CURRICULUM VITAE

Personal details:

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Areas of interest (maximum 5 domains):

1. Therapeutic strategies involving exposure to UVA radiation aimed to enhance the biomechanical properties of the venous wall.

2. The role of anastomosis geometry of AVF in predicting the risk and severity of neointimal hyperplasia

3. Analysis of the biomechanical profile of vascular tissue in different pathologies.

4. Analysis of the geometric characteristics of abdominal aortic aneurysm and their impact on its expansion and risk of rupture.

5. Biomechanical and histological remodeling of the venous graft in lower limb revascularization.

Research activity:

1. **Research projects (maximum 3 projects)**
   1. Therapeutic strategies based on UVA-radiation for augmenting the mechanical resistance of the venous wall and improving the patency of the venous graft in lower limb revascularization

   2. The role of ultrasound determinations, biomechanical properties, and histological structure of the venous graft in the development of neointimal hyperplasia and vascular access dysfunction

3. Stabilization of collagen fibers in the venous wall by UVA-irradiation as a new therapeutic strategy for strengthening the extracellular matrix and improving the maturation process of AVF

2. Articles published in extenso (maximum 5 articles)

1. Arbănaşi, E.-M.; **Russu, E.;** Arbănaşi, E.-M.; Ciucanu, C.C.; Mureșan, A.V.; Suzuki, S.; Chirilă, T.V. Effect of Ultraviolet Radiation on the Enzymolytic and Biomechanical Profiles of Abdominal Aortic Adventitia Tissue. J. Clin. Med. 2024, 13, 633. https://doi.org/10.3390/jcm13020633, **Q1, IF: 3.0.**
2. **Russu, E.;** Munteanu, A.-C.; Arbănași, E.-M.; Szanto, L.-A.; Bartus, R.; Florea, E.; Bandici, B.C.; Arbănași, E.-M.; Ion, A.P.; Cordoș, B.A.; et al. Out-Patient versus In-Patient Arteriovenous Fistula Creation for Dialysis: Assessing Cost-Effectiveness Alongside Clinical Implications. Healthcare 2024, 12, 1102. https://doi.org/10.3390/healthcare12111102, **Q2, IF: 2.4.**
3. **Russu, E.;** Arbanasi, E.-M.; Chirila, T.V.; Muresan, A.V. Therapeutic Strategies Based on Non-Ionizing Radiation to Prevent Venous Neointimal Hyperplasia: The Relevance for Stenosed Arteriovenous Fistula, and the Role of Vascular Compliance. Front. Cardiovasc. Med. 2024, 11, 1356671, **Q2, IF: 2.8.**
4. Mureșan, A.V.; Florea, E.; Arbănași, E.-M.; Bartus, R.; Arbănași, E.-M.; Ion, A.P.; Cordoș, B.A.; Halatiu, V.B.; Niculescu, R.; Stoian, A.; Ciucanu, C.C.; **Russu, E.;** Elevated Leukocyte Glucose Index Is Associated with Long-Term Arteriovenous Fistula Failure in Dialysis Patients. *J. Clin. Med.* **2024**, *13*, 2037. https://doi.org/10.3390/jcm13072037, **Q1, IF: 3.0.**
5. Trâmbițaș, C.; Cordoș, B.A.; Dorobanțu, D.C.; Vintilă, C.; Ion, A.P.; Camelia, D.; Puiac, C.; Arbănași, E.M.; Ciucanu, C.C.; Mureșan, A.V.; Arbanasi, E.-M.; **Russu, E.;** Application of Adipose Stem Cells in 3D Nerve Guidance Conduit Prevents Muscle Atrophy and Improves Distal Muscle Compliance in a Peripheral Nerve Regeneration Model. *Bioengineering* **2024**, *11*, https://doi.org/10.3390/bioengineering11020184, **Q2, IF: 3.8.**