

Sanaz Ebrahimi Samani

Date of Birth: 21 September 1988

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Summary of Qualifications

- Experienced in performing research in interdisciplinary fields with knowledge in Biochemistry, Bioengineering and drug delivery.
- 4 years strong experience in experimental research in nanoparticles synthesis and characterization
- Experienced in cell culturing techniques, cytotoxicity assays, Stem cell differentiation, stable cell transfection and protein purification.
- Experienced in design of experiments and data analysis techniques
- Experienced in managing experimental laboratories
- Experienced in interacting train undergraduate and M.Sc. students on experimental research

Research Experience

Research Assistance, McGill University, CA

February 2015 – June 2016

Graduate Student Researcher, Guilan University, Iran

Sep 2012 – February 2015

- Developed strong expertise in performing research in an interdisciplinary field, such as nanomedicine, where knowledge in biology, chemistry and bioengineering fields are needed
- Experienced in experimental research in different nanoparticles synthesis and characterization (TEM, XPS, ICP-OES, FTIR, UV-VIS, DLS)
- ❖ For the first time, we developed a new method to synthesize multimodal theranostic polymersomes mixed populations of inorganic nanoparticles (Gold and Silver nanoparticles) to use in drug delivery and diagnostic imaging in Dr. Kinsella's lab.
- Developed various experimental protocols regarding different nanoparticle synthesis such as Iron oxide, cerium oxide and polymeric nanoparticles synthesis
- Acquired strong experience in mammalian cell culturing techniques as well as cytotoxicity assays (MTT and live/dead assay) and FRAP assay
- Gained experience in stem cell differentiation on different substrates and adding different drugs
- Achieved strong experience in lentiviral production and stable cell transfection
- Experienced in bacteria transformation and plasmid purification
- Experienced in protein purification, enzyme characterization, western blot and electrophoresis
- Gained some experience in *in vivo* anti-tumor activities of Chitosan and PEG-PLGA nanoparticles (mice model)
- Experienced in managing experimental laboratories
- Familiar with AFM and HPLC
- Train and supervise undergraduate and master on experimental research, more specifically, different cell culturing and nanoparticles synthesis and characterization techniques
- Skilled in different teaching methods and classroom management techniques

Education

Ph.D., Biochemistry

Sep 2012 – Expected July 2016

Field of Study: Cancer research, drug delivery, nanomedicine

Thesis Title: Controlled release of an antiangiogenic peptide derived from endostatin using polymeric nanosystems

Guilan University, Rasht, Iran in collaboration with McGill University, Montreal, Quebec, CA

M.Sc., Biochemistry (GPA: 3.64/4)

Sep 2010 – Sep 2012

Field of Study: Protein structure and activity

Thesis Title: The investigation of structural stability of Chimeric Elastase and Therolysin

Guilan University, Rasht, Iran

B.Sc., Molecular Genetics (GPA: 3.29/4)

Sep 2006 – Jun 2010

Shahrekord University, Shahrekord, Iran

Safety courses

- WHMIS for laboratory personnel (Work Hazardous Materials Information System)
- Introduction to Biosafety
- Safe Use of Biological Safety Cabinets
- Hazardous Waste Disposal for Laboratory

Journal Papers

Ebrahimi Samani S., Amehdi N., J. Matt Kinsella, "Integrating multiple types of inorganic nanoparticles into biodegradable polymersomeMultimodal polymersomes embedded within hybrid inorganic nanoparticles" Nature communication, is undersubmitting.

Ebrahimi Samani S., Asghari S. M., Seraj Z., Naderimanesh H., Esmailie A.R., "Controlled release of a peptide-derived from endostatin using chitosan nanoparticles", Protein and peptide letters, Submitted.

Farsinejad S., Gheiyari Z. **Ebrahimi Samani S.**, Alizadeh A., "Mitochondrial targeted peptides for cancer therapy." *Tumor Biology* 36.8 (2015): 5715-5725.

Memberships

- Canadian Biomaterial Society (CBS)
- Iranian Society of Biology

Languagees

- English, Persian

References

References are available on request.