Report on outreach activities

POLYTHEA – Design and photo-optimization of Photosensitizer for Human Health and Food Security applications or “How light can save lives”

Deliverable 30 D3.3

Project Summary

POLYTHEA – Design and photo-optimization of photosensitizers for human health and food security applications – or “How light can save life” – is a network gathering:

- 7 universities: University of Limoges (France), University of Amsterdam (Netherlands), Trinity College Dublin (Ireland), University of Neuchatel (Switzerland), Politechnika Wroclawska (Poland), University of Coimbra (Portugal), University of Saint Andrews (Scotland)
- 4 industrial partners: BET Solution (Greece), Selvita (Poland), Biolitec (Germany), PorphyChem (France)
- 1 research institute: INSERM (France)

The development of active compounds that can efficiently fight microbial infections and cancer are of upmost importance for food security and human health, two challenges for Europe. Tetrapyrrolic photosensitizers (PS) are good candidates to meet these expectations. The photo-excitable molecules induce cell death via the formation of reactive oxygen species (ROS) and present very low toxicity in the absence of light. They are already used in photodynamic therapy (PDT) for cancer or skin disease treatments or in photo-antimicrobial chemo-therapy (PACT). Unfortunately, the research and training are still largely fragmented in this field in Europe. Some scientific barriers have to be overcome to increase their efficacy, e.g. improvement of the excitation pathways, ROS production, specific cell targeting, Gram (-) bactericidal effect and prevention and/or eradication of biofilms.

The POLYTHEA consortium proposes to develop through 10 Early Stage Researcher (ESR) fellowships:

(i) new tetrapyrrolic PS for various types of PDT applications including anti-cancer, anti-bacterial, anti-inflammatory and immune-activation, and to improve their photophysical and biological properties;
(ii) innovative bio-inspired drug carriers or supports.

In parallel, a multidisciplinary and inter-sectorial training program is implemented through network events and secondments to non-academic partners. It provides a common background on PDT to the ESRs, equips them with transferable skills, trains them in problem solving and advance their career prospects.

Participating organizations

Beneficiaries

Partners

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The content of this communication reflects only the author's view and the Research Executive Agency is not responsible for any use that may be made of the information it contains.

The communication and outreach activities started at the beginning of the project in January 2018, through different means and medias. This document is the deliverable 3.3 and reports the communication and outreach activities undertaken during the first 18 months of the project.

All activities are listed in the attached Excel file, divided as follows:

1. **Website and social media**, detailing the stats and numbers of the website and pages dedicated to the project
2. **Scientific events**, giving an overview of the past and planned events and conferences attended or to be attended of both Early Stage Researchers and Supervisors. All events specify the target audience and the type of intervention.
3. **Large scale public events**, giving an overview of the past and planned large public
4. **Peer-review publications**, scientific publications published under the POLYTHEA framework
5. **Press and social media releases**, offers an overview of the press coverage and tags as well as citations on social media
6. **Consortium productions** is the list of the publications made by the consortium and of public range.
7. **Training events** schools and webinars organized by the consortium, offering both dissemination and communication opportunities.

All data and statistics are dated of June 27th, 2019.