

Curriculum Vitae

Diana D. Bei
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Education:

1987. MD. Tongji Medical University. China.

Award: Excellent medical student graduation dissertation on pharmacology and toxicology research study. Analysis the effects of organophosphorus poison impact to neuronal electrophysiological activities in brain regions of hypothalamus-pituitary, and brain stem motor neurons, cervical spondylotic ganglia, analysis the secreting patterns of hormones and neurotransmission functions. Analyze Acetylcholinesterase on AchR innervations to autonomic rhythms of respiratory and cardiovascular activities.

Clinic Residency training programs in Emergency and Intensive Care Medicine on therapy epidemic ictus contagious infection diseases; therapy severe inflammatory diseases deteriorated from chronic diseases, such as viral stage of cancer diseases. Rescue patients who were poisoned and trauma injury, emergency resuscitate acute arrhythmic cardiac and stroke accidents in hospitals affiliated in Tongji Medical Schools. Pathology Diagnose distinguish hematological abnormality; cancer diseases; pulmonary inflammatory diseases, gastrointestinal diseases, and cardiovascular diseases. Read ECG, X-ray, CT image.

Biomedical Research Experiences:

2006. Clinical Postdoctoral. Cardiovascular Diseases Institute. Zhongshan Hospital. China.

Receive clinical training for catheterization, percutaneous stent implantation to open coronary atherosclerosis stenosis.

2005. Research Associate. Genetic modification facility, Harvard University. Cambridge. MA, USA.

Provide micromanipulation on creating genetic modified mouse models. Demonstrated adult bone marrow cells play roles on brain development.

2003-2004. Sr. Research Assistant. The Jackson Laboratory. Bar Harbor, ME. USA.

Genotyping spontaneous mutated mice modes. Analyze genetic defective mutation in neurological developmental defections including hydrocephalous, cerebellar-vestibular lymphoid edema, postural unbalances, progressing pneumonedema on respiratory failure in early postnatal development.

2000-2001. Sr. Technologist. St. Jude Children Research Hospital. Memphis, TN.USA.

Analysis genetic defective mutations in retinal and neurological developmental defects.

1998-1999. Research Associate. San Francisco Neurosurgery Hospital. CA.

Analyze the alterations of cerebrovascular hemodynamic distributions.

1998. Postdoctoral. Department of Hematology. Tomas Jefferson University. PA. USA.

Analyze thrombin coagulation functions under hemorrhaging conditions in risks of atherosclerosis, thrombus.

1997-1998. PhD Studentship /Sr. Research Assistant. FMI Biomedical Research Institute. Switzerland.

Create transgenic mice to demonstrate thrombin's serine pretenses for activating the receptor on cell proliferation, in risks to brain tumor genesis under brain trauma hemorrhage conditions.

Analysis Actin associate protein function in ruling embryonic visceral organogenesis by knockout mice technology.

1993-1997. Postdoctoral and Research Technician. Department of Neurosurgery. Hahnemann Hospital, Philadelphia. PA. USA. Demonstrate expression of genes, such as mitochondrial 2-oxoglutarate carrier proteins, and MAP proteins for neuron regeneration and repair damaged neurons in responding to brain injury.

1995-1996. Sr. Technician. A.I. DuPont Children Hospital. Wilmington.DE. USA.

Maintain cell culture for analysis inflammation factors impacting pulmonary vascular endothelial cells permeability regarding to blood-tissue barrier functions under severe infectious diseases and hemorrhaging conditions. Analyze endothelial cellular respiration and metabolism activate in glutathione, NADH and cAMP-ATP metabolic pathway.

1992-1993. Sr. Technician. Temple Medical School Fox Chest Cancer Institute. PA, USA.

Isolate and culture oocyte and early embryos for analysis ES cell differentiation by using manipulation of oocyte nuclear transplantation technology.

1991-1992. Research Assistant. Department of Pharmacology & Psychiatry. University of Pennsylvania. PA. USA

Analysis pharmacological mechanism on Dopamine, Serotonin (5-HT), Cocaine e.g. drugs legend-binding to active neuron membrane receptors for G-proteins and protein kinase signal transduction pathway on neurotransmission activities.

Routine used techniques in biomedical research for cardiovascular diseases, neuronal regenerations, immunological responsibilities on inflammatory reactions in cancer and infectious diseases:

Maintain laboratories. Perform Molecular Biology, Biochemistry techniques on identifying genetic regulation on expressing genes by using techniques: Screen cDNA and Genome DNA libraries; Genotyping; RT-PCR; Northern blot, and Southern blot, Western blot; In situ hybridization; and immunohistochemistry; Tissue Histology.

Establish and maintain cell cultures. Isolate and culture embryonic stem cells, neuron cells, bone marrow cells, endothelial cells and tumor cell-lines.

Pharmacology Assay of Protein Kinase; Legend binding Assay; HPLC identify chemical compounds.

Use fluorescent microscope on video record neuronal axon and synapse plasticity. Use radio-image monitor analyses cerebrovascular and cardiovascular blood flow distribution. Use microscope-electrophysiology recording and analysis neuronal electro-physiological activities.

Facility services on genotyping spontaneous mutated mice models. Microsurgery. Micromanipulation for create genetic modified mouse models. Technical services to synthesize recombinant proteins, immunize animal to produce and verification of antibodies and Immunoprecipitation (ELISA).

1987-1990. Research Associate. Public Health, Epidemic Disease Control and Environmental Medicine Surveillance. China, Beijing.

Cooperate hospitals for therapy emergency epidemic diseases, administration vaccine programs for prevent epidemic contagious diseases. Establish environmental survey for maintaining public health standards on testing chemical toxic and microbial pathogenic contaminations in commercial places and manufacture for food, drug, health related commercial products.

2006-2007 Scientist. Conrex Pharmaceutical Corp. Newtown Square. PA. USA.

Pharmaceutical Manufacture.

The biomedical research technical contributions were accredited in publication:

1. Gao J, Cheon K, Nusinowitz S, Liu Q, Bei D, Atkins K, Azimi A, Daiger SP, Farber, DB, Heckenlively JR, Pierce EA, Sullivan LS, Zuo J, Progressive photoreceptor degeneration, outer segment dysplasia, and rhodopsin mis-localization in mice with targeted disruption of the retinitis pigmentosa-1 (Rpl) gene. PNAS 2002 Apr, 99:5698-5703.
2. Liu D, Bei D, Parmar H, Matus A, Activity-Regulated, cytoskeleton-associated protein (Arc) is essential for visceral endoderm organization during early embryogenesis. Mech Dev 2000 Apr, 92(2):207-15
3. Johnstone M, Good RG, Bei D, Fischer I, Gordon Weeks PR, Localization of microtubule-associated protein 1B phosphorylation sites recognized by monoclonal antibody SMI-31, J Neurochem 1997 Oct.