Sanjay Dhar, M.Phil., Ph.D.

236 Wyndover, Irvine, CA 92620, Cell: (949) 903-6031, Email: dharbiosciences@gmail.com

RESUME

PROFESSIONAL SUMMARY

A leader and highly skilled researcher with more than 17 years of R&D experience in pre-clinical, and clinical environments with a strong focus on cell and molecular biology, regenerative medicine, tissue engineering, oncology, biochemistry, immunology and genetic engineering with special emphasis on cell-based product and therapeutic applications. Oncological applications included establishing markers for breast and prostate cancer. Possess a strong experience in industry, academics and investor relations.

As an industry expert in stem cell and platelet rich plasma sciences/applications for more than 19 years, established proprietary protocols for stem cell (ASC) and platelet rich plasma (PRP) isolations with highest efficacy and efficient time management. Both the protocols are FDA compliant. Stem cell isolation technique is enzyme treatment free and the platelet isolation is based density gradient based differential centrifugation.

Expertise in vitro and in vivo (animal) experiments and laboratory management experiences. Exhibited successful leadership experience in research and clinical project management, data collection and analysis. Expert in writing technical, KOL, patent and research documents. A leader in new product development with special emphasis on cell technologies and biomedical engineering. Have a proven record of managing, collaborating and leading various professionals like students, residents, faculties, scientist and engineers from inter –or intra departmental projects. Have also led the collaboration between within academics, industries and industry-academic joint ventures like KOLs, CROs, and research grants. Experience in establishing proof of concept, investigative tasks and motivating staff to attain goals.

Well versed with investor relations including communications with investors, presentations and following company's financial strategy. Also versed with supply chain management, QA/QC, customer relation and acquisition, new product and entity launches. Familiar with merger & acquisitions as I was part of the group which was involved in company going public.

SKILLS

- One of the first to isolate and validate the existence of stem cells in adipose tissue (ASC)
- Isolation of platelet rich plasma (PRP)
- All types of primary human cell lines & tissue cultures and validations and media optimizations
- Cell based protein isolation, assay and characterization
- Cell based therapeutic applications
- Well versed with most of the cell & molecular biology, biochemical, immunological, gene modification, viral vectors and transgene techniques
- Stem cell differentiation in multi-potent lineages
- Writing of KOLs studies, in vitro and in vivo study protocols, IACUCs, IRBs, technical bulletins, research publications, white papers
- Design, execute, manage and lead of multiple projects (technical, financial, performance, etc.) in a timely and efficient manner, e.g., KOL and CRO projects
- Experience in training the sales and marketing personal about product science and mechanism of action to be presented to various outlets (physicians, companies etc.)
- Product packing, presentation, marketing, launch, regulatory compliance and sales

- Have both academic and industry experiences in all aspects of bench and clinical research
- End to End product development and life cycle management
- Fully versed with cGLP, cGMP, QA/QC and data and supply chain management
- Skilled in product and business development both laterally and vertically
- Training of sales and marketing force about the product

WORK HISTORY

01/2018 – Present: Chief Scientific Officer (Consulting), StemStix, Inc. Huntington Beach, California

- Product development based on stem cells
- Manage all aspects of Scientific objectives of the company
- Design and help outsource pre-clinical/clinical studies
- Product formulation
- Advise on various aspects science and business development
- Participating in Investor relation, meetings and presentations
- Establishing the prototype
- Setting up various collaborations viz., specialty supplier, formulation chemistry and product testing
- QA/QC
- All aspects of compliance – in house as well as oversea the CRO and trial conductors
- Product and research reports
- Advise on Business plan and investor presentations and relations

06/2017 – Present: Founder & Principal Scientific Advisor, Dhar Biosciences, Irvine, California

- Advise companies on research lab setups
- Provide scientific expertise to various establishments
- Provide support for basic and clinical research
- Help setup in vitro and in vivo studies within and/or outside country
- Help setup IACUC and IRB protocols for various clients
- Expert advice in the field of regenerative medicine and tissue engineering
- Consulting on various research projects
- Helping companies with patent validations
- Helping companies with regulatory compliance
- Providing services of stem cell isolation to various offices/organizations
- Providing services of PRP isolation to various doctors and centers

04/2012 - 05/2017: Executive Director of Research & Development, NuGene, Inc., Irvine, California

- Headed the companies Research and Development as well as Science and Technology
- Created entirely new brand of products using stem cell derived secretory proteins for skin & hair care
- Designed, optimized and developed the stem cell secretomes based skin and hair care products
- Culture, expansion and banking of human stem and other cell types
- Conducted and managed basic and clinical research (CRO) of the stem cells proteins as the formulations
- Liaison in Investor relation, meetings and presentations in company going public and afterwards
- Establishing and coordinating clinical and KOL studies with medical professionals and industries
- A technical expert in various scientific, investor and other presentations

- Created manufacturing, technical and research documents such as MSDS, COA, product technical sheet, etc.
- Interpreted research findings and summarized data into reports
- Managed quality control and safety profile of cells, ingredients and formulations
- Developed effective working relations with groups, individuals, agencies and the public.
- Key in establishing cross industry relationship for a medical device product development under NuGene BioPharma, Inc.

04/2012 – 05/2017: Sr. Vice President, Science & Technology, NuGene BioPharma, Inc., Irvine, California

- NuGene Intl. is the holding company for NuGene, Inc. and NuGene BioPharma
- Headed all aspects of product development in both the companies
- Developed medical device 1 related product using stem cell technology and bioengineering
- Contributed relevant aspects of company's requirements for reverse merger through Investor relations
- Established and enforced all aspects of compliance
- Established cross industry collaborations

01/2011 – 09/2012: Vice President, Stem Cells on Wheels, Irvine, California

- A startup company who was involved in stem cell treatment
- Standardized its stem cell isolation and characterization protocol
- Helped in establishing business channels
- Data management and compliance

07/2007 – 12/2010: Scientific Consultant

Providing all aspects of scientific and research expertise to companies and research lab in the area of - stem cell, molecular biology, cell biology, gene expression, gene regulation, cancer, viral regulation, lab animal research, IACUC, IRB etc.

02/2002 - 06/2007 - Director of Research, Aesthetic & Plastic Surgery Institute, University of California Irvine, California

- Established and started the research program for Aesthetic and Plastic Surgery Institute, University of California, Irvine
- Created Center for Tissue Engineering & Regenerative Medicine within the Institute
- Started in vitro and in vivo tissue engineering research projects in the area peripheral nerve, bone and cartilage using adipose stem cells, other primary cells and various tissue engineering techniques
- Created a gene delivery model using a cellular construct for peripheral nerve regeneration
- Designed research projects and developed research collaborations within and outside universities
- Advised plastic surgeons of the Institute about new techniques which could be used in surgical practice
- Published and presented studies in numerous peer reviewed journals and conferences
- Mentored more than 40 students, residents and professionals
- Established academic-industry relationship for product development
- Organized California Tissue Engineering Conference in 2004

04/2001 - 02/2002 - Sr. Research Scientist, International Molecular Diagnostics, Huntington Beach, California

- Conducted basic and applied research on molecular diagnostics using cell-based assays
- Collected and analyzed biological data about relationships between cell and its potential in assay systems

12/1998 - 03/2001 - Research Associate, Dept. of Cell and Molecular Biology, New England Medical Center, Boston, Massachusetts

- Gene expression and regulation in oncological settings
- Research included breast cancer and prostate cancer
- Evaluated potential of NES1 gene as a prognostic marker for breast cancer as well its transgene mouse
- Identified potential markers for prostate cancer

12/1996 - 12/1998 – Fogarty Visiting Fellow, Division of Viral Products, Center for Biologics Evaluation and Research/FDA, Bethesda, Maryland

- Researched on molecular aspects gene expression and regulation of TAF250 protein in Herpes Simplex Virus
- Conducted experiments to achieve role of TAF250 at variable time points
- Virus culture and infecting cells

03/1994 – 11/1996 – Teaching/Research Associate, Jawaharlal Nehru University, New Delhi, India

- Teaching Molecular and cell biology to post-graduate biotechnology students
- Design and help experimental and lab work for these students

EDUCATION

- Ph.D.: Molecular and Cell Parasitology, IVRI, Izatnagar, India, 1993
- M.Phil.: Parasitology, University of Kashmir, Srinagar, India, 1986
- BS/MS: Zoology, University of Kashmir, Srinagar, India, 1984

ACCOMPLISHMENTS

- One of the original researchers to give the concept of existence of stem cells in fat
- Developed seven studies resulting in pending patent applications
- Developed a proprietary technique for non-enzymatic isolation of stem cells from adipose tissue
- Completed stem cell derived protein research, which led to the development of skin care solutions
- Published in several industry journals, including The Journal of Tissue Engineering, Cancer Research and
- Reviewer of “Journals of Tissue Engineering”
- Organized California Tissue Engineering Meeting, 2006

Patents:

- Evans GRD, Dhar S. Provisional Patent: Methods, Devices and Systems for “Regulated Growth Factor Delivery for Nerve Regeneration”. (Docket No. UCIVN-059n 2004).
- Dhar S, Kharazmi MA, Zekavati, S: Skin Treatment Formulations. Patent Application # PCT/US2014/ 034738 and WO2015163838A1
- Dhar S, Kharazmi MA, Kharazmi MS: Burn, Scar and Wound Treatment Creams. Patent # PCT/US2016/ 016463 and WO2016126886A1

- Dhar S, Kharazmi MA, Kharazmi MS: Burn, Scar and Wound Healing Aids and Bandages. Patent # PCT/US2016/029892 and WO2016176514A1
- Dhar S, Kharazmi MA, Kharazmi MS: Skin Damage Healing Aids and Dressings. Patent # PCT/US2016/048495 and WO2017035280A1

Publications and Presentations:

- One hundred publication research publications and presentations in peer reviewed journals and two white papers

Certifications:

- FDA Regulatory Course on IND Filings and Evaluation

Research Grants:

- Received a total of $3,845,155 as a PI/Co-PI/Collaborator/Mentor

Mentorship:

- Mentored Forty-three students, researchers, MD's, residents, scientists, and visiting faculties

Invited Lead and Guest Speaker:

- Twenty invited and lead speaker lectures (details in the appendix)

Memberships and Committee Participation:

- American Society of Gene and Cell Therapy
- Organized California Tissue Engineering Meeting in 2006 (CTEM-2006)
- Active member of many research organizations and have participated as reviewer, meeting organizer in ten conferences
- Been on editorial board of peer reviewed journals

Honors (a few mentioned):

1994 J.P. Dubey Young Scientist Award, Indian Parasitology Association, India
1997 FDAs Regulatory Course on IND Submissions
2005 Best Poster: D'Souza, G., Evans, G.R. and Dhar, S. "Tumor Suppressor Gene KLK10 in Breast Cancer Tissue Progression". 4th Annual California Tissue Engineering Meeting, University of California, Irvine, September 16-17, 2005.