



Asima Karim

Languages spoken: **Urdu, Punjabi and a fluent English speaker**

I. Department of Basic Medical Sciences, College of Medicine, University of Sharjah, Sharjah, UAE.

Email: docasima@yahoo.com, akarim@sharjah.ac.ae Phone: 0507570552

ACADEMIC DEGREES

- 2011- 2015** **PhD: Biomedical Sciences**
Thesis title: Morphological properties of articular chondrocytes in various experimental and clinical conditions.
Date of award: 27th November 2015
Centre for Integrative Physiology
University of Edinburgh, Scotland, United Kingdom.
- 2005-2007** **MPhil: Physiology and Cell Biology (Gold-medal)**
Dissertation title: A Study of pubertal development and growth among boys in a sample of local population.
Date of award: 27th June 2008
University of Health Sciences Lahore, Pakistan
- 1991-1997** **MBBS: Bachelor of Medicine and Bachelor of Surgery**
Date of award: 26th June 1998
Fatima Jinnah Medical College
University of the Punjab Lahore, Pakistan

DISTINCTIONS / AWARDS

- 2016** **Gold medal in MPhil Physiology for standing first**
Department of Physiology and Cell Biology
University of Health Sciences, Lahore, Pakistan
- 2013** **George Boyd Travel Fund**
School of Biomedical Sciences, University of Edinburgh, United Kingdom
- 2012** **Runners up for Best Poster Award**
British Orthopaedic Research Society (BORS), 24-25th September, London, United Kingdom.
- 2011-2014** **Global Overseas Research Scholarship for PhD**
University of Edinburgh, Scotland, United Kingdom
- 2011-2014** **Charles Darwin Scholarship for PhD**
College of Medicine and Veterinary Medicine
University of Edinburgh, Scotland, United Kingdom
- 2009** **Best Performance Medal**
Chief Minister Punjab, Pakistan for provision of best medical care to Internally Displaced Persons at Swat
- 2005-2007** **MPhil Fellowship**
Higher Education Commission (HEC) Islamabad, Pakistan
- 1991-1996** **University Merit Scholarship**
The Government of Pakistan
- 1988-1990** **Degree College Merit Scholarship**
The Government of Pakistan

TEACHING AND RESEARCH EXPERIENCE

- Feb 2019 – To date** **Assistant Professor of Physiology**
College of Medicine, University of Sharjah, Sharjah, UAE.
- Apr 2017 – Jan 2019** **Associate Professor of Physiology and Cell Biology**
University of Health Sciences Lahore, Pakistan

Aug 2016 – Apr 2017	Assistant Professor of Physiology and Cell Biology University of Health Sciences Lahore, Pakistan
Jan 2016 – July 2016	Sponsored Researcher funded by The University of Edinburgh to perform preliminary experiments for an MRC research grant and to publish research articles from my PhD project Centre for Integrative Physiology University of Edinburgh, United Kingdom
Sep 2011 – Dec 2015	Demonstrator and Tutor in BMTO and BTO (Biomedical & Biological Teaching Organisations) University of Edinburgh, United Kingdom
May 2010 – Aug 2011	Assistant Professor of Physiology and Cell Biology University of Health Sciences Lahore, Pakistan
Mar 2008 - May 2010	Senior Teaching / Research Fellow of Physiology and Cell Biology University of Health Sciences, Lahore, Pakistan
Jan 2005 – Jan 2007	Managing Experimental Research Laboratory University of Health Sciences, Lahore, Pakistan
Jan 2003 – Jan 2005	Lecturer of Physiology Lahore Medical and Dental College, Pakistan
Oct 1997 – Oct 1998	Internship (House Job) in Gynaecology & Obstetrics Jinnah Hospital Lahore

PUBLICATIONS

Manuscripts in preparation:

- 2019** A. Karim. and A.C. Hall. "Review : Morphology of chondrocytes". (In preparation)
- 2019** A. Karim, Muhammad Nasir Afzal and Muhammad Aslamkhan. "Anthropometric measurements of school-going-girls of the Punjab, Pakistan". (In preparation)

Published abstracts/manuscripts:

- 2018** A. Karim, A.K. Amin, A.C. Hall. "The clustering and morphology of chondrocytes in normal and mildly degenerate human femoral head cartilage studied by confocal laser scanning microscopy". Journal of Anatomy 2018, 232: pp686—698.
- 2016** A. Karim and A.C. Hall. "Chondrocyte morphology in stiff and soft agarose gels and the influence of foetal calf serum". Journal of cellular Physiology 2016, 9999: 1-12.
- 2016** A. Karim and A.C. Hall. "Hyperosmolarity normalises serum-induced changes to chondrocyte properties in a model of cartilage injury" European Cells and Materials 2016, 31: 205-220.
- 2013** A. Karim and A.C. Hall. "Morphological properties of chondrocytes cultured in weak 3D agarose gels" Bone & Joint J 2013;95-B 47.[Abstract]
- 2011** Uzma Zafar, Hamid Javaid Qureshi, A. Karim. "Insulin resistance and serum parameters of iron status in type 2 diabetics" Pak J Physiol 2011, 7(2).
- 2010** Tanzeela Akram, Shahid Hasan, Muhammad Imran, A. Karim, Muhammad Arslan. "Association of Polycystic ovary syndrome with cardiovascular risk factors" Gynaecological Endocrinology January 2010, 26 (1): 47-53.
- 2009** A. Karim and M. Nasir-Afzal. "Pubertal Development and Growth among Boys in a Sample of Local Pakistani Population" Acta Endocrinologica (Buc) 2009, 5 (2): 165-175.

SCIENTIFIC PRESENTATIONS

- 2013** A. Karim and A.C. Hall. "**Morphological characteristics of chondrocytes in injured cartilage cultured under various conditions**". Oral presentation in annual meeting of British Orthopaedic Research Society (BORS) held in Oxford on 4th/5th September 2013.
- 2012** A. Karim and A.C. Hall. "**Morphological properties of chondrocytes cultured in weak 3D agarose gels**". Poster presented in the 40th Scottish Microscopy Group Symposium on 14th November 2012 at John McIntyre Conference Centre Pollock Halls, Edinburgh.
- 2012** A. Karim and A.C. Hall. "**Morphological properties of chondrocytes cultured in weak 3D agarose gels**". Poster presented in the annual meeting of British Orthopaedic Research Society (BORS) on the 24th/25th September 2012 at Stratford Circus London. Runners up for prize for this poster.
- 2009** A. Karim and M. Nasir-Afzal. "**Pubertal development and growth among boys in a sample of local Pakistani population**". Paper presented in 19th Annual Meeting of Medical Research Society of Pakistan (MRSP) in collaboration with Shaukat Khanam Memorial Cancer Hospital and Research Centre, held on 31st October 2009 at University of Health Sciences Lahore.
- 2007** A. Karim. "**Puberty among boys in local population**". Oral presentation in International Symposium on Reproductive Endocrinology held on 13th – 14th Feb 2007 at University of Health Sciences Lahore.

SCIENTIFIC PROJECTS UNDER SUPERVISION

Supervisor of 5 M.Phil. and co-supervisor of one M.Phil. project at the University of Health Sciences, Lahore

Titles of projects:

1. Psychological stress and oxytocin levels in mothers and their children with cerebral palsy (Principal investigator) – Thesis preparation
2. Homocysteine and Folic acid levels in patients suffering from Acute Myocardial Infarction (Principal investigator) – Thesis preparation
3. Serum placenta specific 1 (plac 1) and serum oxidative stress markers levels in patients of breast cancer and healthy controls
4. Comparison of serum vitamin B12, homocysteine and glutathione peroxidase levels in subjects with gestational diabetes mellitus and healthy pregnant controls
5. Comparison of serum vitamin D levels in patients suffering from Acute Myocardial Infarction with diabetes mellitus and without diabetes mellitus

PhD project

1. Proteomic profiling and identification of novel biomarkers in infertile Polycystic Ovary Syndrome and Ovarian Cancer Women (Principal investigator) – Sample collection stage

WORKSHOPS / SEMINARS / CONFERENCES

2017

- 02-Day workshop in “**Strategic Management for HODs of Public Sector HEIs of Pakistan**” on November 14-15th, 2017 at Higher Education Commission, Regional Center, Lahore.
- UHS first International Conference on Medical Ethics “**Ethics in Challenging Times**” on March 20-21st, 2017 at University of Health Sciences, Lahore. (12.0 CME credit hours awarded)
- 15th Biennial Conference of “**Pakistan Physiological Society**” held on February 25-26th, 2017 at Sahiwal Medical College, Sahiwal. (12 CME credit hours awarded)

2013

- British Orthopaedic Research Society (BORS) annual meeting on 4th/5th September 2013 at University of Oxford, UK.

2012

- Laboratory Demonstrators’ Induction course in Biological Sciences by BTO on Wednesday 12th September 2012 at Rutherford Lecture Theatre 1, Daniel Rutherford Building, King’s Building, University of Edinburgh.
- Event by Institute of Academic Development “**Demonstrating Introduction**” by Louise Connelly at Chateris Land, Holyrood road on 18-01-2012, University of Edinburgh.
- Event by Institute of Academic Development “**Effective Tutoring Introduction**” by Louise Connelly and Chris Doye at 7, Bristo Square on 12-01-2012, University of Edinburgh.
- Annual meeting of British Orthopaedic Research Society (BORS) on the 24th/25th September 2012 at Stratford Circus London, UK.
- 40th Scottish Microscopy Group Symposium on 14th November 2012 at John McIntyre Conference Centre, Edinburgh.

2011

- Event by Institute of Academic Development “**Searching Research Literature and Managing Bibliographies**” by Fiona Brown at Roslin Institute on 16/11/2011.
- Event by Institute of Academic Development “**Good practice in PhD research**” by Dr. Andrew Hall, Prof. Jamie Davies and Prof. Andrew Jarman of CIP (SBMS) on 02/11/2011, University of Edinburgh.
- Event by Institute of Academic Development “**Managing Your Research Project**” by Robin Handerson (IAD) held at Room G43, Paterson's Land, Holyrood on 01/11/2011, University of Edinburgh.
- Seminar “**Bridging the gap with VAP to the superhighway in cells**” By Dr Tim Levine (University College, London) Host: Dr Paul Skehel (CIP) Held at HRB lecture theatre on 21/10/2011, University of Edinburgh.
- Workshop on “**Chairing a Committee**” by Prof. John Biggs from Australia at University of Health Sciences, Lahore held on 12th March 2011.
- Workshop on “**Medical Ethics**” by Prof. John Biggs from Australia at University of Health Sciences, Lahore held on 13th and 14th March 2011.
- Workshop on “**Biological Data Analysis and hands on Training of Statistical Software**” in collaboration with HEC at University of Health sciences, Lahore held on 22nd – 25th March 2011.

2010

- Workshop on “**Professional Competency Enhancement Programme for Medical Teachers**” by HEC held on 9th Jan 2010 – 11th February 2010 at UHS, Lahore.
- Workshop on “**Eye Movement Desensitization and Reprocessing**” EMDR (Session I) by Prof. Derek. P. Farrell at University of Health Sciences, Lahore held on 14th February – 17th February 2010.

- Advocacy Seminar “**World Health Day**” held by Pakistan Medical Society (PMS), in collaboration with Executive District Officer (Health), WHO and University of Health Sciences held on 7th April 2010.
- International workshop on “**Medical Education - A way forward**” conducted by Dr. Ian Willis and Hazel Howden Leach (Medical Educationalists) from University of Liverpool UK at The University of Health Sciences, Lahore in collaboration with the University of Liverpool UK on 3rd and 4th May 2010.
- Workshop on “**Eye Movement Desensitization and Reprocessing**” **EMDR (Session II)** by Prof. Derek. P. Farrell from University of Birmingham at University of Health Sciences, Lahore held on 05th May – 07th May 2010.
- Workshop on “**Eye Movement Desensitization and Reprocessing**” **EMDR (Session III)** by Prof. Derek. P. Farrell from University of Birmingham at University of Health Sciences 2010.

2009

- Workshop on “**Presentation Skills**” at University of Health Sciences, Lahore on 6th April 2009.
- Workshop on “**Conduct of OSPE and Oral Assessment**” by the Department of Medical Education at University of Health Sciences, Lahore held on 31st July and 1st August 2009.
- 1st National Conference on “**Mental Health Updates**” held by PMS, IMH in collaboration with UHS on 3rd June 2009.
- **19th Annual Meeting of MRSP** in collaboration with SKMH & RC at University of Health Sciences, Lahore held on 31st October 2009.

2007

- “**1st International Symposium on Reproductive Endocrinology**” at University of Health Sciences, Lahore held on 13th – 14th February 2007.

2005

- Workshop on “**Real Time PCR**” by Bioflux Corporation at University of Health Sciences, Lahore held on 11th August 2005.
- Workshop on “**Research Methods**” at University of Health Sciences, Lahore held on 6th and 7th July 2005.

1998

- Workshop on “**Lactation Management**” in collaboration with Punjab Breast Feeding Steering Committee at Gynae Unit II, Jinnah Hospital, Lahore held on 7th Sep to 9th Sep 1998.

Affiliate member of “**The Physiological Society**” UK and “**British Orthopaedic Research Society**” UK.

LABORATORY SKILLS

Experienced in the use of

- Confocal laser scanning microscopy with fluorescent mode (CLSM)
- 3D analysis of images for quantification of various cellular parameters
- Immunohistochemistry (IHC)
- Immunofluorescence
- Conventional histology techniques (decalcification, preparation and sectioning of frozen and paraffin embedded tissues and staining)
- Cell isolation and 3D cell culture (agarose gels)
- Human and bovine joint dissection and preparation of osteochondral explants
- Enzyme-linked immunosorbent assay (ELISA)
- Radioimmunoassay (RIA)
- Testicular measurements with orchidometer
- Ultrasonography
- Human blood sample collection, serum extraction and storage
- Anthropometry

COMPUTER SKILLS

Experienced in the use of

- 3D image analysis software (CLSM image analysis software, Volocity, Image J and Imaris)
- Statistical software (Graph pad prism and Sigma Stat)
- Microsoft Word, Excel, Picture Manager, Power Point, Paint, Endnote

- **PhD supervisor (recent employer)**
Dr. Andrew C. Hall
Reader
Centre for Integrative Physiology,
Edinburgh Medical School: Biomedical Sciences,
University of Edinburgh,
Hugh Robson Building,
George Square,
Edinburgh EH8 9XD,
Scotland, United Kingdom
Phone + 44 (0)131 650 3263
FAX + 44 (0)131 650 2872
E.mail; a.hall@ed.ac.uk
- **Professional mentor**
Prof. John S G Biggs
MA MD FRCOG FRANZCOG DHMSA
Adj. professor of Medical Education, University of Health Sciences, Lahore; Visiting Fellow Australian National University
Sometime Dean of post graduate medicine, University of Cambridge
Phone: +61261616643
Email: jsgb@homemail.com.au
- **Professional mentor**
Dr. Muhammad Nasir Afzal
Professor of Physiology
College of Medicine, Alfaisal University
P.O. Box 50927, Almaather
Riyadh, 11533, Saudi Arabia
Phone (O): 0966-11-2157971
Mobile: 0966-53-1502445
Email: nasirafzal@hotmail.com
- **Professional mentor**
Prof. Dr. Muhammad Aslamkhan,
Eminent Professor
Founding Head,
Human Genetics & Molecular Biology Department,
University of Health Sciences,
Kkhyaban-i-Jamia Punjab,
Lahore-54600, Pakistan
Phone: +92 42 111 333 366 x 320
Fax' +92 42 923 0870
Cel: 0300 416 3225
eMail: genetics@uhs.edu.pk
dr_aslamkhan@mail.com