

**Ghasem Hosseini Salekdeh, Ph.D. \**

Agricultural Biotechnology Research Institute of Iran,

[www.abrii.ac.ir](http://www.abrii.ac.ir)

Seed & Plant Improvement Campus,

Mahdasht Road, Karaj, Iran.

P. O. Box: 31535-1897

Tel: +98 261 2709485 - 2708282

Fax: +98 261 2704539

E-mail: [h\\_salekdeh@abrii.ac.ir](mailto:h_salekdeh@abrii.ac.ir)

And

Royan Institute ([www.royaninstitute.org](http://www.royaninstitute.org) )

Banihashem Sq., Resalat avenue, Tehran, Iran

Tel: +98 (21) 26300025

Fax: +98 (21) 22310406

Email: [Salekdeh@royaninstitute.org](mailto:Salekdeh@royaninstitute.org)

**Positions**

- President of Iranian Proteomics Society ([www.proteomics.ir](http://www.proteomics.ir))
- Asian and Oceania Human Proteome Organization (AOHUPO) Council member ([www.aohupo.org](http://www.aohupo.org))
- Chair, Human Y Chromosome Proteome Project

**On-going projects (National)**

- Identification of genes involved in Embryonic Stem Cell proliferation and Differentiation
- Generation of induced Pluripotent Stem Cell using protein transduction approach
- Protein-Protein Interaction network in Embryonic Stem Cell
- Proteomics approach to discovering genes involved in plant tolerance to abiotic stresses

**On-going projects (International)**

- Human Y Chromosome Proteome Project, an official project of Human Proteome Organization (HUPO)

- Membrane Proteome Initiative, an official project of Asia Oceana HUPO
- An integrated proteomics and genomics approach to discover salt tolerance genes, a Generation Challenge Program Project

#### Other activities:

- Member of Editorial board of **Proteomics** journal
- Editor of Asia Oceana Human Proteome Organization Newsletter (AOHUPO)

#### Awards

- National Biotechnology award (2007)
- Best researcher award from Ministry of Agriculture (2008)
- Razi Medical Science award for advance technologies (2009)
- Dr. Hadavi award from Iranian Academy of Medical Sciences (2010)
- Khwarizmi International Award for fundamental research (2010)

#### International referee journal Publications

1. Baharvand, H., Salekdeh, G.H., Taei, A., Mollamohammadi, S. 2010. An Efficient and Easy-to-Use Cryopreservation Protocol for Human ES and iPS Cells. *Nature Protocols*; 5: 588-94.
2. Nasrabadi, D., Rezaei, M., Fathi, A., Gourabi, H., Vosough Dizaji, A., Baharvand, H., Salekdeh, G.H., 2010. Nuclear proteome analysis of monkey embryonic stem cells during differentiation. *Stem Cell Reviews and Reports* ; 6: 50-60.
3. Seifinejad A, Taei A, Totonchi M, Vazirinasab H, Hasani SN, Aghdami N, Shahbazi E, Salekdeh GH, Baharvand H. 2010. Generation of Human Induced Pluripotent Stem Cells from a Bombay Individual: Moving Towards "Universal-Donor" Red Blood Cells. *Biochem Biophys Res Commun.* 391: 329–334.
4. Mehdi Totonchi, Adeleh Taei, Ali Seifinejad, Mohammadsharif Tabebordbar, Hassan Rassouli, Ali Farrokhi, Hamid Gourabi, Nasser Aghdami, Ghasem Hosseini Salekdeh, Hossein Baharvand. 2009. Feeder- and Serum-Free Establishment and Expansion of Human Induced Pluripotent Stem Cells. *Int J Dev Biol* 2009, doi: 10.1387/ijdb.092903mt

5. Salekdeh, Gh., Reynolds, M., Bennett, J., Boyer., J. 2009. Conceptual framework for drought phenotyping during molecular breeding. *Trends in Plant Science* 14:488-496.
6. Fathi, A., Pakzad, M., Taei, A., Brink, TC., Pirhaji, L., Ruiz, G., Tabe Bordbar, M., Gourabi, H., Adjaye, J., Baharvand, H., Salekdeh, GH. 2009. Comparative Proteome and Transcriptome Analyses of Embryonic Stem Cells during Embryoid Body-based Differentiation. *Proteomics*: 9:4859-70
7. Kabiri, M., Amoozegar, M., Tabebordbar, M., Gilai, K., Salekdeh, G.H., 2009. Effects of selenite and tellurite on growth, physiology and proteome of a moderately halophilic bacterium. *Journal of Proteome Research*, 8:3098-108.
8. Nasrabadi, D., Rezaei, M., Pirhaji, L., Gourabi, H., Shahverdi, A., Baharvand, H., Salekdeh, GH., 2009. Proteomic analysis of monkey embryonic stem cell during differentiation., *Journal of Proteome Research*, 8: 1527–1539.
9. Torabi, S., Wissuwa, M., Heidari, M., Naghavi, MR., Gilany, K., Hajirezaei, MR., Omid, M., Yazdi-Samadi, B., Ismail, AM., Salekdeh GH., 2009. A comparative proteome approach to decipher the mechanism of rice adaptation to phosphorous deficiency. *Proteomics*, 9:159-70.
10. Baharvand, H., Fathi, A., Gourbai, H., Mollamohammadi, S., Salekdeh Gh. 2008. Identification of mouse embryonic stem cell-associated proteins. *Journal of Proteome Research* , 7: 412-423.
11. Eivazi, AR., Naghavi, MR., Hajheidari, M., Pirseyedi, SM., Ghaffari, MR., Mohammadi, SA., Majidi, I., Salekdeh, GH., Mardi, M., 2008. Assessing wheat (*Triticum aestivum* L.) genetic diversity using quality traits, amplified fragment length polymorphisms, simple sequence repeats and proteome analysis. *Annals of Applied Biology*, 152 : 81-91.
12. Bananej, K., Keshavarz, T., Vahdat, A., Salekdeh. G.H., Glasa, M., 2008. Biological and Molecular Variability of Zucchini yellow mosaic virus in Iran. *J. Phytopathology*, 156, 654 - 659
13. Nohzadeh Malekshah, S., Habibi Rezaei, M., Heidari, M., Salekdeh, GH., 2007. Proteomics reveals new salt responsive proteins associated to rice plasma. *Biosci., Biotechno. Biochem.* 71: 2144-2154.
14. Baharvand H, Heidari, M., Ebrahimi, M., Valadbeigi, T., Salekdeh, GH., 2007. Proteomic analysis of epithelium-denuded human amniotic membrane as limbal stem cell niche. *Molecular Vision*, 13:1711-1721.

15. Salekdeh, GH., Komatsu, S., 2007. Crop proteomics: aim at sustainable agriculture of tomorrow. *Proteomics*, 7: 2976-2996.
16. Baharvand, H., Fathi, A., van Hoof, D., Salekdeh GH. 2007. Trends in Stem Cell Proteomics. *Stem Cells*. 25:1888-1903
17. Babaie, G., Khatabi, B., Bayat, H., Rastgou, M., Hosseini., A., Salekdeh, GH. 2007. Detection and Characterization of Phytoplasmas Infecting Ornamental and Weed Plants in Iran. *J. Phytopathology* 155: 368–372
18. Hajheidari, M., Eivazi, A., Buchanan, BB., Wong, JH., Majidi, I., Salekdeh, GH., 2007, Proteomics uncovers a role for redox in drought tolerance in wheat. *Journal of Proteome Research* , 6: 1451-1460.
19. Gazanchian, A., Hajheidari, M., Khosh kholgh Sima, NA., Salekdeh, GH., 2007. Proteome response of *Elymus elongatum* to severe water stress and recovery. *Journal of Experimental Botany*. 58: 291-300.
20. Dadashi, A., Askari, H., Mayer-Posner, JM., Ziaei, A., Salekdeh, G.H, 2006 Proteome profiling of rice young panicle response to salinity. *Proteomics*, 6, 6498-507.
21. Rastgar-Jazii, F., Najafi, Z., Malekzadeh, R., Conrads, T.P., Ziaee, A.A., Abnet, C., Yazdznbod, M., Karkhane, A.A., Salekdeh, G.H., 2006. Identifi cation of squamous cell carcinoma associated proteins by proteomics and loss of beta tropomyosin expression in esophageal cancer. *World J Gastroenterology* 12: 7104-7112
22. Baharvand H, Hajheidari M, Zonouzi R, Ashtiani SK, Hosseinkhani S, Salekdeh GH. 2006. Comparative proteomic analysis of mouse embryonic stem cells and neonatal-derived cardiomyocytes. *Biochem Biophys Res Commun*. 349: 1041-1049.
23. Baharvand, H., Hajheidari, M., Kazemi-Ashtiani S., Salekdeh G.H, 2006. Proteomic Signature of Human Embryonic Stem Cells. *Proteomics* , 6: 3544-9.
24. Siopongco, J. D. L. C., A. Yamauchi, H. Salekdeh J. Bennett and L. J. Wade., 2006. Root Growth and Water Extraction Response of Double-Haploid Rice Lines to Drought and Rewatering During the Vegetative Stage. *Plant Production Science* 9: 141-151.
25. Askari, H., Edqvist, J., Hajheidari, M., Kafi, M., Hosseini Salekdeh, Gh., 2006. Effects of Salinity Levels on proteome of *Suaeda aegyptiaca* leaves. *Proteomics* 6: 2542-54.

26. Siopongco, J. D. L. C., A. Yamauchi, H. Salekdeh, J. Bennett and L. J. Wade. 2005. Growth and Water Use Response of Doubled-Haploid Rice Lines to Drought and Rewatering During the Vegetative Stage. *Plant Production Science* 8: 497-508
27. Hajheidari, M., Abdollahian-Noghabi, Askari, H., Sadeghian, S.Y., Ober, E. Hosseini Salekdeh, Gh., 2005. Proteome Analysis of Sugar Beet Leaves under Drought Stress. *Proteomics*, 5, 95-960.
28. Rangan, L., Salekdeh, Gh. H., Bennett, J. Swaminathan. 2004. Molecular analysis of a stress-induced cDNA encoding the translation initiation factor eIF1 from salt-tolerant wild relative of rice, *Porteresia coarctata*. *Functional Plant Biology* 31: 1035-1042.
29. Bananej, K., Kheyr-Pour, A., Salekdeh, Gh. H., Ahoonmanesh, A., 2004. Complete nucleotide sequence of Iranian Tomato yellow leaf curl virus isolate: further evidence for natural recombination amongst begomoviruses. *Archives of Virology* 149:1435-43.
30. Shahrokh Safarian, Ali Akbar Moosavi-Movahedi, Saman Hosseinkhani, ZhiCheng Xia, Mehran Habibi-Rezaei, Ghasem Hosseini Salekdeh, Christine Sorenson, and Nader Sheibani. 2003. The Structural and Functional Studies of His119 and His12 in RNase A via Chemical Modification. *Journal of Protein Chemistry*. 22: 643-654.
31. Salekdeh, Gh. H., Siopongco, J., Wade, L. J., Ghareyazie, B., Bennett, J., 2002. A proteomics approach to analyzing drought- and salt-responsiveness in rice. *Field Crops Research*, 76, 2-3: 199-219.
32. Salekdeh, Gh. H., Siopongco, J., Wade, L. J., Ghareyazie, B., Bennett, J., 2002. Proteomics analysis of rice leaves during drought stress and recovery. *Proteomics*, 2:1131-1145.

## Book

Naghavi, M., Ghareyazie, B., Hosseini Salekdeh, Gh. 2005. Molecular Markers. Tehran University Press. P. 320.