



CURRICULUM VITAE

Name: Ali Ahmad Bayat

Date of Birth: 23.3.1974

Sex: Male

Nationality: Iranian

Marital Status: Married

Child: 2 Children

Home Address: No.38. Barzegarpour Alley, Khosh street, Azadi street.

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Work Address: Monoclonal Antibody Research Center.

Avecenna Recearch Institute.

P.O.Box: 19835/177 Tehran, Iran.

I-Position : Executive manager of monoclonal antibody research center, Avicenna Research Institute

II-Education:

B.Sc of cellular and molecular biology. Azad University. Tehran, Iran (1994-1998)

M.Sc of biochemistry, Payame nor university . (2011-2012)

Experience:

1991-1994 Jahad Daneshgahi, Medical Sciences of Shahid Beheshti

1998-Present Researcher, Monoclonal Antibody Research Center
Avecenna Research Institute, Tehran, Iran.

Research Activites:

- Production of monoclonal Monoclonal antibodies against PSA, prolactin and ferritin
- Production of monoclonal Monoclonal Monoclonal antibodies against Sperm Surface antigen.
- Production of monoclonal Monoclonal Monoclonal antibodies against Inhibin
- Production of monoclonal Monoclonal Monoclonal antibodies against different peptides (more than 50 peptides)
- Purification of prostasine from seminal fluid
- Purification of PSA from seminal fluid
- Purification of ferritin from human liver
- Production of polyclonal antibodies against PSA and ferritin
- production of polyclonal antibodies against different isotypes of human Ig and Immunoglobulin of different animals (Mouse, Sheep and Rabbit)

Technical Abilities:

- Cell culture
- Hybridomen technique and monoclonal antibody production
- Enzyme linked Immunosorbent assay
- Cell purification with density gradient media
- Production of polyclonal antibody
- Column chromatography
- Immunofluorescence
- Western blot
- Flow cytometry

List of Publications:

A- Papers in English:

1-Shojaeian J, Jeddi-Tehrani M, Dokouhaki P, Mahmoudi AR, Ghods R, Bozorgmehr M, Nikoo S, **Bayat AA**, Akhondi MM, Ostadkarampour M, Rezania S, Zarnani AH. Mutual helper effect in copulsing of dendritic cells with 2 antigens: a novel approach for improvement of dendritic-based vaccine efficacy against tumors and infectious diseases simultaneously. *J Immunother*. 2009 May;32(4):325-32.

2- Daneshmanesh AH, Mikaelsson E, Jeddi-Tehrani M, **Bayat AA**, Ghods R, Ostadkarampour M, Akhondi M, Lagercrantz S, Larsson C, Osterborg A, Shokri F, Mellstedt H, Rabbani H.

Ror1, a cell surface receptor tyrosine kinase is expressed in chronic lymphocytic leukemia and may serve as a putative target for therapy. *Int J Cancer*. 2008 Sep 1;123(5):1190-5.

3- Arefi S.,Heidari M., Akhondi M.M.,**Bayat A.A.**,Jeddi Tehrani M.,S. Tabaei A.,M. Jarrahi A.R .Antizona pellucida antibodies in follicular fluid and outcome Of ICSI. Middle East Fertility Society Journal2006

4- Arefi S.Jeddi Tehrani M.,M.Akhondi M.M.,Mousavi A.R.,Heidari M.,**Bayat A.A.**,Sadeghpour Tabaei A. Anti-Zona Pellucida antibodies in infertile patients in relation to multiple puncture of ovaries and unexplained infertility. *Iranian Journal of Reproductive Medicine* 2005;3(1):30-5

5- Zarnani A.H., Moazzeni S.M., Shokri F., Salehnia M., **Bayat A.A.**, Mahmoodi S.A.R., Dokouhaki P., Jeddi-Tehrani M., Morphological and cytochemical characteristics purified murine splenic dendritic cells. *Iranian Journal of Allergy, Asthma and Immunology*, Vol 2, Num 3, September 2003, 139-144

6- sharifzadeh S., Modjtahedi H., Jedi Tehrani M., **Bayat A.**, Ghaderi A. Production and Characterization of a Monoclonal Antibody against an Antigen on the surface of Non- Small cell carcinoma of the Lung. *Iranian journal of Immunology*. 2007 Dec; 4(4): 206-14.

7- Shojaeian S., Allameh A., Zarnani AH., Chamankhah M., Ghods R., **Bayat AA.**, Jeddi-Tehrani M.Production and Characterization of Monoclonal Antibodies against the Extracellular Domain of CA 125. *Immunol Invest*. 2010 Jan;39(2):114-31.

8- Daneshmanesh AH, -Farsangi1 H., Khan AS., Jeddi-Tehrani1 M., Akhondi MM., **Bayat AA.**, Ghods R, Mahmoudi A-R., HadaviR., " sterborg A O,4., Shokri F., Rabbani1 H ., Mellstedt H. Monoclonal antibodies against ROR1 induce apoptosis of chronic lymphocytic leukemia (CLL) cells. *Leukemia*. 2012.

9- Kazemi T., Tahmasebi F., **Bayat AA.**, Mohajer N., Khoshnoodi J., Jeddi-Tehrani M., Rabbani H., Shokri F. Characterization of novel murine monoclonal antibodies directed against the extracellular domain of human HER2 tyrosine kinase receptor.*Hybridoma*. 2011 Aug;30(4):347-53.

10- Hadavi R, Zarnani AH, Ahmadvand N, Mahmoudi AR, **Bayat AA**, Mahmoudian J, Sadeghi MR, Soltanghorae H, Akhondi MM, Tarahomi M, Jeddi Tehrani M, Rabbani H. Production of Monoclonal Antibody against Human Nestin. *Avicenna J Med Biotech(AJMB)*. 2010;2(2):69-77

11- Daneshmanesh AH, -Farsangi1 H., Khan AS., Jeddi-Tehrani1 M., Akhondi MM., **Bayat AA.**, Ghods R, Mahmoudi A-R., HadaviR., " sterborg A O,4., Shokri F., Rabbani1 H ., Mellstedt H. Monoclonal antibodies against ROR1 induce apoptosis of chronic lymphocytic leukemia (CLL) cells. *Leukemia*. 2012. Jun;26(6): 1348-55

- 12- Mahmoudian J., Hadavi R., Jeddi-Tehrani M., Mahmoudi AR., **Bayat AA.**, ShabanE., Vafakhah M., Darzi M., Tarahomi M., Ghods R. Comparison of the Photobleaching and Photostability Traits of Alexa Fluor 568- and Fluorescein Isothiocyanate-conjugated Antibody. *CELL JOURNAL*(Yakhteh), 2011. 13, No 3.
- 13- Sarial Sh., Asadi F., Jeddi-Tehrani M., Hadavi R., **Bayat AA.**, Mahmoudian J., Taghizadeh-Jahed M., Shokri F., Rabbani H., A High Affinity Monoclonal Antibody Recognizing the Light Chain of Human Coagulating Factor VII. *Hybridoma* (Larchmt). 2012 Dec;31(6):443-8
- 14- Mahmoudian J, Jeddi-Tehrani M, **Bayat AA**, Mahmoudi AR, Vojgani Y, Tavangar B, Hadavi R, Zarei S. A monoclonal antibody against leptin. *Hybridoma* (Larchmt). 2012 Oct;31(5):372-7.
- 15- Yousefi M, Tahmasebi F, Younesi V, Razavi A, Khoshnoodi J, **Bayat AA**, Abbasi E, Rabbani H, Jeddi-Tehrani M, Shokri F. Characterization of neutralizing monoclonal antibodies directed against tetanus toxin fragment C. *J Immunotoxicol*. 2013 Feb 1.
- 16- Hojjat-Farsangi M., Ghaemimanesh F., Hossein Daneshmanesh A., **Bayat AA** ., MahmoudianJ., Jeddi-Tehrani M., Rabbani H., Mellstedt H. inhibition of the Receptor Tyrosine Kinase ROR1 by Anti- ROR1 Monoclonal Antibodies and siRNA Induced Apoptosis of Melanoma Cells. *PLOS ONE*. April 2013.8. 4. 61167.
- 17- Shamsipour F., Zarnani A.H., Ghods R., Chamankhah M., Forouzesh F., Vafei S., **Bayat A.A.**, Akhondi M.A., Oghabian M.A., Jeddi-Tehrani M .Conjugation of monoclonal antibodies to super paramagnetic iron oxide nanoparticles for detection of her2/neu antigen on breast cancer cell lines. *Avicenna Journal of Medical Biotechnology* 2009; 1(1) 27-31.
- 18- **Bayat Ali Ahmad**, Yeganeh Omid , Ghods Roya, Zarnani Amir Hassan, Bahjati Ardekani Reza, Mahmoudi Ahmad Reza, Mahmoudian Jafar, Haghigat-Noutash Farzaneh, Jeddi-Tehrani Mahmood' Production and characterization of a murine monoclonal antibody against human ferritin. *AJMB* 2013; 5(4) 212-219
- 19- Golsaz Shirazi F, Amiri MM, Mohammadi H, Bayat AA, Roohi A, Khoshnoodi J, Zarnani AH, Jeddi-Tehrani M, Kardar GA, Shokri F. Construction and Expression of Hepatitis B Surface Antigen Escape Variants within the "a" Determinant by Site Directed Mutagenesis. *Iran J Immunol*. 2013 Sep;10(3):127-38.

B:papers in Persian:

- 1- Zarnani A.H Moazzeni S.M. Shokri F. Salehnia M. **Bayat A.A** Jeddi-Tehrani M. Optimization of Dendritic cell purification from mouse spleen: A recommended method for purification of Dendritic cells from reproductive organs. *Medical Journal of Reproduction & infertility*. Winter 2003, 4(1):17-29.
- 2- Mahmudi S.A.R., Ghods R., Zarnani A.H., Heidari M., **Bayat A.A.**, Torkabadi E., Akhondi M.M., Parivar K., Jeddi Tehrani M., Sadeghi M.R. Characterization of a human spermatozoa surface antigens recognized by HS56. monoclonal antibody. *Medical Journal of Reproduction & Infertility*. Autumn 2004; 5(4): 290-298.
- 3- Behjati Ardakani R., Sadeghi M.R., Ghods R., **Bayat A.A.**, Jeddi Tehrani M. Extraction and purification of ferritin from liver tissue. *Journal of Babol Medical University*, winter 2005; 7(1): 14-21.

- 4- Akhondi M.M , TorkAbadi E, **Bayat A.A** , Heidari M , Ghods R , Sadeghi M.R , Dizeji A , Shokri F , Jeddi-Tehrani M. Monoclonal Antibody Production Against Human Spermatozoal Surface Antigens. Journal of Shaheed Sadoughi University of Medical Services & Health Service 2005; 13(4) 36-50
- 5-Arefi S., Akhondi M.A., Sadeghi M.R., Jeddi Tehrani M., Heidari M., Talebian A., **Bayat A.A.**, Sadeghpour Tabaei A. Intrafollicular fluid antigamete antibodies in infertile patient candidates for ICSI. Medical Journal of Reproduction & Infertility. Summer 2006; 7(2): 101-110.
- 6- Torkabadi E, Akhondi MM, Pakzad P, Mahmoodi SAR, **Bayat A**, Sadeghi MR, Jeddi-Tehrani M. Characterization of HS80 monoclonal antibody for detection of its antigen on the surface of human sperm. HAKIM, Vol 9. No. 4 winter 2007.
- 7-Torkabadi E., Akhoondi M.A., Pakzad P., Mahmoodi S.A.R., **Bayat A.**, Torkabadi E., Sadeghi M.R., Jeddi Tehrani M. Characterization of HS80 monoclonal antibody for detection of its antigen on the surface of human sperm. Hakim Research Journal. Winter 2007; 9(4): 65-75.
- 8-A.S. Tabatabaei- panah, Ph.D, A.H. Zarnani, D.M.T, Ph.D. sh. Montaser- Kouhsari, Ph.D, M. chamankhah, Ph.D., R. Ghods, M, Sc., **A.A. Bayat**, B.Sc., G.E. Kazemi- sefat, B.Sc., S.A.R.Mahmoudi, M.Sc., M. ostad karampoor, M. SC., S.Shojaeian, M.Sc., M. Jeddi-Tehrani, Ph.D.
- Production and characterization of Anti- Her2 Monclonal Antibodies. Yakhteh Medical journal, vol 10, No 2, summer 2008
- 9- Tabatabaee A. Zarnani A. montaser Kuhsari SH. Chamankhah M. Ghods R. **Bayat A.A.** Kazemi sefat G. Mahmoodi A. Ostad- karampoor M. Shojaean S. production and Chracterization of anti- Her-2 monoclonal antibodies. Yakhteh Medical Journal 2008. vol 10, No 2.
- 10- Sadeghi MR., Hodjat M., Naseri N., Jeddi-Tehrani M., Mosafa N., Akhondi MA., Ghods R., **Bayat AA.** Purification of inhibin from human follicular fluid using monoclonal antibody. Feyz-Journal of Kashan University of Medical Sciences. 2007 fall;11(3):24-30.
- 11- Tabatabaee A., Zarnani A., montaser Kuhsari SH., Chamankhah M., Ghods R., **Bayat A.A.**, Kazemi sefat G., Mahmoodi A., Ostad- karampoor M., Shojaean S. production and Chracterization of anti- Her-2 monoclonal antibodies. Yakhteh Medical Journal 2008;10(2):109-20

B:Abstract

- 1- **Bayat A.A.**, Ghods R., Behjati R., Saboor A.A., Zarnani A.H., Jeddi Tehrani M., Production and Characterization of a Monoclonal Antibody against ferritin. Proceedings of the 3rd National Biotechnology Congress Islamic Republic of Iran.
- 2- Heidari M., Mahmoodi A.R., Torkabadi E., Ghods R., **Bayat A.A.**, Zarnani A.H., Jeddi Tehrani M., Sadeghi M.R., Akhondi M.M., Production of monoclonal antibodies against sperm surface antigenes and it's characterization. Proceedings of the 3rd National Biotechnology Congress Islamic Republic of Iran.

- 3- Ghods R., Balaee Goli L., **Bayat A.A.**, Mahmoudi A.R., Jeddi Tehrani M., Shokri F., Production of Polyclonal antibodies against human and animal immunoglobulins and preparation of enzyme and fluorescence conjugates. Proceedings of the 3rd National Biotechnology Congress Islamic Republic of Iran.
- 4- Ghods R., Behjati R., **Bayat A.A.**, Jeddi Tehrani M., Production of polyclonal antibodies against human ferritin and designing and ELISA test for ferritin measurement. proceedings of the 3rd National Biotechnology Congress Islamic Republic of Iran.
- 5- Behjati R., Sadeghi M.R., Ghods R., **Bayat A.A.**, Jeddi Tehrani M., Extraction and purification of ferritin from liver tissue. Proceedings of the 3rd National Biotechnology Congress Islamic Republic of Iran.
- 6- Arefi S., Jeddi-Tehrani M., Akhondi M.M., Heidari M., **Bayat A.A.**, Evaluation of the presence of antizona antibodies in follicular fluid of infertile women. 10th Congress of Fertility and Infertility.
- 7- Heidari M., Mahmoudi S.A.R., Torkabadi E., Ghods R., **Bayat A.A.**, Zarnani A.H., Jeddi ehrani M., Sadeghi M.R., Akhoondi M.M. Production of monoclonal antibodies against sperm surface antigens and it's characterization. Proceedings of the 3rd National Biotechnology Congress Islamic Republic of Iran, 9-11 September 2003, Mashhad, Iran
- 8- Heidari M., **Bayat A.A.**, Jeddi Tehrani M., Sadeghi M.R., Akhondi M.M., Production of monoclonal antibodies against sperm surface antigens. First Iranian Conference for Cell and Developmental Biology, University of Tehran, 13-14 September 2003.
- 9- Moasses S.M., Zarnani A.H., Shokri F., Salehnia M., **Bayat A.A.**, Mahmoudi S.A.R., Heidari M, Dokouhaki P., Jeddi-Tehrani M., Immunoregulatory activity of supernatants mouse decidual tissue on antigen presentation by dendritic cells. MEFS 10th annual meeting, December 10-13 2003, Beirut.
- 10-Zarnani A.H., Moazzeni S.M., Shokri F., Salehnia M., **Bayat A.A.**, Mahmoudi S.A.R., Heidari M., Dokouhaki P., Jeddi Tehrani M. Immunoregulatory activity of supernatants from short-term cultures of mouse Decidual tissue on antigen presentation by dendritic cells. Congress on Immunological Aspects of Fertility and Infertility, 14-15 January 2004, Isfahan, Iran.
- 11-Arefi S., Jeddi Tehrani M., Akhondi M.A., Heidari M., **Bayat A.A.**, Anti Zona antibodies in follicular fluid of infertile women. The first congress on Immunological aspects of fertility and infertility. 14-15 Jun 2004-Isfahan.
- 12-Zarnani A.H, Moazzeni S.M., Shokri F., Salehnia M., **Bayat A.A**, Mahmoudi S.A.R., Vazirian F., Ghods R., Dokooohaki P., Jeddi Tehrani M., TH2 Promoting Activity of Decidual Cell Cultures Supernatants on Dendritic Cells. 7th Congress of Immunology & Allergy, Mashhad, 4-7 May 2004.
- 13- Zarnani A.H., Moazzeni S.M, Shokri F., Salehnia M., **Bayat A.A**, Mahmoudi S.A.R., Vazirian F., Dokooohaki P., Jeddi Tehrani M., Characterization of Decidual Dendritic Cells During Mouse Normal Pregnancy. 7th Congress of Immunology & Allergy, Mashhad, 4-7 May 2004.
- 14- Zarnani A.H., Moazzeni S.M, Shokri F., Salehnia M., **Bayat A.A**, Mahmoudi S.A.R., Vazirian F., Dokooohaki P., Jeddi Tehrani M., Cytochemical characteristics of Murine Splenic Dendritic Cells. 7th Congress of Immunology & Allergy, Mashhad, 4-7 May 2004.
- 15- Zarnani A.H., Moazzeni S.M., Shokri F., Salehnia M., **Bayat A.A.**, Mahmoudi S.A.R., Vazirian F., Dokooohaki P., Jeddi Tehrani M., Analysis of Endometrial

- Myeloid and Lymphoid Dendritic Cells during Mouse Estruse Cycle. 7th Congress of Immunology & Allergy, Mashhad, 4-7 May 2004.
- 16- Zarnani A.H., Moazzeni S.M., Shokri F., Salehnia M., **Bayat A.A.**, Mahmoodi S.A.R., Heidari M., Dokooohaki P., Juddi Tehrani M., The Effect of Mouse Decidual Culture Supernatant on Antigen Presentation by Dendritic Cells. 7th Congress of Immunology & Allergy, Mashhad, 4-7 May 2004.
- 17- Zarnani A.H., Moazzeni S.M., Shokri F., Salehnia M., **Bayat A.A.**, Mahmoodi S.A.R., Heidari M., Dokooohaki P., Ghods R., Juddi-Tehrani M. Immunoregulatory activity of supernatants from short-term cultures of mouse decidual tissue on antigen presentation by dendritic cells. 12th International congress of Immunology and 4th Annual conference of FOCIS. Montreal, Canada. 18-23 July 2004.
- 18- Naseri N., **Bayat A.A.**, Talebian A., Ghods R., Mosafa N., Juddi – Tehrani M. M.M.Akhondi., M.R.Sadeghi. purification of native Inhibin from human follicular fluid using monoclonal Antibody. 8th Iranian congress of Biochemistry and the First International Congress of Biochemistry and molecular Biology. Sep 11 – 15, 2005 Tehran / Iran.
- 19- Zarnani A.H., Kalantari A., Shojaeian J., Gharehboghian A., Ghods R., Mahmoodi A.R., **Bayat A.A.**, Akhondi M.M., Juddi Tehrani M. Simultaneous pulsing of dendritic cells with tumor antigen and a third-party antigen: A novel approach for enhancing presentation of tumor antigens by dendritic cells. 1st Mediterranean Workshop on Clinical Immunology. 26th -29th October, 2006.
- 20- Zarnani A., Shojaeian J., Kalantari A., Ghods R., Mahmoodi S., **Bayat A.**, Khakpour J., Heidari M., Akhondi M., Juddi-Tehrani M. Helper antigens enhance capacity of dendritic cells to present tumor antigens. 13th International Congress of Immunology. 21 -25 August, 2007.
- 21- Tabatabaei- Panah A.S., Zarnani A.H., Montasser-kouhsari Sh., Juddi-Tehrani M., Chamankhah M., **Bayat A.A.**, Ghods R., Kazemi-Sefat G.E., Mahmoodi A.R. Quantum dot nanoparticles as useful tools for diagnosis of breast cancer. 3rd International Congress & Exhibition on Nanobiotechnology, 13th -15th June, 2007.
- 22- Tabatabaei-Panah A.S., Zarnani A.H., Juddi Tehrani M., Chamankhah M., Montasser- kouhsari Sh., **Bayat A.A.**, Ghods R., Kazemi-Sefat G.E. Diagnostic of breast cancer's biomarker (Her-2) by quantum dots nanoparticles 525. International Breast Cancer Congress, 23-25 February 2007, Tehran, Iran.
- 23- Arefi S. Juddi Tehrani M., Akhondi M.M., Heidari M., **A.A Bayat**. Evalution of the presence of anti zona antibodies in follicular of infertile Women. IFFS 18th World Congress On Fertility Sterility May 23-28, 2004 Montreal – Canada
- 24- Sadri H., Akhondi M.M., Sadeghi M.R., **Bayat A.A.** Torkabadi E., Juddi Tehrani M., Production of monoclonal antibody against surface antigens of human spermatozoa. Third European Congress of Andrology and the 16th Congress of the German Society of Andrology. 11 – 14 September, 2004 Munster – Germany.
- 25- Naseri N., **Bayat A.A.**, Talebian A. Ghods R., Mosaffa N., Pakzad P., Juddi Tehrani M., Sadeghi M.R. Generation of monoclonal antibody against human inhibin, 11th Congress of Fertility and Infertility, 24-25 February 2005, Tehran, Iran.
- 26- Arefi.S.,Juddi – Tehrani.M., Akhondi M.A., Mousavi J.R., Heidari M., **Bayat A.A.** Anti – zona pellcida antibodies in infertile patients in relation to multiple IVF attempts and unexplained infertility. The 7th World Congress on Controversies in obstetrics gynecology & infertility April 14- 17, 2005 Athenes, Greece.
- 27- Zarnani A.H., Moazzeni S.M., Kalantari A., Shokri F., Salehnia M., **Bayat A.A.**, Mahmoodi S.A.R., Dokouhaki P., Juddi – Tehrani M. Characterization of Decidual Dendritic Cells During Mouse Pregnancy. 10th AASIR Congress and Third

European Congress of Reproductive Immunology Sunday 11th – Thursday 15th September 2005 place: University of Essex, Colchester, England.

- 28- **Bayat Ali Ahmad**, Ghods Roya, Bahjati Ardekani Reza, Mahmoudi Ahmad Reza, Haghigat-Noutash Farzaneh, Shams Mahmood, Zaree Saeed, Zarnani Amir Hassan, Jeddi-Tehrani Mahmood. Production and characterization of a murine monoclonal antibody against human ferritin. The 2nd National Biology Congress Payame noor University.
- 29- **Bayat Ali Ahmad**, Ghods Roya, Bahjati Ardekani Reza, Mahmoudi Ahmad Reza, Haghigat-Noutash Farzaneh, Shams Mahmood, Zaree Saeed, Zarnani Amir Hassan, Jeddi-Tehrani Mahmood. Production and characterization of a murine monoclonal antibody against PSA. The 2nd National Biology Congress Payame noor University.