



Seyed Hamidollah Ghaffari

- **Date of Appointment to University of Mississippi Medical Center Faculty: 10/19/1989**
- **Date of Appointment to University of Tehran Medical Sciences Faculty: 2002**

ADDRESS: Hematology, Oncology, & BMT Research Center Shariaty Hospital
Kargar Street, Tehran, Iran 14114

DATE AND PLACE OF BIRTH: 5/22/51, Zanjan, Iran

MARITAL STATUS: Married, two children

EDUCATIONAL BACKGROUND:

B.S., Medical Technology, Tabriz University, Tabriz, Iran, 1974.

M.S., Microbiology, University of Southwestern Louisiana, Lafayette, LA, May, 1980.

Ph.D., Microbiology with an emphasis in Immunology, minor field in Biochemistry, University of Southern Mississippi, Hattiesburg, MS, August, 1983.

POSTGRADUAT TRAINING:

Postdoctoral Training in Molecular Biology, Department of Biochemistry, University of Mississippi Medical Center, Jackson, MS, 1983-86.

ACADEMIC APPOINTMENTS:

- 2002-Pre. **Assistant Professor**, Department of Hematology, Oncology, & BMT, Shariati Medical Center, University of Tehran Medical Science, Tehran, Iran.
- 1986-98 **Senior Research Associate/Instructor/Research Assistant Professor**, Department of Microbiology, University of Mississippi Medical Center, Jackson, MS.
- 1983-86 **Postdoctoral/Research Associate**, Department of Biochemistry, University of Mississippi Medical Center, Jackson, MS.
- 1980-82 **Teaching Assistant**, University of Southern Mississippi, Hattiesburg, MS; part time job during school years.
- 1979-80 **Teaching Assistant**, University of Southern Louisiana, Lafayette, LA; part time job during school years.
- 1978-79 **Medical Laboratory Technician**, Lafayette Charity Hospital, Lafayette,

1974-76 LA; part time job during school years.
Medical Technologist, Public Health Center, Lahijan, Iran.

HONORS AND AWARDS:

- National Dean's List, 1982-83.
- Elected Chairman of Microbiology and Immunology, Mississippi Academy of Sciences, 1990-91.

PROFESSIONAL MEMBERSHIPS:

- American Society for Microbiology
- Mississippi Academy of Sciences

RESEARCH EXPERTISE:

- Molecular Genetic, Recombinant DNA Technology, Protein Chemistry, Immunochemistry, Immunogenetic, Cancer genetic

TEACHING EXPERIANCE:

- General microbiology laboratory at the University of Southern Mississippi, Hattiesburg, MS, 1982-83.
- General microbiology, medical mycology, and medical parasitology laboratories at the University of Southwestern Louisiana, Lafayette, LA, 1982-83.
- Teaching and research supervision of graduate, undergraduate, medical students, and technicians at the University of Mississippi Medical Center, Jackson, MS, 1989-98.
- Teaching advance immunology and immunogenetic to MS and PhD student at the Genetic Department, Tehran University Medical Sciences and Tarbiat Modarres University, Tehran, Iran, 2004-present.

OTHER EXPERIANCE:

- Clinical laboratory science, including hematology, urinalysis, chemistry, coagulation, parasitology, mycology, and bacteriology.
- Computer-aided analysis of DNA and protein structure.

RESEARCH INTEREST AND PROJECTS INVOLVED AT THE HORC-BMT:

- Design and set up diagnostic protocols, which utilize the latest advances in molecular techniques.
- Use of Real-Time PCR for quantitative analysis of minimal residual disease (MRD) in follow-up of patients with leukemia, micrometastases in patients with solid tumors, and infectious agents (CMV, EBV, and Invasive Aspergillosis) in patient with allogeneic-BMT.
- Analysis of telomere lengths and telomerase activity in patients with cancer.
- Evaluation of changes in the gene expression profiles of acute promyelocytic leukemia cells during treatment with arsenic trioxide with DNA microarray.
- Molecular mechanisms of Arsenic Trioxide for treatment of APL patients.
- FISH and CGH techniques in cancer researches.

Published Abstracts

1. **Ghaffari, S.H.** and Olson, M.O.J. Cloning and sequence analysis of cDNA coding for rat nucleolar protein C23. American Society for Biological Chemistry, Washington, D.C. (June, 1986).
2. **Ghaffari, S.H.**, Middlebrook, B.L. and Toom, P.M. Solid-phase competitive displacement technique for the quantitation of histamine. South Central Branch Amer. Soc. for Microbiology/Biochemistry Meeting, Shreveport, Louisiana (Nov. 1986).
3. **Ghaffari, S.H.** and Lobb, C.J. Conservation of tryptophan residues in channel catfish light chain immunoglobulins. South Central Branch Amer. Soc. , for Microbiology/ Biochemistry Meeting, Shreveport, Louisiana (Nov. 1986).
4. **Ghaffari, S.H.** and Lobb, C.J. Characterization of cDNA clones encoding the constant region of catfish immunoglobulin heavy chain. South Central Branch Amer. Soc. for Microbiology/Biochemistry Meeting, Baton Rouge, Louisiana (Nov. 1988).
5. **Ghaffari, S.H.** and Lobb, C.J. Immunoglobulin heavy chain variable region genes in catfish. South Central Branch Amer. Soc. for Microbiology/Biochemistry Meeting, Baton Rouge, Louisiana (Nov. 1988).
6. **Ghaffari, S.H.** and Lobb, C.J. Cloning and sequence analysis of cDNA coding for catfish heavy chains. International Society of Developmental and Comparative Immunology Congress, Nottingham, England, July 24-29, 1988.
7. **Ghaffari, S.H.** and Lobb, C.J. Cloning and sequence analysis of cDNA coding for catfish heavy chains. Dev. Comp. Immunol. 13:347, 1989.
8. **Ghaffari, S.H.** and Lobb, C.J. The nucleotide sequence of the catfish immunoglobulin heavy chain constant region. Abstr. Ann. Meet Amer. Soc. Microbiol., p. 143, 1989.
9. **Ghaffari, S.H.** and Lobb, C.J. Distinct VH gene families in the channel catfish. International Congress of Immunology, Berlin, Germany, (July 1989).
10. **Ghaffari, S.H.** and Lobb, C.J. Phylogenetic relationships of immunoglobulin heavy chain variable region families in catfish. Mississippi Academy of Sciences, Biloxi, Mississippi, Feb. 22-23, 1990.
11. **Ghaffari, S.H.** and Lobb, C.J. Definition of VH gene families in channel catfish. South Central Branch Amer. Soc. for Microbiol., Orange Beach, Alabama, Nov. 9-11, 1989.
12. **Ghaffari, S.H.** and Lobb, C.J. Immunoglobulin heavy chain variable region complexity in catfish. South Central Branch Amer. Soc. for Microbiol., Little Rock, Arkansas, Nov. 9-10, 1990.
13. **Ghaffari, S.H.** and Lobb, C.J. Complete nucleotide sequence of immunoglobulin heavy chain cDNA and analysis of VH region structure and diversity in channel catfish. Mississippi Academy of Sciences, Jackson, Mississippi, Feb. 21-22, 1991.

14. **Ghaffari, S.H.** and Lobb, C.J. Organization of immunoglobulin heavy chain genes in channel catfish. Mississippi Academy of Sciences, Jackson, Mississippi, Feb. 21-22, 1991.
15. **Ghaffari, S.H.** and Lobb, C.J. A second cluster of immunoglobulin heavy chain constant region genes in the channel catfish. International Society of Developmental and Comparative Immunology Congress, Wageningen, Netherlands, July 31 - Aug. 4, 1994.
16. **Ghaffari, S.H.** and Lobb, C.J. Characterization of two distinct immunoglobulin light chain classes in the channel catfish. International Society of Developmental and Comparative Immunology Congress, Wageningen, Netherlands, July 31 - Aug 4, 1994.
17. B. Chahardouli, Y. Mortazavi, **S.H. Ghaffari**, A. Ghavamzadeh, K. Alimoghaddam, B. Bahar, M. Jahani, M. Irvani, S.A. Mosavi. Detection of chimerism after allogenic peripheral blood stem cell or bone marrow transplantation by multiplex PCR amplification of short tandem repeat (STR) gene loci. The Hematology Journal, Volume 4, Supplement 2, June 2003 (8th congress of the European Hematology Association, Lyon, France, 12-15 June 2003).
18. A. Ghavamzadeh, K. Alimoghaddam, **H. Ghaffari**, S. Rostami, Y. Mortazavi, A. Mousavi, M. Tootonchi, M. Jahani, R. Hosseini, M. Irvani, B. Bahar, and N. Aghdami. Treatment of New Cases of Acute Promyelocytic Leukaemia by Arsenic Trioxide. *Blood* (ASH Annual Meeting Abstracts) 2004 104: Abstract
19. B. Chahardouli, **S.H. Ghaffari**, A. Ghavamzadeh, K. Alimoghaddam, Y. Mortazavi, M. Jahani, B. Bahar, M. Irvani, S.A. Mosavi. Monitoring of chimerism after allogenic peripheral blood stem cell or bone marrow transplantation using multiplex PCR amplification of short tandem repeat marker. The Hematology Journal, Volume 5, Supplement 3, 2004 (9th congress of the European Hematology Association, Geneva Palexpo, Switzerland; 10-13 June 2004).
20. G. Ghavamzadeh, A. Ghavamzadeh, K. Alimoghaddam, R. Hosseini, N. Aghdami, M. Jahani, Sh. Rostami, **H. Ghaffari**, Y. Mortazavi, S.A. Mossavi, B. Bahar, M. Irvani, A. Khodabandeh. Treatment of new cases of acute promyelocytic leukaemia by arsenic trioxide. The Hematology Journal, Volume 5, Supplement 3, 2004 (9th congress of the European Hematology Association, Geneva Palexpo, Switzerland; 10-13 June 2004).
21. **H. Ghaffari**, S.H. Dalirifar, K. Alimoghaddam, A. Ghavamzadeh. Detection of minimal residual disease in acute lymphoblastic leukemia using an allele specific oligonucleotide PCR assay. The Hematology Journal, Volume 5, Supplement 3, 2004 (9th congress of the European Hematology Association, Geneva Palexpo, Switzerland; 10-13 June 2004).
22. **H. Ghaffari**, M. Yaghmaei, J. Sorori, A. Ghavamzadeh, K. Alimoghaddam. Detection and quantification of minimal residual disease after bone marrow transplantation in patients with chronic myelogenous leukemia. The Hematology Journal, Volume 5, Supplement 3, 2004 (9th congress of the European Hematology Association, Geneva Palexpo, Switzerland; 10-13 June 2004).

23. **S.H. Ghaffari**, T. Hemmati, S. Rostami, S.H. Ghaffari, K. Alimoghaddam, A. Ghavamzadeh, A. Gharabaghian. Quantitative analysis of WT1 gene for minimal residual disease detection in leukemic patients. The Hematology Journal, Volume 6, Supplement ?, 2005 (10Th Congress of the European Hematology Association, Stockholm, Sweden, June 2-5 2005).
24. **S.H. Ghaffari**, N. Shayan-Asl, S.H. Ghaffari, A.H. Jamialahmadi, A. Ghavamzadeh. Telomere length in patient with acute promyelocytic leukemia (APL) reflects response to treatment with arsenic. The Hematology Journal, Volume 6, Supplement ?, 2005. (10Th Congress of the European Hematology Association, Stockholm, Sweden, June 2-5 2005).
25. **S.H. Ghaffari**, A.H. Jamialahmadi, S.H. Ghaffari, N. Shayan-Asl, A. Ghavamzadeh. Assessment of arsenic trioxide (As₂O₃) effect on telomerase activity in APL patients and NB4 cell line. The Hematology Journal, Volume 6, Supplement ?, 2005. (10Th Congress of the European Hematology Association, Stockholm, Sweden, June 2-5 2005).
26. M. Mohyeddin Bonab, K. Alimoghaddam, F. Talebian, **S.H. Ghaffari**, A. Ghavamzadeh, B. Nikbin. Aging of bone marrow mesenchymal stem cell. The Hematology Journal, Volume 6, Supplement ?, 2005. (10Th Congress of the European Hematology Association, Stockholm, Sweden, June 2-5 2005).
27. F. Foroughi, **H. Ghaffari**, K. Alimoghaddam, B. Chahardovali, Z. Sanaat, M. Jahani, B. Bahar, M. Iravani, A. Mousavi, A. Ghavamzadeh. Assessment of chimerism after allogeneic marrow transplantation in thalassemia. The Hematology Journal, Volume 6, Supplement ?, 2005. (10Th Congress of the European Hematology Association, Stockholm, Sweden, June 2-5 2005).
28. S.H. Dalirifar, **H. Ghaffari**, K. Alimoghaddam, A. Ghavamzadeh. Comparison of the detection of minimal residual disease in acute lymphoblastic leukemia using clonotypic and allele specific oligonucleotide PCR assay. The Hematology Journal, Volume 6, Supplement ?, 2005. (10Th Congress of the European Hematology Association, Stockholm, Sweden, June 2-5 2005).
29. F. Foroughi, K. Alimoghaddam, **H. Ghaffari**, B. Chahardovali, Z. Sanaat, M. Jahani, B. Bahar, M. Iravani, A. Mousavi, A. Ghavamzadeh. Effects of mixed chimerism on graft-versus-host disease, disease recurrence and survival after HLA-identical marrow transplantation in Iran. The Hematology Journal, Volume 6, Supplement ?, 2005. (10Th Congress of the European Hematology Association, Stockholm, Sweden, June 2-5 2005).
30. **S.H. Ghaffari**, M. Yaghmaie, K. Alimoghaddam, A. Ghavamzadeh. Sequential quantitative analysis of bcr-abl fusion gene in chronic myelogenous leukemia patients after allogeneic stem cell transplantation by real-time PCR. The Hematology Journal, Volume 6, Supplement ?, 2005 (10Th Congress of the European Hematology Association, Stockholm, Sweden, June 2-5 2005).
31. A. Ghavamzadeh, K. Alimoghaddam, **H. Ghaffari**, S. Rostami, Y. Mortazavi, M. Jahani, R. Hosseini, A. Mousavi, M. Iravani, B. Bahar, E. Baybordi, A. Khodabandeh. Treatment of new cases of acute promyelocytic leukemia with Arsenic Trioxide. The Hematology Journal, Volume 6, Supplement ?, 2005 (10Th Congress of the European Hematology Association, Stockholm, Sweden, June 2-5 2005).

32. B. Chahardouli, **H. Ghaffari**, A. Gavamzadeh, K. Alimoghaddam, Y. Mortazavi, S. Rostami, M. Jahani, B. Bahar, S.A. Mosavi, M. Iravani. Multiplex STR-PCR for semi quantitative analysis of chimerism after stem cell transplantation. *The Hematology Journal*, Volume 6, Supplement ?, 2005. (10Th Congress of the European Hematology Association, Stockholm, Sweden, June 2-5 2005).
33. M. Yaghmaie, **S.H. Ghaffari**, K. Alimoghaddam, A. Ghavamzadeh. Qualitative minimal residual disease detection of chronic myeloid leukaemia patients after bone marrow transplantation by multiplex and nested RT-PCR. *Bone Marrow Transplantation*, Volume ?, Supplement ?, March 2005. (31st Annual Meeting of the European Group for Blood and Bone Marrow Transplantation; Prague, Czech Republic, March 20–23, 2005).
34. A. Bassi, A. Mousavi, **H. Ghaffari**, K. Alimoghaddam, A.A. Hedayatiasl, B. Chardouvali, A.R. Shamshiri, M. Iravani, B. Bahar, F. Toutounchian, M. Jahani, A. Ghavamzadeh, H. Ghaffari, A.R. Shamshiri. Correlation between chimerism analysis with STR-PCR method and acute GVHD after haematopoietic cells transplantation. *Bone Marrow Transplantation*, Volume ?, Supplement ?, March 2005. (31st Annual Meeting of the European Group for Blood and Bone Marrow Transplantation; Prague, Czech Republic, March 20–23, 2005).
35. K. Alimoghaddam, **H. Ghaffari**, F. Foroughi, B. Chardouvali, Z. Sanaat, B. Bahar, A. Mousavi, M. Iravani, A. Ghavamzadeh. Effects of chimerism on graft-versus-host disease, disease recurrence and survival after HLA-identical marrow transplantation in Iran. *Bone Marrow Transplantation*, Volume ?, Supplement ?, March 2005. (31st Annual Meeting of the European Group for Blood and Bone Marrow Transplantation; Prague, Czech Republic, March 20–23, 2005).
36. A. Ghavamzadeh, F. Foroughi, K. Alimoghaddam, **H. Ghaffari**, B. Chardouvali, Z. Sanaat, B. Bahar, A. Mousavi, M. Iravani. Effects of chimerism on graft-versus-host disease, disease recurrence and survival after HLA-identical marrow transplantation in thalassaemia. *Bone Marrow Transplantation*, Volume ?, Supplement ?, March 2005. (31st Annual Meeting of the European Group for Blood and Bone Marrow Transplantation; Prague, Czech Republic, March 20–23, 2005).
37. **S.H. Ghaffari**, M. Yaghmaie, K. Alimoghaddam, A. Ghavamzadeh. Real-time quantification of bcr-abl transcript in chronic myeloid leukaemia patients after allogeneic stem cell transplantation. *Bone Marrow Transplantation*, Volume ?, Supplement ?, March 2005. (31st Annual Meeting of the European Group for Blood and Bone Marrow Transplantation; Prague, Czech Republic, March 20–23, 2005).
38. **S.H. Ghaffari**, S. Dalirifar, K. Alimoghaddam, A. Ghavamzadeh. Detection of Minimal Residual Disease in Acute Lymphoblastic Leukemia Using an Allele Specific Oligonucleotide PCR Assay. 10th APBMT Congress, Hangzo, China, Oct. 14-17, 2005. (Oral presentation).
39. **S.H. Ghaffari**, T. Hemmati, S. Rostami, K. Alimoghaddam, A. Ghavamzadeh. Real-Time Quantitative Analysis of WT1 Gene for Minimal Residual Disease Detection in Acute Leukemia Patients. 10th APBMT Congress, Hangzo, China, Oct. 14-17, 2005. (Oral presentation).

40. **S.H. Ghaffari**, M. Yaghmaie, K. Alimoghadam, A. Ghavamzadeh. Sequential Quantitative Analysis of BCR-ABL Transcript in Chronic Myeloid Leukemia Patients after Allogenic Stem Cell Transplantation by Real-time RT-PCR. 18th APCC2005, Seoul, Korea from Sep. 7 to Sep. 9, 2005. (Oral presentation)
41. **S.H. Ghaffari**, N. Shayan-Asl, A.H. Jamialahmadi, A. Ghavamzadeh. Telomere Length in Patients with Acute Promyelocytic Leukemia Reflects Response to Treatment with Arsenic. 18th APCC2005, Seoul, Korea from Sep. 7 to Sep. 9, 2005. (Oral presentation)
42. **S.H. Ghaffari**, T. Hemmati, S. Rostami, K. Alimoghaddam, A. Ghavamzadeh. Real-time Quantitative Analysis of WT1 Gene for Minimal Residual Disease Detection in Acute Leukemic Patients. 18th APCC2005, Seoul, Korea from Sep. 7 to Sep. 9, 2005. (Oral presentation)
43. **S.H. Ghaffari**, Sharbano Rostami, Davood Bashash, Kamran Alimoghaddam, Ardashir Ghavamzadeh. Quantitative analysis of PML-RAR α on newly diagnosed APL patients treated with arsenic trioxide as front-line therapy. The 4th International Symposium on Acute Promyelocytic Leukemia, Rome, Italy 29th September-1st October 2005
44. **S.H. Ghaffari**, T. Hemmati, S. Rostami, K. Alimoghaddam, A. Ghavamzadeh. Quantitative analysis of wt1 gene for minimal residual disease detection in leukemic patients. the 4th International Symposium on Acute. Promyelocytic Leukemia, Rome, Italy, 29th September-1st October 2005.
45. **S.H. Ghaffari**, N. Shayan-Asl, A.H. Jamialahmadi, A. Ghavamzadeh. Telomere length in patient with acute promyelocytic leukemia (APL) reflects response to treatment with arsenic. The 4th International Symposium on Acute Promyelocytic Leukemia, Rome, Italy, 29th September-1st October 2005.
46. **S.H. Ghaffari**, A.H. Jamialahmadi, N. Shayan-Asl, K. Alimoghaddam, A. Ghavamzadeh. Assessment of arsenic trioxide (As₂O₃) effect on telomerase activity in APL patients and NB4 cell line. The 4th International Symposium on Acute Promyelocytic Leukemia, Rome, Italy, 29th September-1st October 2005.
46. **S.H. Ghaffari**, N. Shayan-Asl, A.H. Jamialahmadi, A. Ghavamzadeh. Telomere length in patient with acute promyelocytic leukemia (APL) reflects response to treatment with arsenic. XXXth World congress of the International Society of Hematology, Sept.28-Oct.2, 2005, Istanbul, Turkey. (Oral presentation).
47. **Ghaffari, S.H.**, Jamialahmadi, A.H., Shayan-Asl, N., Alimoghaddam, K., Ghavamzadeh. Evalation of arsenic trioxide treatment in acute promyelocytic leukemia cell line; NB4. XXXth World congress of the International Society of Hematology, Sept.28-Oct.2, 2005, Istanbul, Turkey. (Poster presentation).
48. **S.H. Ghaffari**, T. Hemmati, S. Rostami, K. Alimoghaddam, A. Ghavamzadeh. Quantitative analysis of wt1 gene for minimal residual disease detection in leukemic patients. XXXth World congress of the International Society of Hematology, Sept.28-Oct.2, 2005, Istanbul, Turkey. (Poster presentation).
49. **S.H. Ghaffari**, S. Dalirifar, K. Alimoghaddam, A. Ghavamzadeh. Detection of Minimal Residual Disease in Acute Lymphoblastic Leukemia Using an Allele Specific Oligonucleotide PCR Assay. XXXth World congress of the

International Society of Hematology, Sept.28-Oct.2, 2005, Istanbul, Turkey.
(Poster presentation).

50. **S.H. Ghaffari**, T. Hemmati, S. Rostami, K. Alimoghaddam, A. Ghavamzadeh. Quantitative analysis of WT1 on newly diagnosed APL patients treated with Arsenic Trioxide as front-line therapy. Bone Marrow Transplantation, Volume ?, Supplement ?, March 2006. (32st Annual Meeting of the European Group for Blood and Bone Marrow Transplantation; Hamburg, Germany, March 19–22, 2006).
51. **S.H. Ghaffari**, N. Shayan-Asl, A.H. Jamialahmadi, A. Ghavamzadeh. Monitoring telomere length in patients with acute promyelocytic leukemia (APL) reflects response to treatment with arsenic. Bone Marrow Transplantation, Volume?, Supplement ?, March 2006. (32st Annual Meeting of the European Group for Blood and Bone Marrow Transplantation; Hamburg, Germany, March 19–22, 2006).
52. **S.H. Ghaffari**, A.H. Jamialahmadi, N. Shayan-Asl, K. Alimoghaddam, A. Ghavamzadeh. Assessment of arsenic trioxide (As₂O₃) effect on telomerase activity in APL patients and NB4 cell line. Bone Marrow Transplantation, Volume?, Supplement ?, March 2006. (32st Annual Meeting of the European Group for Blood and Bone Marrow Transplantation; Hamburg, Germany, March 19–22, 2006).
53. **Ghaffari, S.H.**, Jamialahmadi, A.H., Shayan-Asl, N., Alimoghaddam, K., Ghavamzadeh. Evalation of arsenic trioxide treatment in acute promyelocytic leukemia cell line; NB4. Bone Marrow Transplantation, Volume ?, Supplement ?, March 2006. (32st Annual Meeting of the European Group for Blood and Bone Marrow Transplantation; Hamburg, Germany, March 19–22, 2006).
54. Obeidi N, **Ghaffari H**, Gharehbaghian A, Alimoghaddam K, Dehghan M, Ghavamzadeh A, Shamshiri A. Detection and monitoring of Cytomegalovirus (CMV) in bone marrow transplant (BMT) recipients by Real-Time PCR. (11Th congress of the European Hematology Association, Amsterdam, June 16-17, 2006).

Publications

1. **Ghaffari SH**, Rostami S, Bashash D, Alimoghaddam K, Ghavamzadeh A. Real-time PCR analysis of PML-RAR $\{\alpha\}$ in newly diagnosed acute promyelocytic leukaemia patients treated with arsenic trioxide as a front-line therapy. *Ann Oncol*. 2006 Jul 10;
2. Ghavamzadeh A, Alimoghaddam K, **Ghaffari SH**, Rostami S, Jahani M, Hosseini R, Mossavi A, Baybordi E, Khodabadeh A, Irvani M, Bahar B, Mortazavi Y, Totonchi M, Aghdami N. Treatment of acute promyelocytic leukemia with arsenic trioxide without ATRA and/or chemotherapy. *Ann Oncol*. 2006 Jan; 17(1):131-4.
3. Alimoghaddam K, **Ghaffari H**, Foroughi F, Chardouli B, Sanaat Z, Bahar B, Mousavi A, Irvani M, Ghavamzadeh A. Effects of chimerism on graft versus host disease, disease recurrence, and survival after HLA identical marrow transplantation in Iran. *Arch Iran Med*. 2006 Apr; 9(2):99-103.
4. Bonab MM, Alimoghaddam K, Talebian F, **Ghaffari SH**, Ghavamzadeh A, Nikbin B. Aging of mesenchymal stem cell in vitro. *BMC Cell Biol*. 2006 Mar 10; 7:14.
5. **Ghaffari H**, Alimoghaddam K, Foroughi F, Chardouli B, Sanaat Z, Bahar B, Mousavi A, Irvani M, Ghavamzadeh A. Effects of chimerism on graft versus host disease, disease recurrence, and survival after HLA identical marrow transplantation in Iran. *The Scientific Journal of Iranian Blood Transfusion Organization-Research Center*. 2005 Autumn; 2 (5):139-144.
6. Jones JC, **Ghaffari SH**, Lobb CJ. Patterns of gene divergence and VL promoter activity in immunoglobulin light chain clusters of the channel catfish. *Immunogenetics*. 2004 Sep; 56(6):448-61.
7. **Ghaffari SH**, Ghashgaei A, Alimoghaddam K, Ghavamzadeh A. Analysis of chimerism in peripheral blood cell of patients after sex-mismatched bone marrow transplantation by interphase Fluorescent In Situ Hybridization (FISH) technique. *Iranian Journal of Medicine*. 2003 Fall 22(3): 220-225.
8. **Ghaffari SH**, Lobb CJ. Structure and genomic organization of a second cluster of immunoglobulin heavy chain gene segments in the channel catfish. *J Immunol*. 1999 Feb 1; 162(3):1519-29.
9. **Ghaffari SH**, Lobb CJ. Structure and genomic organization of a second class of immunoglobulin light chain genes in the channel catfish. *J Immunol*. 1997 Jul 1; 159(1):250-8.
10. Ventura-Holman T., **Ghaffari S.H.**, Lobb C.J. Characterization of a seventh family of immunoglobulin heavy chain VH gene segments in the channel catfish, *Ictalurus punctatus*. *European Journal of Immunogenetics*. 1996; 23:7-14
11. Ventura-Holman T, Jones JC, **Ghaffari SH**, Lobb CJ. Structure and genomic organization of VH gene segments in the channel catfish: members of different VH gene families are interspersed and closely linked. *Mol Immunol*. 1994 Aug; 31(11):823-32.

12. *Ghaffari SH*, Lobb CJ. Structure and genomic organization of immunoglobulin light chain in the channel catfish. An unusual genomic organizational pattern of segmental genes. *J Immunol*. 1993 Dec 15;151(12):6900-12.
13. Hayman JR, *Ghaffari SH*, Lobb CJ. Heavy chain joining region segments of the channel catfish. Genomic organization and phylogenetic implications. *J Immunol*. 1993 Oct 1; 151(7):3587-96.
14. Lobb CJ, *Ghaffari SH*, Hayman JR, Thompson DT. Plasmid and serological differences between *Edwardsiella ictaluri* strains. *Appl Environ Microbiol*. 1993 Sep; 59(9):2830-6.
15. Jones JC, *Ghaffari SH*, Lobb CJ. Immunoglobulin heavy chain constant and heavy chain variable region genes in phylogenetically diverse species of bony fish. *J Mol Evol*. 1993 May; 36(5):417-28.
16. *Ghaffari SH*, Lobb CJ. Organization of immunoglobulin heavy chain constant and joining region genes in the channel catfish. *Mol Immunol*. 1992 Feb; 29(2):151-9.
17. *Ghaffari SH*, Lobb CJ. Heavy chain variable region gene families evolved early in phylogeny. Ig complexity in fish. *J Immunol*. 1991 Feb 1; 146(3):1037-46.
18. *Ghaffari SH*, Lobb CJ. Nucleotide sequence of channel catfish heavy chain cDNA and genomic blot analyses. Implications for the phylogeny of Ig heavy chains. *J Immunol*. 1989 Oct 15; 143(8):2730-9.
19. *Ghaffari SH*, Lobb CJ. Cloning and sequence analysis of channel catfish heavy chain cDNA indicate phylogenetic diversity within the IgM immunoglobulin family. *J Immunol*. 1989 Feb 15; 142(4):1356-65.
21. Egyhazi E, Pigon A, Chang JH, *Ghaffari SH*, Dreesen TD, Wellman SE, Case ST, Olson MO. Effects of anti-C23 (nucleolin) antibody on transcription of ribosomal DNA in *Chironomus* salivary gland cells. *Exp Cell Res*. 1988 Oct; 178(2):264-72.
22. *Ghaffari SH*, Dumbar TS, Wallace MO, Olson MO. Isolation of proteins for peptide mapping, amino acid analyses, and sequencing using disulfide crosslinked polyacrylamide gels. *Anal Biochem*. 1988 Jun; 171(2):352-9.
23. Lapeyre B, Amalric F, *Ghaffari SH*, Rao SV, Dumbar TS, Olson MO. Protein and cDNA sequence of a glycine-rich, dimethylarginine-containing region located near the carboxyl-terminal end of nucleolin (C23 and 100 kDa). *J Biol Chem*. 1986 Jul 15; 261(20):9167-73.

Books



ایمونوبیولوژی : سیستم ایمنی در سلامت و بیماری

Immunobiology:

The Immune system in Health & Disease

By: Charles A Janeway

Translated by: Dr Seyed H Ghaffari

Published by: Teimourzadeh Publication Co

Aug. 2003



مطالعات موردی در ایمونولوژی بالینی

Case studies in immunology

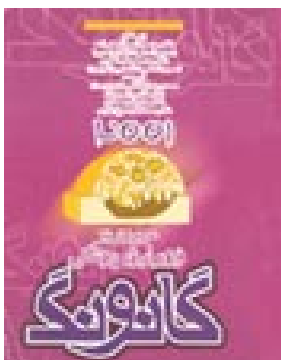
A clinical companion

By: Fred S .Rosen

Supervised & Edited by: Dr Seyed H Ghaffari

Published by: Teimourzadeh Publication Co

Aug. 2003



مروری بر فیزیولوژی پزشکی گانونگ

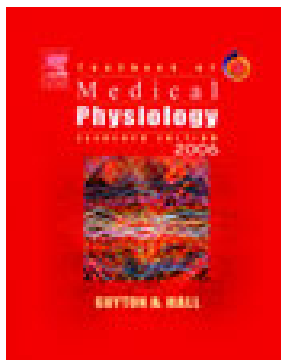
Review of Medical Physiology/ Ganong's

By: William F. Ganong

Supervised part by: Dr Seyed H Ghaffari

Published by: Teimourzadeh Publication Co

Aug. 2003



فیزیولوژی پزشکی گایتون 2006

Text Book of Medical Physiology/Gayton

By: Arthur C Gayton

Supervised part by: Dr Seyed H Ghaffari

Published by: Teimourzadeh Publication Co

2006

Supervision of Thesis and Dissertations during the years 2004-2006 at the HORC-BMT

	Title of Thesis	Supervisor	Advisor	Student Name	Degree	Year	University	Major
1	Detection of minimal residual disease in acute lymphoblastic leukemia using an allele specific oligonucleotide PCR assay	Dr Seyed H. Ghaffari	Dr. K. Alimoghaddam	Shiva H. Dalirifar	M.S.	2004	Khatam University	Cellular and Molecular Biology
2	Detection and quantitation of minimal residual disease (MRD) in patients with acute lymphoblastic leukemia using clonotypic rearrangement of immunoglobulin and T-cell receptor	Dr Seyed H. Ghaffari	Dr. K. Alimoghaddam	Faezeh Vasheghani	M.S.	2004	Khatam University	Cellular and Molecular Biology
3	Detection and quantification of minimal residual disease in patients with chronic myeloid leukemia after bone marrow transplantation	Dr Seyed H. Ghaffari & Dr A. Farazmand	Dr. K. Alimoghaddam	Marjan Yaghmaei	M.S.	2004	Tehran University	Cellular & Molecular Biology
4	Evaluation of Allele frequency distributions and polymorphisms of eleven STR _s & VNTR loci in Iranian population	Dr Seyed H. Ghaffari	Dr. K. Alimoghaddam	Darioush Haidari	M.S.	2004	Iranian Blood Transfusion Organization Research Center	Hematology & Blood Transfusion
5	Quantitation of minimal residual disease (MRD) for detection of PML/RARA) in acute promyelocytic leukemia (APL) (AML-M3) by real-time PCR after arsenic therapy	Dr Seyed H. Ghaffari	Dr. Pourfatollah	Davood Bashash	M.S.	2004	Iranian Blood Transfusion Organization Research Center	Hematology & Blood Transfusion
6	Synthesis of mrp1 Hybridization probe by PCR for FISH technique	Dr F. Mahjobi	Dr Seyed H. Ghaffari	Masomeh Norouzi	M.S.	2004	Azad University	Genetic

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7	Synthesis of mdrl probe for use in molecular cytogenetic technique	Dr F. Mahjobi	Dr Seyed H. Ghaffari	Marta Ghahraman	M.S.	2004	Azad University	Genetic
8	Association of Vitamin D Receptor gene Polymorphisms with thyroid cancer	Dr Seyed H. Ghaffari	Dr M.R. Razavi	Parisa Rahimipour	M.S.	2005	Azad University	Cellular and Molecular Biology
9	Evaluation of Telomerase Activity in Acute Promyelocytic Leukemia (APL) after Treatment with Arsenic trioxide (AS ₂ O ₃)	Dr Seyed H. Ghaffari	Dr. K. Alimoghaddam	Abdolhamid Jami	M.S.	2005	Khatam University	Cellular and Molecular Biology
10	Evaluation of Telomere length in patient with acute promyelocytic leukemia (APL) after treatment with arsenic	Dr Seyed H. Ghaffari	Dr S. Montaser Kohsari	Nilofar Shayan Asl	M.S.	2005	Azad University	Cellular and Molecular Biology
11	Detection and monitoring of Cytomegalovirus (CMV) in bone marrow transplant (BMT) recipients by Real-Time PCR	Dr Seyed H. Ghaffari & Dr A. Gharabaghian	Dr. K. Alimoghaddam & B. Chahardovali	Narghes Obeidi	M.S.	2005	Iranian Blood Transfusion Organization Research Center	Hematology & Blood Transfusion
12	Quantitative analysis of WT1 gene for minimal residual disease detection in leukemic patient	Dr Seyed H. Ghaffari & Dr A. Gharabaghian	Dr. K. Alimoghaddam & S. Rostami	Turadj Hemmati	M.S.	2005	Iranian Blood Transfusion Organization Research Center	Hematology & Blood Transfusion
13	Evaluation of correlation between chimerism analysis with STR-PCR method and acute GVHD after hematopoietic cells transplantation in HORC-BMT of Shriati Hospital	Dr A. Mousavi & Dr Seyed H. Ghaffari	Dr. K. Alimoghaddam & Dr M. Jahani	Dr. A. Basi	Fellowship	2004	Tehran University Medical Sciences/Medical School	Hematology & Oncology

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14	The influence of adjuvant therapy upon micro-metastasis in bone marrow aspiration and detection rate of relapse in follow-up of patients with breast cancer	Dr A. Ghavamzadeh & Dr. K. Alimoghaddam	Dr M. Atri & Dr Seyed .H. Ghaffari	Dr Mozaffar Aznab	Fellowship	2005	Tehran University Medical Sciences/Medical school	Hematology & Oncology
15	Evaluation of Cytomegalovirus (CMV) load in 100 days follow-up of BMT patients by Real-Time PCR and its comparison with PP65 Antigenemia, and Pre-emptive therapy of positive patients in HORC-BMT of Shriati Hospital	Dr. K. Alimoghaddam & Dr Seyed H. Ghaffari	Dr A. Ghavamzadeh & Dr M. Jahani	Dr Mehdi Dehghan	Fellowship	2005	Tehran University Medical Sciences/Medical school	Hematology & Oncology
16	Quantitative analysis of Epstein-Barr virus DNA load in bone marrow transplant recipients using Real-Time PCR	Dr Seyed H. Ghaffari	Dr. K. Alimoghaddam	Shaghayegh Sabri	M.S.	2006	Tarbiat Moddares University	Molecular Biology
17	Detection and follow-up of Invasive Aspergillus in patients with hematological disorder by molecular PCR technique	Dr A. Ghavamzadeh & Dr Seyed H. Ghaffari	Dr. K. Alimoghaddam	Farkhondeh Vafaeizadeh	Fellowship	2006	Tehran University Medical Sciences/Medical school	Hematology & Oncology