Personal specification

First name: Nahid Last name: Bakhtiari Birth date: 1978/march/21 Birthplace: Zanjan

Educational background

Row no	Degree of education	Field of education	Place of education	year
Ŋ	B. Sc	Cell & molecular biology	Tehran university	1995- 1999
2	M. Sc	Biochemistry	Tarbiat modarres university	2000- 2002
3	Ph. D	Biochemistry	Tarbiat modarres university	2003- 2009

Research background

- o Purification and isolation of plasminogen from human's serum
- Stabilization of mouse monoclonal anti hCG
- ο Optimization of expression of recombinant IFN β in *E. coli* with antisense RNA technology
- o Study of antisense RNA effect on prostate cancer cells
- Design, cloning and expression of recombinant peptide drug gene, Teriparatide, in *E. coli*
- Isolation and purification of hPTH(1-34) from recombinant fusion Teriparatide
- Targeting of TWIST mRNA with antisense oligos and study of those effects on inhibition of the invasion and metastasis of prostate cancer cells.
- Cloning, expression and purification of creatinase enzyme for clinical application
- Cloning, expression and purification of creatininase enzyme for clinical application
- Improvement of pharmaceutical fusion rhPTH (1-34) production in batch fermentation condition.

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Working background

- Set up biochemistry and molecular biology laboratories and cell and bacteria culture rooms in the Tofigh Darou company
- Master of molecular biology lab in the Tofigh Darou company from 2004 until 2009
- Assistant professor of the Iranian research organization for science and technology(IROST) from 2011

Teaching background

- Advanced genetic engineering(PhD)
- General Microbiology(PhD)
- Metabolic engineering(PhD)
- Protein engineering(PhD)
- Structure and function of bio-macromolecules(MSc)
- Principles of cell and tissue culture(MSc)
- Microbial bioproducts (PhD)
- Biochemistry of cell membrane(PhD)
- Molecular biotechnology (PhD)

Title of student's thesis

- Design & Construction of a new artilysin against antibiotic resistant A. baumannii and evaluation of its activity
- Design and construction of CWB-KZ-PlyF307 chimer and study of the effect of cell wall binding domain fusion to the PlyF307 enzyme
- Design, Cloning and expression of recombinant peptide drug gene, Teriparatide, in *E.coli* BL21(DE3)
- Isolation and Purification of recombinant peptide drug Teriparatide from *Escherichia coli*
- Investigation on the invasion inhibition of two prostate cancer cell lines with two antisense RNA oligos designed against TWIST1 gene.
- Expression optimization of pharmaceutical fusion rhPTH (1-34) in E. coli
- Purification optimization of pharmaceutical fusion rhPTH (1-34) in E. coli

Seminars and speeches

- Lecture at the International Congress of Biochemistry University of jondi shapour-2003- Stabilization of mouse monoclonal anti hCG
- First International Symposium on Molecular Technology-Tehran- 2005
- Participate in training courses organized by the Pharma Plan company about GMP requirements for Pharmaceutical Facilities-Tehran-2005
- Lecture at the 8th National Congress of Biotechnology University of Tehran- 2013-Investigate the effect of antisense RNA on two prostate cancer cell lines

• The study of cytotoxic effect of two antisense oligo against TWIST1 gene in two prostate cancer cell lines-3rd national & 1st international conference in applied research in biology-Tehran-2016

Poster

- Efect of Antisense Nucleotide Against Acetate Production on Recombinant Beta Interferon Production By E.coli- European Congress of Biotechnology-Spain-September 2009
- Design and Cloning of recombinant peptide drug gene, Teriparatide in E.coli Bl21 (DE3)-15th International and Iranian congress of microbiology. Tehran-August 2014
- Design, Cloning and expression of recombinant peptide drug gene, Teriparatide in E.coli Bl21 (DE3)- second CBG conference.Tehran. 2015
- Solubility comparing of non-classical inclusion bodies in different solubilization buffers-3rd national & 1st international conference in applied research in biology-Tehran-2016
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Paper

- Nahid Bakhtiari, Manouchehr Mirshahi, Valiollah Babaeipour, Nader Maghsoudi*. (2010). Inhibition of ackA and pta genes using two specific antisense RNAs reduced acetate accumulation in batch fermentation of E.coli BL21(DE3) Iranian J Biotechnol; 8(4): 243-251.
- Nahid Bakhtiari, Manouchehr Mirshahi, Valiollah Babaeipour, Nader Maghsoudi*. (2014). down regulation of ackA-pta pathway in E. coli Bl21 (DE3): A step towards optimizing recombinant protein expression. Jundishapur J microbiol; 7(2): e8990
- Nahid Bakhtiari, Manouchehr Mirshahi, Valiollah Babaeipour, Nader Maghsoudi*. (2012). Construction an expression vector harboring antisense RNA cassette for permanent down regulation of acetic acid pathway in E. coli. –Biotechnology and applied microbiology; 1(1):84-97
- Nahid Bakhtiari, Gita Saadatnia. (2014) RNA based antisense drugs: different types, molecular mechanisms and clinical trials-JQUMS; 18(3): 54-63
- Nahid Bakhtiari *, Zahra Amini Bayat, Sepideh Sagharidouz, and Mohsen Vaez . (2017) Overexpression of Recombinant Human Teriparatide, rhPTH (1-34) in Escherichia coli (E. coli): an Innovative Gene Fusion Approach. Avicenna Journal of Medical Biotechnology; 9(1):19-22
- Nahid Bakhtiari, seyedeh Maliheh Safavi, Khosro Hoseinipajouh. (2015) Cytotoxic effects of Clusterin antisense oligonucleotides and Docetaxel on two prostate cancer cell lines- JQUMS; 19(2): 4-10
- F, Azizvakili, G. Saadatnia, P. Salehian, N. Bakhtiari, S. Rezaei1.(2016) Molecular Detection of Chlamydia Trachomatis and Mycoplasma Hominis in endometriosis lesions-JQUMS;20(5):4-10
- Sepideh Abbaszadeh, Nahid Bakhtiari*, Zahra Aminibayat. Effective solubilization and purification of recombinant teriparatide fusion protein expressed in E. coli Biotechnology of Tarbiat Modarres university(accepted)
- Afshari E, Amini-Bayat Z, Hosseinkhani S, Bakhtiari N.(2017) Cloning, Expression and Purification of Recombinant Pseudom*onas putida* ATCC12633 Creatinase, Avicenna Journal of Medical Biotechnology; 9(4):169-175

- Sepideh Abbaszadeh, Nahid Bakhtiari*, Zahra Aminibayat. Simple and effective purification f recombinant peptide drug, hPTH (1-34), expressed in E. coli host. IJPR (accepted)
- Z. Amini-Bayat*, N. Bakhtiari. Cloning, Expression and Purification of Creatininase from Pseudomonas Pseudoalkaligene KF707 in E. coli. Biomacromol J. (accepted)

Research areas of interest

- Recombinant drugs
- Antisense RNA drugs
- Herbal Medicines
- Metabolic engineering

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