



University  
of Basel

Department of  
Biomedical Engineering



Selected research topics in Biomedical Engineering:

### **The Future of Personalized Medicine: 3D Printing and Patient-Specific Technologies**

Location: Biozentrum, Spitalstrasse 41, Basel, Seminar Room U1.191

Date & Time: Tuesday 14.05.2024 11:15 – 13:00

# **Additive Manufacturing of Advanced Biomaterials for Healthcare Applications**

***Dr. Galit Katarivas Levy***

*Head, Biomaterials & 3D-printing Laboratory (GKLab)*

*Dept. of Biomedical Engineering, Faculty of Engineering Sciences*

*Ben-Gurion University of the Negev (BGU), Beer-Sheva, Israel*

## **Abstract**

In this talk, I will discuss several of my group's projects aimed at developing advanced biomaterials through additive manufacturing processes and innovative therapeutic approaches including patient-specific lattice metallic implants for bone reconstruction surgeries, high-performance polymers for 3D-printed patient-specific implants, controlled drug-releasing scaffolds for Glioblastoma (brain tumors) treatments, and bioprinting of skin patches and bone tissue.

## **Biosketch**

Dr. Galit Katarivas Levy is the head of the biomaterials and 3D printing laboratory at BGU. Her research focuses on developing advanced biomaterials and therapeutic approaches for healthcare applications such as orthopedic devices, drug-releasing scaffolds for cancer treatments, and vascularized bone tissue constructs. She holds a B.Sc., M.Sc., and Ph.D. in Materials Engineering with a specialization in biodegradable metal for bone fixation and healing, all from BGU, and postdoctoral fellowships from the University of Cambridge, UK.