

Personal Information

Name	Heba M. Kalbouneh
Place and date of birth	Wadi Seer 28/12/1982
Faculty	Medicine
Department	Anatomy and histology

Qualifications

Qualification	Specialization	University of donor rank	Date
PhD	Anatomy and cell biology	University of Heidelberg	2013
MSc	Anatomy, Histology & Embryology	University of Jordan	2008
DDS	Doctor of dental surgery	University of Jordan	2005

Specialization and domain of interest

Specialization	Anatomy and cell biology
Domain of interest	Neurological diseases, Radiographic and clinical anatomy

Specialization and domain of interest**Title and abstract of the doctoral thesis (within 150 words)****The functional consequences of gephyrin phosphorylation on inhibitory synapses.**

CDK5 has been implicated in neural functions including growth, neuronal migration, synaptic transmission and plasticity of excitatory chemical synapses. Here we report robust effects of CDK5 on phosphorylation of the postsynaptic scaffold protein gephyrin and clustering of inhibitory GABAA receptors in hippocampal neurons. shRNA-mediated knockdown of CDK5 and pharmacological inhibition of cyclin-dependent kinases reduced phosphorylated gephyrin clusters and postsynaptic $\alpha 2$ -containing GABAA receptors. Phosphorylation of S270 is antagonized by PP1/PP2a phosphatase and site directed mutagenesis and in vitro phosphorylation experiments indicate that S270 is a putative CDK5 phosphorylation site of gephyrin. Our data suggest that CDK5 plays an essential role for the stability of gephyrin-dependent GABAA receptor clusters in hippocampal neurons.

Career Experience

Job Title	Place of work	Date
Assistant professor	Department of Anatomy, School of Medicine, University of Jordan	Sep 2013- Current
PhD student	Department of Anatomy, Faculty of Medicine, University of Heidelberg	Sep 2010-Sep 2013
Lecturer	Department of Anatomy, School of Medicine, university of Jordan	Oct 2008- Sep 2010
Teaching and research assistant	Department of Anatomy, School of Medicine, University of Jordan	Sep 2006- Oct 2008
Dentist	Private dental clinic	Feb 2006- Sep 2006
Dentist-internship	Ministry of health	July 2005-Jan 2006

Administrative works and committees

Administrative work and committee	Date
Graduation Committee, Faculty of Medicine, University of Jordan	2013/2014 and 2014/2015
Representative of Anatomy department at faculty board, Faculty of Medicine, University of Jordan	2013/2014 and 2014/2015
Student Counseling Committee, Faculty of Medicine, University of Jordan	2015/2016
Student Research Forum (SRF) Judging, Faculty of Medicine, University of Jordan	2015/2016
Curriculum Committee, Faculty of Medicine, University of Jordan	2015/2016
Educational Credential Assessment, Faculty of Medicine, University of Jordan	2015/2016

Recent Publications within last five years

Name of researcher	Research title, Publisher, Date
Kalbouneh H , Alajoulin O, Alsalem M, Humoud N, Shawaqfeh J, Alkhouljah M, Abu-Hassan H, Mahafza W, Badran D	(2017) Incidence and anatomical variations of accessory navicular bone in patients with foot pain: A retrospective radiographic analysis. Clin Anat.
Alsoleihat F, Alshayyab M, Kalbouneh H , Al-Zer H, Ryalat S, Abeer Alhadidi, Saoud H, Shaweesh A, Al-Omouh S, Khraisat A	(2017) Age Prediction in the Adult based on the Pulp-to-Tooth Ratio in lower third molars: A Cone-beam CT study. International Journal of Morphology 35.
O'Sullivan G.A., Jedlicka P., Chen H.X., Kalbouneh H. , Ippolito A., Deller T., Nawrotzki R.A., Kuhse J., Kalaidzidis Y.L., Kirsch J., Schwarzacher S.W., Betz H.	(2016) Forebrain-specific loss of synaptic GABA receptors results in altered neuronal excitability and synaptic plasticity in mice. Mol Cell Neurosci. 72:101-113.
Heba M Kalbouneh , Abdullah O Alkhawaldah, Omar A Alajoulin, Mohammad I Alsalem	(2016) The patellofemoral joint alignment in patients with symptomatic accessory navicular bone. Italian Journal of Anatomy and Embryology. 121(2): 148-158
Mohammad Alsalem, Ahmad Altarifi, Heba Kalbouneh , Heba Al- Zer, Belal Azab, Khalid El- Salem	(2016) Role of PPAR α and PPAR γ in Mediating the Analgesic Properties of Ibuprofen in vivo and the Effects of Dual PPAR α/γ Activation in Inflammatory Pain Model in the Rat. International Journal of Pharmacology. 12:812-820
Islam Tarawneh, AL-Ajoulin O, Abdullah Alkhawaldah, Heba Kalbouneh , Amjad Shatarat, Darwish Badran, Maher Hadidi	(2016) Normal values of Quadriceps angle and its correlation with anthropometric measures in a group of Jordanians. JRMS 23:53-58.
Al-Zer H., Kalbouneh H.	(2015) Dental pulp stem cells-derived schwann cells for peripheral nerve injury regeneration. Neural Regeneration Research. 10:1945-1946
Alajoulin O.A., Alsbou M.S., Ja'afreh S.O., Kalbouneh H.M.	(2015) Spontaneous Achilles tendon rupture in alkaptonuria. Saudi Med J. 36:1486-1489
Badran D.H., Kalbouneh H.M. , Al-Hadidi M.T., Shatarat A.T., Tarawneh E.S., Hadidy A.M., Mahafza W.S.	(2015) Ultrasonographic assessment of splenic volume and its correlation with body parameters in a Jordanian population. Saudi Med J. 36:967-972

Kalbouneh H. , Schlicksupp A., Kirsch J., Kuhse J.	(2014) Cyclin-dependent kinase 5 is involved in the phosphorylation of gephyrin and clustering of GABAA receptors at inhibitory synapses of hippocampal neurons. PLoS One. 9:e104256.
Kuhse J., Kalbouneh H. , Schlicksupp A., Mukusch S., Nawrotzki R., Kirsch J.	(2012) Phosphorylation of gephyrin in hippocampal neurons by cyclin-dependent kinase CDK5 at Ser-270 is dependent on collybistin. J Biol Chem. 287:30952-30966.

Scientific conferences and symposia

Conference Title	Place and date of conference	Type of participation
Arab Simulation Conference in Medical Education	Bahjat Al-Talhouni Auditorium- University of Jordan. 2016	Participant
8th World Congress on Healthcare and Medical Tourism (<i>Health Congress 2016</i>)	Dubai 2016	Speaker

Training courses

Name of course	Date
<i>Taylor & Francis Research Seminar- How To Get Author Published, University of Jordan</i>	<i>28th March 2017</i>
<i>Scientific research and academics: importance, sources of funding and methods of documentation. Association of Jordanian Women Academics</i>	<i>18th March 2017</i>
<i>Web of science and Endnote training Workshop. The intellectual Property and Science department of Thomson Reuters, University of Jordan</i>	<i>26th Oct. 2016</i>
<i>How to integrate basic clinical skills and simulation adjuncts in an undergraduate medical curriculum, University of Jordan</i>	<i>6th Oct. 2016</i>
<i>Briefing and debriefing practices in simulation, University of Jordan</i>	<i>5th Oct.2016</i>
<i>Academic and Educational Counseling Workshops, School of Medicine, University of Jordan</i>	<i>2nd April, 2016</i>
<i>Presenting Research Results, Department of Key Competencies and Graduate Academy of the University of Heidelberg, Germany.</i>	<i>14th -15th May 2012</i>
<i>Laboratory Animal Science and Methods of Animal Experimentation, Faculty of Biomedical Sciences, Ruprecht-Karls-University Heidelberg, Germany</i>	<i>16th -27th January2012</i>
<i>Development of Educational Skills, University of Jordan</i>	<i>5th -13th June 2009</i>

Teaching activities

Taught Courses	Bachelor	Graduate
Introduction to histology for medicine	x	<input type="checkbox"/>
Histology 1 for dentistry	x	<input type="checkbox"/>
Anatomy of limbs, abdomen and thorax for dentistry	x	<input type="checkbox"/>
General anatomy for nursing	x	<input type="checkbox"/>
Anatomy 2 for rehabilitation	x	<input type="checkbox"/>

Membership in scientific and professional bodies and societies

Name and place of scientific body and society	Date
Jordan Dental Association	2006
Association of Jordanian Women Academics	2015
Alkaptonuria Research Association	2015
Three circles of ALEMAT	2014
German Graduate Association	2013

Awards

Name of Award	Donor and place of award	Date