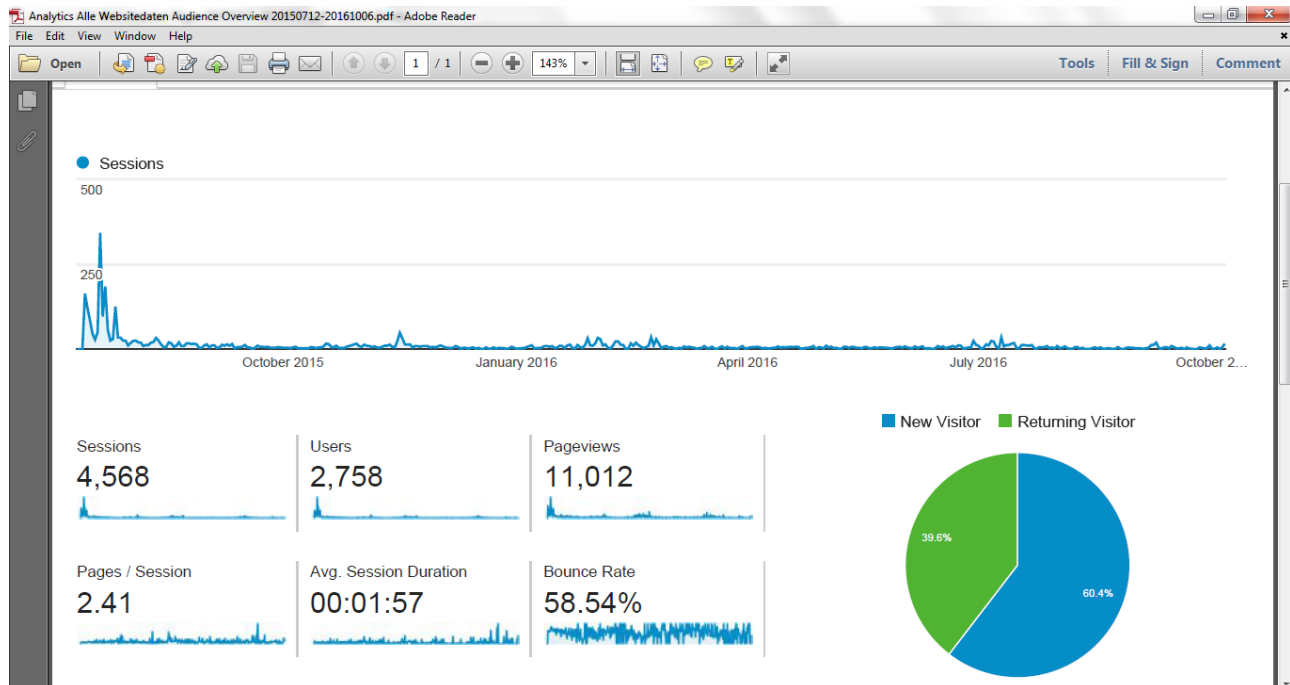


Figure 9 HyMedPoly's Visitor Statistics

The website was called by 2758 unique users (new visitors). With 4568 visits in total and a rate of 40 % returning visitors. In average the user view 2.4 pages per session with a total time of 2 min per visit. The Bounce Rate (users which only visit the start-page and then directly left) is at 59 %. The site was particularly active when the applications for researcher positions were open, followed by the times when the Open Scientific Workshops were run.

With 857 sessions the most visitors came from Portugal (19%) followed by Italy (14%), Germany (14%) and United Kingdom (8%) over the period. Outside Europe, the most visitors came from India (8%).

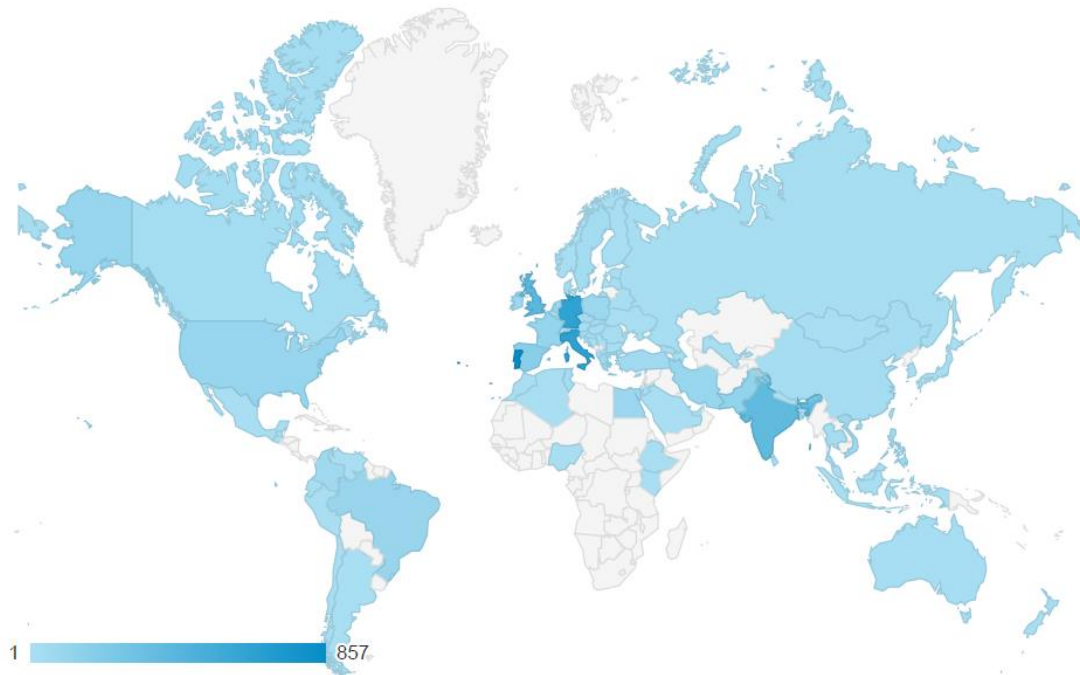


Figure 1 HyMedPoly Worldwide visitors distribution

The most visited pages have been related to the open positions (3,358 views). After this and the home page, the pages related to news, events and publications were popular. The main focus should be on maintaining the topicality and content of these pages in future website development.

6 Other Public Dissemination Activities

As the technology develops the project group intends dissemination activities to stimulate market interest such as seminars to healthcare professionals, press releases to trade journals and brochures and whitepapers on specific aspects of the materials

Although the individual projects are at a relatively early stage, the research groups have started to present their work and participate in outreach activities. Examples include:

- The four ESRs based at the University of Westminster were members of the organizing committee of the 15th Annual meeting of the UK Society of Biomaterials (hosted by University of Westminster, 30th June- 1st July). They also presented posters during the conference (Figure 11a).

They also organised the first HyMedPoly Workshop, “Biomaterials in Medicine: New concepts of drug-free antibacterial therapies” (hosted by University of Westminster, 19th- 20th July 2016) and attended the 15th International Symposium on Biopolymers (Madrid, 26th -29th September) (Figure 11b).



Figure 11 a) Organising committee of UKSB conference b) Attendance at ISBP 2016 c) Isabel Orlando's presentation at ISBP 2016 d) Alexandra Paxinou's poster presentation at ISBP 2016

- Early results and project aims were disseminated by Prof. G. Ciardelli (Politecnico di Torino) through a talk (Subha Purkayastha, Patricia Varela, Elia Ranzato, Susanna Sartori, Gianluca Ciardelli, “Novel polyurethanes mimicking antimicrobial

peptides”) at a national congress (Congresso Biomateriali SIB 2016, Ischia Porto (Naples), 13 – 15 July 2016).

- Two ESRs based at University of Erlangen – Nuremberg (FAU) (Lukas Gritsch and Seray Kaya) attended the Summer School & International Workshop on Advanced Materials Challenges for Health and Alternative Energy Solutions (AMAES V) held from 31 August to 3 September at University of Cologne, Germany.

A poster by Lukas Gritsch, FAU/Lucideon, “Fabrication of Chemically Modified Chitosan Films and Preliminary Characterization”, was awarded for the 2nd best poster at the workshop.

- Seray Kaya (ESR at FAU) attended the 7th International Workshop on Advanced Ceramics (IWAC-07) in Limoges, France 26 - 28 September 2016. She presented the poster: “Processing and Characterization of Mesoporous Bioactive Silicate Glasses Doped with Biologically Active Ions”.

Further outreach activities are planned, for example:

- The ESRs based at Lucideon (Agata Łapa and Muhammad Maqbool) are to attend an undergraduate event at Queen Mary University, London in November 2016 to represent Lucideon/Erlangen/MSCA Scheme.
- The symposium “New advancements in drug-free antibacterial biomaterials for medical applications” proposed by POLITO has been accepted for presentation at TERMIS-EU 2017 26 - 30 June, 2017. Ayesha Idrees (POLITO/RUB) will be involved as co-chair and she is helping in the organization (together with Jem Vasquez (POLITO/Vornia) and Subha Purkayastha (POLITO/Vornia)) by sending invitations to potentially interested attendees.

7 Patent Filing

To ensure that all innovations property generated by HyMedPoly is exploited the project group is developing a strategy, which will include an approach to Intellectual Property protection.

With respect to each piece of scientific knowledge or innovative technology that is considered to be unique, an approach to confirming its novelty, identifying the appropriate method of protection and obtaining protection has been agreed by the project group.

At this stage of the project, patent filing has not started.

Appendix 1 – The HyMedPoly Project Group and Research Projects

HyMedPoly aims to develop new therapies based on biomedical polymers and inorganic materials. The nine universities and companies from across Europe shown in Table 1 are creating a cohort of 15 European Industrial Doctorates. The projects, detailed in Table 2, are to synthesise new biopolymers with added antibacterial functionality and develop functionalised bioactive ceramics and glasses that can act as active agents to kill bacteria and prevent their growth.

The new material systems from HyMedPoly are aimed at applications such as wound care, implants and bio film prevention.

Table 1 - The HyMedPoly Consortium Members

Consortium Member	Legal Entity Short Name
Beneficiaries	
1. Lucideon	Lucid
2. University of Westminster	UoW
3. Politecnico di Torino	Polito
4. University of Erlangen-Nuremberg	FAU
5. Vornia	Vornia
6. University of Southampton	Soton
7. Knappschafts-Hospital Bochum GmbH	KHB
Partner Organisations	
8. IK4 Tekniker	IK4
9. Eurescom	EUR

Table 2 - The HyMedPoly Research Projects and Interaction between Them

Number of ESR	Individual Research Project (Title)	Link WPs	Academic Host	Non-Academic
ESR1 ESR2	Projects 1&2: Bioresorbable Antibacterial Polyesterurethanes ESR1: academic → industrial approach ESR2: industrial → academic approach Interact with Projects 4 and 7	WP1&3	PTO	Vn
ESR3 ESR4	Projects 3&4: Biodegradable and Bioresorbable Polyesters ESR3: academic → industrial approach ESR4: industrial → academic approach Interact with Projects 4 and 7	WP1&3	FAU	Luci
ESR5 ESR6	Projects 5&6: Natural Hybrid Polymers ESR5: academic → industrial approach ESR6: industrial → academic approach Interact with Projects 5 and 7	WP1&3	UoW	Vn
ESR7 ESR8 ESR9	Projects 7,8&9: (i) Bioactive Silica Glass, (ii) Bioceramic, (iii) Bioactive Phosphate Glass ESR7: academic → industrial approach (i) ESR8: industrial → academic approach (ii) ESR9: industrial → academic approach (iii) Interact with Projects 1, 2 and 7	WP1&3	FAU	Luci
ESR10 ESR11	Projects 10&11: Synthesis, Understanding and Development of Antibacterial Inhibitors of Enzymes/Proteins as Novel Antibacterial Agents ESR10: academic → clinical approach ESR11: clinical → academic approach Interact with Projects 3 and 7	WP1&3	UoW	KHB

Number of ESR	Individual Research Project (Title)	Link WPs	Academic Host	Non-Academic
ESR12 ESR13	Projects 12&13: Product Development ESR12: academic → industrial approach ESR13: industrial → academic approach Interact with Projects1-9	WP1-3	Soton	Luci
ESR14 ESR15	Projects 14&15: In Vitro and In Vivo Test ESR14: academic → industrial approach ESR15: industrial → academic approach run in parallel with Projects 1- 1	WP 1-3	PTO	KHB