europass Curriculum vitae

PERSONAL INFORMATION

Dr. MOHAMMAD FAISAL JAMAL KHAN

Medical Genetics Unit, Dept. of Biomedical & Specialty Surgical Sciences, University of Ferrara, 44121 Ferrara (Italy)

+393487899133

khnmmm@unife.it

Skype faisal.khan82

Sex Male | Date of birth 16 May 1982 | Nationality Indian

JOB APPLIED FOR

Borsa di Studio per attività di ricerca *post lauream.*

WORK EXPERIENCE

1 Aug 2013–31 Mar 2014

Researcher

All India Institute of Medical Sciences, New Delhi (India)

Project 1. Transmission electron microscopic study to mark the effect of contact lens solution on corneal collagen fibril and proteoglycan.

Techniques known

- Histology and electron microscopy of cornea
- ImageJ- image analysis tool
- SPSS and Graphpad-statistical package

30 Jan 2009–21 Jul 2013

Researcher

King Saud University, Riyadh (Saudi Arabia)

Project 1. Ultrastructure of camel cornea.

Project 2. Immuno-localization of proteoglycan in camel cornea.

Project 3. Swelling studies in camel and bovine cornea.

Project 4. Effect of multipurpose solutions on hydrogel lens.

Techniques known

- Tissue processing and sectioning for light microscopy (paraffin and cryo-embedding) - Cornea, Brain, Retina
- Immunohistochemistry - Corneal proteoglygan
- Tissue processing & ultrathin sectioning for electron microscopy - Cornea
- Negative staining
- Immuno-labelling for Electron microscopy
- Expertise in Tecnai G^2 HR Transmission electron microscope

EDUCATION AND TRAINING

1 Jan 2014–Present

PhD in molecular medicine and pharmacology

University of Ferrara, Ferrara (Italy)

Title: Genetic, epigenetic and histological study of orofacial cleft: Influence of sex in disease susceptibility.

The work on congenital anomalies to understand genetic, epigenetic and histology of orofacial cleft (OFC), mainly focusing on maternal periconceptional folic acid use and smoking as factors to explore

gene-environmental interaction. Moreover, the first to investigate global DNA methylation in cleft lip tissues in response to maternal periconceptional folic acid supplementation. Besides, I developed a morphological analysis method to study muscle fibres in lip tissues using ImageJ, an open source imaging software.

Techniques known

- Isolation and quantification of DNA from blood and tissues.
- Isolation of Peripheral blood mononuclear cells (PBMC)
- Real time polymerase chain reaction (RT-PCR) for allelic discrimination
- Quantitative polymerase chain reaction (qPCR) for viruses and cells
- DNA and Protein gel electrophoresis
- Silver staining
- DNA and tissue bio-banking
- DNA methylation analysis by bi-sulfite conversion and pyrosequencing
- Metaphase chromosome spreading and banding
- Fluorescent in-situ hybridization (FISH) on tissues (lip, decidua and chorionic villi)
- Statistical analysis of case-parent trios genotypes (Transmission disequilibrium test and log-linear analysis of relative risk)
- Establishment of primary cell culture (chorionic villi tissue and lip)
- Section and staining of lip tissues for light and electron microscopy
- Development of image processing tool to decipher muscle fibre types in lip tissue specimen

1 Aug 2005–1 Oct 2007

Masters in Biochemistry

Hemwati Nandan Bhuguna Garhwal University, Srinagar (India)

Subject Studied

Plant and animal biochemistry

Animal and Plant tissue culture

Cell and Molecular biology

Bio-energetics

Dissertation project for accomplishment of degree titled "Impact of soluble cytokine evaluation on the graft outcome in renal transplant patients".

Techniques known

- HLA typing – HLA AB and DRB for kidney transplant
- ELISA - Th1 and Th2 cytokines

1 Jul 2002–1 Jun 2005

Bachelor of Science in Biotechnology

University of Pune, Pune (India)

Subject studied

Biochemistry

Animal and plant tissue culture

Cell and molecular biology

Immunology

Bio-physics

Environment biotechnology

Microbiology.

Dissertation project for accomplishment of degree titled "Effect of Mycorrhiza on growth and biochemistry of Mentha *piperata*".

PERSONAL SKILLS

Mother tongue(s): Hindi, Urdu

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	B2	C2	C2	C1
	Cambridge CAE				
Urdu	C2	A1	C2	C2	A1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

Communication skills
- Excellent written and verbal communication.
- Excellent presentation.
- Scientific writing demonstrated by scientific papers as corresponding author.

Organisational / managerial skills
- Supervising experiments
- Tutoring technical graduate students
- Designing experiments
- Analyzing data
- Writing research papers

Job-related skills
- Identifying publishing venues, getting feedback, participating in peer-review, submitting manuscripts for publication, etc.
- Communicating complex ideas in a clear, transparent way.

ADDITIONAL INFORMATION

Honours and awards

ESF-EuroCleftNet-Exchange Visiting Researcher (January 2016–June 2016) University of Ferrara, Ferrara, Italy.

DNA and Tissue Biobanking for Ecogenetic and Epigenetic of Orofacial Clefts.

ESF-EuroCleftNet-Exchange Visiting Researcher (April 2015–September 2015) University of Ferrara, Ferrara, Italy.

DNA Biobanking and Ecogenetics of Orofacial Clefts.

Publications

Khan MFJ, Little J, Mossey PA, Steegers-Theunissen RPM, Autelitano L, Lombardo I, Bassi Andreasi R, Rubini M (2017). Evaluating LINE-1 methylation in cleft lip tissues and its association with early pregnancy exposures (Submitted. *Epigenomics, Ref#:*).

Khan MFJ, Abelli L, Nag TC, Autelitano L, Mossey PA, Rubini M (2017). Muscle fiber diameter on lateral and medial side of cleft lip using an image processing tool. (Accepted. *Cleft Palate-Craniofacial Journal, Ref#:17-011*).

Khan MFJ, Nag TC, **Igathinathane C,** Osuagwu UL, Rubini M (2015). A new method of detecting changes in corneal health in response to toxic insults. *Micron.* 78:45-53.

(http://www.ncbi.nlm.nih.gov/pubmed/26312735)

Ogbuehi KC, **Khan MFJ**, Alanazi S, AlMubrad T, Osuagwu UL. (2014). Transmittance properties of contact lens multipurpose solutions and their effects on a hydrogel lens. *Annual Research & Review in Biology*. 4(15) 2484-2500.(http://www.sciencedomain.org/abstract.php?iid=497&id=32&aid=4355)

AlMubrad T, **Khan MFJ**, Akhtar S. (2010). Swelling studies of camel and bovine corneal stroma.*Clin Ophthalmol*. 4:1053-106.(http://www.ncbi.nlm.nih.gov/pubmed/20922042).

Conferences

Bassi Andreasi R, **Khan MFJ**, Galuppi E, Govoni M, Rubini M. (2017). Replication analysis of gene-gene interaction between HLA-DQA2 AND HLA-DQB2 variants in Italian rheumatoid arthritis patients. **European League against Rheumatism (EULAR-2017),** Madrid, Spain.

Khan MFJ. (2016). Optimising the cleft case-parent trios DNA bio-bank from EU and advantaged gene-environment interaction studies (Oral presentation). **EUROCleftNet-2016, Dundee, U.K.**

Khan MFJ, Bassi Andreasi R, Pisani KA, Autelitano L, Brusati R, Garattini G, Aiello V, Franceschelli, P, Mossey PA, Rubini M. (2015). Opposite effect in males and females of a deletion polymorphism in TGFA gene in determining the risk of nonsyndromic orofacial cleft. **SIGU-2015**, Rimini, Italy

Rubini M, Roversi Bonomo E, Aiello V, **Khan MFJ**, Franceschelli P, Andreasi Bassi R, Farina I, Galuppi E, M. Govoni. (2015). Gender-dependent association between HLA-G 14b insertion/deletion polymorphism and rheumatoid arthritis in Italian patient. **European League against Rheumatism (EULAR-2015),** Rome, Italy.

Akhtar S, **Khan MFJ**, Ahmed M, AlMubrad T. (2012). Ultrastructural changes in hydrated camel corneal stroma. **World Ophthalmology conference (WOC-2012),** Abu Dhabi, United Arab Emirates (UAE).

Akhtar S, **Khan MFJ**, Ahmed M, AlMubrad T. (2011). Effect of swelling on the ultrastructure of camel corneal stroma. **European Association for Vision and Eye Research (EVER)**, Crete, Greece.

AlMubrad T, **Khan MFJ**, Akhtar S. (2010). Ultrasructural features of camel cornea. **European Association for Vision and Eye Research (EVER)**, Crete, Greece.

Khan MFJ, AlMubrad T, Akhtar S. (2010). Hydration and rehydration in camel and bovine cornea. **European Association for Vision and Eye Research (EVER)**, Crete, Greece.

References

Prof. Michele Rubini

Medical Genetics Unit Department of Biomedical and Specialty Surgical Sciences, University of Ferrara, Italy.

Phone: +39.0532974473 Email: rub@unife.it

Prof. Tapas Chandra Nag

Department of Anatomy All India Institute of Medical Sciences Ansari Nagar, New Delhi, India.

Phone: +91.11.26546699 Email: tapas_nag@yahoo.com

Prof. Julian Little

School of Epidemiology, Public Health and Preventive Medicine, Univerity of Ottawa, Canada.

Phone: +613.562.5800 Ext. 8159 Email: jlittle@uottawa.ca

Prof. Peter Anthony Mossey

WHO Collaborating Centre for Oral Health & Craniofacial Anomalies, University of Dundee, Dundee, Scotland, United Kingdom.
Phone: +44.01382381.643 Email: p.a.mossey@dundee.ac.uk

"Il sottoscritto acconsente, ai sensi del D.Lgs. 30/06/2003 n.196, al trattamento dei propri dati personali."

"Il sottoscritto acconsente alla pubblicazione del presente curriculum vitae sul sito dell'Università di Ferrara".