CURRENT MATERIAL RANGE @ PBM

- Biodegradable polyesters
  - Commercial FDA approved: (PLA, PCL, …)
  - In House synthesis: (PDLLA, PLAMA, PMA,…)

- Photocrosslinkable Hydrogels (modified gelatin, alginate,…)

- Acrylate end-capped photocrosslinkable macromonomers (patented toolbox)

Houben et al, Novel urethane based materials, derivatives, methods of their preparation and uses. EP15175956
ADDITIVE MANUFACTURING @ PBM

Applications:
- Polyester-gelatin combination scaffolds
  - Encapsulated MC3T3 cell line
  - Gel-MOD as carrier

ADDITIVE MANUFACTURING @ PBM

Applications:
- Polyester scaffolds
- Polyester-gelatin combination scaffolds
- Direct plotting of synthesized materials (AUP)
- Hydrogel solution printing (AUP)
- Cell encapsulation

ADDITIVE MANUFACTURING @ PBM - BPHOT

Collaboration with Prof. A. Ovsianikov, TUWien, Austria

Van Hoorick, J. et al. Crosslinkable gelatins with superior mechanical properties enabling efficient two photon polymerization (in preparation)
Collaboration with Prof. A. Ovsianikov, TUWien, Austria
CONCLUSIONS @ PBM

- Tailorable patented materials toolbox at hand
  - Unique reactivity
  - Solid state crosslinkable
  - Tailorable to different materials
- Extensive hydrogel expertise
  - Gelatin derivative range
  - Proper biomedical capabilities
- Different AM opportunities at hand