

Projects:

a) Director:

2011-2014 (it is processing)

Preparation of cell collection identity cards in National Cell Bank of Iran and cell culture, quality control laboratories standardization. President Technology Deputy-Biotechnology Committee and Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2011-2014 (it is processing)

Toxic effects of anti-CD123 and anti-CD45Ra as specific leukemic blast cell surface markers in Acute Myeloid Leukemia(AML) and Acute Lymphoid Leukemia(ALL). Iranian research and technology supportive center and Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2011-2014 (it is processing)

Evaluation and Comparison of the effect of the Bone marrow derived mesenchymal stem cell and autologous chondrocyte on polyvinyl alcohol-poly urethane scaffold in vitro and in vivo condition for Cartilage Tissue Engineering in sheep model. Tehran University, Veterinary College and Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2011-2014 (it is processing)

Establishment of animal embryonic stem cell bank in Iranian cell bank. President Technology Deputy-Stem Cell Committee and Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2011-2014 (it is processing)

Cloning, expression and purification of Recombinant Human Epidermal Growth Factor with Collagen binding ability for using in tissue engineering. Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2011-2014 (it is processing)

Evaluation of rabbit myocardial repair with transplantation of cardiomyocytes differentiated from mesenchymal and animal adipose-derived stem cells by mechanical loading. President Technology Deputy-Stem Cell Committee and Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2011-2013 (ended)

The generation of living skin containing biocompatible scaffold and stem cells and its evaluation in regeneration of experimental animal burned. President Technology Deputy-Stem Cell Committee and Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2008-2011 (ended)

CD20 antigen and preparation of monoclonal antibody against CD20(specific marker in Non-Hodgkin's lymphoma (NHL)). Food & Drug deputy, Health Ministry and Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2008-2011 (ended)

Construction of human living skin composed of 2 dermis and epidermis layers on a biocompatible and biodegradable scaffold and its evaluation on Rats (animal study). The Stem Cell Research and Development Center, Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2008-2009 (ended)

Evaluation of seeding of gingival fibroblasts on a biodegradable scaffold for gingival augmentation: A pilot study in animal model. Shaheed Beheshti University of Medical Sciences, Dental School and Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2008-2010 (ended)

Synthesis, characterization and evaluation of in situ forming poly (ethylene glycol itaconate(PEGI)-co-chondroitin sulphate methacrylate) hydrogel containing chondrocytes for cartilage defect repairs(in vitro-phase I). Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2008-2010 (ended)

Studies on the effect of inorganic and organic arsenic compounds on polymerization of microtubule protein and cytotoxicity and apoptotic evaluation its on 6 cancer cell lines of highly frequent cancer in Iran. Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2007-2009 (ended)

Synthesis, characterization and biocompatibility evaluation of PCLF/NVP/nano-HA scaffolds applicable in bone regeneration. Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2007-2009 (ended)

Isolation, characterization and proliferation of human cartilage cells(chondrocytes) for clinical and tissue engineering use. Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2007-2009 (ended)

Study of lipocalin2(Lcn2) antioxidant activity in vitro. Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2006-2008 (ended)

Design and manufacturing of a pilot system suitable for production of bilayered living skin including human fibroblasts and keratinocytes on a biodegradable and biocompatible scaffold. Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2006-2008 (ended)

Study of chromosomal instability of hybridoma cell line in various expansion intervals and the effect of chemotherapeutics on each complementation group. Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2006-2008 (ended)

Biomechanical analysis of arterial endothelial cells reflection to cyclic loading. Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2005-2007 (ended)

Determination of polymorphism of IL-1, IL-6, IL-10, IL-12, TNF α and TGF β in Iranian patients with multiple sclerosis(MS). Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2004-2006 (ended)

Cytotoxic effect of antiproliferative drugs eluted from polymethylmethacrylate on stromal cell in Giant Cell tumor of bone: an in vitro analysis. Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2005-2006 (ended)

Evaluation of seeding of human gingival fibroblasts on a biodegradable scaffold for gingival augmentation: A pilot study. Shaheed Beheshti University of Medical Sciences, Dental School and Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2003-2006 (ended)

The study of cytotoxic property of *Chenopodium botrys* and *Elaeagnus angustifolia* extracts. Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

b) Collaborator:

2011-2014 (it is processing)

Design and manufacture of bioreactor of human blood pressure wave in order to differentiate mesenchymal stem cells to arterial endothelial cells. President Technology Deputy-Biotechnology Committee and Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2011-2013 (it is processing)

Hydrostatic pressure evaluation on mesenchymal stem cells differentiation to chondrocytes and cartilage regeneration in rabbits. President Technology Deputy-Biotechnology Committee and Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2008-2011 (it is processing)

Design & synthesis of dendrimeric nanoparticles based on polyhedral oligomeric silsesquioxane-Hydroxyethyl methacrylate with application as biocompatible coating of medical devices visible in magnetic resonance imaging. The Ministry of Health & Medical Education.

2008-2010 (ended)

Isolation and characterization of fetal bovine epithelial and endothelial cell lines. Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2008-2010 (ended)

Comparison of new methods of mycoplasma decontamination in human and animal cell lines deposited in National Cell Bank of Iran. Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2007-2011 (ended)

Vaccination of patients with metastatic breast cancer using autologous tumor-lysate pulsed dendritic cells in a phase I/II clinical trial. Oroomeea University, Oroomeea and Millad Hospital.

2008-2010 (ended)

In vitro fabrication of biocompatible and biodegradable nanocomposite scaffold from Collagen/nHA /PLGA for bone tissue engineering. The Ministry of Health & Medical Education, Food and Drug Organization and Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2008-2010 (ended)

Fabrication of doxorubicin bound to surfactant-coated poly (butyl cyanoacrylate) nanoparticles in brain tumor therapy. The Ministry of Health & Medical Education, Food and Drug Organization and Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2006-2010 (ended)

Function evaluation of *Helicobacter Pylori* toxins in different species isolated from Iranian gastric disease, gene and protein study. World Health Organization(WHO) and Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2007-2009 (ended)

Analysis of drug resistance gene polymorphism in Iran epilepsy patients. Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2007-2008 (ended)

Species identification of animal cell lines deposited at NCBI'S by NP and G6PD isoenzyme's profiling. Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2006-2008 (ended)

Short tandem repeat(STR) evaluation in CVID disease and comparison with normal population. Emam Khomeini Hospital, Immunology Research Center and Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2005-2007 (ended)

Cytotoxicity effect evaluation of released ions from implant materials grafted in human gingival on human gingival fibroblast cells. Tehran University of Medical Sciences, Dental School, Dental Research Center and Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2005-2006 (ended)

Evaluation of effect of Hepatocyte Growth Factor (HGF/SF) on the level of Survivin & XIAP expression in a Burkitt's lymphoma cell line, after treating with DNA damaging agent. Esfahan University of Medical Sciences, Medical School and Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2004-2006 (ended)

Evaluation mechanism of EBV virus on B-cell immortalization from telomerase gene. Razi Institute of vaccine research, Virology Department and Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2004-2006 (ended)

Rate of two cell embryo development, GSH Level and Spindle Area in Mouse Oocyte in MEME Medium in presence of Cysteamine. Tehran University of Medical Sciences, School of Medicine and Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2004-2006 (ended)

Evaluation of MCF-7 Cells Proliferation in Co-culture with Human Adipocytes and Preadipocyte in Three Dimensional Collagen Gel Matrix: Norepinephrine, Estrogen, Leptin as a Lipolytic Factors and Insulin as a Lipogenic Factor. Tehran University of Medical Sciences, School of Medicine and Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2002-2005 (ended)

Establishment of a collection of immortal cell lines from Iranian patients with genetical disorders. The Ministry of Health & Medical Education, Iran Medical Biotechnology Network and Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2002-2005 (ended)

Preparation and deposition of hybridoma cells necessary for research centers. The Ministry of Health & Medical Education, Iran Molecular Medicine Network and Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2002-2004 (ended)

In vitro Analysis of T Cell Responses Induced by Dendritic Cells Pulsed with Breast Tumor Antigens. National Research Center for Medical Sciences of I.R. IRAN(NRCMS) and Immunology Department, School of Medical Sciences, Tarbiat Modarres University and Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2002-2004 (ended)

Determination of cytokine production profile in healthy adult responders and non-responders to recombinant hepatitis B vaccine. responders responders. Tehran University of Medical Sciences, School of Public Health and Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2002-2004 (ended)

Production of B lymphocytes of monoclonal antibody producer, specific for Rh antigens and its characterization. The Ministry of Health & Medical Education, Food and Drug Organization and Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

2002-2004 (ended)

Generation of immortalized cell collection with Epstein-Barr virus(EBV) and its HLA typing (Phase2: molecular HLA-typing, PCR-SSP). Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

1998-2000 (ended)

Generation of immortalized cell collection with Epstein-Barr virus(EBV) and its HLA typing (Phase 1: microlymphocytotoxicity test). Pasteur Institute of Iran(IPI), National Cell Bank of Iran(NCBI).

1997-2000 (ended)

Development of National Cell Bank of Iran(NCBI). IRI IRAN President Organization, Program and Budget Committee and Pasteur Institute of Iran(IPI).