


Ali Kamali

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EDUCATION

University of Arizona, Tucson, Arizona, USA

- Ph.D. in Biomedical Engineering (Student) Aug 2019 – Present
 - Advisor: Prof. Kaveh Laksari
 - Focus: Brain Biomechanics.

Sharif University of Technology, Tehran, Iran

- M.S. in Mechanical Engineering Sep 2015 – Jan 2018
 - Advisor: Prof. Amir Shamloo
 - Thesis: Fabrication of a multi-layered scaffold composed of hydrogel and electrospun layers to be used in dermal wound healing

Shiraz University, Shiraz, Iran

- B.S. in Mechanical Engineering Sep 2011 – Sep 2015
 - Advisor: Prof. Omid Abouali
 - Research Project: CFD (Computational Fluid Dynamics) modeling of human respiratory system using CT-scan images and studying particle deposition and drug delivery in the nasal airway

EXPERIENCE

Laksari Lab, University of Arizona

- Graduate Research Assistant Aug 2019 – Present
 - Helped in acquiring and post-processing pre-clinical MR images
 - Led a pilot study on TBI in mice that required individual effort and coordination with multiple collaborators
 - Contributed to writing a review paper on computational modeling of TBI

Tissue Engineering Lab, Sharif University of Technology

- Graduate Research Assistant Aug 2016 – Jan 2018
 - Explored fabrication of biomaterial constructs in the form of hydrogels and electrospun scaffolds
 - Proposed a fabrication method to produce freeze-gelled polymer-blend hydrogels (one paper published)
 - Designed and fabricated a freeze-gelled bilayer dermal wound healing scaffold (one paper published)
 - Co-supervised and collaborated on a study of an alginate-gelatin scaffold for wound healing (one paper published)

Freelance

- Academic Writing Consultant Jul 2016 – Jul 2019
 - Translator and English writing consultant for papers written by non-native researchers
 - Hired a secretary in charge of marketing and costumer affairs

Fars Combined Cycle Power Plant, Shiraz, Iran

- Intern Jun 2015 – May 2015
 - Analysis of the lube oil system of gas turbines and finding possible solutions for the higher-than standard oil temperatures around the bearings.

PUBLICATIONS

JOURNALS

- [1] Afjoul, H., Shamloo, A., **Kamali, A.** (2020). Freeze-gelled alginate/gelatin scaffolds for wound healing applications: An in vitro, in vivo study. *Materials Science and Engineering: C*, 110957.
- [2] **Kamali, A.**, Shamloo, A. (2020). Fabrication and evaluation of a bilayer hydrogel-electrospinning scaffold prepared by the freeze-gelation method. *Journal of Biomechanics*, 98, 109466.
- [3] Shamloo, A., **Kamali, A.** (2017). Numerical analysis of a dielectrophoresis field flow fractionation device for the separation of multiple cell types. *Journal of Separation Science*, 40(20), 4067-4075.
- [4] Shamloo, A., **Kamali, A.**, Fard, M. R. B. (2019). Microstructure and characteristic properties of gelatin/chitosan scaffold prepared by the freeze-gelation method. *Materials Research Express*, 6(11), 115404.

CONFERENCES

- [1] **Kamali, A.**, Narimani, M., Amouzandeh, R., Ebadi, M. and Narimani, R., “Measurement and comparison of lumbopelvic rhythm during forward sagittal trunk rotation in healthy individuals and patients having back pain,” in *25th Annual International Conference on Mechanical Engineering (ISME 2017)*, Tehran, Iran.

- [2] Bahmanzadeh, H., **Kamali, A.**, Abouali, O., “Numerical simulation of drug particle deposition in the sphenoid sinus after sphenoidotomy surgery,” in *23rd Annual International Conference on Mechanical Engineering (ISME 2015)*, Tehran, Iran.

POSTER PRESENTATIONS

- [1] **Kamali, A.**, Borjali A., Tajik, P., Amouzandeh, R., Arjmand, N., Chizari, M., “Spine Load Analysis of the Squat Exercise,” in *8th World Congress of Biomechanics*, July 2018, Dublin, Ireland.

HONORS

- Research Assistantship, University of Arizona Aug 2019
Department-funded research assistantship for the first year of PhD program
- Iran National Graduate School Entrance Exam May 2015
Ranked in the top 0.8% in the Iran National University Entrance Exam
- Exceptional Undergraduate Talent Feb 2012
Awarded by Shiraz University as an exceptional talent
- Iran National University Entrance Exam Aug 2011
Ranked in the top 0.3% in the Iran National University Entrance Exam

LANGUAGES

- English: Fluent
- Persian: Native Language

SKILLS

Programming: MATLAB, Python, C++

Wet Lab: Tissue Engineering, biomaterial constructs, cell culture, *in vitro* and *in vivo* studies

Imaging: Hands-on experience with acquisition and analysis of MRI, CT, and Ultrasound

Tools: Solidworks, ANSYS (Solid and Fluid Simulations), COMSOL Multiphysics, Microsoft Office, L^AT_EX

[CV compiled on 2020-05-19]