

During the last 18 years of the Laboratory we developed collaborations with several institutions and companies. The following paragraphs show our most important partners and the related topics.

Scientific collaboration with final result (research and development)

JBS-France

- The development of a hip prosthesis stem which is intramedullary screwed into the femur
- Self-retractor for spine surgery
- The development of a dowel for bone surgery
- The development of the CAB hooks

Royal Veterinary College of London

- Mechanical tests of the CAB hooks

Laboratoire National d'Essais, Paris

- Dynamic tests of the CAB hooks

Royal National Orthopaedic Hospital London, Biomedical Engineering

- The development of temporary hip knee spacers

I.E.R.D.E.C. Médical France (Medical Implant Manufacturing and Marketing Company)

- The improvements of the temporary knee spacer implant system

Ecole Nationale Supérieure d'Arts et Métiers (Technical University), Paris

Ecole Nationale Supérieure d'Arts et Industrie (Technical University), Strasbourg

UD Technical College, Measurement Laboratory, Debrecen

- Biomechanical examination on a hip prosthesis stem the "Prothese fémorale vissée dynamique"

University of Miskolc

- The computer modeling of osteotomies around the hip joint

Eurosurgical SA France

- Implant development for spine surgery

Scientific collaboration still in progress (research and development)

University of Debrecen/

Department of Anatomy, Histology and Embryology

Department of Pathology

Department of Radiology

Prosthetic Dentistry and Biomaterials

Oral and Maxillofacial Surgery

Department of Pulmonology

Department of Biochemistry and Molecular Biology

Department of Solid State Physics

Department of Inorganic and Analytical Chemistry

Department of Mathematics

Faculty of Public Health

- Biomechanical experimentations on implant development and surgical technique improvement
- Allergy and Rheology examination on bone cement
- Development of nanocomposite based material for bone substitution
- Development of new titanium foam for base material of orthopaedic implants

Sanatmetal Orthopaedic and Traumatologic Implant Manufacturing Company

- Implant development
- Biomechanical testing