Reha Abbasi

Department of Chemical & Biological Engineering and Center for Biofilm Engineering
(406) 580-8371 • abbasi.reha@gmail.com • Bozeman MT
https://www.linkedin.com/in/reha-abbasi-4b2461168/

Summary

Motivated research and development professional with experience in 3D bioprinting, cell culturing, soft materials, polymers, colloids and microfluidic devices. Author of 3 published peer-reviewed research articles and over 10 presentations at international and national science conferences.

Education

Ph.D. in Chemical Engineering | 2021
Montana State University, Bozeman, MT
GPA: 3.75 / 4.00
Thesis title: "Improving Transport in Hydrogels for 3D Bioprinting Applications"

B.S, Bioengineering | 2016
Montana State University, Bozeman, MT
Istanbul Technical University, Istanbul, Turkey
GPA: 3.60 / 4.00

Professional Experience

Research Scientist | 2015 – 2021
Center for Biofilm Engineering
- In-depth knowledge of 3D bioprinting, hydrogels, polymers and PDMS-based microfluidic devices
- Created 3D bioprinting platform form mammalian cells and biofilms
- Excellent communication, leadership, and mentoring skills

Teaching Assistant | 2016 – 2018
Montana State University
- Taught weekly recitations, graded assignments performed office hours

Microfluidics Internship in Nano Lab | 2015
Istanbul Technical University
- Assisted to design a lab-on-a-chip device to detect cancer cells in blood
- Applied nano fabrication methods in a cleanroom

Biomedical Equipment Internship | 2014
TOSHIBA, Istanbul
- Maintenance and repair of CT and MRI equipment

Publications

R. Abbasi*, T. B. LeFevre, A. D. Benjamin, I. J. Thornton, J. N. Wilking (2021), Coupling Fluid Flow to Modular Hydrogels with ''Pop-it'' Connections, *Lab on a Chip*.

A. D. Benjamin*, **R. Abbasi***, M. Owens, R. J. Olsen, T. B. LeFevre, J. N. Wilking (2019), Light-Based 3D Printing of Hydrogels with High-Resolution Channels, *Biomed. Phys. Eng. Express*.
*co-first authors

P. M. Cruz, M. Wood, **R. Abbasi**, T. B. LeFevre, S. McCalla (2021), An inexpensive, versatile, compact, programmable temperature controller and thermocycler for simultaneous analysis and visualization within a microscope, *Microfluidics and Nanofluidics*.

Honors and Awards

MSU PhD Dissertation Completion Award	2020
MSU Abdi Scholarship	2020
MSU College of Engineering General Scholarship	2020
MSU Graduate Student Engineering Award	2020
MSU Professional Advancement Grant	2019
MSU Graduate School Travel Award	2019
1st place at both people and judge's choice at MSU Three Minute Thesis Competition	2019
Award for highest GPA among graduating bioengineers at ITU	2016
MSU ChBE Departmental Scholarship	2015 – 2016
Honor List during undergraduate - seven semesters	2012 – 2016

Skills

Software: CAD (i.e Fusion 360), MATLAB, Polymath, TRIOS, Super Pro Designer, MS Office, ImageJ, KaleidaGraph and Adobe Creative Cloud (Illustrator, Premier Pro etc…)

Formal Presentations

Building Biofilms with 3D Printing, Annual Biofilm Meeting, MSU, MT	2017
3D SLA Hydrogel Printing, Material Science Symposium, University of Montana, MT	2017
Printing Channels in Hydrogels with SLA Based 3D Printing, ACS Conference, MT	2018
Stereolithography Based 3D Hydrogel Printing, Annual BuG ReMeDEE Meeting, MT	2018
Structuring Microbial Biofilms with 3D Printing, 2019 AIChE Annual Meeting, Orlando FL	2019
3D Printing Methanotroph Communities, BugReMeDEE Annual Meeting, Rapid City SD	2019
Stereolithography Based 3D Hydrogel Printing for Biofilm Engineering, IPF Leibniz, Germany	2019
Soft Materials & Beyond, 2020 Center for Biofilm Engineering Conference, MSU, MT	2020

Synergistic Activities

Center for Biofilm Engineering Conference Committee Member	2019 – Present
Volunteer Scientist for ''Letters to a Pre-Scientist'' Program	2019 – Present
Project Judge at FIRST LEGO League, Montana State University	2019 – 2020
Event Organization Team at 34th Montana Science Olympia	2018
Event Organization Team in Supplies for Success, Montana State University	2018
Event Organization Team at Science and Cooking Program, Montana State University	2018
Member of ''Be My Eyes''Community to Help Blind Citizens via Video Calls	2018 – Present
Mentor for Undergraduate Researchers, Montana State University	2016 – Present