



## Kardelen Tüfekçi

☎ (+90) 534042031 Date of birth: 14/03/1996 Gender: Female

✉ Email address: [kardelentufekci@hotmail.com](mailto:kardelentufekci@hotmail.com)

📍 Address: Istanbul (Turkey)

### WORK EXPERIENCE

---

#### University Research Assistant

*Yeditepe University, Department of Genetic and Bioengineering, Biotechnology* [ 01/09/2018 – Current ]

City: Istanbul

Country: Turkey

#### Tasks:

- Generation of cell-laden osteochondral tissue substitutes via 3D Bioplotter (EnvisionTEC, Germany)
- 3D Bioprinting of synthetic and natural polymers
- 3D Bioprinting of hydrogels
- Decellularization of soft tissues
- Teaching Assistant in the Classical and Molecular and Genetics Laboratory in Genetics and Bioengineering Department

#### Clinical Trial Coordinator

*Merck Sharp & Dohme (MSD)* [ 23/10/2020 – Current ]

Country: United States

#### Tasks:

- Trial and site administration:  
Track (e.g. essential documents) and report  
Ensure collation and distribution of study tools and documents
- Document management:  
Prepare documents and correspondence
- Budgeting, Agreement and Payments:  
Develop, control, update and close-out country and site budgets  
Calculate and execute payments (to investigators, vendors, grants)  
Ensure adherence to financial and compliance procedures

#### Internship

*Sabancı University, Integrated Manufacturing Technologies Research and Application Center* [ 25/06/2018 – 10/08/2018 ]

City: Istanbul

Country: Turkey

#### Tasks:

- 3D Bioprinting of vascular constructs  
3D printing of Pluronic F-127 and alginate  
Create a model and algorithm to print for an artery structure

### EDUCATION AND TRAINING

---

#### Integrated PhD

*Yeditepe University* [ 01/09/2021 – Current ]

Address: Istanbul (Turkey)

Field(s) of study: Department of Genetic and Bioengineering, Biotechnology

Final grade : 3.79

## Bachelor degree

*Istanbul Kültür University* [ 01/09/2014 – 01/06/2018 ]

Address: Istanbul (Turkey)

Field(s) of study: Molecular Biology and Genetics, Science and Literature

Final grade : 3.00/4.00

Thesis: Molecular Mechanism of Aging in Caenorhabditis Elegans Model Organism

## Bachelor degree

*Anadolu University* [ 01/09/2015 – 01/06/2018 ]

Address: Eskişehir (Turkey)

Field(s) of study: Laboratory Assistants and Veterinary Laboratory Services, Veterinary

Final grade : 2.80/4.00

## DIGITAL SKILLS

---

### My Digital Skills

AutoDESK AutoCAD (Optimal Knowledge) / GraphPad Prism / ImageJ / MS Office (MS Word, MS Powerpoint, MS Excel, MS)

## LANGUAGE SKILLS

---

Mother tongue(s): **Turkish**

Other language(s):

### English

**LISTENING C1 READING C1 WRITING C1**

**SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2**

### German

**LISTENING A1 READING A1 WRITING A1**

**SPOKEN PRODUCTION A1 SPOKEN INTERACTION A1**

## PUBLICATIONS

---

**Tüfekçi K, Büyük Nİ, Cumbul A, Ayşan E, Torun Köse G. A novel method for providing scaffold: Decellularization of parathyroid capsule. J Biomater Appl.**

[2022]

<https://pubmed.ncbi.nlm.nih.gov/34918999/>

**Taşkın S, Tüfekçi K, Çolak Ö, Evaluation of the effects of PPAR-gamma agonism and ischemic preconditioning on ischemia reperfusion injury of the rat inferior epigastric arter skin flap**

[2022]

Under preperation

**Menteşe T, Tüfekçi K, Çolak Ö, The effect of 3D printed hyperelastic bone on heterotopic bone formation**

[2022]

Under preperation

## SKILLS AND TECHNIQUES

---

### Additive Manufacturing Technologies

- 3D Printing of Hyperelastic Bone, Fluffy PLGA, PCL (various MW), PLGA, PLA, PLLA, PBS-u, PE, PU)
- Bioink (Xantan gum, Locust bean gum, Alginate, Pluronic F-127, Methyl cellulose)

### Tissue Engineering Techniques

- EnvisionTEC 3D Bioplotter
- Decellularization
- Electrospinning
- Wet spinning
- sGAG assay

- Cell viability assay (MTS, MTT, XTT, Cell Titer Glo 3D Cell viability, Presto blue assay, and live-dead assay),
- Biomechanical analysis (DMA q800, Instron mechanical device)
- Biodegradation analysis
- Histological analysis (hematoxylin-eosin, Masson's trichrome staining, Periodic acid schiff staining)
- Isolation of primer cells (Nasal chondrocyte cells, rat bone marrow stem cells (RBMSCs))
- Differentiation of RBMSCs to adipogenic, osteogenic, and chondrogenic lineages
- Characterization of differentiated RBMSCs (Von-kossa staining, Alizarin red staining, Alcian blue staining, Oil red o staining, and ALP assay)

### **Molecular Biology Techniques**

- DNA / RNA isolation
- Bacterial transformation, transfection, and cloning
- Mammalian cell culture
- PCR
- Flow cytometry
- Fluorescence microscopy
- Immunohistochemical analysis

### **Model Organism Studies (Caenorhabditis elegans)**

- Investigation of spermidine or roscovitine induced autophagy mechanism on longevity and lipogenesis in *Caenorhabditis elegans* model organism
- Maintenance and Culturing of *Caenorhabditis elegans*
- Lifespan Assay
- Protein Extraction from *C.elegans*
- Genetic transformation by microinjection of DNA into the syncytial gonad

## **CERTIFICATES**

---

### **The Global Regenerative Congress**

[ 15/09/2022 – 17/09/2022 ]

### **Certificate of animal use in experimental research- Yeditepe University Animal research local ethics committee**

[ 02/09/2019 – 11/09/2019 ]

### **3D Bioprinting- Sabancı University**

[ 25/06/2018 – 10/08/2018 ]

### **Successfully completed C1 level (Advanced) in English- American Culture Education Institutions- EUROPEAN LANGUAGE PORTFOLIO Portfolio code: 745848**

[ 11/05/2017 ]

### **Elocution- Ministry of Education- İSMEK**

[ 01/11/2012 – 21/12/2012 ]

### **Dynamic Mechanical Analyzer (DMA q800) - TA Instruments**

[ 14/09/2021 ]

## **HOBBIES AND INTERESTS**

---

**Pole Dance**

**Gardening**

**Playing cello and ukulele**

**Pilates**