# FACULTY FULL NAME: FIRDOS ALAM KHAN

POSITION: PROFESSOR

#### Personal Data

Nationality | INDIAN

Date of Birth | MAY 1<sup>ST</sup>, 1969

Department | INSTITITE FOR RESEARCH & MEDICAL CONSULTATIONS (IRMC)

Official UoD Email | fakhan@iau.edu.sa

Office Phone No. | 013 3330866

#### Language Proficiency

Language	Read	Write	Speak
Arabic	Yes	Yes	No
English	Yes	Yes	Yes
Urdu	Yes	Yes	Yes

#### Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
October 1997	PhD Neuroscience	Nagpur, India	Nagpur, India
March 1994	MSc Zoology	Nagpur, India	Nagpur, India
March 1990	BSc Zoology, Chemistry, Botany	Nagpur, India	Nagpur, India

#### PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions)

PhD	Studies on some neuroactive substances containing systems in the brain of <i>Clarias batrachus</i> (Linn.): Structure-Function Correlates
Master	
Fellowship	

#### Professional Record: (Beginning with the most recent)

Job Rank	Place and Address of Work	Date
Professor	Department of Stem Cell Biology, Institute for	Sept 2017
	Research & Medical Consultations, Imam	
	Abdulrahman Bin Faisal University, Dammam,	
	Saudi Arabia	

Professor	School of Life Sciences, Manipal University Dubai	Sept 2009 to Jun
	Campus, Dubai, United Arab Emirates	2017
Associate Professor	School of Life Sciences, Manipal University Dubai	Dec-2005-August
	Campus, Dubai, United Arab Emirates	2009
Research	Embryonic Stem Cell Laboratory, Reliance Life	Aug 2002-Nov-
Scientist/Assistant	Sciences, Mumbai, India	2005
Professor Rank		
Postdoctoral Associate	Department of Brain and Cognitive Sciences,	Nov-1998-May-
	Massachusetts Institute of Technology (MIT),	2001
	Cambridge, Massachusetts 02139 USA.	

## Administrative Positions Held: (Beginning with the most recent)

Administrative Position	Office	Date
Chairman	Department of Stem Cell Biology, Institute for Research	Since September 2017
	& Medical Consultations, Imam Abdulrahman Bin	
	Faisal University, Dammam, Saudi Arabia	
Chairperson	School of Life Sciences, Manipal University Dubai	Dec 2005 to Jun 2017
	Campus, Dubai, United Arab Emirates	

#### Scientific Achievements

#### Published Refereed Scientific Researches (Major Publications)

(In Chronological Order Beginning with the Most Recent)

#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
1	Firdos Alam Khan, Dana Almohazey,	Impact of nanoparticles on neuron	International Journal of Nanomedicine.
	Munthar Alomari, and Sarah Ameen	biology: current research trends.	2018; 13: 2767–2776. Published online
	Almofty.		2018 May 9. PMCID: PMC5951135
			PMID: 29780247;
			https://doi:10.2147/IJN.S165675
2	Firdos Alam Khan, Sultan Akhtar,	FMSP-Nanoparticles Induced Cell	Biomolecules 2018, 8(2), 32. DOI:
	Sarah Ameen Almofty, Dana	Death on Human Breast	10.3390/biom8020032
	Almohazey and Munthar Alomari.	Adenocarcinoma Cell Line (MCF-7	
		Cells): Morphometric Analysis.	
3	Firdos Alam Khan, Sultan Akhtar,	Fluorescent magnetic submicronic	Artificial Cells, Nanomedicine, and
	Dana Almohazey, Munthar Alomari,	polymer (FMSP) nanoparticles	Biotechnology, DOI:
	Sarah Ameen Almofty & Abdelhamid	induce cell death in human	10.1080/21691401.2018.1491476
	Eliassari.	colorectal carcinoma cells.	
4	Firdos Alam Khan, Sultan Akhtar,	Extracts of clove (Syzygium	International Journal of Biomaterials.
	Dana Almohazey, Munthar Alomari	aromaticum) potentiate FMSP-	DOI: 10.1155/2018/8479439
	and Sarah Almofty.	nanoparticles induced cell death in	
		MCF-7 cells.	
5	Firdos Alam Khan, Dana Almohazey,	Isolation, Culture and Functional	Stem Cell International.
	Munthar Alomari and Sarah Almofty.	Characterization of Human	DOI: 10.1155/2018/1429351

		Embryonic Stem Cells: Current Trends and Challenges.	
6	Mary VM, Lahijani HA, Khan FA.	Ozone Induced Cell Death in HeLa cell Culture Mediated through Stimulation of TNF- Alpha.	MOJ Immunol 2(4): 00051. DOI: 10.15406/moji.2015.02.00051.
7	Dravida S, Pal R, Khanna A, Tipnis SP, Ravindran G, Khan F.	The transdifferentiation potential of limbal fibroblast-like cells.	Brain Res Dev Brain Res. 7;160(2):239-51.
8	Khan, FA., Saha, SG., Sarkar, A., and Subhedar, N.	B-Endorphin in the olfactory system, forebrain and pituitary of the teleost, Clarias batrachus (Linn).	General and Comparative Endocrinology 1999 Feb;113 (2):290- 301.
9	Khan, FA., Jain, MR., Saha, SG., and Subhedar, N.	FMRFamide-like immunoreactivity in the olfactory system responds to morphine treatment in the teleost Clarias batrachus: Involvement of opiate receptors.	General and Comparative Endocrinology 1998 Apr;110 (1):79-87.
10	0Subhedar, N., Khan, FA., and Jain, MR.	Calcitonin-like immunoreactivity in the subcommissural organ and Reissner's fiber in the teleost Clarias batrachus, frog Rana tigrina and lizard Calotes versicolor.	Brain Research 1997 Mar 14; 751 (1):13-9
11	Burade, VS., Jain, MR., Khan, FA., Saha, SG., and Subhedar, N.	Involvement of corticosteroid-like neurosteroids in pentobarbital-induced sleep.	NeuroReport 8:139-141. (1994)
12	Subhedar, N., Deshmukh, MK., Jain, MR., Khan, FA., and Krishna, NS.	Activation of hypothalamic neurons by intraovarian pressure signals in a teleost fish, Clarias batrachus: role of mechanosensitive channels	Brain Behavior & Evolution. 47:179-184 (1996)
13	Jain, MR., Khan, FA., Krishna, NS., and Subhedar, N.	Intracranial metyrapone stimulates CRF-ACTH axis in the teleost, Clarias batrachus: possible role of neurosteroids.	NeuroReport 1994 27;5 (16):2093-2096. (1994)

## Refereed Scientific Research Papers Accepted for Publication

#	Name of Investigator(s)	Research Title	Journal	Acceptance Date
1	Sarah Mouas Asiri, Firdos	Synthesis of chitosan	Artificial Cells,	October 2018
	Alam Khan, Ayhan Bozkurt	nanoparticles, chitosan-bulk,	Nanomedicine, and	
		chitosan nanoparticles conjugated	Biotechnology,	
		with glutaraldehyde with strong		
		anti-cancer proliferative		
		capabilities		

## Scientific Research Papers Presented to Refereed Specialized Scientific Conferences (Major

#	Name of Investigator(s)	Research Title	Conference and Publication Date
1	Khan, F.A. (2010).	In vitro generation of GABAergic neurons	June 16-19, 2010, San Diego, California,
		from mammalian embryonic stem cells	USA.

		(abstract). International Society for Stem Cell Research 8th Annual Meeting,	
2	Khan, FA., and Subhedar, N.	Calcitonin-like immunoreactivity in the subcommissural organ and Reissner's fiber of the catfish, frog, and lizard (Abstract).  Joint Meeting of the International Society for Neurochemistry	American Society for Neurochemistry held at Boston, MA, USA. 1997
3	Khan, FA., Jain, MR., Saha, SG., Burade, SG., and	Response of GnRH-immunoreactive system in the forebrain of the teleost,	(Abstract). Journal of Neurochemistry 63(Suppl.2),pp. S16. 1996
	Subhedar, N.	Clarias batrachus to opiate treatment. (	00(04PP1.275PP. 010: 1770
4	Khan, FA., Saha, SG., Burade, VS., and Subhedar, N. (1996).	Response of FMRFamide-like immunoreactivity in the olfactory system to intracranial morphine administration in the teleost, Clarias batrachus.	(Abstract). First Congress of the Federation of Asian-Oceania Neuroscience Societies and First IBRO Regional Congress, Pattaya, Thailand, pp. 112. 1996

## Patents Granted/ Applied

#	Name of Inventors	Patent Title	Report Date
	(Supported by)		
1	Firdos Alam Khan and	In vitro generation of GABAergic neurons from embryonic stem	United States Patent
	Satish Totey	cells and their use in the treatment of neurological disorders.	# 7,820,439; Issue
			date: 10-26-2010
2	Firdos Alam Khan and	Establishment of a human embryonic stem cell line using	United States Patent
	Satish Totey	mammalian cells.	# 7, 8211, 817; Issue
			date: 10-12-2010
3	Firdos Alam Khan and	Pluripotent embryonic-like stem cells derived from corneal	United States Patent
	Satish Totey	limbus, methods of isolation and uses thereof.	Application No:
			8,067,233, Issue Date:
			29 November 2011.

#### **Books Published**

#	Name of Author	<b>Book Title</b>	Report Date
1	Firdos Alam Khan	Biotechnology (2015) Published by CRC Press (Taylor and Francis Group, USA)	
		Fundamentals-	http://www.amazon.com/Biotechnology-Fundamentals-Second-Firdos-
		2nd Edition	Alam/dp/149872342X/ref=sr_1_1?s=books&ie=UTF8&qid=1453722392&sr=1-
			1&keywords=firdos
2	Firdos Alam Khan	Biotechnology in	(2014) Published by CRC Press (Taylor and Francis Group, USA)
		Medical Sciences	http://www.amazon.com/Biotechnology-Medical-Sciences-Firdos-
			Alam/dp/1482223678/ref=sr_1_1?ie=UTF8&qid=1402288233&sr=8-
			1&keywords=firdos

#### **Current Researches**

#	Research Title	Name of Investigator(s)
1	Efficient Method of Production of GABAergic Neurons Derived from	Firdos Alam Khan
	Human Cord Blood Stem Cells by Using Nanoparticles" granted by Dean of	
	Scientific Research, Imam Abdulrahman Bin Faisal University, Dammam,	
	Saudi Arabia	
2	Impact of nanoparticles and biomaterials on cancer cells biology: In vitro	Firdos Alam Khan, Ayhan Bozkurt, Sultan
	and cellular assay	Akhtar

#### Contribution to Scientific Conferences and Symposia

#	Conference Title	Place and Date of the Conference	Extent of Contribution
1	World Bio Summit & Expo	Invited lecture on topic "Adult human	Invited Speaker
	November 02-04, 2015	limbal-corneal tissue possessed the self-	
	Dubai, UAE	renewing and multi-lineage differentiation	
		Capacity	
	4th Middle East Conference	Structure-Based Drug Discovery:	Invited Lecture
	on Healthcare Informatics	Accomplishments & Challenges	
	on 22-24 April 2013 at		
	Hotel Crown Plaza, Dubai,		
	UAE.		
	9th International	Role of Information Technology in Drug	Keynote Speaker
	Conference on Innovation	Discovery	
	in Information Technology		
	and Workshop organized by		
	College of Information		
	Technology, UAE		
	University, Al Ain, UAE on		
	March 17th, 2013.		
	First genetics and	Future of Genetics & Biotechnology Field	Invited Lecture
	Biotechnology Conference,		
	held at Zayed University,		
	Dubai, on December 21,		
	2009.		
	Bombay Hospital, March	Stem cell therapy for Neurological Disorder	Invited lecture
	2003		

### Membership of Scientific and Professional Societies and Organizations

- International Brain Research Organization (IBRO)
- Society for Neuroscience
- Neuroscience Society of India

## Teaching Activities

## Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	Pharmacology -BSc Biotechnology at Manipal University Dubai	BBT-201	48 lectures/Semester Taught for 5 years
2	Business of Biotechnology -BSc Biotechnology at Manipal University Dubai	BBT-305	48 lectures/Semester Taught for 5 years
3	Biomedicine -BSc Biotechnology Honors at Manipal University Dubai	BBT-402	48 lectures/Semester Taught for 5 years

## Postgraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	Cell Biology -MSc Medical Biotechnology MSc Molecular Biology & Human Genetics at Manipal University Dubai	MMB-101	48 lectures/Semester Taught for 10 years
2	Bioethics & IPR -MSc Medical Biotechnology at Manipal University Dubai	MMB-201	48 lectures/Semester Taught for 8 years
3	Cell & Tissue Engineering  MSc Medical Biotechnology at  Manipal University Dubai	MMB-202	48 lectures/Semester Taught for 3 years

#### **Course Coordination**

#	Course Title and Code	Coordination	Co-coordination	Undergrad.	Postgrad .	From	То
1	BSc Biotechnology	Chair		BSc Biotechnology		2005	2017
2	MSc Medical Biotechnology	Chair		MSc Medical Biotechnology		2007	2017

## Student Academic Supervision and Mentoring

#	Level	Number of Students	From	To
1	BSc	370	2005	2017
2	MSc	100	2007	2017

## Supervision of Master and/or PhD Thesis

#	Degree Type	Title	Institution	Date
1	PhD	Analysis of Dietary Bioactive	School of Life Sciences, Manipal University	2015-
		Compounds as Epigenetic	Dubai Campus, UAE	2018
		Modifiers in Cancer Prevention		
2	MSc	In vitro cell culture analysis of	School of Life Sciences, Manipal University,	2008-
		ozone induced cell death in	Dubai, UAE	2010
		human cancer cell line		
3	MSc	To study the effect of medical	School of Life Sciences, Manipal University,	2008-
		ozone-induced cell death in	Dubai, UAE	2010
		human cancer cell line mediated		
		by TNF-alpha		

## Administrative Responsibilities, Committee and Community Service (Beginning with the most recent)

## Administrative Responsibilities

#	From	То	Position	Organization
1	Dec 2017	Till to date	Core Member of Graduate	Institute for Research & Medical Consultations, Imam
			Committee for master's	Abdulrahman Bin Faisal University, Dammam, Saudi
			Program (master's in	Arabia
			biotechnology &	
			Entrepreneurship & Master	
			in Nanotechnology &	
			Entrepreneurship),	
2	Dec 2013	June 2017	Chairman, Research &	Manipal University Dubai Campus, UAE
			Development Program	
3	March 2006	March 2017	Chairperson of organizing	Manipal University Dubai Campus, UAE
			committee for annual	
			Biotechnology meets (Bio-	
			Trends) held every year at	
			Manipal University Dubai.	

#### **Editorial Board Member**

#	From	To	Position	Name of Journal
1	2010	Till to date	Associate Editor	3 Biotech (Springer Nature Publication)
2	2017	Till to date	Reviewer	Oncotarget (Nature Publication)

#### Volunteer Work

#	From	To	Type of Volunteer	Organization
1	2006	2017	Chief coordinator, Blood	Al Wasl Hospital, Dubai, UAE
			Donation Camp	

#### UNIVERSITY PREPRESENTATION- ACADEMIC AFFAIRS

- Chair-Board of Studies for Biotechnology discipline at Manipal University Dubai
- Member, Board of Studies for Manipal University India and Dubai
- Member, Student Disciplinary Committee at Manipal University Dubai
- Member of University Examination Committee

#### Personal Key Competencies and Skills:

- 1 Pluripotent stem cells
- 2 Neural stem cells differentiation
- 3 Stem cell transplantation (preclinical)
- 4 GLP and GMP level production of stem cells
- 5 Anti-cancer molecules bioassay
- 6 In vitro and In vivo testing of Nanoparticles or Biomaterials

#### Social Media Association:

**ORCID** http://orcid.org/0000-0002-6892-1530

**Google Scholar**: <a href="https://scholar.google.ae/citations?user=fGILR-YAAAAJ&hl=en">https://scholar.google.ae/citations?user=fGILR-YAAAAJ&hl=en</a>

ResearcherID: http://www.researcherid.com/rid/A-5190-2017

LinkedIn: www.linkedin.com/in/firdoskhan1969

Last Update

20/11/2018