

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	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
Associate professor	Department of Anatomy, School of Medicine, University of Jordan	Sep 2017-current
Assistant professor	Department of Anatomy, School of Medicine, University of Jordan	Sep 2013- Sep 2017
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 2014/2015
Representative of Anatomy department at faculty board, Faculty of Medicine, University of Jordan	2013/2014 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	2016/2017
Educational Credential Assessment, Faculty of Medicine, University of Jordan	2016/2017
Head of a Committee assigned by the dean (studying the applicability of Anatomy TV -powered by Primal Pictures- in anatomy education)	2018
Coordinator of Musculo-Skeletal System	2017/2018 2018/2019
Graduation Committee, Faculty of Medicine, University of Jordan	2019/ 2020
Scientific Research Committee, Faculty of Medicine, University of Jordan	2019/ 2020
Representative of Faculty of Medicine at Community Service for promotion Committee	2019/ 2020
Research Evaluation at The King Abdullah 2 Fund for Development	2019/ 2020

Recent Publications within last five years

Name of researcher	Research title, Publisher, Date
Alsalem M, Ahmad A, Haddad H, Aldossary S, Kalbouneh H , Aldaoud, Saleh, Alsalem K.	(2019) Antinociceptive and Abuse Potential Effects of Cannabinoid/Opioid Combinations in a Chronic Pain Model in Rats. Brain Sciences
Kalbouneh H , Alajoulin O, Alsalem M, Mansour Y, Shwaqfeh J, Altarawneh T, Alhusni D, Almuhtaseb M.	(2019) Incidence of symptomatic os trigonum among non-athletic patients with ankle sprain. Surgical and Radiological Anatomy.

Mustafa A, Abusamara H, Kanaan N, Alsalem M, Allouh M, Kalbouneh H.	(2019) Morphometric study of the facial skeleton in Jordanians: A computed tomography scan-based study, Forensic science international.
Kalbouneh H , Alzghoul L.	(2019) Neonatal Exposure to Citalopram Increases Pyramidal and Granular Cell Density in Dorsal Hippocampus of Male but not Female Adult Rats: A Quantitative Nissl Study. International journal of morphology
Alsalem M, Haddad M, Aldossary S., Kalbouneh H , Azab B, Dweik A, Imraish A, Alsalem K.	(2019) Effects of Dual Peroxisome Proliferator-Activated Receptors α and γ Activation in Two Rat Models of Neuropathic Pain. PPAR research
Alsalem M, Haddad M, Aldossary S., Kalbouneh H , Altarifi A, Jaffal S, Abbas M, Aldaoud N, Alsalem K.	(2019) Role of cannabinoid receptor 1 and the peroxisome proliferator-activated receptor α in mediating anti-nociceptive effects of synthetic cannabinoids and a cannabinoid-like compound. Inflammopharmacology
Aldossary S, Alsalem M, Kalbouneh H , Haddad M, Azab B, Alshboul O, Mustafa A, Obiedat S, Alsalem K.	(2018) The role of transient receptor potential vanilloid receptor 1 and peroxisome proliferator-activated receptors- α in mediating the antinociceptive effects of palmitoylethanolamine in rats. Neuroreport
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. 30 (4): 436–444
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: 488-493
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

2 nd Gobal conference on Mental Health	Bahjat Al-Talhouni Auditorium- University of Jordan. 5th -7th October 2017	Participant
The 9th Scientific Research Conference	Agriculture Faculty, University of Jordan. 9 November, 2019	Participant

Training courses

Name of course	Date
<i>Scientific Research Skills</i>	28 th November, 2019
<i>Ethics of teaching From A Practical Perspective</i>	27 th November, 2019
<i>Patents and Intellectual Properties</i>	19 th November, 2019
<i>Management and Leadership Skills</i>	18 th November, 2019
<i>Introduction to Simulation in Medical Education</i>	14 th November, 2019
<i>Publishing Your Paper in a Peer Reviewed journal by Emerald Publishing</i>	7 th November, 2019
<i>Training and management meeting ERASMUS PLUS project MediTec University of Malta</i>	26-29 June, 2019
<i>Taylor & Francis Research Seminar- How To Get Author Published, University of Jordan</i>	28 th March, 2017
<i>Scientific research and academies: importance, sources of funding and methods of documentation. Association of Jordanian Women Academics</i>	18 th March, 2017
<i>Web of science and Endnote training Workshop. The intellectual Property and Science department of Thomson Reuters, University of Jordan</i>	26 th Oct, 2016
<i>How to integrate basic clinical skills and simulation adjuncts in an undergraduate medical curriculum, University of Jordan</i>	6 th Oct, 2016
<i>Briefing and debriefing practices in simulation, University of Jordan</i>	5 th Oct, 2016
<i>Academic and Educational Counseling Workshops, School of Medicine, University of Jordan</i>	2 nd April, 2016

<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 January, 2012</i>
<i>Development of Educational Skills, University of Jordan</i>	<i>5th -13th June, 2009</i>

Teaching activities

Taught Courses	Bachelor	Graduate
General Histology for Master Students		x
Musculoskeletal System	x	
Hemato-Lymphoid System	x	
Anatomy and Histology for Pharmacy	x	
Introduction to Histology for Medicine	x	
Histology 1 for Dentistry	x	
Anatomy of limbs, abdomen and thorax for Dentistry	x	
General Anatomy for Nursing	x	
Anatomy 2 for Rehabilitation	x	

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