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Dr. Oana Dobre is Lecturer in Biomedical Engineering, Centre for the Cellular Microenvironment (CeMi), Advanced Research Centre at the University of Glasgow, Glasgow, UK.

Oana Dobre studied Biomedical Engineering at the Politehnica University of Bucharest, Bucharest, Romania (2003-2008). After her graduation in engineering, she was awarded a PhD in Mechanical Engineering (Tribology) from the Imperial College London (2012-2016). After her doctoral studies, she worked as a Research Associate at the University of Manchester for two years, where she became fascinated by mechanobiological research and developed an expertise in biology to complement her extensive engineering background. From 2017 to 2022, Dr. Dobre was a Research Associate at the Centre for the Cellular Microenvironment (CeMi) at the University of Glasgow. Her research focused on developing and characterizing full-length protein-based hydrogels for efficient growth factor delivery for tissue engineering applications, with a particular emphasis on bone tissue regeneration, spinal cord injuries, and vascularization. She started as a Lecturer in Biomedical Engineering at the University of Glasgow in 2022. Her current research is focused on the development of a biomaterial platform using piezoelectric constructs for applications in regenerative medicine, particularly muscle regeneration, in vitro tissue models for drug testing, and new therapies using additive manufacturing techniques. Her work combines a strong engineering foundation with deep knowledge of stem cell biology and extracellular matrix dynamics.

Research Interests: Biomedical Engineering; Developmental Biology; Automotive Engineering; Biomaterial Engineering; Biomaterial Functionalization; Biomaterial Applications; Finite Element Modeling; Friction