



Curriculum Vitae

Name & Family name: Farzin ROOHVAND

Affiliations: Assoc. Prof. in Virology and Biotechnology

Date of Birth: March 25, 1968

Languages: English, Turkish, Persian (Farsi) & French.

Frequent working address: Institut Pasteur Paris, Unité Hépacivirus 25/28 Rue du Dr. Roux

75724 Paris, France

Tel: +33 (0)145688522

E. mail: farzin.roohvand@pasteur.fr

Present working address: Pasteur Institute of Iran. Virology Dept, Pasteur Ave., Tehran /13164, IRAN.

Tel/Fax: 98 21 66496682

Mobile Phone: +98(0)912 412 9269

E. mail: rfarzin@pasteur.ac.ir
: farzin.roohvand@gmail.com

Biography:

farzin Roohvand received his Ph.D in Biotechnology from Middle East Technical Univ. (Ankara-Turkey) in 1998 and started his career in Hepatitis and AIDS Dept. of Pasteur Institute of Iran since 1999. During 2002-2003 he did his First Post-doc studies in Molecular medicine and Carcinogenic hepatitis Unit of Paris Pasteur Institute in the domain of Hepatitis C and later during 2004-2005 he served as a guest scientist in Unité Hépacivirus of Pasteur Institute in Paris. During 2008-2010 he worked in the same Institute and unit as Principal investigator and confirmed international scientist supported by ANRS (Agence National de Research sur SIDA et Hepatit Viral - France). Since 2012, he serves as an associated Prof of Biotechnology and Mol. Virology and principal investigator in Virology Dept. of Pasteur Institute of Iran. He has been author of a number of international articles

and book chapters in the domain of Molecular virology and biotechnology and supervised several Ph.D and master theses. Currently, Dr. Roohvand serves in Editorial Board of several scientific Journals”.

Academic positions:

Associated Prof. and Principal investigator (Web link to the official profile:
<http://en.pasteur.ac.ir/pages.aspx?id=918>)

Research interests:

Hepatitis viruses (specially HCV); Human Papiloma Virus (HPV); Recombinant Expression in Yeast; Strptokinase; thrombolytic drugs; vaccines.

Collaboration with scientific Journals:

- **Editor-in-Chief** in: International Invention Journal of Biochemistry and Bioinformatics (IJBB),
<http://internationalinventjournals.org/journals/IJBB/editors.html>
- **Associated Editor** in: "Hepatitis Monthly" Journal (IF:1.26);
http://hepatmon.com/?page=pages&page_id=58
- **Editorial Board of the following Journals:**
- World Journal of Virology (WJV); http://www.wjgnet.com/2220-3249/g_info_20100722180841.htm
- Virology Discovery (VD); <http://www.hoajonline.com/virology/editorialboard>
- Research Journal of Infectious Disease (RJID);
<http://www.hoajonline.com/infectdis/editorialboard>
- Journal of Clinical and Translational Hepatology;
http://www.jcthn.com/index.php?option=com_content&view=article&id=101&Itemid=514

- Webmed Central Plus Virology (ISSN 2051-0799);
http://www.webmedcentralplus.com/editorial_board_members?alpha=R
- Trends in Vector Research and Parasitology;
<http://www.hoajonline.com/parasitology/editorialboard>
- COMPREHENSIVE RESEARCH JOURNAL OF BIOLOGICAL SCIENCE;
<http://www.crjournals.org/CRJBS/Editorial.htm>
- Journal of Microbiology and infections;
<http://www.vipoa.org/microbiol/editorialboard>
- Gastroenterology and Hepatology (Canadian Research center of sciences and Cultures); <http://www.cscanada.net/index.php/gh/about/editorialTeam>
- **Frequent reviewer in Journals of:** Vaccine, J. of Biotechnology, AJMB, IBJ, IJIA,...

Professional Positions:

- Associated Prof in Mol. Virol. and principal investigator in Virology Dept. of IPI (Institut Pasteur d'Iran) (2012 to present).
- Principal investigator in Hepatitis & AIDS Dept. of IPI (2010-2012).
- **Principal investigator and confirmed international scientist supported by ANRS (Agence National de Research sur SIDA et Hepatit Viral - France). Institut Pasteur Paris, Unité Hépacivirus 25/28 Rue du Dr. Roux 75724 Paris, France: April 2008 to June 2010.**
- Head of Recombinant Gene lab. and Principal investigator. **Hepatitis and AIDS Dept.** of Institut Pasteur d'Iran (IPI): **2007 to 2012.**
- Guest scientist based on a sabbatical fellowship from International office of Institut Pasteur (RIP): **Institut Pasteur Paris, Unité Hépacivirus** 25/28 Rue du Dr. Roux 75724 Paris, France: **May 2004 to March 2005.**

- Assis. Prof. **Hepatitis and AIDS Dept.** of Institut Pasteur d'Iran (IPI): 2003-2004.
- Post-doctoral scientist. **Institut Pasteur Paris, Molecular medicine and Carcinogenic hepatitis Unit**, 25/28 Rue du Dr. Roux 75724 Paris, France: **February 2002 to February 2003.**
- Researcher. **Hepatitis and AIDS Dept.** of Institut Pasteur d'Iran (IPI): **March 2000 to February 2002.**
- Research associate. **Molecular Biology Dept.** of Institut Pasteur d'Iran: **March 1999 to February 2000.**

Education:

- **Post-doctoral fellowship (virology-Hepatitis): Institut Pasteur (Paris), 2002-2003.**
- **Ph.D. in Biotechnology**, Middle East Tech. Univ. (Ankara)-Pasteur Institute (Tehran), **1993-1998.**
- **M.Sc. in Biotechnology**, Middle East Tech. Univ., Ankara/TURKEY **1990-1992.**
- **B.Sc. in Biology**, Middle East Tech. Univ., Ankara/TURKEY, **1985-1989.**
(Medium of instruction in Middle East Tech. Univ. is English)
- **Certificate of the attendance in workshops and symposiums:**
 - A. Immuno-electrophoresis Methods (Workshop), 8-10 May **2000**, Tehran University, **Tehran.**
 - B. Risques Professionels en Laboratoire (Course), 18 June **2002**, Institut Pasteur **Paris-France.**
 - C. Nouveaux traitement des hepatitis virales: de la recherché a la clinique (Symposium), 6-7 December **2002**, Univ. Lumiere, **Lyon-France.**
 - D. Bio-informatics in Molecular Biology (Workshop), 7-9 Feb. **2004**, NRCGEB, **Tehran-Iran.**
 - E. Application of Molecular & cellular techniques in Diagnosis of Human Genetic Diseases (Workshop), 7-10 March **2004**, NRCGEB, **Tehran.**
 - F. Advanced Vaccinology course, 24 May **2007**, **Annecy-France.**

International Publications (in English):

- Application of the 3'-noncoding region of poliovirus RNA for cell-based regulation of mRNA stability-implication for Biotechnological applications. Rasekhian M, **Roohvand F**, Teimoori-Toolabi L, Amini S, Azadmanesh K. **Biotechnol Appl Biochem.** 2014 Feb 25. doi: 10.1002/bab.1218. [Epub ahead of print]
- Immunization of Mice by BCG Formulated HCV Core Protein Elicited Higher Th1-Oriented Responses Compared to Pluronic-F127 Copolymer. Maryam Yazdaniyan , Arash Memarnejadian,* , Mehdi Mahdavi , Seyed Mehdi Sadat, Fatemeh Motevali , Rouhollah Vahabpour 1, Hossein Khanahmad 3, Seyed Davar Siadat 4, Mohammad Reza Aghasadeghi , **Farzin Roohvand *(Corresponding Author)**. **Hepat Mon.** 2013 October; **13(10): e14178**
- Towards a superior streptokinase for fibrinolytic therapy of vascular thrombosis. Keramati M, Arabi RM, Memarnejadian A, Mirzaie A, Sazvari S, Aslani MM, **Roohvand F*(Corresponding Author)**. **Cardiovasc Hematol Agents Med Chem.** 2013 Mar 21.
- Screening, Cloning and Expression of Active Streptokinase from an Iranian Isolate of *S.equisimilis* Group C in *E. coli*. Malihe Keramati, **Farzin Roohvand*(Corresponding Author)**, Mohammad Mehdi Aslani, Shohreh Khatami, Mohammad Reza Aghasadeghi, Mehdi Sadat, Arash Memarnejadian , Fatemeh Motevalli. **Ir J Basic Med Sci;** 2013, 16, (4); 612-619.
- Cell surface display of Propioni bacterium acnes linoleic acid isomerase by *Pichia pastoris*. JAMSHID FARMANI, **FARZIN ROOHVAND* (Corresponding Author)**, MOHAMMAD SAFARI, MOHAMMAD REZA AGHASADEGHI, SEYYED HADI RAZAVI, FATEMEH MOTEVALL. **Romanian Biotechnological Letters ;** 2013, 18 (3); 8307-8316.
- Pitfalls in screening streptococci for retrieving superior streptokinase (SK) genes: no activity correlation for streptococcal culture supernatant and recombinant SK. Keramati M, **Roohvand F*(Corresponding Author)**, Aslani MM, Motevalli F, Khatami S, Memarnejadian A. **J Ind Microbiol Biotechnol.** 2013 Jan;40(1):151-8. doi: 10.1007/s10295-012-1205-y.
- Optimization of transfection methods for Huh-7 and Vero cells: comparative study. Hashemi A, **Roohvand F*(Corresponding Author)**, Ghahremani MH, Aghasadeghi MR, Vahabpour R, Motevau F, Memarnejadian A. **Tsitol Genet.** 2012 Nov-Dec;46(6):19-27.
- Selection of valid reference genes for expression studies of hepatic cell lines under IFN- α treatment. Hashemi A, **Roohvand F*(Corresponding Author)**, Ghahremani MH. **Biochem Biophys Res Commun.** 2012 Oct 5;426(4):649-53.
- Cationic influenza virosomes as an adjuvanted delivery system for CTL induction by DNA vaccination. Jamali A, Holtrop M, de Haan A, Hashemi H, Shenagari M, Memarnejadian A, **Roohvand F**, Sabahi F, Kheiri MT, Huckriede A. **Immunol Lett.** 2012 Nov;148(1):77-82.
- PCR/RFLP-based allelic variants of streptokinase and their plasminogen activation potencies. Keramati M, **Roohvand F*(Corresponding Author)**, Eslaminejad Z, Mirzaie A, Nikbin VS, Aslani MM. **FEMS Microbiol Lett.** 2012 Oct; 335(2):79-85.
- Expression and characterization of Escherichia coli derived hepatitis C virus ARFP/F protein. Baghbani-arani F, **Roohvand F*(Corresponding Author)**, Aghasadeghi

- MR, Eidi A, Amini S, Motevalli F, Sadat SM, Memarnejadian A, Khalili G. **Mol Biol (Mosk)**. 2012 Mar-Apr; 46(2):251-9.
- Advances in hepatitis C virus vaccines, part two: advances in hepatitis C virus vaccine formulations and modalities. **Roohvand F*(Corresponding Author)**, Kossari N. **Expert Opin Ther Pat**. 2012 Apr; 22(4):391-415. Epub 2012 Mar 29. Review.
 - A comparative study on the activity and antigenicity of truncated and full-length forms of streptokinase. Arabi R, **Roohvand F*(Corresponding Author)**, Norouzian D, Sardari S, Aghasadeghi MR, Khanahmad H, Memarnejadian A, Motevalli F. **Pol J Microbiol**. 2011;60(3):243-51.
 - Design, modeling, and expression of erythropoietin cysteine analogs in *Pichia pastoris*: improvement of mean residence times and in vivo activities through cysteine-specific PEGylation. Maleki A, Madadkar-Sobhani A, **Roohvand F*(Corresponding Author)**, Najafabadi AR, Shafiee A, Khanahmad H, Cohan RA, Namvar N, Tajerzadeh H. **Eur J Pharm Biopharm**. 2012 Apr;80(3):499-507.
 - Lipoprotein lipase inhibits hepatitis C virus (HCV) infection by blocking virus cell entry. Maillard P, Walic M, Meuleman P, **Roohvand F**, Huby T, Le Goff W, Leroux-Roels G, Pécheur EI, Budkowska A. **PLoS One**. 2011; 6(10):e26637. Epub 2011 Oct 21.
 - Identification of a functional, CRM-1-dependent nuclear export signal in hepatitis C virus core protein. Cerutti A, Maillard P, Minisini R, Vidalain PO, **Roohvand F**, Pecheur EI, Pirisi M, Budkowska A. **PLoS One**. 2011; 6(10):e25854. Epub 2011 Oct 24.
 - Advances in hepatitis C virus vaccines, Part one: Advances in basic knowledge for hepatitis C virus vaccine design. **Roohvand F*(Corresponding Author)**, Kossari N. **Expert Opin Ther Pat**. 2011 Dec;21(12):1811-30. Epub 2011 Oct 25. Review.
 - Evaluation of bioactivity and pharmacokinetic characteristics of PEGylated *P.pastoris*-expressed erythropoietin. Maleki A, Najafabadi AR, **Roohvand F*(Corresponding Author)**, Shafiee A, Khanahmad H, Faghihi H, Hedayati MH, Tajerzadeh H. **Drug Deliv**. 2011 Nov;18(8):570-7. Epub 2011 Sep 5.
 - Design, modeling, expression, and chemoselective PEGylation of a new nanosize cysteine analog of erythropoietin. Cohan RA, Madadkar-Sobhani A, Khanahmad H, **Roohvand F**, Aghasadeghi MR, Hedayati MH, Barghi Z, Ardestani MS, Inanlou DN, Norouzian D. **Int J Nanomedicine**. 2011;6:1217-27. doi: 10.2147/IJN.S19081. Epub 2011 Jun 15
 - Conjugated linoleic acid-producing enzymes: A bioinformatics study, Jamshid Farmani, Mohammad Safari, **Farzin Roohvand**, Seyyed Hadi Razavi, Mohammad Reza Aghasadeghi and Hassan Noorbazargan, **Eur. J. Lipid Sci. Technol**. 2010, 112, 1088–1100.
 - Recombinant lambda-phage nanobioparticles for tumor therapy in mice models. Ghaemi A, Soleimanjahi H, Gill P, Hassan ZM, Razeghi Jahromi S, **Roohvand F.**, **Genet Vaccines Ther**. 2010 May 12;8(1):3.

- Fusion of HBsAg and prime/boosting augment Th1 and CTL responses to HCV polytope DNA vaccine. Memarnejadian A, **Roohvand F*** (Corr. Author), *Cell Immunol.* **2010; 261(2):93-8.**
- Construction of HCV-polytope vaccine candidates harbouring immune-enhancer sequences and primary evaluation of their immunogenicity in BALB/c mice. Arashkia A, **Roohvand F*** (Corr. Author), Memarnejadian A, Aghasadeghi MR, Rafati S. *Virus Genes.* **2010 Feb; 40(1):44-52.**
- High Expression of Methylotrophic Yeast-Derived Recombinant Human Erythropoietin in a pH-Controlled Batch System. Ahmad Maleki, **Farzin Roohvand (Corr. Author)** , Hosnieh Tajerzadeh, Hossein Khanahmad, Maryam B. Nobari, Ahmad Beirut, and Abdolhossein Rouholamini Najafabadi, *Avicenna J Med Biotech* **2010; 2(4): 197-206.**
- Prevalence of HBV Lamivudine-resistance mutations in a cohort of Iranian HBV-infected patients with and without HIV co-infection, M.R. Aghasadeghi, A. Farahani Far, G. Bahramali, S.M. Sadat, A. Memarnejadian, S.D. Siadat, M. Mohraz, M. Foroughi, F. Javadi, **F. Roohvand**, R. Vahabpour, M.S. Pouriayevali, *Clinical microbiology and Infection*, **Vol. 16(2): S316, 2010.**
- Polytope DNA vaccine development against hepatitis C virus: a streamlined approach from in silico design to in vitro and primary in vivo analyses in BALB/c mice., Memarnejadian A, **Roohvand F (corresponding Author)**, Arashkia A, Rafati S, Shokrgozar MA., *Protein Pept Lett.* **2009; 16(7):842-50.**
- Initiation of hepatitis C virus infection requires the dynamic microtubule network: role of the viral nucleocapsid protein. **F. Roohvand** , P. Maillard , JP Lavergne, S. Boulant , M. Walic , U. Andréo L. Goueslain, F. Helle F, A. Mallet, J. McLauchlan, and A. Budkowska. *Journal of Biological Chemistry*, **2009, 15; 284(20):13778-91.**
- Studying the association between X gene mutations with hepatocellular carcinoma and liver cirrhosis in HBsAg positive patients referring to medical centres in Tehran, S. Hekmat, M. Ahmadi Pour, S. Amini, **F. Roohvand**, S. Alavian , M. Joulaie, S. Andalibi Mahmoudabadi, *Clinical Microbiology and Infection* **13 (s1), S677–S727, 2007.**
- High expression of HCV core protein: a comparative study on effect of 6xHis-tag location (N- versus C- terminal) and purification method for various properties. M. Sadat, M. Aghasadeghi, G. Bahramali, **F. Rouhvand** , *Clinical Microbiology and Infection* **13 (s1), S677–S727, 2007.**
- Immunisation of mice with HCV core protein formulated in montanide-ISA720 and CpG primes CD+8 CTLs and elicits Th1-Th2 responses, M. Aghasadeghi, M. Sadat, A. Khabiri, **F. Rouhvand**, *Clinical Microbiology and Infection* **13 (s1), S677–S727, 2007.**

- HCV core protein immunization with Montanide/CpG elicits strong Th1/Th2 and long-lived CTL responses, **F. Roohvand (corresponding Author)**, M. R. Aghasadeghi, M. Sadat, A. Budkowska, A. Khabiri, *Biochem Biophys Res Commun.* 354(3):641-9, 2007.
- HCV core protein interacts with β -Tubulin and inhibits Tubulin Polymerization, **Farzin Roohvand**, Jean-Pierre Lavergne, Ursula Andréo, Marie Flamand, Jacques d'Alayer and Agata Budkowska, *J. Clin. Virol. July 2006, Supplement 2, P. 166.*
- Prevalence and typing of adenoviruses in stool of Iranian children with acute diarrhoea: a comparative study by molecular and serological assays, **F. Roohvand (corresponding Author)**, F. Motevali, M. Ghazanfari, S. Salmanzadeh-Ahrabi, F. Jafari, M. Zali, *Clinical Microbiology & Infection*, 2006, 12 (s4), P527.
- Subcloning and expression of human alpha-fetoprotein gene in *Pichia pastoris*, Mohammad Reza Mashayekhi, Nosratollah Zarghami, Delavar shahbazzadeh, **farzin Rohvand**, Mohammad Azizi and Behrang Alani, *African Journal of Biotechnology* 2006 Vol. 5 (4), pp. 321-326 .
- Evaluation of a Native Preparation of HCV Core Protein (2-122) for Potential Applications in Immunization, Diagnosis and mAb Production. MR Aghasadeghi ¹, SM Sadat , AR Khabiri , S Amini , A Budkowska , G Bahramali, SR Naddaf **and F Roohvand (corresponding Author)**, *Ir. J Publ Health*, 2006, Vol. 35, No. 1, pp.1-10.
- Aids, diarrhea and opportunistic enteric pathogens. Buzoni-Gatel D, Belec L, **Roohvand F.**, Marchal G. Prendki V., Le Bouguenec C., Cerf-Bensussan N. and Germani Y., *Updates in Tropical Immunology*, 2005, 333-376, Oliver Garraud, Research Signpost.
- Fc (gamma) receptor-like activity of Hepatitis C virus core protein, Patrick Maillard, Jean-Pierre Lavergne, Sophie Sibénil, **Farzin Roohvand**, Grazyna Faure , Stephane Petres , Jean Luc Teillaud and Agata Budkowska, *J. Biol. Chem.*, 2004, 279: 2430-2437.
- Detection, Cloning, Molecular characterization and phylogenetic analyses of a new primate T-cell lymphotropic virus type I in olive baboon. Azadmanesh K., Roohvand F., Amini S., and Kazanji M, *Ir. Journal of Biotechnology* 2(1): 25-34, 2004.
- Intracellular expression of human calcitonin gene in Yeast Cells: Potential application as functional food, Ofoughi H and **Rouhvand F**, *Yeast*, 2003, Vol. 20(S1): S322.
- Genotyping of *Toxoplasma gondii* strains isolated from patients and mice by PCR-RFLP assay, 2003, Roodabeh Behzadi, **F. Roohvand**, M Reza Razavi, Arpy Hovanessian, Mehdi Asmar, *Ir Journal of Biotechnology* 1 (2): 82-86.

International Congress Presentations:

1. Key note lecture: Updates on Hepatitis C virus Vaccines (Plenary Lecture; P.P.: 39). **Roohvand F.** 12th International Congress of Immunology & Allergy of Iran, April 29th-May 2nd, Tehran, Iran (www.ICIA.ir) - Iranian J. of Immunology Vol. 11, Sup. 1, April-May 2014 (ISSN: 1735-1383).
2. Potential application of 3'-noncoding region of poliovirus RNA genome for stabilization of RNA-based vaccines in cancer immunotherapy (O2068; P.P.: 115-116). Rasekhian M, **Roohvand F.**, Teimoori Toolabi L, Azadmanesh K. 12th International Congress of Immunology & Allergy of Iran, April 29th-May 2nd, Tehran, Iran (www.ICIA.ir) - Iranian J. of Immunology Vol. 11, Sup. 1, April-May 2014 (ISSN: 1735-1383).
3. Whole recombinant *Pichia pastoris* expressing HPV16 L1 antigen induces potent L1 specific immune response (P1960; P.P.:176-177). Bolhassani A, **Roohvand F.**, Motevalli F, Agi E, Aghasadeghi MR, Shokri M. 12th International Congress of Immunology & Allergy of Iran, April 29th-May 2nd, Tehran, Iran (www.ICIA.ir) - Iranian J. of Immunology Vol. 11, Sup. 1, April-May 2014 (ISSN: 1735-1383).
4. Immunization of mice by canola (*Brassica napus*) oilseeds-derived hepatitis C virus (HCV) core protein-A plant based HCV vaccine (P2934; P.P.: 896). Mohammadzadeh S, Ehsani P, Salmanian AH, Ajdary S, **Roohvand F.** 12th International Congress of Immunology & Allergy of Iran, April 29th-May 2nd, Tehran, Iran (www.ICIA.ir) - Iranian J. of Immunology Vol. 11, Sup. 1, April-May 2014 (ISSN: 1735-1383).
5. Construction of Whole recombinant yeast vaccines against Leishmaniasis (P2617; P.P.: 584-585). Shokri M, **Roohvand F.**, Ajdary S, Memarnejadian A, Ebrahimi-Rad M, Alimohammadian MH. 12th International Congress of Immunology & Allergy of Iran, April 29th-May 2nd, Tehran, Iran (www.ICIA.ir) - Iranian J. of Immunology Vol. 11, Sup. 1, April-May 2014 (ISSN: 1735-1383).
6. Cloning & Expression of *LmST11* gene from *Leishmania* major parasite in *E.coli*. Tavakoli E, Shokri M, Ajdary S, **Roohvand F.**, Ebrahimi-Rad M, 1st International Genetic Congress of Iran, 24th-26th May, 2014, Tehran, Iran.
7. Cloning & expression of an HBsAg-fused HCV polytope by Potato virus X-based vector in Tobacco. Mohammadzadeh S, Ehsani P, Memarnejadian A, **Roohvand F.** 1st International Genetic Congress of Iran, 24th-26th May, 2014, Tehran, Iran.
8. Cloning & Expression of *LmST11* gene from *Leishmania* major parasite in *Sacharomyces cerevisiae*. Esmaeelvand E, Shokri M, Ajdary S, Ebrahimi-Rad M, **Roohvand F.** 1st International Genetic Congress of Iran, 24th-26th May, 2014, Tehran, Iran.

9. Stabilization of MTS by HCV infection: Role of HCV core protein. **Farzin Roohvand*(Corresponding Author)**, Patrick Maillard, Andrea Cerutti and Agata Budkowska. **5th International Tehran Hepatitis congress, 15-17 May, 2013. Tehran, Iran (www.THCS.ir).**
10. Studies on the effect of HCV Core Protein Expression on Transcriptional Levels of selected interferon-stimulated genes in Huh-7 Cell Lines. Atieh Hashemi, Fatemeh Motevali, Masoomeh Lolaie, Mohammad-Hossein Ghahremani and Farzin Roohvand* (**Corresponding Author**), **5th International Tehran Hepatitis congress, 15-17 May, 2013. Tehran, Iran (www.THCS.ir).**
11. Comparison of BCG and F127 adjuvant systems for HCV core protein vaccine formulations in immunization studies of BALB/c mice. Maryam Yazdanian, Arash Memarnejadian, Mehdi Mahdavi, Fatemeh Motevali, Siadat SD, Hossein Khanahmad, Aghasadeghi MR, Agata Budkowska and Farzin Roohvand* (**Corresponding Author**), **5th International Tehran Hepatitis congress, 15-17 May, 2013. Tehran, Iran (www.THCS.ir).**
12. Evaluation of cellular responses for a chimeric HBsAg-HCV core DNA vaccine in BALB/c mice. Maryam Yazdanian, Arash Memarnejadian, Mehdi Mahdavi, Fatemeh Motevali, Mehdi Sadat, Rouhollah Vahabpour, Hossein Khanahmad, Hoorieh Soleimanjahi, Agata Budkowska and Farzin Roohvand* (**Corresponding Author**), **5th International Tehran Hepatitis congress, 15-17 May, 2013. Tehran, Iran (www.THCS.ir).**
13. TRANSCRIPTIONAL ACTIVATION OF INTERFERON STIMULATED GENES (ISGS) BY HCV F PROTEIN (ARFP). Atieh Hashemi, fatemeh Motevali, masoomeh Lolaie, rouhollah Vahabpour, Ali Houshmand, Hassan Noorbazargan, **Farzin Roohvand*(Corresponding Author)**, *19th International meeting on hepatitis C virus & related Viruses, Oct. 5-9, 2012. Venice, Italy.*
14. Advances in development of hepatitis C virus vaccines: Turning the immune system on a moving target (Plenary lecture). **F. Roohvand**. **11th International congress of immunology and allergy; 26-29 April 2012, Tehran, Iran. Iranian J. of Immunology Vol.9, Sup. 1, April 2012 (ISSN: 1735-1383).**
15. Studies on potential interfering effect of HCV core+1 protein on interferon-based transcriptional regulation (P571; P.P.: 140). Lolaei M, Hashemi A, Motevalli F, Vahhabpour R, **Roohvand F**, Hooshman A. **11th International congress of immunology and allergy; 26-29 April 2012, Tehran, Iran. Iranian J. of Immunology Vol.9, Sup. 1, April 2012 (ISSN: 1735-1383).**
16. *E.coli*-generated recombinant HCV core +1 (ARFP) Protein: A potentially valuable diagnostic and immunotherapeutic tool. F. Baghbani-arani; **F. Roohvand (corresponding Author)**; M.R. Aghasadeghi, S.Amini, F. Motevalli, S.M. Sadat, A. Memarnejadian. **14TH ANNUAL MEETING OF THE EUROPEAN SOCIETY FOR CLINICAL VIROLOGY. 22-25 Sept. 2011, Maderia, Portugal.**
17. Immune -dominancy of HCV-CTL epitopes on each other is less profound in Immunization by a single polytopic-peptide vaccine than mixture of the

minimal-CD8⁺ peptides, Fatemeh Motevalli, Seyed Mehdi Sadat, Arash Memarnejadian, Golnaz Bahramali, Shahadeh Alizadeh, Mohammad Reza Aghasadeghi and **Farzin Roohvand (corresponding Author)**, *17th International meeting on hepatitis C virus & related Viruses, Oct. 3-7, 2009, 10-14th September, 2010, Yokohama, Japan.*

18. Role of cellular tubulin and viral nucleocapsid protein in hepatitis C virus infection. **Roohvand F.**, Maillard P and Budkowska A. **3rd International Tehran Hepatitis Congress. 6-9 Oct 2010, Tehran & Shiraz, I R Iran.**
19. HCV core protein Sub-cellular localization is influenced by its nuclear export signal (NES) that function in a CRM-1 dependent manner, Andre Cerutti, Rosalba Minisini, Pierre-Olivier Vidalain, Patrick Maillard, **Farzin Roohvand**, Mario Pirisi and Agata Budkowska, **10^{eme} reunion de reseau national hepatitis de l'ANRS, Paris 21-22 Janvier 2010.**
20. Characterization of the interaction of HCV core protein with Tubulin and Microtubules, **Farzin Roohvand**, Patrick Maillard, Andre Cerutti, Jean Pierre Lavergne and Agata Budkowska, *16th International meeting on hepatitis C virus & related Viruses, Oct. 3-7, 2009, Nice, France.*
21. HCV core protein contains a functional, CRM-1 dependent nuclear export signal (NES) that can influence its sub-cellular localization, Andre Cerutti, Rosalba Minisini, Pierre-Olivier Vidalain, Patrick Maillard, **Farzin Roohvand**, Mario Pirisi and Agata Budkowska. *16th International meeting on hepatitis C virus & related Viruses, Oct. 3-7, 2009, Nice, France.*
22. Lipoprotein lipase inhibits cell infection with HCV produced in cell culture and in UPA-SCID mice engrafted with human hepatocytes, Marine Walic, Patrick Maillard, Philip Meuleman, **farzin Roohvand**, Thierry Huby, Geert Leroux-Roles and Agat Budkowska, *16th International meeting on hepatitis C virus & related Viruses, Oct. 3-7, 2009, Nice, France.*
23. Microtubule network is required for HCV cell entry and for the virus release from cells, **F. Roohvand**, P. Maillard, JP Lavergne, S. Boulant, M. Walic, L. Goueslain, J. McLauchlan, and A. Budkowska. *15th International meeting on hepatitis C virus & related Viruses, Oct. 5-9, 2008, San Antonio, Texas.*
24. French-Iranian collaborative studies on HCV vaccines (CD8-polytopic DNA constructs and protein based immunogens as therapeutic and prophylactic vaccine candidates). **F. Roohvand (Oral Presentation)**, A. Memarnejadian, A. Arashkia, MR. Aghasadeghi, M. Sadat, A. Budkowska, B. Combadière, *Research on Infectious Diseases-A Global Challenge (26-27 June 2008, Paris).*
25. Production of native recombinant HCV core protein for diagnostic and therapeutic (vaccine) applications, M. Sadat, MR Aghasadeghi, G. Bahramali, F. Motevalli, A. Budkowska and **F. Roohvand**, *Research on Infectious Diseases-A Global Challenge (26-27 June 2008, Paris).*

26. Evaluation of humoral and cellular responses to combination of different Human compatible adjuvants and HCV core protein in immunized mice, MR Aghasadeghi, M. Sadat, G. Bahramali, F. Motevali, A. Budkowska and **F. Roohvand**, *Research on Infectious Diseases-A Global Challenge (26-27 June 2008, Paris)*.
27. Evaluation of processing and immunogenicity of CD8-polytope DNA-construct preparations based on HCV epitopes. **F. Roohvand**, A. Arashkia, A. Memarnejadian. *9-11 December 2007, Amsterdam, The Netherlands (ORAL PRESENTATION)*.
28. Construction and evaluation of CD8 polytope DNA constructs based on immunodominant and subdominant HCV epitopes, **F. Roohvand**, A. Arashkia, A. Memarnejadian. *The 14th International Meeting on Hepatitis C Virus & Related Viruses, 9-13 September 2007, Glasgow, Scotland*.
29. HCV core protein elicits strong and balanced Th1/Th2 immune responses in the presence of Montanide ISA720 plus synthetic CpG ODNs, M. R. Aghasadeghi, M. Sadat, G. Bahramali, A. Budkowska and **F. Roohvand**. *13th International Meeting on Hepatitis C Virus & Related Viruses 27-31 Aug 2006, Cairns/Australia*.
30. Interaction of HCV core protein with Hepatic and endothelial cells. **Roohvand F**, Andreo U, Flamand M., Lavergne J-P, Budkowska A. *11th international Symposium on hepatitis C virus and related viruses. Heidelberg-Germany, October 3rd-7th 2004*.
31. Intracellular expression of human calcitonin gene in yeast cells: Potential application as functional food, Hamide Ofoghi and **Farzin Rouhvand**. *XXIth International Conference on Yeast Genetics and Molecular Biology, Göteborg-Sweden, 7-12th July 2003*.
32. Nucleic Acid-Metal (II) Ions-Membrane Interactions in cell Functioning, Proceedings of NATO Advanced Studies Institute, An inorganic aspect of life, pages 5-7, 1994, Greece, Renat Zedanov, Gul Kahveci, Farzin Roohvand, M. Reza Mozafari, Gulhayat Atlay & Paolo Bruni.
33. Transformation of *S.cerevisiae* with a shuttle vector plasmid DNA by Electroporation, **Farzin Roohvand** and Ufuk Gunduz. *6th European Congress on Biotechnology, ITALY, June 1993*.

Research interests:

-Viral Hepatitis (B and C), specially Hepatitis C virus pathogenesis, life cycle and vaccinology. Role of MTs in HCV life cycle. HCV core/Core+1 proteins.

-HPV and adenoviruses: Regional Prevalence, Genotypes, Vaccinology, Diagnosis.

- **Expression and Purification of recombinant viral proteins and other therapeutic/diagnosis proteins in different expression systems specially Yeast (*S.cerevisiae*, *P.pastoris*).**
- **Fibrinolytic drugs & Plasminogen activators (specially Streptokinase).**

Granted Projects (as principal investigator):

International grants:

1. International collaborative project (**ACIP-AP-20-2010**) among IP Paris-China-Iran (entitled: Subversion of interferon responses in hepatitis C infection by HCV core protein: Role of HCV core- Microtubule interactions and mutated forms: Production and applications; **2010 to 2012**): Supported by International network of Pasteur Institutes (RIP). Coordinator: Dr. Farzin Roohvand- Unite Hepacivirus, Institut Pasteur Paris and Hepatitis and AIDS Dept. Institut Pasteur d'Iran.
2. Production of novel diagnostic and therapeutic tools based on a native r-core protein of Hepatitis. Supported by C-ISSESCO grant for young scientists (**2006 to 2008**).
3. International collaborative project (**ACIP-2005**) among IP Paris-Russia-Greece-Iran (entitled: HCV core (+1) protein and mutated forms: Production and applications; **2005 to 2007**): Supported by International network of Pasteur Institutes (RIP). Coordinator: Dr. Agata Budkowska-Unite Hepacivirus, Institut Pasteur Paris.

National grants:

1. National Gene Bank (**From 2005 to 2008**) – Supported by Pasteur Institute, Office for technology advancements and Medical Biotechnology network.
2. Production of Pilot scale of approved lab. Scale products: HBeAg, HCV-core Ag, Streptokinase and Related MAbs (**From 2000 to 2002**) - Supported by Pasteur Institute.
3. Detection and typing of adenoviruses in stool of Iranian children (**2005 to 2007**) – Supported by national Research centre for Food Borne Disease.

4. Evaluation of Immune responses to Immunization of Th/CD8+ epitopic peptides alone, mixed or in polyepitopic-peptides related to HCV proteins in BALB/c mice. Supported by Institut Pasteur (2008 to 2010).
5. Immunogenicity and production of poly/mono clonal antibodies against ARFP/F (core+1) protein of HCV by utilization of epitopic-synthetic peptides & core+1 recombinant protein-Evaluation of new human compatible adjuvants and different myeloma cells. Supported by Institut Pasteur (2008 to 2010).

Granted Projects (as co-investigator):

1. Role of Microtubules in Herpatitis C infection. Contributed as main investigator. Supported by ANRS (Agence National de Research sur SIDA et Hepatit Viral - France). Institut Pasteur Paris, Unité Hépacivirus 25/28 Rue du Dr. Roux 75724 Paris, France (2009 to 2011). Principal investigator: Dr. Agata Budkowska.
2. Hepatitis C Virus genotyping project (determination of subtypes– **2001 to 2004**).
3. Hepatitis B Virus genotyping project 1 (determination of mutations related to X gene – **2002 to 2004**).
4. Hepatitis B Virus genotyping project 2 (Determination of HBV genotypes in prisoner populations – **2008 to 2010**).
5. Hepatitis B Virus genotyping project 3 (Genotyping of HBV in parafinized liver tissues of HCC patients – **2006 to 2008**).
6. HIV genotyping project 1 (Determining HIV-1 subtypes among infected individuals from various HIV high risk population in Tehran province - **2010 to 2012**).
7. Designing, constructing and evaluation of bicistronic plasmid capable of simultaneous expression of antigen and IL18/Ig adjuvant (**2009 to 2010**).
8. Construction, expression and immunological evaluation of mzNL4-3/HCV-NS3 in BALB/c mice (2010-2012).

Principal Supervisor of master theses entitled:

1. Mrs. Monfared-Cloning & Expression of HBsAg in *P.pastoris* Yeast (defended in 2000).
2. Miss Mahmazi-Cloning & Expression of Streptokinase gene in *P.pastoris* Yeast (defended in 2000).

3. Mr. Hghighi: Isolation, Cloning & Expression of HBeAg in *S.cerevisiae* yeast (defended in 2001).
4. Miss Jahanshir: Isolation, Cloning & Expression of HBeAg in *P.pastoris* yeast (defended in 2001).
5. Mr. Memarnejadian: Cloning & Expression of His-tag labeled Streptokinase in *E.coli* (defended in 2003).
6. Mr. Arashkia: Cloning & Expression of His-tag labeled HBeAg in *E.coli* (defended in 2003).
7. Mrs. Motevali: Detection, genotyping and subtype determination of adenoviruses in stool of Iranian children based on Hexon gene (defended in 2005).
8. Miss Monzavi: Design and construction of cysteine Streptokinase analogs and evaluation of the activities (defended in 2009).
9. Miss Momeni: PCR-based molecular Detection, genotype and subtype determination of adenoviruses in stool of Iranian children based on Fiber and VA-RNA genes (defended in 2009).
10. Mr. Nourbazargan: Cloning and expression of hepatitis C ARFP/F (core +1) protein in Huh7 liver cells (defended in 2010).
11. Mrs. Sharifi al Agha: Evaluation of expression of HCV core (174 amino acids) in transgenic potato plant via Agrobacteria (defended in 2010).
12. Miss Ghodsi: Expression of epitopic polytope of HCV in transgenic potato plant (defended in 2010).
13. Miss Abbassi: Identification of hepatic cell proteins interacting with HCV ARFP/F (core +1) protein (defended in 2011).
14. Mrs. Lolaie: Studies on expression of HCV ARFP (core +1 protein) on regulation of PKR gene in Huh7 cells (defended in 2012).
15. Mr. Sazvari: Cloning & expression of selected streptokinase genes from group A streptococci in *E.coli* (defended in 2012).
16. Miss Esmailvand: Cloning & expression of LMSTII antigen of Leishmania major in *S. serevisiae* (defended in 2013).

Co-supervisor (advisor) of master theses entitled:

1. Mr. Abachi, Cloning & Expression of human Alpha-Fetoprotein in *P.pastoris* yeast (defended in 2000).
2. Investigation of the polymorphisms of different Toxoplasma strains by molecular approaches (defended in 2000).
3. Mr. Mashayekhi, Expression of engineered Alpha-Fetoprotein with estrogen binding properties in *Pichia pastoris* (defended in 2001).
4. Miss Baghbani, Detection and Molecular Typing of enteric *E.coli* strains in beef meat samples in Tehran (Defended in 2005).
5. Mrs. Kadkhodayan, Cloning of HTLV-I Tax gene and evaluation of its expression and immunogenicity in Balb/C Mice (Defended in 2007).

6. Mrs. Sanghsepidi, Cloning and expression of hydrophilic region of HCV core protein (amino acids 2-121) in transgenic potato plant (Defended in 2010).
7. Mr. Mirzaee, Genotyping of the α and β domains of Streptokinase gene from Persian isolated streptococci (defended in 2010).
8. Mr. Shandiz, Construction of a recombinant BCG for HCV polytope construct (defended in 2010).
9. Mrs. Tavakoli, Cloning & expression of LMSTII antigen of Leishmania major in *E.coli* (defended in 2013).

Principal Supervisors of Ph.D. theses entitled:

1. Mr. Aghasadeghi, Expression of native and truncated forms of HCV-core protein, making mAbs against them and evaluation of products - **In collaboration with Dr. Agata Budkowska (Institut Pasteur, Paris/France)**-(Defended in 2007).
2. Mr. Memarnejadian, Design and construction of poly-top DNA vaccine based on Immunodominant HCV epitopes **In collaboration with Dr. Behazine combadiere (Univ. Paris 9, Paris/France)** (defended in 2009).
3. Mr. Arashkia, Evaluation of immunogenicity of a multi-epitope construct based on sub-dominant epitopes **In collaboration with Dr. Behazine combadiere (Univ. Paris 9, Paris/France)** (defended in 2010).
4. Mr. Arabi, Cloning and expression of engineered-truncated streptokinase Molecules with higher activity, specificity and lower immunogenicity (defended in 2010).
5. Mr. Maleki, Design, cloning and expression and evaluation of cysteine-specific pegylated-Erythropoytin analogs in *P. pastoris* (defended in 2010).
6. Mr. Farmani, Bio-synthesis of conjugated linoleic acid by expression of linoleic acid isomerase gene from propioni bacteria in *Pichia pastoris* in organic and water media (defended in 2010).
7. Miss Baghbani, Cloning, Expression and purification of Hepatitis C virus ARFP/F (Core +1) protein and evaluation of its immunological properties in BALB/c mice (defended in 2011).
8. Mr. Salehzadeh, Cloning, Expression and secretion of human –Calcitonin hormone in *P. pastoris* (defended in 2011).
9. Mrs. Keramati. Cloning and expression of Streptokinase gene from Iranian isolated streptococci: Evaluation of SK allels and enzymatic specificities of the enzyme (defended in 2012).

10. Mrs. Hashemi. Studies on expression of complete and truncated forms of capsid protein of HCV (core and ARFP) on induction of selected interferon response genes (ISG56, ISG20, IRF1) in Huh7 cells (defended in 2012).
11. Mrs. Yazdani. Evaluation of Immune responses against H2d epitope of HCV core protein (amino acids 39-48) by native core protein immunization or different multiples of the epitope in the context of polytope constructs in BALB/c mice (defended in 2013).
12. Mr. Shokri: Construction of Whole recombinant yeast expressing LMSTI1 and evaluation of its immunogenicity and protective role against Leishmania major infection (in progress).
13. Mr. Abdoli: Construction of Herpes simplex oncolytic virus based on expression of ICP34.5 under control of hTERT promoter (in progress).
14. Mr. Motevali: Designing and assembly of human Papiloma virus L2-based constructs to optimize immune response against L2 protein as a vaccine candidate (in progress).
15. Mrs. Rafipour: Construction and evaluation of chimeric streptokinase (SK) via intra- and inter-cluster domain replacements of SK genes (in progress).
16. Mrs. Kazemi: Construction and expression of engineered Streptokinase (SK) molecules for obtaining a SK with improved activity (in progress).

17. Mrs. Bahraloloumi:

18. Mrs. Ahani:

Co-supervisor (adviser) of Ph.D. theses entitled:

1. Mr. Azadmanesh, Construction of DNA-vaccine against HTVL-I by application of mutated *Tax* gene of the virus (Defended in 2005).
2. Mr. Ghaemi, Design and construction of recombinant lambda-phage nano-bioparticles containing E7 gene of human papiloma virus (type 16) for expression evaluation in mammalian cells and immunological evaluation in mice model (defended in 2010).
3. Mr. Ahanghari, Construction of cysteine-specific pegylated-Erythropoytin analogs and expression in CHO cells and evaluation of pegylated products (defended in 2011).
4. Mrs. Mohamadzadeh: Studies on immunization of BALB/C mice by plant-derived recombinant HCV core protein (in Progress).

5. Mr. Etemadzadeh: Construction of a recombinant molecular clone of mumps virus pseudotyped with surface glycoprotein of measles virus and evaluating its *in vitro* oncolytic activity(in Progress).

Invited Speaker and lecturer/organizer in:

1. Invited speaker in Hepatitis Congress Cuba-Havana-2014
2. Invited speaker in Virology 1 day semina-Tehran-IPI-2013
3. Invited speaker in 12th international congress of Immunology and allergy-Plenary lecture in vaccine section, Keynote lecture: Updates in HCV vaccines. April 29th-May 2nd, Tehran, Iran (www.ICIA.ir).
4. Invited speaker-Plenary lecture in vaccine section, Advances in development of hepatitis C virus vaccines: Turning the immune system on a moving target. F. Roohvand. 11th International congress of immunology and allergy; 26-29 April 2012, Tehran, Iran.
5. Member of the scientific committee-11th international congress of Immunology and allergy- 26-29 April 2012, Tehran, Iran.
6. Member of the scientific committee-12th international congress of Immunology and allergy-April 29th-May 2nd, Tehran, Iran (www.ICIA.ir).
7. Invited Speaker and opening lecture on, “Biotechnology: Past, Present and Future” Regional Biotechnology Congress, Oct. 15, 2010, Gorgan Islamic azad univ.
8. Workshop on, “Molecular Techniques in Diagnosis & Typing of Infectious Diseases”, Institut Pasteur d’Iran, 21-29 Nov. 2006 (With Financial Support of I P Paris).
9. Invited Speaker on, “Role of Microtubules for viral infection and Trafficking”, Tehran Medical Sciences Univ. 27 Nov. 2006 (With support of Association for Virology).
10. Workshop on Molecular Cloning Techniques, Tehran Univ. October 1999.

Presenting lecture courses on:

1. Yeast Molecular Biology (Ph.D. students of Pasteur Institute of Iran and Science & Research center of Azad Univ.).
2. Yeast Genetic Eng. (Ph.D. students of Pasteur Institute of Iran and Science & Research center of Azad Univ.).
3. HCV vaccines (Ph.D. students of Pasteur Institute of Iran).

4. Advanced Genetic Eng. (Ph.D. students of Pasteur Institute of Iran and Science & Research center of Azad Univ.).
5. Advanced Virology (Ph.D. students of Pasteur Institute of Iran).
6. Biotechnology (B.Sc. students of Alzahra Univ.).

- **Prizes:**

1. Selected as Superior researcher with highest impact factor published article in Institut Pasteur of Iran in Research week (**2007**).
2. C- ISSESCO prize for young scientists (**2006**). Production of novel diagnostic and therapeutic tools based on a native r-core protein of Hepatitis.
3. Selected as Superior researcher with highest-cited article in Institut Pasteur of Iran in Research week (**2012**).
4. Selected as Best oral-presentation in 5th-Tehran in International Hepatitis Congress-15-17 May, **2013**. Tehran, Iran (www.THC5.ir).

- **Fellowships:**

- Advanced Vaccinology course, 24 May **2007**, **Annecy-France**.
- Guest scientist based on a sabbatical fellowship from International office of Institut Pasteur (RIP): Institut Pasteur Paris, Unité Hépacivirus 25/28 Rue du Dr. Roux 75724 Paris, France: **May 2004 to March 2005**.
- Post-doctoral fellowship from International office of Institut Pasteur (RIP):. Institut Pasteur Paris, Molecular medicine and Carcinogenic hepatitis Unit, 25/28 Rue du Dr. Roux 75724 Paris, France: **February 2002 to February 2003**.

Research Interests:

- Virology and vaccines in Hepatitis viruses (HCV in specific) and HPV.
- Production of recombinant proteins in Yeast (*S. cerevisiae* and *P. pastoris*).
- Whole Yeast vaccines.
- Fibrinolytic Enzymes (Streptokinase in specific).
- Viral therapy of cancers.