

## BIOfilm-REsistant Materials for hard tissue Implant Applications

### BIOREMIA – H2020 MSCA European Training Network

Implant-associated infections caused by bacterial biofilms are a major cause of implant rejection. The key idea behind this project is to inhibit microbial biofilm formation by fabricating novel biomaterials and surfaces with enhanced antimicrobial device functionality that will result in improved biological acceptance of hard tissue implants.

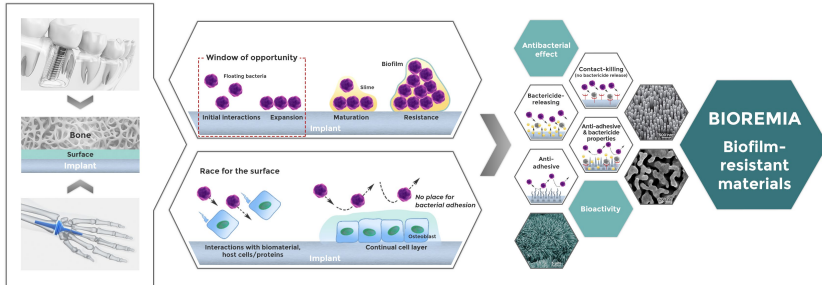
BIOREMIA has the primary goal of training a pool of young researchers in the emerging area of biofilm-resistant biomaterials and coatings for bone-related implant applications.

### ➔ Recruitment of 15 PhD students

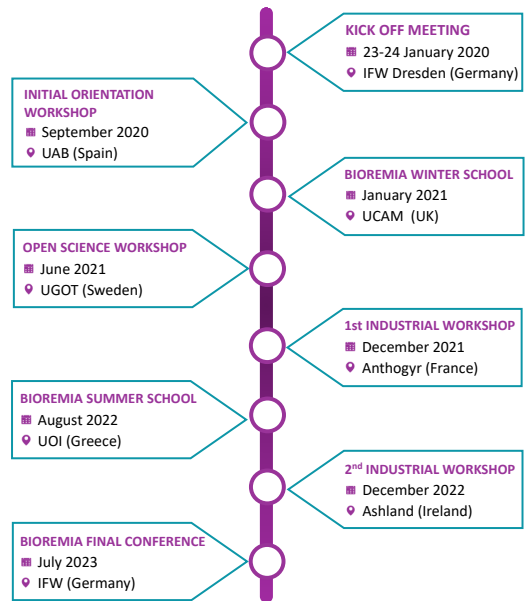


### Research

- 4 work-packages + 15 PhD / ESR projects



### Training Events



### Work-packages



15 PhD Projects



15 Early Stage Researchers (ESRs/PhD st.)

- WP 1: Material design & Innovative processing
- WP 2: In-depth characterisation of materials
- WP 3: Biocompatibility & Bacterial testing
- WP 4: Gateway to industry

- WP 5: Training
- WP 6: Dissemination & Outreach
- WP 7: Network management & IPR
- WP 8: Ethics requirements

### BIOREMIA Network

17 organisations located in 12 countries

#### 11 Beneficiaries

- B1. IFW Dresden (IFW)** – Germany  
M. Calin, A. Gebert, T. Gemming, U. Kühn
- B2. Montanuniversität Leoben (MUL)** – Austria  
J. Eckert, F. Spiekermann, B. Sarac
- B3. University of Ioannina (UOI)** – Greece  
C. Lekka
- B4. Goeteborgs Universitet (UGOT)** – Sweden  
A. Palmquist, M. Trobos
- B5. University of Cambridge (UCAM)** – UK  
S. Best, R. Cameron, L. Greer
- B6. Universitat Autònoma de Barcelona (UAB)** – Spain  
J. Sort, E. Pellicer, M.D. Baro, C. Nogués, J. Fornell
- B7. Università degli Studi di Torino (UNITO)** – Italy  
P. Rizzi, F. Turci
- B8. PX Services SA (PXS)** – Switzerland  
A. Blatter
- B9. Ashland Specialties Ireland Ltd (Ashland)** – Ireland  
U. Greiser
- B10. Anthogyr SAS (Anthogyr)** – France  
N. Courtois
- B11. Stryker Trauma GmbH (Stryker)** – Germany  
R. Büscher, R. Schwanbeck

#### 6 Partner Organisations

- P1. Yellow Research BV (YR)** – The Netherlands  
L. Jaspers
- P2. Technische Universität Dresden (TUD)** – Germany  
K. Nielsch
- P3. University Clinics of Giessen & Marburg (UKGM)** – Germany  
C. Heiß, K. Lips
- P4. University College Dublin (UCD)** – Ireland  
T. Ó Cróinín
- P5. Yale University (Yale)** – USA  
U. Schwarz, J. Schroers
- P6. INSA Lyon (INSA)** – France  
D. Fabregue, J. Chevalier

#### External Advisory Board

- Johannes Gutenberg University Mainz, Germany**  
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