

Dr. NAJAM A. SIDDIQI

MBBS, Ph.D (Japan) Postdoc., Johns Hopkins University, USA

**Professor and Head of Department of Anatomy &
Neurobiology,
Course Director BIOL 341,
Course Director Anatomy-I (MPRC0201),
Course Director ANA-II (MPRC0202)
College of Medicine and Health Sciences, National University
of Science and Technology, Oman
Affiliated with West Virginia University, USA**



Chair, Faculty and Staff Professional development Committee

PERSONAL DETAILS

Name: Dr. Najam Ashfaq Siddiqi
Address: College of Medicine and Health Sciences, National University of
Science and Technology, Al-Tarif, PO Box 391, Postal Code 321,
Sohar, Sultanate of Oman
Mobile: Off: 00968-26852043, cell: 00968-97515661
Email: najamsiddiqi@nu.edu.om,
Date of Birth: 18.9.1959
SSN: 213-37-8652
Married with two daughters

AWARDS

PhD Supervisor (Anatomy) by Higher Education Commission, Pakistan

Gold medal for standing 1st in FSc at Cadet College Petaro (dist. Dadu), 1975

Japanese Government Scholarship (MEXT) award for PhD in Japan

Ministry of Science and Technology, Pakistan, scholarship award for PhD at Manchester University, UK

Gold Medal for best poster at 19th ORTHOCON, Islamabad, Pakistan, March, 2005

2nd Prize-- 8th International Scientific Conference for Medical Students in the GCC countries, Sultan Qabus University, Muscat, Jan.28-Feb.1, 2012 (presentation by Dr Syed M. Saud my students of OMC)

1st Prize-- in poster competition at OMC 1st Research Day 2016 “Mobile’s radio frequency electromagnetic waves—A possible invisible environmental carcinogen?” (Aisha Al Balushi, Afaf Al Farsi, Najam Siddiqi)

1st Prize in poster competition at OMC 2nd Research day “ Mobile phone electromagnetic waves causing fatty change in the developing chick embryo: 11 April, 2017 (Rana Al Balushi, reem Al Balushi, Najam Siddiqi)

1st prize in poster competition at OMC 3rd Research Day” Mobile phones may cause damages to the retina: A histological study in a developing chick embryo, Afaf Al Farsi, Dr Najam Siddiqi, 26 March, 2018

2nd prize in poster competition at OMC 3rd Research Day” Electromagnetic waves affecting the heart of the developing chick embryo: An Electron Microscopic study, Fatma Al Beloshi, Dr. Najam Siddiqi, 26 March, 2018

1st Prize in proposal competition, 5th research Day, College of Medicine, National University, June 1, 2022 “Morphological changes of selected tumor cell lines after exposure to low frequency electromagnetic waves”

QUALIFICATIONS

Qualification	Name of Institution	Dates
MBBS	Bolan Medical College, Pakistan	1983
House Job-General Surgery	Sandamen Civil Hospital, Pakistan	1983-1984
Diploma Hand Surgery	Section of Hand Surgery, Yamanashi Medical University, Japan	1987
PhD Medical Sciences (Morphology)	Yamanashi Medial University, Japan	1992

POSITIONS HELD

Name of Institution	Position Held	Dates	No. of years
Johns Hopkins University, Baltimore, USA	Post doctorate Research Fellow Biomechanics	1992-1995	3 years
Islamic International Medical College, Islamabad, Pakistan	Assistant Professor of Anatomy	1996-1998	2 years
Margalla Institute of Health Sciences, Pakistan	Assistant Professor of Anatomy	1998-Oct. 2000	2 years 4 months
Foundation University Medical College. Rawalpindi, Pakistan	Assistant Professor of Anatomy	Dec. 2000-30 Oct. 2001	1 years
Foundation University Medical College. Rawalpindi, Pakistan	Associate Professor of Anatomy	1st Nov. 2001- Feb. 2006	4 years 3 months

University of Witwatersrand, Johannesburg, South Africa	Lecturer at School of Anatomy	20 Feb. 2006-31 Aug 2006	0 year 6 months
Oman Medical College, Sohar Sultanate of Oman	Associate Professor of Anatomy/ Course Director Human Structure and Neurobiology	3 rd Sep 2006 till date	14 year 2 months
	Total		27 years

TEACHING RESPONSIBILITIES at OMC:

- 1. Human Structure (403) (Ex-Course Director)**
- 2. Course Director Anatomy-I (MPRC0201)**
- 3. Course Director ANA-II (MPRC0202)**
- 4. Course Director, General Embryology & General Histology BIOL 341**
- 5. Neurobiology (Ex-Course Director)**
- 6. General Anatomy (Ex-course Director) (BIOL 207)**
- 7. Problem Based Learning (PBL)**
- 8. PDCI (Clinical Examiner)**

TEACHING EXPERIENCE

Gross anatomy: Initially when I started my career as a faculty member in the Department of Anatomy, I taught gross anatomy, and helped the students with the dissection. We also made specimens of different parts of the body for the museum. I still teach gross anatomy with special interest in hand anatomy, nerves of the limbs, nerves injuries and anatomical deficits as the result of the injuries. I take lectures on various topics in gross anatomy, which includes all the regions of the body. Here our teaching is very clinical orientated, integrated with its microscopic structure and development. I am the Course Director therefore responsible for yearly time table, all exams, and smooth running of the day to day academic activities of the department. I am also the In-charge of SOLE, which is the online web page which we use to deliver lectures and other teaching materials to the students.

A new modern dissection hall has recently been build which is equipped with highly sophisticated dissection tables, camera and TV screens to show the specimens, special designed tanks to keep the cadavers and a cold room. All the equipment was brought from Germany.

Embryology& Histology: I am also teaching General Embryology to the Foundation years for the last 6 years. I use simulation models and videos on fertilization, gastrulation, folding of the embryo; which helps the students to understand the subject. During the Human Structure Block, most of the Special histology is also taught by me which also include the practical in the histology lab.

Neurobiology: I also teach Neuroanatomy in the Neurobiology block, which also include neuro physiology. We have very good brain specimens to conduct laboratory sessions on gross anatomy of the brain and spinal cord.

Examiner: I have good exposure of taking professional examination of the University, which include setting of the question paper, checking the answer sheets and compiling the results.

Seminars/student activities: I have conducted seminars, tutorials and once organized a model and poster competition among the students. The students made excellent models starting from the histological structures such as cell membrane, nucleus, mitochondria etc. to gross anatomy structures such as the ascending and descending tracts, parts of the brain, joints, different organs etc. using different materials. Some students made excellent charts showing steps of fertilization and early development.

USE OF “SOLE” FROM WEST VIRGINIA UNIVERSITY

SOLE is a website developed from West Virginia University, USA. This site is used by all the departments to upload their lectures, the students can login to the site if they are taking the course and can get all the course information from there.

SOLE is also used for examination. The questions (mostly MCQs) are uploaded and the students take the exam on a computer in the examination hall. This system has lots of advantages. The result is ready as soon as the student finished the exam, it has a grade book which compiles the results of all the exams and calculates the final score. This website also has programs which can analyze the questions and gives the statistical analysis of all the questions. This tells us the difficulty index and discrimination index of the questions.

RESEARCH PROJECTS CONDUCTED AS SUPERVISOR /CO-SUPERVISOR

I have vast experience of research in Japan and later at Johns Hopkins University, Baltimore. I also worked with **Prof. Harri Reddi** who discovered Bone Morphogenic proteins and is now working on Cartilage Morphogenic Proteins. We organized the **1st International Congress on BMP** at Johns Hopkins University. During the postdoc fellowship, I also got the opportunity to teach the students at Hopkins, especially during summer vacations when we used to get students from all over the world. I also attended weekly Grand Rounds, and Journal Club. At Hopkins we developed a model of the whole

body on the computer and later used it for teaching the students and doing various simulations such as movements of the shoulder joint during pitching of the baseball.

1. Healing of the Tendon in a tendon-trauma model

A tendon trauma model was developed and the healing of the tendon was studied in different conditions using different barriers to prevent peritendinous adhesions.

2. Electron microscopic study of the tendon trauma model

Electron microscopy was done after 3, 6, 9 and 12 weeks of tendon suture and healing of the tendon was studied in different conditions.

These two studies were done at Yamanashi Medical University, Japan and were supported by a grant from a company in Japan. This was also the thesis for PhD degree.

The following research grants were completed at Johns Hopkins University, Baltimore, USA:

3. Distal tibial allograft size matching and computer stress analysis on the knee joint:

The ultimate goal of this project was to develop better methods of applying allografts to bridge skeletal defects after bone and soft tissue resection. Allografts that does not anatomically match the size of the defect may alter joint kinematics and pressure distribution which may reduce the functional life of the graft. Knee specimens were first divided into groups based on anatomical size. Knee joint simulator at Johns Hopkins Biomechanics laboratory was used to measure the kinematics after using femoral condylar allografts of different sizes. This project has significant clinical value in the limb salvage surgery using massive allograft transplantation.

4. Interactive biomechanical modeling of musculo-skeletal systems

The objectives of this research was:

1. To develop accurate biomechanical models to increase our knowledge and understanding of normal and pathological musculoskeletal mechanics.
2. To simulate different surgical techniques i.e osteotomies of long bones, joint arthroplasties etc. to predict their effect on the reconstructed system.
3. To promote the use of such models in clinical practice to guide treatment of the patients.
4. To realize the “ Virtual Human” on the computer workstation for simulation different surgical conditions such as tendon transfer etc.

5. Computer-aided exercise planning and walking rehabilitation robotic device.

Many physical modalities used for musculoskeletal rehabilitation have not been scientifically validated for their efficacy. Computer-Aided rehabilitation and the use of specially designed robotic devices were developed and used on patients for walking rehabilitation. The gait analysis was done using computers thus determine the progress of the patients.

6. Long bone dimension study

Original long bones and large number of plain radiographs of these long bones were collected from two populations: 1. Caucasians 2. Asians. Caucasians bones were collected from USA while the Asian bones were collected from Japan, Korea, China and Taiwan. Parameters to measure the bones were identified and measurements were made on the bones as well as on plain radiographs for femur, tibia and humerus to determine the bone geometry. This data was used to accurately design the knee prosthesis for the Asian population. Currently all the prosthesis are designed from the Caucasian bone data.

This project will also use to develop a bone bank on the internet which could be assessed worldwide and the size of the allograft needed could be matched with the help of these parameters.

RESEARCH EXPERIENCE

1988-1992 (Japan)

1. Flexor tendon healing after repair in an animal model
2. Electron microscopic studies on tendon healing
3. Prevention of peritendinous adhesions using different methods
4. Gait training in the disabled using a gait training robotic device
5. Use of Orthofix external fixator in multiple trauma patients
6. Early mobilization of multiple trauma patients using a gait training robot

1992-1995 (USA)

1. Hip and Knee joint kinematics
2. Oxygen consumption during walking at constant speed at different body weight support levels using a computer-aided gait training device (REHABOT)
3. Computer-aided preoperative planning for osteotomies of the lower extremity
4. Parameters for distal femoral and proximal tibial allograft size matching
5. Long bone dimension studies in Caucasians and Oriental populations
6. Effects of loading on fracture healing

2006 (Wits University)

1. Long bone dimension studies in African Tribes
2. Effects of vascular endothelial growth factors (VEGF) on pancreatic duct stem cell replication into insulin cells; new strategies in cell therapy for type-I diabetes mellitus

2006-2012 (Oman Medical College)

1. Effects of electromagnetic waves on rapidly multiplying stem cells
2. Quality assurance in medical education
3. Internet based Examination delivery system
4. Teaching Human Anatomy in 16 weeks block: pros and cons
5. Using videos as a teaching tool in gross anatomy
6. Electron microscopic study of cardiac muscle and liver tissues on developing chick embryo exposed to mobile phone electromagnetic waves
7. Long bone dimension study comparing Caucasians and Oriental populations on femur, tibia and humerus.
8. Prevalence of smart phone use by the teenagers and college students in Oman
9. Effects of electromagnetic waves on the human sperm

ADMINISTRATION

1. **Director of Studies:** .Foundation University Medical College. The responsibilities were to organize schedules of the lectures, tutorials, practical of 1st year, 2nd year and 3rd year students for the MBBS course.
2. **Director of Studies:** Margalla Institute of Health Sciences.
3. **Head of Examination cell.** Margalla Institute of Health Sciences
4. **Staff Officer of the Dean:** Foundation University Medical College.
5. **Chief Editor of College magazine:** At Margalla Institute of Health Sciences and Foundation Medical College
6. **Chief Organizer sports week:** Margalla Institute of Health Sciences, Islamic International Medical College and Foundation University Medical College.
7. **At Foundation University Medical College** I performed the duties of the Director of Studies. The responsibilities are to organize all the timetables of the lectures, tutorials, practicals of all the classes of MBBS course.
8. **Director of Studies at Margalla Institute of Health Sciences.**

CURRENT ADMINISTRATIVE DUTIES AT OMAN MEDICAL COLLEGE

1. **Chair, Faculty Development committee, Oman Medical College**
2. **Ex-Chairman, Student's services committee, Oman Medical College**
3. **Chair, Standard 7, College Accreditation Committee**
4. **Member, College's Council**

5. Member, Institutional Review research Board
 6. Faculty Coordinator, Faculty Club
 7. Patron and Incharge, Hiking Club
 8. Incharge, Students Sports Activities
 9. Organized 1st Oman Medical College Alumni reunion (2016, April 28)
 10. Chief Organizer, Oman Medical College 3rd Research Day, March 26, 2018
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9. I organized the sports week, was the Chief Editor of College magazine at Margalla Institute of Health Sciences, Islamic International Medical College and Foundation University Medical College.

STAFF DEVELOPMENT/TRAINING

1. Teacher's Development Course at Wits University, South Africa.
2. Learning and Evaluation Course at Wits University, South Africa
3. High risk student's seminar at Wits University, South Africa
4. Medical education workshop on student assessment, May 6-7, 2009, Oman Medical College
5. Workshop on Biostatistics, Oman Medical College, 15 Dec. 2010
6. SQU E-learning day "moving forward through Moodle 2.0", 11 May, 2011, SQU
7. IT workshop, Oman Medical College, Jan. 2011
8. Facilitator at :Hands on Research Proposal Writing Workshop" at Oman Medical College, Feb.1, 2014
9. "Best Interactive lecture" Workshop, Chief organizer and speaker, Dec. 28, 2016, Oman Medical College, Oman

MEMBERSHIPS

Member, Editorial Board, Biomedical & Pharmacology Journal
 Member, Review Panel for Anatomy paper, Journal Ayub Medical college
 Member, Editorial Board, Journal of Anatomy, Medwin publishers
 Author—IntechOpen publishers, UK

Member, Anatomical Society of Southern Africa



[Citation by International Journals \(344\)—Google Scholar](#)
[h index 9, i10 index 7](#)

PUBLICATIONS

- 1) Toshihito Yamaguchi, Yoshiki Hamada, **Siddiqi, N.A.** et al.; Effects using the splint therapy for diseases of the wrist joint. *J Jpn Soc Surg Hand*, 6:884-887, 1989
- 2) Yoshiki Hamada, Toshihito Yamaguchi, **Siddiqi, N.A.** et al.; Results of the treatment for the post-traumatic painful syndrome. *Cent Jpn J Orthop Trauma* 2(1): 305-308, 1990
- 3) Toshihito Yamaguchi, Yoshiki Hamada, **Siddiqi, N.A.** et al.; A case of ulnar deep branch paralysis caused in Hamate hook fracture. *Rinsho Seikei Geka*, 25:661-664, 1990.
- 4) Yoshiki Hamada, **Siddiqi, N.A.**, Tadahito Toshima et al.; Therapeutic experience with transcutaneous electrical nerve stimulation for reflex sympathetic dystrophy, *Yamanashi Med. J.* Vol 6(1); 45-53, 1991
- 5) Toshiki Yamaguchi, Noriya Akamatsu, **Siddiqi, N.A.**, et al.; An experimental vascularized whole-joint transplantation with a specific suppression of allo-reactivity. *J Ishoku*, 24(6): 571-576, 1991
- 6) Tadahito Toshima, **Siddiqi N.A.**, Toshihito Yamaguchi, Yoshiki Hamada et al.; Treatment of severe injuries of lower extremities. *East Jpn J Clin Orthop*, 32:332-334, 1991
- 7) **Siddiqi, N.A.**, Yoshiki Hamada, Toshihito Yamaguchi et al.; An experimental study on the application of a hydroxyapatite artificial tendon sheath to prevent adhesions after tendon repair. *J Jpn Orthop Assoc.* 65: 561-570, 1991
- 8) **Siddiqi, N.A.**, Yoshiki Hamada, Noriya Akamatsu; Flexor tendon healing in chickens: An electron microscopic study. *International Orthopaedics (SICOT)*, 16:363-368, 1992
- 9) **Siddiqi, N.A.**, Yoshiki Hamada, Noriya Akamatsu; The use of hydroxyapatite artificial tendon sheath to protect the tenorrhaphy site from adhesions: a new possibility. *Artif Organ Today*, 2(3): 185-196, 1992.
- 10) **Siddiqi, N.A.**, Yoshiki Hamada, Noriya Akamatsu; The tendon-hydroxyapatite and alumina ceramics interfaces: A comparative experimental study. *Manuscript book of First International Symposium on Apatite, Japan*, 1992

- 11) Noriya Akamatsu, Yoshiki Hamada, Hideki Kohno, **Siddiqi, N.A.**; Treatment of Osteofibrous Dysplasia by bracing. *International Orthopaedics (SICOT)*, 16:180-184, 1992
- 12) S.T Ali, R N Shaikh, **Siddiqi NA**, Siddiqi PQR. Semen analysis in Insulin-dependent/non-Insulin dependent diabetic men with/without neuropathy. *Archives of Andrology* Vol. 30: 47-54, 1993
- 13) S.T Ali, R N Shaikh, **Siddiqi NA**, Siddiqi PQR. Comparative studies of the induction of erectile response to film and fantasy in diabetic men with and without neuropathy. *Archives of Andrology* Vol. 30: 137-145, 1993
- 14) S.T Ali, R N Shaikh, **Siddiqi NA**, Siddiqi PQR. Conduction velocity of the dorsal nerve of penis and penile brachial index in Insulin dependent/Non-Insulin dependent diabetic men with/without neuropathy. *Archives of STD/HIV research*. Vol. VII, 105-114, 1993
- 15) S.T Ali, R N Shaikh, **Siddiqi NA**, Siddiqi PQR. Erectile impotence in Insulin dependent and non-Insulin dependent diabetic men with/without neuropathy. *Archives of STD/HIV research* Vol. VII: 98-103, 1993
- 16) S.T Ali, R N Shaikh, **Siddiqi NA**, Siddiqi PQR. Serum and urinary levels of pituitary-gonadal hormones in Insulin-dependent and non-Insulin dependent diabetic males with and without neuropathy. *Archives of Andrology* Vol. 30: 117-123, 1993
- 17) S.T Ali, R N Shaikh, **Siddiqi NA**. HIV-1 associated neuropathies in males; impotence and penile electrodiagnosis. *Acta Neurol Belg*. Vol. 94: 194-199, 1994
- 18) **Siddiqi, N.A.**, Takatoshi Ide, Noriya Akamatsu; A computer-aided walking rehabilitation robot. *Am J Phys Med Rehab*. 73:212-216, 1994
- 19) **Siddiqi, N.A.**, Yoshiki Hamada, Noriya Akamatsu; Effects of hydroxyapatite and alumina sheaths on postoperative peritendinous adhesions in chickens. *J Applied Biomaterial*, 6, 43-53, 1995
- 20) **Siddiqi, N.A.**, Rukhsana N, Syed T. Ali; Assessment of a neuropathic factor in HIV-1 associated impotence penile electrodiagnosis. *Acta Physiologica Hungarica* Vol. 84, 73-80, 1996
- 21) Siddiqi NA. Artificial Tendon Sheath. *Annals of Bolan Medical College*. Vol.1, 17-22, 1996
- 22) **Siddiqi, N.A.**, Fabio Gazzani, John Des Jardins, Edmund Y.S. Chao; The use of a robotic device for gait training and rehabilitation. in book "Medicine meets virtual reality" by K.S. Morgan et al. , IOS Press 1997, pp. 440-449.

- 23) **Siddiqi, N.A.**, Frassica, J.F., Chao, E.Y.S.; A new methodology for the size matching of the distal femoral osteochondral allografts. J Pak Orthopedic Association Vol. 9 (suppl.) 10-16, 1997
- 24) Mansoor Illyas, **Najam Siddiqi**. Multiple cases of neglected DDH in a single family treated by single stage operative method. . J Pak Orthopedic Association Vol. 10, 1998
- 25) **Najam Siddiqi**. Artificial tendon sheath. Pakistan J Hand Surg. Vol. 1: 29-36, 1999
- 26) S.T Ali, M. Saleh Waheed, R N Shaikh, , **Siddiqi NA**, Siddiqi PQR. Measurement of the gastric emptying rate in Insulin-dependent and Non-Insulin dependent diabetic men with and without neuropathy and the effect of Metoclopramide on gastric stasis. Pakistan Journal of Pharmacology. Vol. 16; 41-47, 1999
- 27) M. Shaffi, **Najam Siddiqi** and Ijaz Ahmed. Quadriplegia due to aspergillosis of cervicodorsal spine. J CPSP. Vol. 10(8): 308-311, 2000
- 28) **Najam Siddiqi**, Takatoshi Ide, Noriya Akamatsu, Arthroscopy of the hip joint: Indications, operative technique and clinical results. J Surgery, PIMS, 21:27-31, 2001
- 29) **Najam Siddiqi**. Telemedicine and Tele surgery. Editorial. J Surgery, Pakistan Institute of Medical Sciences (PIMS). 2002
- 30) **Najam Siddiqi**, Takatoshi Ide, Yamamoto M, Acetabular labrum tears treated by arthroscopic resection. Journal of Pakistan Orthopaedic Association, 14: 114-121, 2002
- 31) **Najam Siddiqi**. Hydroxyapatite coated implants: the new trends. Editorial. J Surgery, PIMS. Vol. 26, 5-8, 2003
- 32) **Siddiqi, NA**, Hajime Sugiyama, Tadahiho Horiuchi, Prof. Yoshiki Hamada. Hydroxyapatite-coated cementless Total Knee Prosthesis, J Surgery, PIMS, Vol. 27. 44-49, 2004
- 33) **Siddiqi, NA**, Hajime Sugiyama, Prof. Yoshiki Hamada. Hydroxyapatite-coated Total Knee arthroplasty: a short-term follow-up study. JCPSP, Vol. 15 (6), 333-337, June 2005
- 34) Siddiqi N**, Comparison of osteometric femoral bone dimensions among the South Africans of different ethnic groups and South African whites, Egyptian Journal of Forensic Sciences, Vol.3, 8-14, 2013
- 35) Firdous Jahan, Naeem shaikh, Mark Norrish, **Najam Siddiqi**, Rizwan Qasim. Comparison of student's self-assessment to examiners assessment in a formative

observed structured clinical examination: A pilot study. J Postgrad Med Inst, 2013; 27:94-9

36) Firdous Jahan, Huda Al Shibli, **Najam Siddiqi**. Teaching communication skills in undergraduate medical students: Is role play going to help? Middle East Journal of Family medicine, 2013;11: 28-35

37) **Najam Siddiqi**, Muthusami John, Mark Norrish, Geener John, Four month intensive teaching of anatomy: an acceptable foundation for the clinical years, Journal of Ayub Medical College, 2014;26(4), 501-505

38) **Najam Siddiqi**, Muthusami John C, Syed M Saud, Ayesha Shafaq, Marwan Zaki. Effects of mobile phone 1800 Hz electromagnetic field on the development of chick embryo—A pilot study. IICBE 2015 International Conference program, March 18-19, 2015 Dubai (UAE)

39) **Najam Siddiqi**, Muthusami John, Mark Norrish, Thomas Heming. Growth retardation of chick embryo exposed to a low dose of electromagnetic waves. J Ayub Med Coll, 2016; 28(2):224-228

40) **Najam Siddiqi**, Tom Heming, Asem Shalaby, Mohammad Al Kindi, Fatima Al Ghafri, Mobile phone electromagnetic waves causing fatty change in the hepatocytes of the developing chick embryo: Are smart phones too close for comfort? Biomedical and Pharmacology Journal, 10(3): 1139-1147, 2017

41) **Najam Siddiqi**, Firdous Jahan, Faisal Moin, Fatima Al Shehhi and Fatima Al Balushi. Excessive use of mobile phones by medical students: should precautions be taken? Biomedical and Pharmacology Journal, 10(4): 1631-1638, 2017

42) **Najam Siddiqi**. Sexual dimorphism from femoral bone dimensions parameters among African tribes and South Africans of European descent. Int J Forens Sci, 2018, 3(1):135

43) **Najam Siddiqi**, Antonio Valdevit, EYS Chao. Differences in femoral morphology among the Orientals and Caucasians: A comparative study using plain radiographs. Anat Sci Int, June 2018, DOI 10.1007/s12565-018-0450-1

44) **Najam Siddiqi**, Asem Shalaby et al. Mobile phone electromagnetic fields affected the hepatocytes in the White leghorn chicken embryo: an ultrastructural study. In press, Biomedical and Pharmacology Journal, 13: 245-252, 2020 (Oriental Scientific Publishing Company) (Scopus indexed) <https://bit.ly/2TSSI4j>

45) **Najam Siddiqi**, Muhammad Humza Kamal, Dr. Faisal Moin , The prevalence of mobile phone use in the school going children in North Al Batinah region of Oman: a cross sectional study, Biomedical and Pharmacology Journal, 13: 1993-2002, 2020

Presentations at International and National Conferences:

- 1) Akamatsu N, Hamada Y, Kohno H, Horiuchi T, **Siddiqi NA**, *Revision of total knee prosthesis seventeen years after surgery*. 5th International Symposium on Limb Salvage. **Saint-Malo, France, Sept. 6-9, 1988**
- 2) **Siddiqi NA**, Hamada Y, Yamaguchi T, Toshima T, Koyama , *An experimental study of hydroxyapatite tunnel to prevent adhesion after tendon suture*. 8th Japanese Orthopaedic Ceramic Implant Research Conference. **Osaka, Japan, Oct. 12, 1988**.
- 3) Yamaguchi T, Hamada Y, Toshima T, **Siddiqi NA** et al. 3rd Annual Meeting of Eastern Japan Society for Surgery of Hand, **Tokyo, Japan Feb. 18, 1989**
- 4) **Siddiqi NA**, Hmada Y, Yamaguchi T, Toshima T, *An experimental study of hydroxyapatite tunnel to prevent adhesion after tendon suture (Part II)*. 4th Annual meeting of the Japanese Orthopaedic Research Association. **Tokyo, Japan, Sept. 1, 1989**
- 5) Toshima T, Yamaguchi T, Akamatsu N, Hmada Y, **Siddiqi NA**, 4th Annual meeting of the Japanese Orthopaedic Research Association. **Tokyo, Japan, Sept. 1, 1989**
- 6) **Siddiqi NA**, Hmada Y, Akamatsu N, *The effects of a hydroxyapatite artificial tendon sheath on tendon repair: An electron microscopic study*. 11th Japanese Biomaterial conference, **Kyoto, Japan, Oct. 27, 1989**
- 7) Yamaguchi T, Akamatsu N, Hmada Y, Toshima T, **Siddiqi NA** et al. 15th Annual Meeting of Japanese Society of Reconstructive Microscopy, **Tokyo, Japan, Dec. 2, 1989**
- 8) **Siddiqi NA**, Hamada Y, Akamatsu N. *Application of a hydroxyapatite and alumina ceramics to prevent adhesions after tendon repair: a comparative study with tendon sheath repair (Part II)*. 12 th Japanese Biomaterial Conference, **Tsukuba, Japan, Oct 11, 1990**
- 9) **Siddiqi NA**, Akamatsu N, Hmada Y, Yamaguchi T, Toshima T et al., *Prevention of flexor tendon adhesions by using hydroxyapatite and alumina ceramics: a comparative study*. 5th Annual meeting of Japanese Orthopaedic Research Asociation. **Kobe, Japan, Oct. 24, 1990**

- 10) **Siddiqi NA**, Akamatsu N, Hamada Y, Yamaguchi T, Toshima T, Hagino, *The effects of hydroxyapatite artificial tendon sheath on tendon healing and postoperative adhesions*. 5th General Meeting of SIROT (International Research Society for Orthopaedics and Traumatology, **Montreal, Canada**, Sept. 7-10, 1990
- 11) **Siddiqi NA**, T. Ide, Akamatsu N. *Clinical application of medical and healthcare robotics*. 64th Annual meeting of Japanese Orthopaedic Association, **Kyoto, Japan**, April 20, 1991
- 12) **Siddiqi NA**, Akamatsu N, Hamada Y, Yamaguchi T, Toshima T. *The effects of hydroxyapatite artificial tendon sheath on tendon healing and postoperative adhesions*. The 5 annual meeting of Apatite Symposium, **Tokyo, Japan**, Dec. 5-6, 1990
- 13) **Siddiqi NA**, Gazzani F, Chen M, Campbell B, Ide T, Chao EYS. *Application of rehabilitation robot for mobility and exercise training in severely disabled patients*. 13 Southern biomedical Engineering Conference, university of District of Columbia, **Washington DC**, April 16-17, 1994
- 14) **Siddiqi NA**, Hamada Y, Ide T, Akamatsu N. *Effects of hydroxyapatite and alumina barriers in reducing tendon adhesions after severe trauma*. 13 Southern biomedical Engineering Conference, university of District of Columbia, **Washington DC**, April 16-17, 1994
- 15) **Siddiqi NA**, Gazzani F, Ide T, Campbell K, Chao EYS. *Effects of partial weight bearing on gait relearning*. 2nd World Congress of Biomechanics, **Amsterdam**, The Netherlands, July 10-15, 1994
- 16) **Siddiqi NA**, *Biomechanics and physiology of robotic-assisted gait exercise*. Advances in Orthopaedic Biomechanics and their clinical application. Workshop III: Robotic-assisted exercise and rehabilitation. Johns Hopkins University, **Baltimore**, Oct. 27-30, 1994
- 17) **Siddiqi NA**, *Robotic assisted gait training*. ASEAN travelling fellows scientific session. **Johns Hopkins University, Baltimore** May 23, 1994
- 18) **Siddiqi NA**, Gazzani F, Ide T, Chao EYS. *Effects of partial weight bearing on gait relearning*. American Society of Mechanical Engineers (ASME), **Chicago**, Nov. 9-11, 1994
- 19) **Siddiqi NA**, Genda E, Chao EYS. *Dimensional parameters for osteochondral allograft size matching*. 8th International symposium on limb salvage. Combined meeting of European musculo-skeletal oncology society and American musculo-skeletal tumour society, **Florence, Italy**, May 8-9, 1995

- 20) **Siddiqi NA**, Delaney C, Frassica FJ, Chao EYS. *Shape and Dimensional parameters for osteochondral allograft size matching*. Combined Orthopaedic Research Societies Meeting (America, Europe, Canada and Japan) **San Diego, California**, Nov. 6-8, 1995
- 21) **Siddiqi NA**, Chen M, Gazzani F, Chao EYS. *Biomechanics and physiology of gait under partial weight support*. Combined Orthopaedic Research Societies Meeting (America, Europe, Canada and Japan) **San Diego, California**, Nov. 6-8, 1995
- 22) **Siddiqi NA**, et al. *Arthroscopic surgery of the hip: operative technique and clinical results*. 11th Pakistan Orthopedic Association Annual Meeting. **Quetta**, 19-21, Oct. 1996
- 23) **Siddiqi NA**, et al. Computer assisted preoperative planning in Orthopedic Surgery. 11th Pakistan Orthopedic Association Annual Meeting. **Quetta**, 19-21, Oct. 1996
- 24) **Siddiqi NA**, et al. Biomechanics of Kienbock's disease: A computer simulation. 4th Annual Congress of Pakistan Society for Surgery of the Hand. Dec. 27-28, 1996, King Edward Medical College, **Lahore**.
- 25) M. Shaffi, **Najam Siddiqi** and Ijaz Ahmed. Quadriplegia due to aspergillosis of cervicodorsal spine. 15th Pakistan Orthopedic Association Annual Meeting. **Lahore**, Oct. 2000
- 26) Mansoor Illyas, **Najam Siddiqi**. Multiple cases of neglected DDH in a single family treated by single stage operative method. 16th Pakistan Orthopedic Association Annual Meeting. **Karachi**, Oct. 2001
- 27) **Siddiqi, NA**, Hajime Sugiyama, Prof. Yoshiki Hamada. HA-coated TKA: a short-term follow-up study. 77th Annual Congress of Japanese Orthopaedic Association, May 20-23, 2004, **Kobe, Japan**
- 28) **Siddiqi NA**, Takatoshi Ide: Exercise and gait training in severe disabled patients using a gait training robot. 19th ORTHOCON, 25-28 March, 2005, Islamabad, Pakistan
- 29) **Siddiqi N**, Takatoshi Ide, EYS Chao. Direct Human Contact Robot for gait training and exercise therapy in severely disabled patients. 2006 Health Sciences research Day, 23th Aug. 2006, University of Witwatersrand, Johannesburg, South Africa Johannesburg
- 30) **Siddiqi N**, Comparison of femoral dimensional parameters in African tribes. 37th Annual Conference of the Anatomical Society of Southern Africa, 22-25th April, 2007, North West Province, **South Africa**

- 31) **Siddiqi N**, Yoshiki Hamada*, Takatoshi Ide Anatomy and biomechanics of the total Hip system: an experimental study. 37th Annual Conference of the Anatomical Society of Southern Africa, 22-25th April, 2007, North West Province, **South Africa**
- 32) **Siddiqi N**, Femoral dimensional parameters in African tribes. American Association of Anatomists Annual Congress, San Diego, USA, 8-10 April, 2008-04-08
- 33) **N Siddiqi**, T Ide, EYS Chao A direct human contact robot for gait training in severely disabled patients., 1st International medical student conference, Sohar, Oman, March 26-28, 2008-04-08
- 34) **Siddiqi N**, Total knee replacement in severe cases of rheumatoid arthritis. Update in Rheumatology Symposium/CME; 1st International medical student conference, Sohar, Oman, March 26-28, 2008-04-08
- 35) **Siddiqi N**, MAL Ajmani, PA Kumar, Klink, Teaching anatomy in 16 weeks: a challenge. International Congress of Medical Education, 2010, Abu Dhabi, Dec. 4-7, 2010
- 36) **Najam Siddiqi**, Mark Norrish, Tom Heming, Internet based examination delivery system. AEME Congress, March 3-5, 2012, Islamabad, Pakistan
- 37) **Najam Siddiqi**, Vinod Nambiar, Mubarak Pasha, Quality Assurance in Medical Education: The pathway to excellence "An OMC portrait" AEME Congress, March 3-5, 2012, Islamabad, Pakistan
- 38) **Najam Siddiqi**, Tom Heming, Effects of Radiofrequency waves (RFW) from mobile phone on the embryonic stem cells, Experimental Biology congress, May 20-24, 2013, Boston, USA
- 39) **Najam Siddiqi**. Four month intensive teaching of anatomy: an acceptable foundation for the clinical years, AEME, Lahore, 7-9 March, 2014
- 40) Aya Al Rawahi, Khulood As Kalbani, Ahmed Al Sinani, **Najam Siddiqi**, Maximizing the recall of Anatomy in the clinical years: Quo Vadis. 1st Research Day, Boshwar Campus, OMC, 23 April, 2014
- 41) Nithin Thomas, Marwan Zaki, Ruqiya Samad, Harshini Ashogan, **Najam Siddiqi**, Morphological and histological changes in chick embryo due to mobile phone electromagnetic waves (RFW). 1st Research Day, Boshwar Campus, OMC, 23 April, 2014
- 42) **Najam Siddiqi**, Muthusami John C, Syed M Saud, Ayesha Shafaq, and Marwan Zaki Effects of Mobile Phone 1800 Hz Electromagnetic Field on the Development of Chick Embryos – A Pilot Study. IICBE-Dubai, 18-19 March, 2015

- 43) **Najam Siddiqi**, Nabila Ali Syeda, Sultan Mohammad Al Mazroni, Marwa Saleh, Syed Samir Anis, Mustafa Wasifuddin, Mobile phone's Radio Frequency Electromagnetic waves ---A possible invisible environmental carcinogen? IICBE-Dubai, 18-19 March, 2015
- 44) **Najam Siddiqi**. Four month intensive teaching of anatomy: an acceptable foundation for the clinical years, Department of Anatomy, Shifa College of Medicine, Islamabad, February, 2015
- 45) **Najam Siddiqi**, Dr. Syed Ali Wajid. Effects of mobile phones electromagnetic waves on CNS and retina (in chick embryo). Sohar hospital Training and staff development, "Ocular emergencies" Department of Ophthalmology, Ministry of Health, Nov.12, 2015, Majan Hall, Sohar
- 46) Asisha Al Balushi, Abeer Al muqbali, Afaf Al Farsi, **Najam Siddiqi**, Mobile phone electromagnetic waves (REW) causing fatty change in the developing liver of chick embryo. Research Day, SQU, May 8, 2016
- 47) Fatima Shihi, Aamir Rafe, Rana Hamood, **Najam Siddiqi**. The prevalence of mobile phone use by Oman Medical College students in the Sultanate. Research Day, SQU, May 8, 2016
- 48) SQU Research day "**Best Research Idea**": Effects of mobile phone radiofrequency electromagnetic waves (REW) on the development of chick embryo. Aaisha Al Balushi, May 8, 2016
- 49) **Najam Siddiqi**, 1st International Conference on Frankincense and medicine plants: Recent advances in research and industry. Sultan Qaboos University, Oman Oct30-Nov 1, 2018
- 51) **Najam Siddiqi**, Takatoshi Ide, EYS Chao, A Direct Human Contact Robot for Gait Training in Severely Disabled Patients. Feb.13, 2019, 3rd Research Conference, Sohar University, Sohar
- 52) **Najam Siddiqi**, 21st ISANH and 4th Middle East ISANH World Congress, Sultan Qaboos University, March 4-5, 2019
- 53) **Najam Siddiqi**, Naseer Al Nizwani, Zoya Shaikh, Asem Shalaby, Yahya Tamimi, the effects of electromagnetic field on mitochondria: an ultra-structural and biochemical study. Experimental Biology Annual Congress, April 6-10, 2019, Rosen Center Hotel, Orlando, USA

BOOK CHAPTERS

- 1) **Siddiqi NA**, Fabio Gazzani, John Des Jardins, EYS Chao. The use of a robotic device for gait training and rehabilitation. in book named "**Medicine Meets Virtual Reality**" K.S. Morgan et al. (Eds.) ISO Press, USA, 1997
- 2) **Siddiqi NA**, et al. Medical Robotics: the future. In "**Text Book of Community Medicine**" edited by Prof. H.A. Siddiqi, National Book Foundation, Pakistan, 1997
- 3) **Najam Siddiqi**, Naseer Al Nizwani. Electromagnetic waves affect cells proliferation in vivo. Book Chapter for "**Electromagnetic waves**" Intech Open, London, UK (accepted on Jan.24, 2019)

SPORTS/HOBBIES

- 1) **2nd position, 10th OMC Table tennis Tournament, March 2015**
- 2) **2nd position, 9th OMC Table tennis Tournament, Nov. 2014**
- 3) **2nd position in OMC Photographic competition 2013**
- 4) **In charge, OMC Hiking Club**
- 5) **In Charge, Faculty Club, OMC**

Sincerely yours



Dr. Najam Siddiqi

Associate Professor of Anatomy