



BME PARIS
BioMedical Engineering
MASTER'S PROGRAM

Fighting Bone Infection

Open Your Mind Seminar

Friday Dec 10 2021
1.30 pm – 3 pm

Arts et Métiers
155 Boulevard de l'Hôpital
75013 Paris
Bézier Amphitheater

Antibiotics Loaded Hydrogel Carrier for the Prevention and Treatment of Bone Infection

Infectious complications occur in less than 5% of patients who undergo orthopedic or trauma surgery, but the consequences for the patient and for society are dramatic. First-line antibiotics, introduced systematically and locally are still the prime solution for preventing and treating patients. Local antibiotic carriers offer the prospect of controlled delivery of antibacterial agents directly in target tissues and implant, without inducing toxicity in non-target organs. However, with the risk of introducing a foreign body in an infected milieu. Additionally, the emergence of bacteria resistance in hospitals worldwide, by use and misuse of antibiotics limits the use of conventional delivery systems. We have developed an antibiotics loaded hydrogel-based carrier with the ability to prevent and treat infection in small and large animal models. This lecture will highlight the several scientific and technical locks that we identified, and our effort to provide a relevant solution to patients and clinicians.

David ENGLIN

Centre Ingénierie Santé, Mines Saint-Etienne ;
INSERM, U1059 Saint Etienne, France

