

Kingdom of Saudi Arabia  
Ministry of Higher Education  
**KING FAISAL UNIVERSITY**

# **STAFF RESEARCH HANDBOOK**



**2017**

**COLLEGE OF CLINICAL PHARMACY**

**Kingdom of Saudi Arabia**  
**Ministry of Higher Education**  
**KING FAISAL UNIVERSITY**  
**COLLEGE OF CLINICAL PHARMACY**

**STAFF RESEARCH**  
**HANDBOOK**

**2017**





# STAFF RESEARCH HAND BOOK

2017

## College Vision

To be recognized nationally and internationally for preparing **role models** in pharmacy practice, education and research through its commitment to **community engagement**.

## College Mission

To excel in pharmacy education, patient centered care, community engagement and research

## College Values

Based on Islamic Principles, the College of Clinical Pharmacy promotes an environment of mutual respect and collaboration, where we value:

- Excellence : Pursue exceptional quality and performance in all that we do
- Responsiveness to community
- Lifelong, self directed learning
- Creativity
- Integrity:

at all levels of teaching, training, research and patient care.

## College Strategic Goals

1. Prepare Pharm D graduates through **excellence in Pharmacy education and training**
2. **Recruit**, develop and retain internationally recognized, competent faculty members in all the disciplines.
3. Continue to develop **administration** that will provide leadership for achievement of strategic goals
4. Maintain and enhance the **quality assurance management**, verified through accreditation by National and International Accrediting agencies in Pharmacy Education
5. Engage the **local, national and international** communities for mutual benefits through expanding the opportunities for collaboration, continuing professional development and postgraduate education.
6. Conduct exceptional **research** in basic and clinical sciences.

### CONTENTS

Pharmaceutical sciences	03
Biomedical sciences	54
Pharmacy practice	66
Research Instruments	79

## Dr. Ibrahim A. Alhaider

*B. Pharm., King Saud University, KSA,. Ph. D., Univer. of Houston, Houston, USA.*

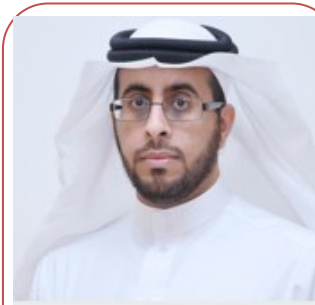
**TEACHING EXPERIENCE:** Involved in teaching undergraduate students mainly pharmacology.

### RESEARCH INTERESTS:

1. Studying the effects of Alzheimer's disease on the hypothetical model of learning and memory using electrophysiological recordings.
2. Molecular Pharmacology of memory in the hippocampus, including the levels of crucial proteins such as brain derived neurotrophic factors and calcium-calmodulin kinase II.
3. Investigating the impact of sleep deprivation on memory-related tasks.
4. The correlation between environmental factors such as caffeine, nicotine, and exercise and spatial memory.

### LIST OF PUBLICATIONS:

1. Tahir Mehmood Khan, Syed Azhar Syed Sulaiman, Ibrahim Al-Haider, & Abdul Aziz Alhafez . Pregabalin safety assessment among patients with uraemic pruritus, Letter to the Editor, Australasian Medical Journal, AMJ 2014, 7, 2, 81-82.
2. Alhaider IA. Effects of edavarone on scopolamine induced dementia in experimental rats, Int J Pharmacol. 2013, 9(4): 271-276.
3. Alhaider IA, Mueen Ahmed K.K., Gupta BM. Pharmaceutical research in the Kingdom of Saudi Arabia: A scientometric analysis during 2001–2010, Saudi Pharmaceutical Journal, 2013.
4. Tahir Mehmood Khan, Ibrahim Al-Haider, and Mohamed Azmi Hassali Linguistic validation of the 5D itching scale to Arabic in patients with end-stage kidney disease. Journal of Renal Care, 39(4):222 (2013).
5. Alhaider IA, Mueen Ahmed K.K., Gupta BM. Global research output on date palm (Pheonix dactylifera): a 12 years scientometric perspective. Scientometrics, 2013.



*Room Location : College of  
Clinical Pharmacy,  
Ph.: 035817175  
Extn.: 222  
IP Phone : 03-5899896  
Email :  
ialhaider@kfu.edu.sa*

### Research Grants

#### Received :

- ◆ *Evaluation of long-term effect of stem-cell therapy for cardiac repair, KACST grant, Strategic Plan, 2012-2014, 200000 SAR.*
- ◆ *Evaluating the therapeutic potential of water-soluble compounds extracted from Phoenix dactylifera (Date fruits) in myocardial infarction: Role of circulating progenitor cells Date Palm Research Center Grant, 2012-2014, 539000 SAR*

### **Chapters in a Book**

◆ *Karim A. Alkadhi, Munder A. Zagaar, Ibrahim A. Alhaider and Karem H. Alzoubi Neuroprotective Effects of Caffeine in Sleep Deprivation in Caffeine: Chemistry, Analysis, Function and Effects, Victor R. Preedy (ed.), 2012 (RSC publishing) King's College, London.*

◆ *Karim A. Alkadhi, Ibrahim Alhaider, Munder Zagaar, Karem Alzoubi. "Food and Nutritional Components in Focus: caffeine: chemistry, analysis, function and effects." Victor R. Preedy (ed.), 2012. The Royal Society of Chemistry (RSC Publishing), King's College, London.*

6. Alhaider IA. Sub-chronic treatment of calcineurin inhibitor averts impairment of cognitive function in animal model of amnesia, *African Journal of Pharmacy and Pharmacology*, 2013, 7(47), 2998-3003. doi:10.5897/AJPP2013.3925.
7. Alhaider IA. Ameliorative Impact of Piracetam on Cognitive Dysfunction Associated with Animal Model of Alzheimer's Disease, *Zagazig J. Pharm. Sci.*, 2013, 22(2), 1-7.
8. Zagaar M, Dao A, Levine A, Alhaider I, Alkadhi K. Regular exercise prevents sleep deprivation associated impairment of long-term memory and synaptic plasticity in the CA1 area of the hippocampus. *Sleep*. 2013, 36(5):751-61. doi: 10.5665/sleep.2642.
9. Zagaar M, Dao A, Alhaider I, Alkadhi K. Regular treadmill exercise prevents sleep deprivation-induced disruption of synaptic plasticity and associated signaling cascade in the dentate gyrus. *Mol Cell Neurosci*. 2013, 56: 375-383. doi: 10.1016/j.mcn.2013.07.011.
10. Alzoubi KH, Khabour OF, Alhaider IA, Aleisa AM, Alkadhi KA. Diabetes impairs synaptic plasticity in the superior cervical ganglion: possible role for BDNF and oxidative stress. *J Mol Neurosci*. 2013, 51(3): 763-770. doi: 10.1007/s12031-013-0061-1.
11. Nair AB, Singh K, Al-Dhubiab BE, Attimarad M, Harsha S, Alhaider IA. Skin uptake and clearance of ciclopirox following topical application. *Biopharm Drug Dispos*. 2013, 34: 540-549. doi: 10.1002/bdd.1866.
12. Alkadhi K, Zagaar M, Alhaider I, Salim S, Aleisa A. Neurobiological consequences of sleep deprivation. *Curr Neuropharmacol*. 2013, 11(3): 231-249. doi: 10.2174/1570159X11311030001.
13. Almogbel Y, Abughosh S, Almogbel F, Alhaider I, Sansgiry S. Predictors of smoking among male college students in the Kingdom of Saudi Arabia. *Eastern Mediterranean Health Journal*, 2013, 19(11): 909-914.
14. Nair AB, Kumria R, Harsha S, Attimarad M, Al-Dhubiab BE, Alhaider IA. In vitro techniques to evaluate buccal films. *J Control Release*. 2013, 166(1): 10-21. doi: 10.1016/j.jconrel.2012.11.019.

*Success is the ability to go from one failure to another with no loss of enthusiasm.*

15. Khan TM, Al-Haider I, Syed Sulaiman SA, Hassali MA. Linguistic validation of the 5d itching scale to arabic in patients with end-stage kidney disease. *J Ren Care*. 2013, 39(4): 222-227. doi: 10.1111/j.1755-6686.2013.12038.x.
16. Elnakish MT, Hassan F, Dakhllallah D, Marsh CB, Alhaider IA, Khan M. Mesenchymal stem cells for cardiac regeneration: translation to bedside reality. *Stem Cells Int*. 2012;2012:646038. doi: 10.1155/2012/646038. Epub 2012 Jun 7.
17. Attimarad M, Al-Dhubiab BE, Alhaider IA, Nair AB, N SH, K MA. Simultaneous determination of moxifloxacin and cefixime by first and ratio first derivative ultraviolet spectrophotometry. *Chem Cent J*. 2012, 6(1): 105. doi: 10.1186/1752-153X-6-105.
18. Zagaar M, Alhaider I, Dao A, Levine A, Alkarawi A, Alzubaidy M, Alkadhi K. The beneficial effects of regular exercise on cognition in REM sleep deprivation: behavioral, electrophysiological and molecular evidence. *Neurobiol Dis*. 2012, 45(3): 1153-1162. doi: 10.1016/j.nbd.2011.12.039.
19. Tran TT, Srivareerat M, Alhaider IA, Alkadhi KA. Chronic psychosocial stress enhances long-term depression in a subthreshold amyloid-beta rat model of Alzheimer's disease. *J Neurochem*. 2011, 119(2): 408-416. doi: 10.1111/j.1471-4159.2011.07437.x.
20. Alzoubi KH, Alhaider IA, Tran TT, Mosely A, Alkadhi KK. Impaired neural transmission and synaptic plasticity in superior cervical ganglia from  $\beta$ -amyloid rat model of Alzheimer's disease. *Curr Alzheimer Res*. 2011, 8(4): 377-384.
21. Aleisa AM, Helal G, Alhaider IA, Alzoubi KH, Srivareerat M, Tran TT, Al-Rejaie SS, Alkadhi KA. Acute nicotine treatment prevents REM sleep deprivation-induced learning and memory impairment in rat. *Hippocampus*. 2011 Aug;21(8):899-909. doi: 10.1002/hipo.20806.

### **DSR, KFU Research Grants received**

1. Dr. Maged El-Sayed Mohamed, Dr Ibrahim Alhaider ,Dr Hany Ezzat Khalil, Dr Omar Mohafez, Phytochemical and biological screening of essential oils from some aromatic plant families in the eastern area (Al-Ahsa) of Saudi Arabia, KFU, DSR project, 2014-2015, SAR. 112400
2. Dr. Promise Emeka, Dr. Mohamed Morsy, Dr Ibrahim Alhaider, Dr Maged Elsayed, Subchronic administration of mitoxantrone and the influence of inducing and inhibiting agents on the induction of cardiotoxicity -A metabolic evaluation in mice. KFU, DSR project, 2014-2015, SAR. 72400

## DSR Projects

3. Dr. Mohammed Abdou Khedr, Dr. Ibrahim Al-Haider, Dr. Bandar Al- Dhubiab, Dr. Tamer Mustafa, Dr. Maged El- Sayed. Design and Synthesis of Novel Phosphonate Containing molecules that could be used in Treatment of cancer, KFU, DSR Project, 2014-2015, SAR. 96100
4. Dr. Omar Mohafez, Dr. Ibrahim Al-Haider, Dr. Majed Mohamed, Dr. Tamer Shehata, Evaluation of the effect of Arugula, Lupin and Sage oils on levels of different adipokines in obese rats. KFU DSR Project, 2014-2015, SAR 99400
5. Influence of captagon on spatial learning and memory at the behavioral level, KFU annual research grant, 2012-2013, 52000 SAR.

### **Memberships:**

*Active member of Saudi pharmaceutical society, Riyadh, Kingdom of Saudi Arabia. 2003-present.*

*Active member of Society for Neuroscience, Washington DC, USA. 2007-present.*

### **Presentations and Abstracts**

1. Mahesh V Attimarad, Bander E Al-Dhubiab, **Ibrahim A Alhaider**, Anroop B Nair and Sree Harsha N, Mueen Ahmed K Development of a Rapid and Sensitive RP-HPLC Method for the Determination of Metformin and Vildagliptin in Formulation and Plasma. [American Association of Pharmaceutical Society, AAPS 2013]
2. Mahesh V Attimarad, Bander E Al-Dhubiab, **Ibrahim A Alhaider**, Anroop B Nair and Sree Harsha N, Mueen Ahmed K., Simultaneous determination of moxifloxacin and cefixime by first and ratio first derivative ultraviolet spectrophotometry. [American Association of Pharmaceutical Society, AAPS 2012]
3. Mahesh V Attimarad, Bander E Al-Dhubiab, **Ibrahim A Alhaider**, Anroop B Nair and Sree Harsha N, *In vitro* and *in vivo* evaluation of a novel carrier for calcium delivery [AAPS 2012]
4. Mahesh V Attimarad, Bander E Al-Dhubiab, **Ibrahim A Alhaider**, Anroop B Nair and Sree Harsha N, Therapeutic drug monitoring of carbamazepine by reverse iontophoresis [AAPS 2012]
5. Mahesh V Attimarad, Bander E Al-Dhubiab, **Ibrahim A Alhaider**, Anroop B Nair and Sree Harsha N, Skin permeation and dermatokinetics of ciclopirox olamine [AAPS 2012]

*Success is the ability to go from one failure to another with no loss of enthusiasm.*



## Presentations and Abstracts

6. Dr. Mohammed Abdou Khedr, Dr. Ibrahim Al-Haider, Dr. Bandar Al- Dhubiab, Dr. Tamer Mustafa, Dr. Maged El- Sayed. Design and Synthesis of Novel Phosphonate Containing molecules that could be used in Treatment of cancer, KFU, DSR Project, 2014-2015, SAR. 96100
7. Dr. Omar Mohafez, Dr. Ibrahim Al-Haider, Dr. Majed Mohamed, Dr. Tamer Shehata, Evaluation of the effect of Arugula, Lupin and Sage oils on levels of different adipokines in obese rats. KFU DSR Project, 2014-2015, SAR 99400
8. Influence of captagon on spatial learning and memory at the behavioral level, KFU annual research grant, 2012-2013, 52000 SAR.
9. M. Zagaar, **I. A. Alhaider**, K. Alkadhi; Effect of chronic endurance exercise on spatial memory impairment in acutely sleep-deprived rats. Soc Neuroscience, 2010.
10. **I. A. Alhaider**, T. T. Tran, K. A. Alkadhi. Effects of chronic caffeine treatment on sleep deprivation-impaired late-LTP in area CA1. Soc Neuroscience, 2010.
11. **I. A. Alhaider**, T. T. Tran, A. M. Aleisa, K. H. Alzoubi, K. A. Alkadhi. Effect of caffeine on cognitive deficit in acutely sleep deprived rats: Electrophysiological and molecular evidence. Soc Neuroscience, 2009.
12. T. T. Tran, M. Srivareerat, **I. A. Alhaider**, K. A. Alkadhi. Chronic psychosocial stress accelerates the onset of cognitive impairment in an at-risk rat model of Alzheimer's disease: Molecular studies. Soc Neuroscience, 2009.
13. K. A. Alkadhi, K. H. Alzoubi, **I. A. Alhaider**, A. M. Aleisa. Streptozotocin-induced diabetes impairs ganglionic transmission and synaptic plasticity in the superior cervical ganglion. Soc Neuroscience, 2009.
14. A. M. Aleisa, K. H. Alzoubi, **I. A. Alhaider**, M. Srivareerat, T. T. Tran, K. A. Alkadhi. Nicotine treatment reverses sleep deprivation-induced impairment of LTP in anesthetized rats. Soc Neuroscience, 2008.
15. **I. A. Alhaider**, A. M. Aleisa, T. T. Tran, M. Srivareerat, K. H. ALZOUBI, K. A. Alkadhi. Caffeine prevents the impairment of the spatial learning and memory induced by sleep deprivation. Soc Neuroscience, 2008.
16. T. T. Tran, M. Srivareerat, A. M. Aleisa, **I. A. Alhaider**, K. A. Alkadhi. Stress impairs long-term potentiation in the dentate gyrus in an early-stage Alzheimer's disease rat model. Soc Neuroscience, 2008.
17. K. A. Alkadhi, K. H. Alzoubi, **I. A. Alhaider**, A. M. Aleisa, M. Srivareerat. Chronic i.c.v infusion of  $\beta$ -amyloid impairs ganglionic transmission and synaptic plasticity in the superior cervical ganglion. Soc Neuroscience, 2008.

## SEMINARS:

*Antidepressants, Sultan Bin Abdulaziz Humanitarian City, Riyadh. 2003.*

*Role of Polyethylene Glycol 3350 in Gastrointestinal Tract, Sultan Bin Abdulaziz Humanitarian City, Riyadh. 2003.*

*Chronic caffeine treatment prevents sleep deprivation-induced impairment of cognitive function and synaptic plasticity. University of Houston, Houston, USA. 2010.*



*Room Location : College of Clinical Pharmacy,  
Ph.: 5817175 Extn.: 1783  
IP phone :03-5899897*

#### **Instruments Handled :**

*High Performance Liquid Chromatography (HPLC)  
Hot stage.  
Electronic microscope.  
Differential Scanning Calorimetry (DSC)*

#### **Conference Attended**

- ◆ *Malaysian Pharmaceutical Society- Pharmacy Scientific Conference, held during 21<sup>st</sup> – 23<sup>d</sup> October 2011*
- ◆ *46<sup>th</sup> ASHP Midyear Clinical meeting & exhibition at New Orleans Ernest N Morial Convention Center, New Orleans, USA*
- ◆ *ACS conference, San Diego, USA from 25<sup>th</sup> March to 29<sup>th</sup> 2012*
- ◆ *ASHP 2012, summer meeting and exhibition, Baltimore, MD on June 9<sup>th</sup> to 13<sup>th</sup>*
- ◆ *AAPS (The American Association of Pharmaceutical Scientist), Annual Meeting and Exposition was held from October 14<sup>th</sup> to 18<sup>th</sup>, 2012 in McCormick Place, Chicago.*

## **Dr. Bandar E. Aldhubaib**

*B. Ph ., King Saud Univ, KSA, & Ph. D., University of Arizona , USA*

### **ASSISTANT PROFESSOR, PHARMACEUTICAL SCIENCES**

**TEACHING EXPERIENCE:** Involved in teaching undergraduate students mainly Pharmaceutics, Biopharmaceutics and clinical pharmacokinetics..

#### **RESEARCH INTERESTS:**

1. Analysis of Pharmaceutical Compounds
2. Dissolution studies of some generic drugs.
3. Development of new analytical methods using HPLC

#### **LIST OF PUBLICATIONS AND PRESENTATIONS:**

1. Al-Dhubiab BE, Anroop B, Kumria R, Attimarad M, Harsha S. Development and evaluation of buccal film impregnated with selegiline loaded nanospheres. *Drug Deliv*, 23(7):2154-2162, 2016.
2. Anroop B, Kumria R, Al-Dhubiab BE, Attimarad M, Harsha S, Development of transdermal delivery system of vildagliptin and its comparison with oral therapy. *Indian J Pharm. Edu. Res.*, 50(1): 130-137, 2016.
3. Al-Dhubiab BE, Anroop B, Kumria R, Attimarad M, Harsha S. Formulation and evaluation of nano based drug delivery system for the buccal delivery of acyclovir. *Colloids Surf B Biointerfaces*136; 878-884, 2015.
4. Anroop B, Kumria R, Al-Dhubiab BE, Attimarad M, Harsha S, Noninvasive sampling of gabapentin by reverse iontophoresis. *Pharm. Res.* 32: 1417-1424, 2015.
5. Harsha SN, Aldhubiab BE, Nair AB, Alhaider IA, Attimarad M, Venugopala KN, et al. Nanoparticle formulation by Büchi B-90 Nano Spray Dryer for oral mucoadhesion. *Drug design, development and therapy* 2015;9:273-82. Impact factor – 3.28
6. Harsha S, Bandar E. Al-Dhubiab, Anroop B. Nair, Mohammed Al-Khars, Mohammed Al-Hassan, Raja Rajan, Mahesh Attimarad, Venugopala Narayanaswamy & Afzal Haq Asif. "Novel Drying Technology of Microsphere and Its Evaluation for Targeted Drug Delivery for Lung", *Drying Technology: An International Journal*, 2015, 44 (4): 502- 512 Impact factor – 1.518
7. Kumria R, Anroop B, **Al-Dhubiab BE**. Loratidine buccal films for allergic rhinitis: development and evaluation. *Drug Dev.Ind.Pharm.*40: 625-631, 2014.
8. Anroop B, Singh K, **Al-Dhubiab BE**, Attimarad M, Harsha S, Alhaider IA, Skin uptake and clearance of ciclopirox following topical application, *Bio-pharm. Drug Dispos.* 34: 540-549, 2013.
9. Anroop B, Jacob S, **Al-Dhubiab BE**, Attimarad MV, Harsha S, Basic considerations in the dermatokinetics of topical formulations, *Brazilian J. Pharm. Sci.* 49,423-434, 2013.

1. .
10. **Bandar E Al-Dhubiab**. Formulation and in vitro evaluation of gelatin nanospheres for the oral delivery of selegiline. *Curr. NanoSci.* 2013, 9: 21
11. Anroop B Nair, Rachna Kumria, Sree Harsha S, Mahesh V Attimarad, **Bandar E Al-Dhubiab**, Ibrahim A Alhaider. In vitro techniques to evaluate buccal films. *J Control Release.* 2013, 166: 10-21. (2012 Impact factor 7.6).
12. Sree Harsha, Mahesh V Attimarad, Tanveer A Khan, Anroop B Nair, **Bandar E. Al-Dhubiab**, Sighatullah Sangi and Arshia Shariff, Design and formulation of mucoadhesive microspheres of sitagliptin, *J. Microencapsul.* 2013, 30: 257-264. (2012 Impact factor 1.5).
13. Anroop B Nair, Kishan Singh, Sree Harsha, **Bandar E Al-Dhubiab**, A comprehensive study to evaluate the effect of constant low voltage iontophoresis on transungual delivery, *Drug Dev. Ind. Pharm.* 2013, 39: 807-815.
14. Satarupa Acharjee, Bijaya Ghosh, **Bandar E Al-Dhubiab**, Anroop B Nair, Understanding type 1 diabetes: etiology and models. *Can. J. Diabetes*, 37, 269-276, 2013. (2012 Impact factor 0.5).

### **Research Grants (DSR, King Faisal University)**

1. "Formulation and optimization of lung-targeting microspheres: In vitro/ Pharmacokinetic studies, Proposal grant No. 160005, 69900 SAR – 2016.
2. Development of transdermal delivery system of vildagliptin and its comparison with oral therapy, 2014, 82400 SAR
3. Formulation and Evaluation of Vildagliptin Dual Drug Release microsphere, 2014, 54900 SAR
4. Development of Nano based drug delivery system for the buccal delivery of acyclovir, 2014, 77400
5. Simultaneous determination of amlodipine, hydrochlorothiazide and several sartans by Liquid Chromatography and /or Capillary Electrophoresis in formulations and plasma, 2014 75400 SAR
6. Formulation and evaluation of buccal films impregnated with selegiline loaded nanospheres, 2013, 68400SAR
7. Preparation and Evaluation of Spraydried Oral Mucoadhesive Noveon Aa-1 Polycarophil Nanoparticles Containing Anti-Diabetic Drug, 2013, 74400 SAR
8. Development of a novel non invasive technique for therapeutic drug monitoring in epilepsy patients, 2013, 65900 SAR
9. Development and validation of Stability indicating Chromatographic method for simultaneous determination of Statin and Gliptin , 2013, 57900SAR
10. "Mucoadhesive microspheres containing a new antidiabetic drug: Preparation and in-vitro characterization" – 2012., SAR 87400

### **Presentation & Posters:**

*An LC-MS method for simultaneous determination of ofloxacin and cefixime in human plasma: MSACL, San Diego, CA, USA, 2013 (Accepted).*

*In vitro and in vivo evaluation of a novel carrier for calcium delivery, AAPS, 2012.*

*Therapeutic drug monitoring of carbamazepine by reverse iontophoresis, AAPS, 2012.*

*Skin permeation and dermatokinetics of ciclopirox olamine, AAPS, USA, 2012.*

*Simultaneous determination of moxifloxacin and cefixime by first and ratio first derivative ultraviolet spectrophotometry in presence of tablet excipients, AAPS, USA, 2012.*

*Using NMP as a model for the solubility of the drugs [American Association of Pharmaceutical Society, AAPS], 2009.*

*Eutectic formation using PEG 400, [AAPS], 2009.*

*Eutectic formation using disposable syringe method, [AAPS], 2009 Los Angeles CA.*

*Effect of the pH on the solubilization of the drugs in the Micelle, [AAPS], 2008.*

*Solubility of the sparingly soluble drugs using PVP, [AAPS], 2007. San Diego CA*



*Room Location : College of Clinical Pharmacy,*

*Ph.: 5817175 Extn.: 1783/234*

*Email : shakrawi@kfu.edu.sa*

◆ *Supervised more than 17 Post-Graduate students*

◆ *Head of the Bioequivalence Studies Unit, Principal Investigator for the Bioequivalence Studies, and Head of the Analytical Laboratory,*

◆ *Conducted more than 18 bioequivalence studies*

## A. DEPARTMENT OF PHARMACEUTICAL SCIENCES

### Dr. Sabah H. Akrawi

*B.Sc, University of Baghdad, Iraq , & Ph. D., University of Kentucky , USA*

#### ASSOCIATE PROFESSOR, PHARMACEUTICAL SCIENCES

**TEACHING EXPERIENCE:** Teaching under- graduate and post-graduate courses in Biopharmaceutic, Pharmacokinetics, Clinical Pharmacokinetics, and Physical Pharmacy over 20 years.

**RESEARCH INTERESTS:** Research activities included the determination and evaluation of drug concentration to detect its relationship of the pharmacokinetic parameters to the therapeutic effects and pharmaceutical dosage form. Moreover, performed and validated drug analytical method.

For instance; the evaluation and interpretation of the pharmacokinetic parameters of drugs (AUC, Clearance,  $T_{1/2}$ ,  $K_e$ ,  $K_m$ ,  $C_{max}$ ,  $T_{max}$ ,  $V_d$  ...etc.); Pharmacokinetic/ Pharmacodynamic relationship. Drugs under investigations required studies to determine their disposition, stereoselective disposition, through renal or metabolic route of elimination in addition to its absorption and distribution in various body tissues; dose and dosing rate can be specified after treating the data with statistical programs to determine if it is significant or not; effect of Drug–Drug and Drug–Food interaction on the disposition and its effect on pharmacokinetic parameters; bioavailability and bioequivalence studies include three parts the clinical, analytical and data statistical analysis; using micro sampling technique and the chronic intra hepatic infusion of drugs in unrestrained animals to predict the drug disposition and concentration profile.

#### PUBLICATIONS:

1. "Pharmacokinetic Interaction between Dietary Black Tea and Carbamazepine in Epileptic Patients" Sabah H. Akrawi, Muna J. Hadi, Yasir Ibrahim, and Sabah Al-Dabbagh; Latin American Journal of Pharmacy; 34 (4), pp 754-9, 2015.
2. "Solid State NMR and Bioequivalence Comparison of the Pharmacokinetic Parameters of Two Formulations of Clindamycin" Zeyad A. Al-Talla1, Sabah H. Akrawi and Abdul-Hamid Emwas , J. Clinical Therapeutics, Vol. 49-No. 7/2011.
3. "Bioequivalence assessment of two formulations of ibuprofen, Zeyad A. Al-Talla1, Sabah H. Akrawi, Luke T. Tolley, Salim H. Sioud, and Abdul-Hamid Emwas, J. Drug Design, Development and Therapy, 2011:5 427-433.
4. "A two way cross over bioequivalence study for two formulations (100 mg suppository) containing indomethacin and treatment monitoring" Sabah H. Akrawi\* and Haidar F. Hadi. J. Appl. Sci., Vol. 7, No. 1, 38-47, 2005
5. "Bioequivalence Assessment of Doloraz<sup>®</sup> 100 mg Suspensions in Healthy Human Volunteers". Sabah H. Akrawi, Ziad Al-Talla', Sabah D. Salim and Loay Rashan. Iraqi Journal of Pharmacy, Vol 3. No. 1, 2003.

6. "Bioequivalence study of indomethacin test product (25 mg capsule)" Haidar F. Hadi, Sabah H. Akrawi and Salim A. Hamadi, Iraqi J. Pharm Sci, vol 13. 2002.
7. "Bioequivalence Assessment of Clindox<sup>®</sup> 150 mg Capsules in Healthy Human Volunteers". Sabah H. Akrawi, Ziad Al-Talla', Sabah D. Salim and Loay Rshan. Iraqi Journal of Pharmacy, Vol 3. No. 1, 2003.
8. 'Bioequivalence Assessment of Hypoten<sup>®</sup> 100 mg Tablets in Healthy Human Volunteers and Treatment Monitoring'. Sabah H. Akrawi, Iraqi Journal of Pharmacy, Vol 3. No. 1, 2003.
9. "Possible drug interaction between carbamazepine and tea components in epileptic patients", Muna J. Hadi, Sabah Akrawi and Sabah Al-Dabagh, Iraqi J. Pharm. Sci. Vol, (11) 2000.
10. "Bioavailability – Bioequivalency study of a formulation containing Cephalixin", Sabah H. Akrawi, The Iraqi Journal of Community Medicine, 2000.
11. "Potentiation of Gentamicin Induced Nephrotoxicity by Molsidomine in Rats". Sabah H. Akrawi and Marwan S.M. Al-Nimer, Iraqi J. Pharm. Sci. Vol, (9) 1998.
12. "Effect of L-carnitine on lipid peroxidation in gentamicin induced nephrotoxicity in rats". Marwan S.M. Al-Nimer, Sabah H. Akrawi, Suhad Kh, Al-Jubory. Iraqi J. Pharm. Sci. Vol. 8(1) 1997.
13. "Prescribing errors in selected Hospital and Private Clinics in Baghdad". Sabah H. Akrawi. Iraqi J. Pharm. Sci. Vol. 7 1996.
14. "The evaluation of renoprotective effect of L-carnitine against gentamicin nephrotoxicity". Sabah H. Akrawi. Iraqi J. Pharm. Sci. Vol. 7 1996.
15. "Changes in brain glucose and glycogen in epileptic mice", S.P. Jazrawi and S.H. Akrawi, Al-Buhooth Al Tachaniya, Vol 9 ,N0 33, 1996.
16. Nosocomial infections in three of Erbl's Hospitals". Kawa F. Dizayee and Sabah H. Akrawi. Iraqi J. Pharm. Sci. Vol. 6(1) 1995.
17. Effect of molsidomine on trace metals in gentamicin induced nephrotoxicity in rats". Sabah H. Akrawi, Faris S. Allah-Werdi and Marwan S.M.Al-Nimer, Iraqi J. Pharm. Sci. Vol. 6(1) 1995.
18. The effect of alphotocopherol on experimentally induced gentamicin nephrotoxicity in rats". Abdulla T.M. Al-Ani, Marwan S.M. Al-Nimer and Sabah H. Akrawi, Iraqi J. Pharm. Sci. Vol 5(1) 1994.

- ◆ *Conducting Chronic Intrahepatic & IV drug infusion in unrestrained animals.*
- ◆ *Conducting intranasal administration of drugs.*
- ◆ *Development and Validation of analytical methods for drugs using Micro Samples of blood.*
- ◆ *Design and Supervision of clinical studies.*
- ◆ *Design and Supervision of Disposition studies of drugs using Micro Samples.*
- ◆ *Drug Metabolism & its Stereoselective Disposition.*
- ◆ *Design and Supervision of Drug-Drug and Drug-Food interaction studies.*



*Room Location : College of  
Clinical Pharmacy,  
Room No : 1004  
Ph.: 03-5899912  
Email :  
sharsha@kfu.edu.sa*

**Contribution in Book:**

*Chapter 8: Targeted Drug  
Delivery system,  
Chapter 11: Microspheres  
Textbook of Industrial  
Pharmacy, Publisher-  
Orient Longman Private  
Ltd. ISBN 13: 978-81-250-  
3309-7, Year 2008.*

**Reviewer :**

*The Journal of Microen-  
capsulation  
The International Journal  
of Pharmaceutics  
The Journal of Pharma-  
ceutical Innovation (JPI)  
The Archives of Pharma-  
ceutical Sciences and Re-  
search (APSR)  
Journal of Medicinal  
Plants Research*

## Dr. Sree Harsha

*M.Pharm & Ph. D, Rajiv Gandhi Uni. Health Sciences, India*

### ASSISTANT PROFESSOR, PHARMACEUTICS

**TEACHING EXPERIENCE :** 13 years of experience in teaching pharmaceutics, pharmacokinetics & biopharmaceutics and physical pharmacy.

### RESEARCH INTEREST :

Dr. Sree Harsha's research interests are in the fields of Targeted Drug Delivery and Topical Drug Delivery systems. His research laboratory is currently exploring in the following areas:

1. Development of nanoparticle mucoadhesive formulation for anti-diabetic drugs.
2. Formulation of targeted drug delivery for lungs.
3. Development of topical treatment for cutaneous leishmaniasis from fruit of Date Palm (Phoenix dactylifera).

### LIST OF PUBLICATIONS:

1. Anroop B Nair, Rachna Kumria , Bandar E Al-Dhubiab , Mahesh Attimarad and **Sree Harsha**. Development of Transdermal Delivery System of Vildagliptin and Its Comparison with Oral Therapy. Indian Journal of Pharmaceutical Education and Research, Vol 50, Issue 1, Jan-Mar, 2016.
2. Usha Ganganahalli Kapanigowda, **Sree Harsha Nagaraja**, Balakeshwa Ramaiah and Prakash Rao Boggarapu Rajarajan Subramanian. "Enhanced trans-corneal permeability of valacyclovir by polymethacrylic acid copolymers based ocular microspheres: *In vivo* evaluation of estimated pharmacokinetic/ pharmacodynamic indices and simulation of aqueous humor drug concentration-time profile". Journal of Pharmaceutical Innovation. 2016.
3. Usha Ganganahalli Kapanigowda, **Sree Harsha Nagaraja**, Balakeshwa Ramaiah and Prakash Rao Boggarapu "Improved intraocular bioavailability of ganciclovir by mucoadhesive polymer based ocular microspheres: development and simulation process in Wistar rats". DARU Journal of Pharmaceutical Sciences 2015, 23:49. Impact factor – 1.64
4. Bandar E. Al-Dhubiaba, Anroop B. Naira, Rachna Kumriab, Mahesh Attimarada, **Sree Harsha**. Formulation and evaluation of nano based drug delivery system for the buccal delivery of acyclovir. Colloids and Surfaces B: Biointerfaces 2015, 136, 878 – 884. Impact factor – 4.152

5. **Harsha, S.**; Al-Khars, M.; Al-Hassan, M et al. Pharmacokinetics and tissue distribution of spray-dried carboplatin microspheres: lung targeting via intravenous route. *Arch Pharm Res* 2014, 37, 352-60.
6. Al-Dhubiab, BE.; Nair, AB.; Kumria, R.; Attimarad, M.; **Harsha, S.** Development and evaluation of buccal films impregnated with selegiline-loaded nanospheres. *Drug Deliv* 2014, 1-9.
7. Nair, AB.; Singh, K.; Shinu, P.; **Harsha, S.**; Al-Dhubiab, BE. A comprehensive study to evaluate the effect of constant low voltage iontophoresis on transungual delivery. *Drug Dev Ind Pharm* 2013, 39, 807-15.
8. Nair, AB.; Singh, K.; Al-Dhubiab, BE.; Attimarad, M.; **Harsha, S.**; Alhaider, IA. Skin uptake and clearance of ciclopirox following topical application. *Bio-pharm Drug Dispos* 2013, 34, 540-9.
9. Nair, AB.; Kumria, R.; **Harsha, S.**; Attimarad, M.; Al-Dhubiab, BE.; Alhaider, IA. In vitro techniques to evaluate buccal films. *J Control Release* 2013, 166, 10-21.
10. Nair, AB.; Attimarad, M.; Al-Dhubiab, BE.; Wadhwa, J.; **Harsha, S.**; Ahmed, M. Enhanced oral bioavailability of acyclovir by inclusion complex using hydroxypropyl- $\beta$ -cyclodextrin. *Drug Deliv* 2013.
11. Nair, A.; Jacob, S.; Al-Dhubiab, B.; Attimarad, M.; **Harsha, S.** Basic considerations in the dermatokinetics of topical formulations. *Brazilian Journal of Pharmaceutical Sciences* 2013, 49, 423-434.
12. **Harsha, S.**; E Aldhubiab, B.; Abdulrahman Alhaider, I.; Attimarad, M.; Nair, A. Carbopol 934-P Loaded with Vildagliptin for Diabetic Delivery: In Vitro and In Vivo Evaluation of Nanoparticles. *Current Nanoscience* 2013, 9, 642-647.
13. **Harsha, S.**; Attimard, M.; Khan, TA et al. Design and formulation of mucoadhesive microspheres of sitagliptin. *J Microencapsul* 2013, 30, 257-64.
14. **Harsha, S.** Pharmaceutical suspension containing both immediate/ sustained-release amoxicillin-loaded gelatin nanoparticles: preparation and in vitro characterization. *Drug Des Devel Ther* 2013, 7, 1027-33.
15. Baby, B.; **Harsha, S.**; Jayaveera, K.; Abraham, A. Formulation and Evaluation of a Robust Drug Delivery System by Using Levofloxacin-Chitosan/ Hydroxypropyl  $\beta$ -Cyclodextrin Nanoparticles. *Drug Delivery Letters* 2013, 3, 12-17.
16. Sangi, S.; Turki, MA.; Otaibi, GA.; Hazoom, MAKA.; **Harsha, S.** Analysis and evaluation of prescriptions in Al-Ahsa (Saudi Arabia). 2012.
17. Ghosh, B.; Iyer, D.; Nair, AB.; Sree, HN. Prospects of iontophoresis in cardiovascular drug delivery. *J Basic Clin Pharm* 2012, 4, 25-30.
18. BABY, B.; **Harsha, S.**; JAYAVEERA, K.; ABRAHAM, A. Determination of Process Variables Using Factorial Design on Entrapment Efficiency of Levofloxacin Nanoparticles. *Journal of Pharmacy and Chemistry* 2012, 6, 3-7.

#### ◆ ***KFU DSR Projects***

◆ *Arshia Shariff, Sree Harsha, Bandar Essa Aldhubiah "Formulation and Evaluation of Vildagliptin Dual Drug Release microsphere" Proposal grant No. 150207/ Deanship of Scientific Research, King Faisal University, Saudi Arabia, SAR 54, 900/- 2014 – 2015 – Completed*

◆ *Sree Harsha, Mahesh, Bandar, Anroop "Formulation and optimization of lung-targeting microspheres: In vitro/ Pharmacokinetic studies, Proposal grant No. 160005, 69900 SAR – 2015 – 2016. – Completed.*

◆ *Dr. Anroop Nair, Dr. Bandar Al Dhubiab, Dr. Mahesh Attimarad, Dr. Sree Harsha. "Design and development of polymeric nanoparticles for oral delivery of candesartan, Proposal grant No. 160010, SAR 75,000 – In Process*

◆ *Dr. Mahesh Attimarad, Dr. Bandar Al Dhubiab, Dr. Sree Harsha. Dr. Anroop Nair, "Capillary Electrophoresis method Development for Simultaneous estimation of antidiabetic drugs in biological samples and its application to pharmacokinetic studies Proposal grant No. 160009, SAR 65,000 – In Process*

◆ *Dr. Afzal Haq Asif and Dr. Sree Harsha. Dr. Anroop Nair, "Novel drug delivery approach to treat diabetes: In vitro/ In vivo studies. Proposal grant No. 160148, SAR 70,400 – In Process*

## DSR Projects

◆ Mahesh Attimarad, Anroop Nair Dr. Bandar Essa Aldhubiah, **Sree Harsha**, "Simultaneous determination of amlodipine, hydrochlorothiazide and several sartans by Liquid Chromatography and / or Capillary Electrophoresis in formulations and plasma" Proposal grant No. 150190. SAR 75400/- **2014 – 2015 –**

◆ "Development of Nano based drug delivery system for the buccal delivery of acyclovir" Proposal grant No. 140103. SAR 77, 400/- **2014 – 2015**

◆ "Development of transdermal delivery system of vildagliptin and its comparison with oral therapy" Proposal grant No. 140069. SAR 82,400/- **2014 – 2015**

◆ "Design and Evaluation: Vildagliptin–Metformin Nanoparticle Combination" Proposal grant No. 150196. SAR 55, 900/- **2014 – 2015** Arshia Shariff,

◆ "Formulation and Evaluation of Vildagliptin Dual Drug Release microsphere" Proposal grant No. 150207. SAR 54, 900/- **2014 – 2015 – Accepted**

## Dr. Sree Harsha

19. Baby, B.; Harsha, NS.; Jayaveera, KN.; Abraham, A. Formulation and Evaluation of Levofloxacin Nanoparticles by Ionic Gelation Method. Research & Reviews: Journal Of Pharmacy And Pharmaceutical Sciences 2012, 1.
- 20.
21. Attimarad, M.; Ahmed, KKM.; Aldhubaib, BE.; **Harsha, S.** High-performance thin layer chromatography: A powerful analytical technique in pharmaceutical drug discovery. Pharm Methods 2011, 2, 71-5.
22. Usha GK.; R, B.; **Harsha, S.**; Rajarajan, S.; Ramesh, K. A Review of Pharmacoepidemiological Methods: Intensive hospital monitoring and medical record linkage. Pharmacology online journal 2010, 1, 1145 – 1154.
23. Shanth, K.; Shobha, R.; **Harsha, S.** High-Performance Liquid Chromatographic Determination of Plasma Theophylline Levels in the Presence of Caffeine and Dietary Xanthine Metabolites. Archives of Pharmacal Research 2010, 2, 274 – 282.
24. Mahalingan, K.; Rajarajan, S.; Baby, B.; **Harsha, S.** Formulation and Evaluation of Clarithromycin Extended Release Tablets. Journal of Pharmaceutical Sciences and Research 2009, 1, 97-100.
25. **Harsha, S.**; Rajarajan, S.; Chandramouli, R.; Srinivas, S.; Shobha, R. Preparation and Evaluation of Gentamicin Biodegradable Polymeric microspheres. Archives of Pharmaceutical Science and Research 2009, 2, 14-19.
26. **Harsha, S.**; R, C.; Rani, S. Ofloxacin targeting to lungs by way of microspheres. Int J Pharm 2009, 380, 127-32.
27. **Harsha, S.**; Nagashekhar, M.; N, SH. Carboplatin Microspheres Targeting to Lungs: Preparation and Evaluation. Malaysian Journal of Pharmacy 2009, 1.
28. **Harsha, S.**; Kumar, GS.; Al-Wesali, MS.; Sahibzada, TR.; Ibrahim, FAS. Exploring the Anti-leishmaniasis activity of Phoenix dactylifera (Date Palm). Pharmacology online journal 2009, 3, 791-799.
29. **Harsha, S.**; Al-Wesali, MS. Preparation and evaluation of nanospheres for lung targeting. International Journal of Nano and Biomaterials 2009, 2, 143-146.
30. **Harsha, S.**; Rani, RHS. Drug targeting to lungs by way of microspheres. Arch Pharm Res 2006, 29, 598-604.
31. Shymala, B.; **Harsha, S.** Hydrodynamic Oral Floating Controlled Delivery of Diltiazem Hydrochloride. Eastern Pharmacist 2001, 44, 105-108.
32. Bhaskaran, S.; **Harsha, S.** Effect Of Permeation Enhancer And Lontophoresis On Permeation Of Atenolol From Transdermal Gels, 2000.



## Dr. Sree Harsha

### Presentations

1. Mohammed Al-Khars and **Sree Harsha** received best poster award "Salbutamol microspheres targeting to lung: preparation and in vitro release" under Pharmacy Student Thematic Poster Awards in DUPHAT(Dubai International Pharmaceuticals & Technologies Conference & Exhibition) held in Dubai during March 10 -12, 2014.
2. Speaker invitation for "3<sup>rd</sup> International Conference on Nanotek and Expo" on December 2-4, 2013 held at Hampton Inn Las Vegas, USA hosted by OMICS Group Conferences. Presented topic on "Pharmaceutical suspension containing both immediate/sustained release omeprazole loaded carbopol nanospheres: preparation and in vitro characterization".
3. A. B. Nair, B. E. Al-Dhubiab, M. Attimarad, **S. Harsha**, I. A. Alhaider. Skin Permeation and Dermatokinetics of Ciclopirox Olamine, *AAPS Annual Meeting and Exposition*, McCormick Place, Chicago. **2012**.
4. M. Attimarad, A. B. Nair, B. E. Al-Dhubiab, **S. Harsha** LC-MS method for simultaneous determination of ofloxacin and cefixime in human plasma: Mass Spectrometry Applications in Clinical Laboratories, San Diego, CA, USA, 2013
5. M. Attimarad, A. B. Nair, B. E. Al-Dhubiab, **S. Harsha** Simultaneous determination of moxifloxacin and cefixime by first and ratio first derivative ultraviolet spectrophotometry. [American Association of Pharmaceutical Society, AAPS 2012]
6. A. B. Nair, B. E. Al-Dhubiab, M. Attimarad, **S. Harsha**, I. A. Alhaider "Therapeutic Drug Monitoring of Carbamazepine by Reverse Iontophoresis" *AAPS Annual Meeting and Exposition*, McCormick Place, Chicago **2012**.
7. A. B. Nair, B. E. Al-Dhubiab, M. Attimarad, **S. Harsha**, I. A. Alhaider, In Vitro and In Vivo Evaluation of a Novel Carrier for Calcium Delivery *AAPS Annual Meeting and Exposition*, McCormick Place, Chicago **2012**.
8. M. Attimarad, A. B. Nair, B. E. Al-Dhubiab, **S. Harsha**, Simultaneous Determination of Moxifloxacin and Cefixime by First and Ratio First Derivative Ultraviolet Spectrophotometry in Presence of Tablet Excipients, I. A. Alhaider, *AAPS Annual Meeting and Exposition*, McCormick Place, Chicago **2012**.
9. **Sree Harsha**, Chandra mouli, Rajarajan, Srinivasan, Shobha rani, and Mohamed Al-Wasali "The effect of process parameter on preparation of biodegradable polymeric nanospheres" *International Conference for Nanotechnology and Advanced Materials*, University of Bahrain, BAHRAIN. Page 102, **2009**

### Skills

1. Proficient in all leading word and numerical processing packages Corel Draw
2. Data analysis and statistics like Sigma Plot and Design of Experiments.

### DSR Projects

- ◆ **Sree Harsha, Mahesh Attimarad, Bandar Essa Aldhubiah, Anroop Nair** Annual competitive research grant of SAR 74400 for the project "Preparation and evaluation of spraydried oral mucoadhesive Noveon AA-1 polycarboxiphil nanoparticles containing anti-diabetic" Proposal grant No. 140131. SAR 74, 400/- **2012 – 2013 – Completed**
- ◆ Annual "Development of a novel noninvasive technique for therapeutic drug monitoring in epilepsy patients" Proposal grant No. 140069. SAR 65, 900/- **2012 – 2013 – Completed**
- ◆ "Formulation and evaluation of buccal films impregnated with selegiline loaded nanospheres" Proposal grant No. 140103. SAR 68, 400/- **2012 – 2013 – Completed**

### ◆ KFU GRANTS:

◆ Mahesh Attimarad, S. Ramachandra Setty, **Sree Harsha** "Simultaneous Estimation of Flavoxate HCl and Ofloxacin by High Performance Liquid Chromatography" SAR 71,400/- **2009 – 2010** -

◆ "Mucoadhesive microspheres containing a new anti-diabetic drug: Preparation and in-vitro characterization" Proposal grant No. 130012. SAR 87,400/- **2011 – 2012** -

◆ "Validated Liquid Chromatographic method Development for Simultaneous estimation of Metformin and Gliclins" Proposal grant No. 130010. SAR 63,100/- **2011 – 2012**

◆ "Self Emulsifying Drug Delivery Systems (SEDDS) for Oral Delivery of Lipophilic Anti-Muscarinic Drugs" Proposal grant No. 130014. SAR 66,665/- **2011 – 2012 – In Process**

◆ "Therapeutic effects of some herbal extracts on male infertility in experimental animals" SAR 54,400/- **2011 – 2012 – Completed**

◆ Mahesh Attimarad, Ahmaed O. Alnajjar, **Sree Harsha** "Simultaneous Estimation Of Metformin And Miglitol By High Performance Liquid Chromatography", Deanship of Scientific Research, King Faisal University, Saudi Arabia SAR 92,400/- **2010 – 2011 - Completed**

## Dr. Sree Harsha

### Presentations :

10. **Sree Harsha**, Chandra mouli, Rajarajan, Srinivasan, Shobha rani, and Mohamed Al-Wasali "Preparation and evaluation of Nanospheres: Liver Targeting" *International Conference for Nanotechnology and Advanced Materials*, University of Bahrain, Bahrain. Page 103, **2009**
11. Nagashekhar M, **Sree Harsha**, Shivaprasad H.N "Determination of Machiavellianism and its impact on sales performance amongst pharmaceutical sales representatives; a questionnaire survey". *4<sup>th</sup> Malaysian Pharmaceutical Society Pharmacy Scientific Conference*, Universiti Sains Malaysia, Penang, **2009**
12. Nagashekhar M, **Sree Harsha**, Shivaprasad H.N "Carboplatin Microspheres Targeting to Lungs: Preparation and Evaluation", *4<sup>th</sup> Malaysian Pharmaceutical Society Pharmacy Scientific Conference*, Universiti Sains Malaysia, Penang, Malaysia. **2009**
13. **Sree Harsha** and Mohamed Al-Wasali, Preparation and evaluation of nanospheres for lung targeting, *ICON 008*, Jeddah, Saudi Arabia, **2008**.
14. **Sree Harsha** and Shobha Rani "Drug targeting to lungs by way of microspheres" *International Congress of Indian Pharmacy Graduates*. Tamil Nadu, India, **2003**.
15. **Sree Harsha** and Shobha Rani "Quality Control analysis of Personal Care Products, *Indian Cosmetics Technologist Association*", Belgaum, India, **2004**.
16. **Sree Harsha** and Shobha Rani "Microspheres targeting to lungs", *Association of Pharmaceutical Teachers of India (APTI)*, Goa, India, **2003**.
17. **Sree Harsha** and Shobha Rani "Use of Microsoft excels in Pharmacy field. 54<sup>th</sup> *Indian Pharmaceutical Congress*" Pune, India, **2002**.
18. **Sree Harsha** and Shobha Rani "Drug targeting to lungs" 54<sup>th</sup> *Indian Pharmaceutical Congress*, Pune, India, **2002**.
19. **Sree Harsha** and Shobha Rani "Formulation and evaluation of microspheres of gentamicin sulphate" *International Pharmaceutical Federation (F.I.P)* Germany, **2001**.
20. **Sree Harsha** and Shobha Rani "Preparation and evaluation of microspheres of gentamicin sulphate". 53<sup>rd</sup> *Indian Pharmaceutical Congress*, Delhi, India, **2001**.
21. **Sree Harsha** and Shobha Rani "Preparation of self-cross linked gelatin microspheres". 52<sup>nd</sup> *Indian Pharmaceutical Congress*. Hyderabad, India, **2000**.
22. **Sree Harsha** and Shobha Rani "Gelatin as a hydrogel for controlled release" 51<sup>st</sup> *Indian Pharmaceutical Congress*, Indore, India, **1999**.

## Dr. Mahesh Attimarad

B.Pharm Gulbarga University, M.Pharm; Bangalore Uni, Ph.D. Rajiv Gandhi Uni. Health Sciences, India

### ASSISTANT PROFESSOR, PHARMACEUTICAL & ANALYTICAL CHEMISTRY

**TEACHING EXPERIENCE :** 15 years of experience in teaching pharmaceutical chemistry, medicinal chemistry and analytical chemistry.

#### RESEARCH INTEREST :

1. Development of new analytical methods for drug molecules
2. Microwave assisted synthesis of organic compounds.
3. In-vitro antioxidant screening.
4. Screening for anti-inflammatory and analgesic activities.
5. Bioavailability studies in rodents.

#### LIST OF PUBLICATIONS:

1. **Mahesh Attimarad**, Multivariate optimization of a capillary zone electrophoresis assay method for simultaneous quantification of metformin and vildagliptin from a formulation, Journal of Liquid Chromatography & Related Technologies, 39(8), 401-407, 2016,
2. Katharigatta N Venugopala, GB Dharma Rao, Subhrajyoti Bhandary, Melendhran Pillay, Deepak Chopra, Bandar E Aldhubiab, **Mahesh Attimarad**, Osama Ibrahim Alwassil, Sree Harsha, Koleka Mlisana, Design, synthesis, and characterization of (1-(4-aryl)-1H-1, 2, 3-triazol-4-yl) methyl, substituted phenyl-6-methyl-2-oxo-1, 2, 3, 4-tetrahydropyrimidine-5-carboxylates against Mycobacterium tuberculosis, Drug Design, Development and Therapy, 10, 2681, 2016.
3. **Mahesh Attimarad**, Sree Harsha Nagaraja, Bandar Essa Al-Dhubaib, Anroop Balachandran Nair and Venugopala Kattarigatta Narayanaswamy Capillary Electrophoresis: MEKC assay method for simultaneous determination of olmesartan medoxomil, amlodipine besylate and hydrochlorothiazide in tablets, Indian Journal of Pharmaceutical Education and Research, 50(2 Suppl.), 188-195, 2016
4. Anroop B Nair, Rachna Kumria , Bandar E Al-Dhubiab , **Mahesh Attimarad** and Sree Harsha. Development of Transdermal Delivery System of Vildagliptin and Its Comparison with Oral Therapy. Indian Journal of Pharmaceutical Education and Research, Vol 50, Issue 1, Jan-Mar, 2016.
5. Bandar E. Al-Dhubiaba, Anroop B. Naira, Rachna Kumriab, **Mahesh Attimarad**, Sree Harsha. Formulation and evaluation of nano based drug delivery system for the buccal delivery of acyclovir. Colloids and Surfaces B: Biointerfaces 2015, 136, 878 – 884. Impact factor – 4.152
6. **Mahesh V. Attimarad**, Anroop B. Nair and Bandar E. Aldhubaib, Development of liquid chromatographic method for the simultaneous determination of metformin and miglitol in human plasma: application to pharmacokinetic studies, Journal of the Iranian Chemical Society, 2015, 12, 1629-1636. (2014 Impact factor 1.409)



*Room Location : College of  
Clinical Pharmacy,  
Room No : 1004  
Ph.: 035899601  
Email : mattimarad  
@kfu.edu.sa  
mattimarad@gmail.com*

#### **Instruments handled :**

*LC-MS  
GC-MS  
HPLC – Shimadzu.  
CHN elemental analyzer  
FT IR - Shimadzu and  
Perkin Elmer.  
UV Visible Spectrophotometer – Shimadzu and Elco.  
Spectrofluorophotometer  
Flash Chromatography.*

**KFU DSR GRANTS:**

◆ *Dr. Mahesh Attimarad, Dr. Bandar Al Dhubiab, Dr. Sree Harsha. Dr. Anroop Nair, "Simultaneous determination of sacubitril, valsartan, metformin, statin and gliptin by HPLC / CZE in formulations and plasma: : Application to stability studies, Proposal grant No. 1700010, SAR 68800. 2016-2017*

◆ *Dr. Mahesh Attimarad, Dr. Bandar Al Dhubiab, Dr. Sree Harsha. Dr. Anroop Nair, "Capillary Electrophoresis method Development for Simultaneous estimation of antidiabetic drugs in biological samples and its application to pharmacokinetic studies Proposal grant No. 160003, SAR 65,000, 2015-2016.*

◆ *Annual competitive research grant from King Faisal University, Al-Ahsa, Saudi Arabia sanctioned SAR 87400 for the title "Mucoadhesive microspheres containing a new antidiabetic drug: Preparation and in-vitro characterization" Proposal grant No. 130012. PI- Sree Harsha, CO-PI Mahesh Attimarad, Bandar Essa Aldhubiah. In Process*

◆ *Research grant of SAR 63100 for proposal title "Validated Liquid Chromatographic method Development for Simultaneous estimation of Metformin and Gliptins" Dr. Mahesh Attimarad, CO-PI Sree Harsha, Ahmed Omer Alnajjar Bandar Essa Aldhubiah from King Faisal University, Al-Ahsa, Saudi Arabia. Research Grant No. 130010, In Process*

**LIST OF PUBLICATIONS:****Dr. Mahesh Attimarad**

7. Ahmed O. Alnajjar, Abubakr M. Idris, **Mahesh V. Attimarad**, Rafea E. E. Elgorashe Quadruple Response Factorial Design Optimization of Capillary Zone Electrophoresis Assay Procedure for Metformin and Sitagliptin Combination, *Journal of Liquid Chromatography & Related Technologies*, 38: 1379–1383, 2015.
8. **Mahesh Attimarad**, Sree Harsha Nagaraja, Bandar E. Aldhubaib, Ahmed Al-Najjar, Development of a Rapid RP-HPLC Method for Simultaneous Determination of Metformin and Vildagliptin in Formulation and Human Plasma, *Journal of Young Pharmacists*, 2014; 6 (4):40-46
9. **Mahesh Attimarad**, Sree Harsha Nagaraja, Bandar E. Aldhubaib, Anroop B. Nair, Venugopala K. N. Simultaneous Determination of Metformin and Three Gliptins in Pharmaceutical Formulations Using RP HPLC: Application to Stability Studies on Linagliptin Tablet Formulation, *Indian J Pharma Edu. Res*, 48,(4), 2014
10. **Mahesh Attimarad** and Ahmed O. Alnajjar: A conventional HPLC-MS method for the simultaneous determination of Ofloxacin and Cefixime in plasma: Development and validation, *J. Basic Clin Pharma*. 2013, 4, 36-41.
11. Ahmed O. Alnajjar, Abubakr M. Idris, **Mahesh V. Attimarad**, Adnan M. Aldughais and Rafea E.E. Elgorashe, Capillary Electrophoresis Assay Method for Metoprolol and Hydrochlorothiazide in their Combined Dosage Form with Multivariate Optimization, *Journal of Chromatographic Science*, 2012;00:1–6. (2011 Impact factor 1.07).
12. **M. Attimarad**. Simultaneous Determination of Ofloxacin and Flavoxate Hydrochloride by First and Ratio First Derivative UV Spectrophotometry, *Journal of the Iranian Chemical Society*, 2012, 9:551-557 (DOI: 10.1007/s13738-012-0068-5) (2011 Impact factor 1.65).
13. Mahesh V Attimarad, Bander E Al-Dhubiab, Ibrahim A Alhaider, Anroop B Nair and Sree Harsha N, Mueen Ahmed K, Simultaneous determination of moxifloxacin and cefixime by first and ratio first derivative ultraviolet spectrophotometry, 2012, 6:105, *Chemistry Central Journal* . (Impact Factor 3.28)
14. Sree Harsha, Mahesh Attimarad, Tanveer A. Khan, Anroop B. Nair, Bandar E. Al-Dhubiab, Sighatullah Sangi and Arshia Shariff, Design and formulation of mucoadhesive microspheres of sitagliptin, *Journal of Microencapsulation*, Nov 12<sup>th</sup>, 2012 (Impact factor 1.5).
15. Mahesh Attimarad, Sree Harsha N, Ramachandra Setty S, Simultaneous Determination Of Ofloxacin And Flavoxate Hydrochloride In Human Plasma By RP HPLC, *Journal of Liquid Chromatography and Related technologies* 2012, 35:6 (In press) (DOI: 10.1080/10826076.2011.608234) (2011 Impact factor 0.953).
16. Mahesh Attimarad, KK Mueen Ahmed, Bandar E Aldhubaib, Sree Harsha, High-performance thin layer chromatography: A powerful analytical technique in pharmaceutical drug discovery, *Pharmaceutical Methods*, 2011, Vol 2 (2), Pages 71-75.

17. Mahesh Attimarad. Simultaneous Determination of Ofloxacin and Flavoxate Hydrochloride by Absorption Ratio and Second Derivative UV Spectrophotometry in tablets, J. Basic Clin Pharm, 2011, 2(1), 53-61.
18. Anroop B Nair, Rachna Gupta, Rachna Kumria, Shery Jacob and Mahesh Attimarad, Formulation and evaluation of enteric coated tablets of proton pump inhibitor, J. Basic Clin Pharm, 2010, 1(4), 215-221.
19. Mahesh Attimarad. Rapid RP HPLC Method For Quantitative Determination Of Lornoxicam In Tablets. J. Basic Clin Pharm, 2010, 1(2), 115-118
20. Mahesh Attimarad, Liquid Chromatographic Determination of Flavoxate HCl In Pharmaceutical Formulation. J. Young Pharmacist, 2010, 2(3), 280-283.
21. Brajesh Porwal, B. S. Jayashree, and Mahesh Attimarad "Synthesis of Some New 3-Coumarinoyl Pyridinium and Quinolinium Bromides for their Antimicrobial Activity, J. Basic and Clin Ph, 2010, 1(1), 29-32,
22. Pradeep Kumar, Mahesh Attimarad and Sudha Mallapur "Development of New UV Spectrophotometric And Colorimetric Methods for the Estimation of Metadoxine in Tablets". Asian Journal of Chemistry, 2008, 20 (2), 1642-1644.
23. Mahesh Attimarad and S. Mohan "An Expeditious Synthesis of Methyl 5-(2-Amino 4-Arylthiazolyl) acetates using Microwave Irradiation" Journal of the Indian Chemical Society, 2006, 83(12), 1276-1279.
24. Mahesh Attimarad and S. Mohan, "Microwave assisted synthesis of ethyl 2,4, -di substituted thiazoe-5 acetates for their antioxidant activity, Asian Journal of Chemistry, 2005, 17(2), 991-995.
25. Mahesh Attimarad and S. Mohan "Synthesis of Hydroxy benzothiophene/naphthalene carboxylic acids as potent NSAIDs." Indian Journal of Heterocyclic Chemistry, 2005, 14, 285-288.
26. Mahesh Attimarad, Vanith somasekhar and S. Mohan "Synthesis of 2-N-acyl amino arylthiazole-5-acetic acids/esters for their anti-inflammatory and analgesic activities" Asian J. of Chemistry, 2004, 16 (1), 179-182.

#### Papers Accepted in International Conferences

1. An LC-MS method for simultaneous determination of ofloxacin and cefixime in human plasma: **MSACL, San Diego, CA, USA, 9-13 Feb.** 2013.
2. Simultaneous determination of moxifloxacin and cefixime by first and ratio first derivative ultraviolet spectrophotometry in presence of tablet excipients, **AAPS, USA, Sept.** 2012.
3. Development of HPLC Analytical Method With Programmed Wavelength UV Detection for Simultaneous Determination of Paracetamol and Lornoxicam in Tablet" accepted for Oral presentation at **First United Arab Emirates Conference on Pure and Applied Chemistry, American University of Sharjah, UAE, 1-3 March,** 2011

#### DSR Projects

◆ Mahesh Attimarad, Anroop Nair Dr. Bandar Essa Aldhubiah, Sree Harsha, "Simultaneous determination of amlodipine, hydrochlorothiazide and several sartans by Liquid Chromatography and/or Capillary Electrophoresis in formulations and plasma" Proposal grant No. 150190. SAR 75400/- **2014 – 2015 –**

◆ "Development of Nano based drug delivery system for the buccal delivery of acyclovir" Proposal grant No. 140103. SAR 77, 400/- **2014 – 2015**

◆ "Development of transdermal delivery system of vildagliptin and its comparison with oral therapy" Proposal grant No. 140069. SAR 82,400/- **2014 – 2015**

◆ "Design and Evaluation: Vildagliptin–Metformin Nanoparticle Combination" Proposal grant No. 150196. SAR 55, 900/- **2014 – 2015** Arshia Shariff,

◆ "Formulation and Evaluation of Vildagliptin Dual Drug Release microsphere" Proposal grant No. 150207. SAR 54, 900/- **2014 – 2015 – Accepted**



*Room Location : College of  
Clinical Pharmacy,  
Ph.: 03589819  
Email :  
momorsy@kfu.edu.sa*

#### ***Theses Co-Supervision:***

*1 PhD thesis and  
7 MSc theses.*

#### **Books**

- ◆ *Morsy M, Emeka P. Diabetes Mellitus and Gastrointestinal Disorders. In: Research on Diabetes II. iConcept Press Ltd (Ed.), 2014. iConcept Press Ltd, Hong Kong. ISBN 978-1-922227-263.*
- ◆ *Morsy M, El-Sheikh A. Prevention of Gastric Ulcers. In: Peptic Ulcer Disease. Chai J (Ed.), 2011. InTech, Croatia, 437-460. ISBN 978-953-307-976-9.*

## **Dr. Mohamed Aly M. Morsy**

*Ph.D. in Pharmacology, Kumamoto Univ., Japan; Diploma in Clinical Pharmacy, Minia Univ. Egypt*

### **ASSOCIATE PROFESSOR, PHARMACOLOGY**

**TEACHING EXPERIENCE:** Total of 23 years in teaching pharmacology to medical, pharmacy, dental and nursing under- and postgraduates at Minia University (Egypt), Kumamoto University (Japan), and King Faisal University (Kingdom of Saudi Arabia).

### **RESEARCH INTEREST:**

1. Experiments on cardiovascular system (blood pressure measurement, isolated perfused heart preparation as well as ECG tracing in experimental animals).
2. Experiments on gastro-intestinal tract (induction of gastric ulcer and hepatotoxicity by different models).

### **RECENT PUBLICATIONS:**

1. El-Sheikh AA, **Morsy MA**, Al-Taher AY. Protective mechanisms of resveratrol against methotrexate-induced renal damage may involve BCRP/ABCG2. *Fundam Clin Pharmacol.* 2016 Oct;30(5):406-18.
2. **Morsy MA**, Heeba GH. Nebivolol ameliorates cisplatin-induced nephrotoxicity in rats. *Basic Clin Pharmacol Toxicol.* 2016 Jun;118(6):449-55.
3. El-Sheikh AA, **Morsy MA**, Hamouda AH. Protective mechanisms of thymoquinone on methotrexate-induced intestinal toxicity in rats. *Pharmacogn Mag.* 2016 Jan;12(Suppl 1):S76-81.
4. **Morsy MA**, Ibrahim MA, Abd-Elghany MI. Dimethyl dimethoxy biphenyl dicarboxylate attenuates hepatic and metabolic alterations in high fructose-fed rats. *Toxicol Ind Health.* 2016 Jan;32(1):59-67.
5. Heeba GH, **Morsy MA**. Fucoidan ameliorates steatohepatitis and insulin resistance by suppressing oxidative stress and inflammatory cytokines in experimental non-alcoholic fatty liver disease. *Environ Toxicol Pharmacol.* 2015 Nov;40(3):907-14.
6. El-Sheikh AA, **Morsy MA**, Abdalla AM, Hamouda AH, Alhaider IA. Mechanisms of thymoquinone hepatorenal protection in methotrexate-induced toxicity in rats. *Mediators Inflamm.* 2015;2015:859383.
7. **Morsy MA**, Heeba GH, Mahmoud ME. Ameliorative effect of eprosartan on high-fat diet/streptozotocin-induced early diabetic nephropathy in rats. *Eur J Pharmacol.* 2015 Mar 5;750C:90-97
8. Morsy MA, Ibrahim SA, Amin EF, Kamel MY, Rifaai RA, Hassan MK. Sildenafil ameliorates gentamicin-induced nephrotoxicity in rats: role of iNOS and eNOS. *J Toxicol.* 2014;2014:489382.

9. El-Sheikh AA, **Morsy MA**, Al-Taher AY. Multi-drug resistance protein (Mrp) 3 may be involved in resveratrol protection against methotrexate-induced testicular damage. *Life Sci.* 2014 Dec 5;119(1-2):40-46. Morsy MA, Ibrahim SA, Amin EF, Kamel MY, Rifaai RA, Hassan MK. Sildenafil ameliorates gentamicin-induced nephrotoxicity in rats: role of iNOS and eNOS. *J Toxicol.* 2014;2014:489382.
10. Morsy MA, Ibrahim SA, Amin EF, Kamel MY, Abdelwahab SA, Hassan MK. Carvedilol Ameliorates Early Diabetic Nephropathy in Streptozotocin-Induced Diabetic Rats. *Biomed Res Int.* 2014;2014:105214. doi: 10.1155/2014/105214.
11. Ramzy MM, El-Sheikh AA, Kamel MY, Abdelwahab SA, Morsy MA. Mechanism of testicular protection of carvedilol in streptozotocin-induced diabetic rats. *Indian J Pharmacol.* 2014 Mar;46(2):161-5. doi: 10.4103/0253-7613.129307.
12. El-Sheikh AA, Morsy MA, Mahmoud MM, Rifaai RA. Protective mechanisms of coenzyme-Q10 may involve up-regulation of testicular P-glycoprotein in doxorubicin-induced toxicity. *Environ Toxicol Pharmacol.* 2014 Mar;37(2):772-81. doi: 10.1016/j.etap.2014.02.010.
13. Morsy MA, Ibrahim SA, Amin EF, Kamel MY, Rifaai RA, Hassan MK. Curcumin ameliorates methotrexate-induced nephrotoxicity in rats. *Adv Pharmacol Sci.* 2013;2013:387071. doi: 10.1155/2013/387071
14. Morsy MA, Ibrahim MA, Abd-Elghany MI. Dimethyl dimethoxy biphenyl dicarboxylate attenuates hepatic and metabolic alterations in high fructose-fed rats. *Toxicol Ind Health.* 2013 Sep 10. doi: 10.1177/0748233713498445.
15. Abdel-Latif RG, Morsy MA, El-Moselhy MA, Khalifa MA. Sildenafil protects against nitric oxide deficiency-related nephrotoxicity in cyclosporine A treated rats. *Eur J Pharmacol.* 2013 Mar 7;705(1-3):126-134. doi: 10.1016/j.ejphar.2013.02.039.
16. Morsy MA, El-Moselhy MA. Mechanisms of the protective effects of curcumin against indomethacin-induced gastric ulcer in rats. *Pharmacology.* 2013 May 15;91(5-6):267-274. doi: 10.1159/000350190.
17. Fouad AA, Al-Mulhim AS, Jresat I, Morsy MA. Protective effects of captopril in diabetic rats exposed to ischemia/reperfusion renal injury. *J Pharm Pharmacol.* 2013 Feb;65(2):243-52. doi: 10.1111/j.2042-7158.2012.01585.x.
18. Zhou J, Morsy M, Kunika K, Yokomizo K, Miyata T. Ergogenic capacity of a 7-Chinese traditional medicine extract in aged mice. *Chinese Medicine.* 2012 Dec;3(4):223-8. doi: 10.4236/cm.2012.34032.
19. El-Sheikh AA, Morsy MA, Mahmoud MM, Rifaai RA, Abdelrahman AM. Effect of coenzyme-q10 on doxorubicin-induced nephrotoxicity in rats. *Adv Pharmacol Sci.* 2012;2012:981461. doi: 10.1155/2012/981461.
20. Ibrahim MA, Morsy MA, Hafez HM, Gomaa WM, Abdelrahman AM. Effect of selective and non-selective cyclooxygenase inhibitors on doxorubicin-induced cardiotoxicity and nephrotoxicity in rats. *Toxicol Mech Methods.* 2012 Jul;22(6):424-31. doi: 10.3109/15376516.2012.666658.
21. Morsy MA, Heeba GH, Abdelwahab SA, Rofaeil RR. Protective effects of nebivolol against cold restraint stress-induced gastric ulcer in rats: role of NO, HO-1, and COX-1,2. *Nitric Oxide.* 2012 Jun 8;27(2):117-122. doi: 10.1016/j.niox.2012.06.001.
22. Morsy MA, Abdalla AM, Mahmoud AM, Abdelwahab SA, Mahmoud ME. Protective effects of curcumin,  $\alpha$ -lipoic acid, and N-acetylcysteine against carbon tetrachloride-induced liver fibrosis in rats. *J Physiol Biochem.* 2012 Mar;68(1):29-35. doi: 10.1007/s13105-011-0116-0.

**Skills:**

*Tissue culture technique.*

*RNA and DNA extraction and manipulation techniques.*

*RT-PCR technique.*

*Protein separation.*

*Western blotting technique.*

*Confocal laser microscope technique.*

*Liquid scintillation counter, ELISA, spectrofluorophotometer and spectrophotometer techniques.*

**Journals' Reviewer**

*Reviewer in: European Journal of Pharmacology, PLoS ONE, Pharmacy and Pharmacology, Clinical and Experimental Pharmacology and Physiology, Life Sciences, Medical Science Monitor, Food and Chemical Toxicology, Archives of Pharmacal Research, Journal of Food Science, Phytotherapy Research, Journal of Pharmacy and Bioallied Sciences.*

**Research Grants' Reviewer**

*Reviewer in: King Abdulaziz City for Science and Technology (KACST), Riyadh, Saudi Arabia.*

**Dr. Mohamed Aly M. Morsy**

23. Morsy MA. Protective effect of lisinopril on hepatic ischemia/reperfusion injury in rats. *Indian J Pharmacol.* 2011 Nov;43(6):652-5. doi: 10.4103/0253-7613.89820.
24. Morsy MA, Ibrahim SA, Abdelwahab SA, Zedan MZ, Elbitar HI. Curative effects of hydrogen sulfide against acetaminophen-induced hepatotoxicity in mice. *Life Sci.* 2010 Dec 18;87(23-26):692-8. doi: 10.1016/j.lfs.2010.10.004.
25. Abdel-Hamid NM, Morsy MA. Novel biochemical pathways for 5-Fluorouracil in managing experimental hepatocellular carcinoma in rats. *J Membr Biol.* 2010 Mar;234(1):29-34. doi: 10.1007/s00232-010-9236-7.

**RECENT ORAL PRESENTATIONS:**

1. **Morsy MA**, El-Sheikh AA, Okasha AM. Protective effect of resveratrol against cyclophosphamide-induced toxicity in rats. "4<sup>th</sup> MNGHA Research Day". King Abdulaziz Hospital, King Abdullah International Medical Research Center, King Saud bin Abdulaziz University for Health Sciences, Ministry of National Guard Health Affairs (MNGHA), Eastern Region, Al-Ahsa, Saudi Arabia. April 23, 2015.
2. **Morsy MA**, Heeba GH. Ameliorative effects of fucoidan on hepatic and metabolic changes in high-fat diet-induced non-alcoholic fatty liver disease in rats. The 30th meeting of the Saudi Biological Society, Tabuk, Saudi Arabia. April 7-9, 2015.
3. **Morsy MA**, El-Sheikh AAK, Al-Taher AY. Involvement of Multi-Drug Resistance Protein (Mrp) 3 in Resveratrol Protection against Methotrexate-Induced Testicular Damage. ICPSP 2015: XIII International Conference on Pharmaceutical Sciences and Pharmacology, Paris, France. January 23-24, 2015.
4. Morsy MA, El-Sheikh AAK, Mahmoud MM, Rifaai RA. Protective mechanisms of coenzyme-Q10 involves up-regulation of testicular P-glycoprotein in doxorubicin-induced toxicity. The 29th meeting of the Saudi Biological Society, Dammam, Saudi Arabia. February 25-27, 2014.
5. Morsy MA, El-Moselhy MA, Abdel-latif RG, Khalifa MA. Sildenafil ameliorates cyclosporine-induced nephrotoxicity in rats: role of nitric oxide. The Saudi International Conference of Nephrology & Transplantation. King Fahd Cultural Center, Riyadh, Kingdom of Saudi Arabia. February 19-22, 2012.
6. Morsy MA, Ibrahim SA, Abdelwahab SA, Zedan MZ, and Elbitar HI. Therapeutic effects of hydrogen sulfide on acetaminophen-induced hepatotoxicity in mice. Beirut Arab University, Beirut, Lebanon. May 6-7, 2010.



**RECENT ORAL PRESENTATIONS:**

4. Morsy MA, Ibrahim SA, Abdelwahab SA, Zedan MZ, and Elbitar HI. Therapeutic effects of hydrogen sulfide on acetaminophen-induced hepatotoxicity in mice. University of Aleppo, Aleppo, Syria. April 13-15, 2010.
5. Morsy MA, Eshra A, Azar A. Artificial neural network for automatic detection of arrhythmia from electrocardiogram. EPHAR 2008 Congress, University of Manchester, Manchester, UK. July 13-17, 2008.

**RECENT POSTER PRESENTATIONS:**

1. Morsy MA, El-Sheikh AAK, Abdalla AM, Hamouda AH, Alhaider IA. Mechanisms of thymoquinone hepato-renal protection in methotrexate-induced toxicity in rats. The 29th meeting of the Saudi Biological Society, Dammam, Saudi Arabia. February 25-27, 2014.
2. El-Moselhy MA, Morsy MA, Abdel-latif RG, Khalifa MA. Enhanced nitric oxide synthase-nitric oxide (NOS-NO) signaling underlies sildenafil amelioration of cyclosporine-induced nephrotoxicity in rats. 12th Experimental Biology Meeting, San Diego, CA. April 21-25, 2012.
3. Ibrahim MA, Morsy MA, Ashour OM, Abd-Elghany. The potential protective effect of chloroquine against high fructose-induced metabolic disorders. Assiut University 8th International Pharmaceutical Sciences Conference, Faculty of Pharmacy, Assiut University, Assiut, Egypt. March 14-15, 2012.
4. El-Sheikh AA, Morsy MA, Mahmoud MM, Rifaai RA, Abdelrahman AM. Protective mechanisms of coenzyme Q10 in doxorubicin-induced nephrotoxicity in rats. Assiut University 8th International Pharmaceutical Sciences Conference, Faculty of Pharmacy, Assiut University, Assiut, Egypt. March 14-15, 2012.
5. Ibrahim MA, Morsy MA, Abd-Elghany MI. Dimethyl dimethoxy biphenyl dicarboxylate (DDB) attenuates hepatic and metabolic changes in high fructose-fed rats. 52nd Annual Scientific Conference of the Egyptian Society of Pharmacology and Experimental Therapeutics, Cairo University, Cairo, Egypt. March 10, 2012.
6. El-Sheikh AA, Morsy MA, Mahmoud MM, Rifaai RA. Protective mechanisms of co-enzyme Q10 involves up-regulation of testicular P-glycoprotein in doxorubicin-induced toxicity. 52nd Annual Scientific Conference of the Egyptian Society of Pharmacology and Experimental Therapeutics, Cairo University, Cairo, Egypt. March 10, 2012.
7. Morsy MA. Protective effects of lisinopril on hepatic ischemia/reperfusion injury in rats. 51st Annual Conference of the Egyptian Society of Pharmacology and Experimental Therapeutics. Ain Shams University, Cairo, Egypt. March 16-17, 2010.



**Room Location:** College of  
Clinical Pharmacy  
**Room No:** 1003  
**IP Phone:** 03-5899821  
**Email:**  
pemeka@kfu.edu.sa

#### **Grant Received:**

- ◆ *PhD Grant award 15,400 Naira- University of Lagos -Nigeria*
- ◆ *Cardiotoxic and oxidative stress protection, by caffeic acid phenethyl ester following acute and sub-chronic exposure to co-administration of cyclophosphamide and naproxen in mice. KFU annual Research Grant, 2012-2013, SAR/ 69500.0.*

## **Dr. Promise Madu Emeka**

*B.Sc.. University of Ibadan, M. Sc; Ph.D. University of Lagos. Nigeria*

### **ASSISTANT PROFESSOR, PHARMACOLOGY**

**TEACHING EXPERIENCE :** Thirteen years of experience in teaching the undergraduate and post graduate Pharmacy students in pharmacology related courses.

### **RESEARCH INTEREST :**

1. Pharmacological Intervention in the treatment of diabetes mellitus and its comorbidities
2. Evaluation of antimicrobial activities of natural products and rational use of antibiotics.
3. In-vivo screening of antioxidant.
4. Evaluation of antiprotozoal activities of natural products.
5. Bioavailability studies
6. Molecular Pharmacology research

### **LIST OF PUBLICATIONS:**

1. Promise Emeka, Hussien Al Hilal, Afzal H Asif, Ahmed Almukhalaf, Tahir Khan. An assessment of frequent haemolytic crisis in G6PD deficiency subjects linked with chronic disease states in Al Ahsa Community, Saudi Arabia. *Health*, 2015; 7: 625-632.
2. Tahir Mehmood Khan, Promise Emeka, Amal Khalil Suleiman, Fahad Sahood Alnutafy, and Hisham Aljadhey. Pharmaceutical Pricing Policies and Procedures in Saudi Arabia: A Narrative Review. *Therapeutic Innovation & Regulatory Science* 2168479015609648, first published on October 26, 2015 doi:10.1177/2168479015609648.
3. Promise Madu Emeka. Teratogenic and embryotoxic effects of orally administered cypermethrin in pregnant albino rats. *J. Toxicol. Environ. Health Sci.* 2015;Vol. 7(7): 60-67.
4. Promise Madu Emeka. Can Co-administration of Sulfadoxine-pyremethamine and Single-dose Activated Charcoal Reduce the Chances of Adverse Reactions in Cases of Inadvertent Repeat Dose? *International Journal of Pharmacology*. 2016 | Volume: 12 | Issue: 6 | Page No.: 605-611.
5. DOI: 10.3923/ijp.2016.605.611 Amal K. Suleiman, Tahir Mehmood Khan, Promise Madu Emeka, Sohail A. Ahmed, Sarab M. Mansoor. The public purchase of aphrodisiac products without prescriptions in the Alahsa region of KSA. *J Taibah Univ Med Sc* 2016;11(5):413e417.
6. Promise M Emeka, Ahmed Al Mukalaf, Hussien Al Helal, Tahir M Khan, Mishial A Almukalf. Prevalence of poor glycaemic-blood pressure control and pattern of drug use among Primary Healthcare outpatients in Al Ahsa Saudi Arabia. *International Journal of Health Sciences (IJHS)*. (Accepted and in Press).

7. Iniaghe L.O., **Emeka P.M** and Ogbunugafor H (2012) Effects of co-administration of ascorbic acid on sulphadoxine/pyrimethamine in mice infected with Plasmodium berghei Nigerian Journal of Pharmacy, 45(1); 48-52.Emeka PM, Badger-Emeka LI, Fateru F. In-vitro Antimicrobial activities of Acalypha ornate Leaf Extracts on Bacterial and Fungal Clinical Isolates. Journal of herbal Medicine. 2012; 2:136-142.
8. **Promise Madu Emeka**, Mokhtar Jawad Al-Omar & Tahir Mehmood Khan. A Qualitative Study Exploring Role of Community Pharmacy in the Irrational Use and Purchase Of Nonprescription Antibiotics In Al Ah-saEur J Gen Med 2012;9(4):230-234.
9. Tahir Mehmood Khan, **Promise Emeka** and Amer Hayat Khan. Drug Information Activity and Nonprescription Requests Over the Malaysian Counter. Therapeutic Innovation & Regulatory Science published online 7 January 2013. DOI: 10.1177/2168479012462214.
10. Nnoli, M., Hadas G., **Emeka, PM.**, Chukwuonye I.J , Nnoli C. Cocaine Intoxication-Clinical Findings from 402 Acute Deaths. IOSR Journal of Dental and Medical Sciences (IOSR-JDMS) e-ISSN: 2279-0853, p-ISSN: 2279-0861. Volume 5, Issue 3 (Mar. - Apr. 2013), PP 54-58.
11. Emeka Lorina. Ineta, **Emeka Promise**. Madu, Okoli, Chigozie. Linus. Evaluation of antibiotic susceptibility of *Staphylococcus aureus* isolated from nasal and thumbprints of University students and their resistance pattern. IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)e-ISSN: 2279-0853, p-ISSN: 2279-0861. Volume 5, Issue 5 (Mar.- Apr. 2013), PP 59-64.
12. Morsy M, **Emeka P**. Diabetes Mellitus and Gastrointestinal Disorders. In: Research on Diabetes. iConcept Press (Ed.), 2013. iConcept Press, Hong Kong, China. ISBN 978-14775550-1-9. (Book Chapter:in press)
13. Badger-Emeka L, **Emeka P**, Egbu V. (2013). Prevalence of Plasmodium parasite among Blood Donors at Nsukka Area, Southeast Nigeria. BEST: International Journal of Humanities, Arts, Medicine and Sciences (BEST: IJHAMS) Vol. 1(2): 45-50.
14. **Emeka PM**, Badger-Emeka LI. et al., (2014). Dietary Supplementation of chloroquine with Nigella sativa seed and oil extract in the treatment of malaria induce Plasmodium berghei. Phcog Mag 2014 (10) 357-362.
15. **Promise M. Emeka**, Mokhtar Al-Omar, Tahir M. Khan. Public attitude and justification to purchase antibiotics in the Eastern region Al Ah-sa of Saudi Arabia. Saudi Pharmaceutical Journal. 2014. Open Access. DOI: 10.1016/j.jsps.2014.02.014.
16. Emeka Lorina I, **Emeka Promise M** & Tahir M Khan. Antimicrobial activity of Nigella sativa Linn. Seed oil against multi-drug resistant *Staphylococcus aureus* isolated from diabetic wounds. [Accepted and in-press, Pakistan Journal of Pharmaceutical Sciences].
17. Badger-Emeka LI, **Emeka PM** and Dibua UME. Profile of Multi Antibiotic Resistant Staphylococcus aureus isolated from Diabetic Wounds from Patients at Nsukka, South-Eastern, Nigeria. [Accepted in the African Journal of Biotechnology-2014].

### **Book Chapter**

***Promise Madu Emeka & Lorina Badger-Emeka. Mechanism of Action of Plants in Relation to Their Medicinal Properties printed in Vol. 43 Phytotherapeutics of the Series "Recent Progress in Medicinal Plants 2014 Book Chapter [in Press].***

**Dr. Promise Madu Emeka**

18. Mbang A.wolabi, Moyosola M. Abass, **Promise M. Emeka**, Smith I. Jaja, Martin Nnoli, Benjamin O. S. Dosa. 2010. Biochemical and histologic changes in rats after prolonged administration of the crude aqueous extract of the leaves of *Vitex grandifolia*. Pharmacognosy Research. September Vol 2.( 5):273-278.
19. O.A. Sofola, A. Akintonwa, **P. Emeka**, C. Ladipo, I Raji: 2005: Peak Expiratory Flow Rate in Petroleum Depot Workers and Petrol Filling Station Attendants. Nigerian Medical Practitioner. Vol. 47 (3); 22-25.
20. O. Aina, **P. M. Emeka**, A. Akintonwa, P.U. Agomo. 2005. Comparative Efficacy Study of Chloroquine Dihydroartemisinin and Dihydroartemisinin plus Mefloquine Combination in Children with Acute Uncomplicated Falciparum Malaria. Nig. Qr. J. Hosp Med. Vol. 15 (2): 59-63.
21. Alade Akintonwa, B.A. Ojo, **P. Emeka**, H.A.B. Coker, and O. Sofola. Effect Of Chronic Exposure To Petroleum Products On Some Haematological And Biochemical Parameters. Nig. Qr. J. Hosp Med. Vol. 15 (2): 77-82.
22. U.E. Mendie, **P.M. Emeka** and A.F. Banjo: 2005: Are high potency multivitamin syrups toxic? Nig. Qr. J Hosp Med. Vol. 15 (3): 123-126.
23. OO. Aina, **PM Emeka**, A Akintonwa, PU Agomo and OO Aina. 2006: Comparative efficacy of dihydroartemisinin, chloroquine and combination of dihydroartemisinin and chloroquine or mefloquine in mice infected *Plasmodium berghei*. Nig. Journal of Health and Biomedical Sciences. Vol. 5 (1): 64-67.
24. RA, Oshinubi, **PM Emeka** and Awodele. 2006: The effect of ethanol stem extract of *Gongronema Latifolium* on blood glucose of normal and alloxan induced diabetic rabbits. Nig. Journal of Health and Biomedical Sciences. Vol. 5 (2): 39-44.
25. AA Akinyede, A Akintonwa, SO Olayemi. **PM Emeka**. 2006: Investigating the Idoho oil spillage into Lagos: Some confounding health factors. Nig. Journal of Health and Biomedical Sciences. Vol. 5 (2): 89-93.
26. **Emeka, PM.**; Badger-Emeka, L.I. and Iwuanyanwu, S. 2006: Antibacterial activity of the aqueous extract of the leaf of jatropha curcas. Journal of Integrative Medicine and Biomedical Research. Vol. 1 (2). 15-18.
27. O. Awodele, **P.M Emeka**, A. Akintonwa. O.O. Aina. 2007: Antagonistic effect of vitamin E on the efficacy of Artesunate against *Plasmodium Berghei* infection In Mice. African Journal of Biomedical Research. Vol. 10: 51-57.
28. Akintonwa, O. Awodele, **P.M. Emeka**, O. Osajare. 2007: The mutagenic potentials of potassium bromate and some commonly used food additives. African Journal of Biotechnology. Vol. 6 (8): 1004-1006.
29. O. Awodele, **P.M. Emeka**, H.C. Agbamuche, and A. Akintonwa. 2007: The antimicrobial activities of some commonly used disinfectant on *Bacillus subtilis*, *Pseudomonas aeruginosa* and *Candida albicans*. African Journal of Biotechnology. Vol. 6 (8): 987-990.

**Presentations and abstracts:**

1. **2004:** Emeka PM, Ukpo GE, Oyelahan, O.O.: Biochemical and Haematological evaluation of (Cucurbitaceae) *Cucubita Maxima* in albino rats. Published abstract International Congress on Natural Products Research July 31 – August 4, 2004 Phoenix, Arizona USA
2. **2003: P.M.Emeka.,** S. Iwuanyanwu.,and L.I.Emeka: Screening of *Azadiracta Indica aqueous* leaf extract for possible activity in mice infected with Trypanosoma Brucei brucei . Published abstract. A020,30<sup>h</sup> Regional Conference of the WASP, October 2003, 18--24<sup>th</sup> University of Ibadan, Ibadan
3. **2003 : P.M.Emeka.,**M.M.Lawal.,S. Genebiche.,In-Vitro studies of *Bryophyllum Pinna-tum* aqueous extract on blood coagulation. . Published abstract. Number B024, 30<sup>h</sup> Regional Conference of the WASP, October 2003, 18--24<sup>th</sup> University of Ibadan, Ibadan.
4. 2000: **Emeka P.M.** Akintonwa A and Adeyemi O.O. Toxicity studies of *manihot wscu-lenta* crantz in albino rats. Published abstract. 27<sup>th</sup> Regional Conference of the WASP, October 2000, 23-28<sup>th</sup> Port Harcourt.
5. 2000: **Emeka P.M.** Akintonwa .A and Adeyemi O.O Changes in thiocyanate levels of Diabetic and Goiter patients. Published abstract. 27<sup>th</sup> Regional Conference of the WASP, October 2000, 23-28<sup>th</sup> Port Harcourt
6. 2000: Akinydede A. Olayemi S. Akintonwa A. ,**Emeka P.M.** Assessing thr health impact of the Mobil Idoho iol spillage. Published abstract. 27<sup>th</sup> Regional Conference of the WASP, October 2000, 23-28<sup>th</sup> Port Harcourt
7. 1999: **Emeka P.M.** Akintonwa A. and Adeyemi O.O. Baseline study of thiocyanate lev-els among Nigeria residing in Lagos. Published abstract. 26<sup>th</sup> Regional conference of the West Africa Society for Pharmacology (WASP) October 1999, 20-23<sup>rd</sup>. Nsukka.
8. 1998: **Emeka P.M.** Akintonwa Adeyemi O.O. A comparatine study of cardiotoxic ef-fect of linamarin and potassium cyanide in animal models. Published abstract XIIIth inter-national congress of pharmacology, July 2-31 Munchen, Germany.

**Professional services :**

1. Bioavailability studies of parakaf /paracetamol for NAFDAC- Nigeria
2. Toxicology Analysis of drug/products routine- Nigeria
3. Bioavailability study of Thalazole and Thiazamide for May and Baker- Nigeria
4. Bioavailability studies of Paracetamol/ caffeine for Roche (Nig) Limited, Lagos Nigeria
5. Clinical trials of anti-malaria- Paluther for May & Baker Plc. Lagos- Nigeria
6. Toxicology studies of Multivitamin-Chemiron Nigeria Limited
7. Clinical trials of Ashton and Parson Teething power for SmithKline Beechams (Nig.) Ltd.



*Room Location: College of  
Clinical Pharmacy*

*Room No: 1067*

*IP Phone: 03-5899831*

*Email: anair@kfu.edu.sa*

### **Book Authorship**

- ◆ *Transdermal Delivery of Antihypertensive agents. ISBN-10: 3847301934, Lambert Academic Publishing, USA, 2011.*
- ◆ *In vitro and in vivo models for transungual drug delivery studies (Book Chapter), ISBN-10: 1439811296, CRC Press-Taylor and Francis Group, USA,*

### **Supervision:**

*17 PhD thesis*

*More than 25 M. Pharma thesis*

## **Dr. Anroop B Nair**

*B. Ph. Dr. MGR Medical Univ, M. Ph; BITS Ranchi, Ph.D. Jadavpur Uni, Kolkata, India*

### **ASSISTANT PROFESSOR, PHARMACEUTICS**

#### **Teaching Experience**

Fifteen years of experience in teaching the undergraduate and post graduate Pharmacy students in courses like Drug Delivery, Pharmaceutics, Biopharmaceutics & Pharmacokinetics, Physical Pharmacy and Dosage Form Design.

#### **Research Interest**

Transdermal and transungual drug delivery.  
Topical bioavailability and dermatokinetics of topical drugs.  
Noninvasive approach for therapeutic drug monitoring.  
Noninvasive buccal delivery.  
Micro and macro nutrients delivery in chronic disorders.  
Enhancement of oral bioavailability using nano formulations.  
Nano delivery for liver targeting

#### **LIST OF PUBLICATIONS:**

1. **Anroop B**, Quantification of uptake and clearance of acyclovir in skin layers. *Antivir Ther.* 2016; 21(1):17-25.
2. Jacob S, **Anroop B**, An updated overview on therapeutic drug monitoring of recent antiepileptic drug. *Drugs R D.* 16:303-316, 2016.
3. **Anroop B**, Jacob S, A simple practice guide for dose conversion between animals and human. *J. Basic. Clin. Pharm.* 7, 27-31, 2016.
4. Al-Dhubiab BE, **Anroop B**, Kumria R, Attimarad M, Harsha S. Development and evaluation of buccal film impregnated with selegiline loaded nanospheres. *Drug Deliv*, 23(7):2154-2162, 2016.
5. Kumria R, **Anroop B**, Goomber G, Gupta S. Buccal films of prednisolone with enhanced bioavailability. *Drug Deliv*, 23: 471-478, 2016.
6. **Anroop B**, Kumria R, Al-Dhubiab BE, Attimarad M, Harsha S, Development of transdermal delivery system of vildagliptin and its comparison with oral therapy. *Indian J Pharm. Edu. Res.*, 50(1): 130-137, 2016.
7. Al-Dhubiab BE, **Anroop B**, Kumria R, Attimarad M, Harsha S. Formulation and evaluation of nano based drug delivery system for the buccal delivery of acyclovir. *Colloids Surf B Biointerfaces* 136; 878-884, 2015.
8. **Anroop B**, Kumria R, Al-Dhubiab BE, Attimarad M, Harsha S, Noninvasive sampling of gabapentin by reverse iontophoresis. *Pharm. Res.* 32: 1417-1424, 2015.
9. Kumria R, **Anroop B**, Al-Dhubiab BE. Loratidine buccal films for allergic rhinitis: development and evaluation. *Drug Dev. Ind. Pharm.* 40: 625-631, 2014.
10. **Anroop B**, Singh K, Al-Dhubiab BE, Attimarad M, Harsha S, Alhaider IA, Skin uptake and clearance of ciclopirox following topical application, *Biopharm. Drug Dispos.* 34: 540-549, 2013.
11. **Anroop B**, Jacob S, Al-Dhubiab BE, Attimarad MV, Harsha S, Basic considerations in the dermatokinetics of topical formulations, *Brazilian J. Pharm. Sci.* 49,423-434, 2013.

12. **Anroop B**, Singh K, Shinu P, Harsha S, Al-Dhubiab BE, A comprehensive study to evaluate the effect of constant low voltage iontophoresis on transungual delivery, *Drug Dev. Ind. Pharm.*, 39:807-815, 2013.
13. **Anroop B**, Kumria R, Harsha S, Attimarad MV, Al-Dhubiab BE, Alhaider IA, In vitro techniques to evaluate buccal films. *J. Control Release*, 166, 10-21, 2013.
14. Gupta A, **Anroop B**, Kumria R, Al-Dhubiab BE, Chattopadhyaya I, Gupta S, Assessment of pharmacokinetic interaction of Spirulina with glitazone in type II diabetes rat model. *J Med Food*. 16, 1095-1100, 2013.
15. Wadhwa J, **Anroop B**, Kumria R. Potential of plant mucilages in pharmaceuticals and therapy, *Curr. Drug Deliv*. 10, 198-207, 2013.
16. **Anroop B**, Kaushik A, Attimarad M, Al-Dhubiab BE, Enhanced oral bioavailability of calcium using bovine serum albumin microspheres. *Drug Deliv*. 19, 277-285, 2012.
17. **Anroop B**, Vaka SRK, Gupta S, Repka MA, Murthy SN. *In vitro* and *In vivo* evaluation of a hydrogel based prototype transdermal patch system of alfuzosin hydrochloride. *Pharm. Tech. Dev*. 17, 158-163, 2012.
18. Wadhwa J, **Anroop B**, Kumria R. Emulsion forming drug delivery system for lipophilic drugs. *Acta Pol. Pharm. Drug Res*. 69, 179-191, 2012.
19. Rao R, Sanju N, **Anroop B**, Influence of ultrasound mediated transdermal delivery of losartan potassium. *Drug Del Lett*. 2, 46-53, 2012.
20. **Anroop B**, Goel A, Prakash S, Kumar A, Therapeutic drug monitoring by reverse iontophoresis. *J. Basic. Clin. Pharm*. 3, 207-213, 2012.
21. **Anroop B**, Vaka SRK, Murthy SN. Trans-ungual delivery of terbinafine by iontophoresis in onychomycotic nails. *Drug Dev. Ind. Pharm*. 37, 1253-1258, 2011.
22. Wadhwa J, **Anroop B**, Kumria R. Self-emulsifying therapeutic system: a potential approach to deliver lipophilic drugs. *Brazilian J. Pharm. Sci*. 47, 447-465, 2011.
23. **Anroop B**, Vyas H, Shah J, Kumar A. Effect of permeation enhancers on the iontophoretic transport of metoprolol tartrate and the drug retention in skin. *Drug Deliv*. 18, 19-25, 2011.
24. **Anroop B**, Chakraborty B, Murthy SN. Effect of polyethylene glycols on the trans-ungual delivery of terbinafine, *Curr. Drug Deliv*. 7, 407-414, 2010.
25. **Anroop B**, Gupta R, Kumria R, Jacob S, Attimarad M. Formulation and evaluation of enteric coated tablets of proton pump inhibitor. *J. Basic. Clin. Pharm*. 1, 215-221, 2010.
26. **Anroop B**, Vyas H, Kumar A. Controlled release matrix uncoated tablets of enalapril maleate using HPMC alone. *J. Basic. Clin. Pharm*. 1, 71-74, 2010.
27. **Anroop B**, Kim HD, Friden PM, Davis SP, Etheredge R, Barsness M, Murthy SN. An ex vivo toe model used to assess applicators for the iontophoretic unguual delivery of terbinafine. *Pharm. Res*. 26, 2194, 2009.
28. **Anroop B**, Kim HD, Chakraborty B, Singh J, Zaman M, Gupta A, Friden PM, Murthy SN, Ungual and trans-ungual iontophoretic delivery of terbinafine for the treatment of onychomycosis. *J. Pharm. Sci*. 98, 4130-4140, 2009.
29. Murthy SN, Vaka SRK, Sammeta SM, **Anroop B**. TranScreen-N™: Method for rapid screening of Trans-ungual drug delivery enhancers. *J. Pharm. Sci*. 98, 4264-4271, 2009.
30. **Anroop B**, Ghosh B, Parcha V, Khanam J. Transdermal delivery of atenolol: Effect of prodrugs and iontophoresis. *Curr. Drug. Deliv*. 6, 280-290, 2009.

### Manuscript Reviewer

- *European Journal of Pharmaceutics and Biopharmaceutics.*
- *International Journal of Pharmaceutics.*
- *Journal of Controlled Release.*
- *Drug Delivery*
- *Pharmaceutical Technology and Development.*

### Highlights:

- *Post-Doctoral Fellow, University of Mississippi, Mississippi, USA (2007-2009).*
- *One project has completed the phase II clinical trials in USA.*
- *More than 100 research findings; published in peer reviewed journals/presented in conferences.*
- *Supervised 25 Post Graduate theses.*
- *Steering committee member of micro-dialysis Focus group.*
- *Expertise in the field of novel preclinical drug delivery approaches, trans-ungual drug delivery, topical & transdermal drug delivery, dermatokinetics, nano formulation and drug delivery, in vivo animal studies, oral controlled drug delivery, targeted drug delivery, pre-formulation studies, protocol development, analytical development etc.*
- *Active member of several pharmaceutical councils/forums, and reviewer journals in the field of Pharmaceutics.*

## Dr. Anroop B Nair

### Selected Abstracts

1. **Anroop B**, Kumria R, Al-Dhubiab BE, Development of drug in adhesive transdermal system of vildagliptin, AAPS Annual meet, Orlando, USA (2015).
2. **Anroop B**, Al-Dhubiab BE, Kumria R, Alotaibi FF, In vitro and in vivo evaluation of a drug in adhesive transdermal system of carbidopa and levodopa, AAPS Annual meet, San Diego, USA (2014).
3. **Anroop B**, Jacob S, Kumria R, Al-Dhubiab BE, Polymeric nanoparticles enhances the oral bioavailability of alfuzosin, AAPS Annual meet, San Diego, USA (2014).
4. **Anroop B**, Jacob S, Ahmed M.K. Al-Dhubiab BE, Al-Jaeid BM, Constant low voltage iontophoresis for the transungual delivery of terbinafine, AAPS Annual meet, San Antonio, USA (2013).
5. **Anroop B**, Wadhwa J, Jacob S, Ahmed MK, Al-Dhubiab BE, Measurement of uptake and clearance of topical acyclovir in the target site using rat model, AAPS Annual meet, San Antonio, USA (2013).
6. **Anroop B**, Wadhwa J, Al-Dhubiab BE, Attimarad M, Harsha S, Therapeutic drug monitoring of gabapentin by reverse iontophoresis, AAPS Annual meet, San Antonio, USA (2013).
7. **Anroop B**, Al-Dhubiab BE, Attimarad M, Harsha S, Al-Jaeid BM, Buccal delivery system for controlled release of selegiline, AAPS Annual meet, San Antonio, USA (2013).
8. **Anroop B**, Al-Dhubiab BE, Attimarad M, Harsha S, Alhaider I.A., In vitro and in vivo evaluation of a novel carrier for calcium delivery, AAPS Annual meet, Chicago, USA (2012).
9. **Anroop B**, Al-Dhubiab BE, Attimarad M, Harsha S, Alhaider I.A., Therapeutic drug monitoring of carbamazepine by reverse iontophoresis, AAPS Annual meet, Chicago, USA (2012).
10. **Anroop B**, Al-Dhubiab BE, Attimarad M, Harsha S, Alhaider I.A., Skin permeation and dermatokinetics of ciclopirox olamine, AAPS Annual meet, Chicago, USA (2012).
11. **Anroop B**, Kim HD, Davis SP, Friden PM, Murthy SN. Trans-ungual iontophoresis of terbinafine for onychomycosis: Ex vivo evaluation, AAD conference, San Francisco, CA (2009).
12. **Anroop B**, Jacob S, Ahmed M.K. Al-Dhubiab BE, Al-Jaeid BM, Constant low voltage iontophoresis for the transungual delivery of terbinafine, AAPS Annual meet, San Antonio, USA (2013).
13. **Anroop B**, Wadhwa J, Jacob S, Ahmed MK, Al-Dhubiab BE, Measurement of uptake and clearance of topical acyclovir in the target site using rat model, AAPS Annual meet, San Antonio, USA (2013).
14. **Anroop B**, Wadhwa J, Al-Dhubiab BE, Attimarad M, Harsha S, Therapeutic drug monitoring of gabapentin by reverse iontophoresis, AAPS Annual meet, San Antonio, USA (2013).



**Highlights:**

- ◆ Received research grant from King Abdulaziz city for Science and Technology (KACST), National Science, Technology and Innovation Plan under Strategic Technology program.
- ◆ Post-Doctoral Fellow, University of Mississippi, Mississippi, USA (2007-2009).
- ◆ One project has completed the phase II clinical trials in USA.
- ◆ More than 100 research findings; published in peer reviewed journals/presented in conferences.
- ◆ Supervised 25 Post Graduate theses.
- ◆ Steering committee member of micro-dialysis Focus group.
- ◆ Active member of several pharmaceutical councils/forums, and reviewer journals in the field of Pharmaceutics.
- ◆ Expertise in the field of novel preclinical drug delivery approaches, trans-ungual drug delivery, topical & transdermal drug delivery, dermatokinetics, nano formulation and drug delivery, *in vivo* animal studies, oral controlled drug delivery, targeted drug delivery, preformulation studies, protocol development, analytical development etc.
- ◆ Current research interests include the improvement of treatment methods of diseases and replace all invasive and painful techniques with the most patient acceptable noninvasive techniques.

**PG Thesis Supervised**

- ◆ Dermal absorption and pharmacokinetics of ciclopirox.
- ◆ Constant low voltage iontophoresis: A novel approach for transungual drug delivery.
- ◆ Microparticulate drug delivery system for oral delivery of calcium
- ◆ Transdermal delivery of a model anti-neo plastic agent: Comparison of iontophoresis with nanoparticles.
- ◆ Solubility enhancement of poorly soluble drugs by solid dispersion technique.
- ◆ Controlled release of alfuzosin using HPMC-based matrix tablets.
- ◆ Formulation and *in vitro* evaluation of floating tablet of various drugs.
- ◆ Formulation and evaluation of fast dissolving tablets by novel approaches.
- ◆ Enhanced transdermal delivery using chemical permeation enhancers and iontophoresis.
- ◆ Development of gels for the transdermal application by iontophoresis.



**Room Location :** College of  
Clinical Pharmacy,  
Ph.: 03589904  
**Email :**  
tshhata@kfu.edu.sa

#### **DSR KFU Grants:**

- ◆ *King Faisal University, DSR 140184, Evaluation of Iontophoresis Effect on Niosome-Emulgel Combination as a Novel Transdermal Drug Delivery System. Principle investigator, DR. Tamer Shehata (2012-2013)*
- ◆ *King Faisal University, DSR 15782, In-vivo and In-vitro Evaluation of Atorvastatin Transdermal Patches as Promising Drug Delivery System, Principle investigator DR. Tamer Shehata (2013-2014).*

## **Dr. Tamer Mohamed Shehata**

*B.Sc. M. Ph, Zagazig Uni, Egypt, Ph.D. Okayama University, Japan*

### **ASSISTANT PROFESSOR, PHARMACEUTICS**

**TEACHING EXPERIENCE :** 5 years in teaching pharmaceutics, industrial Pharmacy, physical pharmacy, pharmaceutical dosage forms, Bioavailability and Pharmacokinetics at under graduate and post graduate students.

### **RESEARCH INTEREST :**

- Formulation and evaluation of different pharmaceutical dosage forms.
- Bioavailability and Pharmacokinetics analysis
- Target Drug Delivery designs and evaluation
- Animal Handling Experience (Rat and Mice)
- Cell line handling and Tumor inculcation into BALB C mice (C26 cell line)
- HPLC, Gel Electrophoresis, Western Plot, Biotechnological tools for protein analysis, Radioisotope.

### **LIST OF PUBLICATIONS:**

1. In-vivo disposition characteristics of PEG niosome and its interaction with serum proteins. T Shehata, T Kimura, K Higaki, K Ogawara. International Journal of Pharmaceutics 512 (1), 322-328 (2016)
2. Formulation and evaluation of venlafaxine hydrochloride tablet. AA Khedr, TM Shehata, HA EL-Ghamry. Pharma Science Monitor 7 (2) (2016) Formulation and Evaluation of Tramadol Hydrochloride Microspheres. F.S.Ghazy, O.A.Sammour, M.E.Abu-Selem, and T.M.Shehata. Zagazig J. Pharm. Sci.12:29-35(2003)
3. Formulation and Evaluation of Tramadol Hydrochloride Suppository Bases. F.s.Ghazy, O.A.Sammour,M.E.Abu-Selem,andT.M.Shehata. Zagazig MJPS.21:1-18 (2005)
4. Prolongation of residence time of liposome by surface-modification with mixture of hydrophilic polymers, Tamer Shehata, Ken-ichi Ogawara, Kazutaka Higaki and Toshikiro Kimura. Int.J.Pharm. (2008)
5. In Vitro Evaluation Of Sustained Release Suppositories Containing Propranolol Hydrochloride Microspheres. Tamer M. Shehata and Mahmoud M. Ibrahim. Zagazig J. Pharm. Sci. June: 12-19(2010)
6. The Enhancement of Transdermal permeability and anti-inflammatory effect of Ketorolac Tromethamine formulated as novel niosome emulgel combination. Mahmoud M. Ibrahim and Tamer M. Shehata. J. Drug Del. Sci. Tech. 22 (4) 353-359 (2012)

7. Ahmed S Zidan , Bader M Aljaeid , Mahmoud Mokhtar , Tamer M. Shehata. Taste-masked orodispersible tablets of cyclosporine self-nanoemulsion lyophilized with dry silica. *Pharm Dev Technol.* 2014 Jul 29:1-10. [Epub ahead of print]
8. Sherif E. Emam, Fakhr-Eldin S. Ghazy, Ahmed S. Zidan & Tamer M. Shehata. Solid Dispersion Approach for Optimized Bioavailability of Sulpiride. *Latin American Journal of Pharmacy* - 32 (6) – 2013
9. Mohammed A. Khedr, Tamer M. Shehata, Maged E. Mohamed. Repositioning of 2, 4-Dichlorophenoxy acetic acid as a potential anti-inflammatory agent: In Silico and Pharmaceutical Formulation study. *Eur J Pharm Sci.* 2014 Sep 20;65C:130-138
10. Tamer M. Shehata, Marwa H. Abdallah and Mahmoud Mokhtar Ibrahim. Proniosomal Oral Tablets for Controlled Delivery and Enhanced Pharmacokinetic Properties of Acemetacin. [ *AAPS PharmSciTech* (# 2014) DOI: 10.1208/s12249-014-0233-5]

#### CONFERENCE/SEMINAR/WORKSHOP:

1. Participated in El-Azhar International conference in 2003, Cairo. Egypt
2. Participated in IXXX conference of pharmaceutical science and VIII conference of the college of pharmacy in the Arab world in 2004, Cairo, EGYPT (Formulation and Evaluation of Tramadol Hydrochloride Microspheres). Tamer.M.Shehata, O.A.Sammour, M.E.Abu-Selem, and F.s.Ghazy.
3. Participated in APSTJ Global education seminar west, 2005, Kobe. Japan
4. Participate in DDS conference in 2006, Tokyo. Japan (Formulation and Evaluation of Liposomes Coated with Mixture of Hydrophilic Polymers) Tamer Shehata, Ken-ichi Ogawara, Kazutaka Higaki and Toshikiro Kimura
5. Participated in APSTJ conference in 2007, Tokyo. Japan (Hepatic disposition characteristics of Liposomes Coated with Mixture of hydrophilic polymers) Tamer Shehata, Ken-ichi Ogawara, Kazutaka Higaki and Toshikiro Kimura
6. Participated in Okayama University meeting for Proteomic handling researcher in 2008, Okayama. Japan
7. Participated in EJISST conference in 2008, Tokyo. Japan (Prolongation of residence time of liposome by surface-modification with mixture of hydrophilic polymers) Tamer Shehata, Ken-ichi Ogawara, Kazutaka Higaki and Toshikiro Kimura
8. Participated in DDS conference in 2008, Tokyo. Japan (Formulation and Evaluation of PEGylated Niosomes for Targeted Drug Delivery) Tamer Shehata, Ken-ichi Ogawara, Kazutaka Higaki and Toshikiro Kimura
9. Attending in APSTJ Global education seminar west, 2008, Kyoto. Japan
10. Participated in Assuit University Pharmaceutical conference, 2010, Egypt.
11. Attending 32nd International conference of Egyptian Pharmaceutical Society, 2011, Egypt.
12. FUE international Conference, 2012, EGYPT.
13. 1<sup>st</sup> Saudi Quality Forum, Riyadh, 2013, Saudi Arabia.
14. Participated 29<sup>th</sup> conference of Saudi Biological Society, FEB.25-27-2014 In Dammam, KSA

*Supervising 5 master course students, in projects dealing with, Tablet, Solid dispersion, Suppository, Microemulsion, Microspheres, and Liposomes*

#### Awards:

1. *Egyptian President award, as one of the best-graduated student from Egyptian national Universities, Cairo, 2000.*
2. *Full scholarship for Ph.D. degree in Targeted Drug Delivery System, from the Egyptian Government, 2005-2009.*
3. *The Nagai Foundation award, presented In Expectation of Much Greater Achievement in Pharmacy and Pharmaceutical Science. Tokyo, 2007.*
4. *The First Egypt-Japan International Symposium on Science and Technology, EJISST 2008 award. Waseda University, Japan, 2008.*



*Room Location : College  
of Clinical Pharmacy,  
Ph.: 035817175 / 358*

## Dr. Mohammed Abdou Khedr

*B.Ph & M. Ph, Helwan University Egypt, M Phil & Ph.D. Cardiff University, UK*

### ASSISTANT PROFESSOR,

**TEACHING EXPERIENCE :** .10 years of teaching medicinal chemistry, drug design and pharmaceutical organic chemistry

### RESEARCH INTEREST :

1. Structure-based drug design
2. Ligand-based drug design
3. Virtual screening of new anti diabetic drugs.
4. Design and synthesis of novel anticancer.
5. All computational & molecular modeling studies.
6. Homology modeling.
7. 3D QSAR.

### LIST OF PUBLICATIONS:

1. Platelet-12 lipoxygenase targeting via a newly synthesized curcumin derivative radiolabeled with technetium-99m. Chemistry Central Journal, (2016) 10:73. *Impact factor*. 2.55
2. Antimycobacterial, docking and molecular dynamic studies of pentacyclic triterpenes from Buddleja saligna leaves. Journal of biomolecular Structure & Dynamics · September 2016 Impact = 2.3
3. 3-Substituted-4-Hydroxycoumarin as a New Scaffold with Potent CDK Inhibition and Promising Anticancer Effect: Synthesis, Molecular Modeling and QSAR Studies Bioorganic Chemistry 67 · June 2016 Impact factor 2.25
4. Design, Synthesis, Assessment, and Molecular Docking of Novel Pyrrolopyrimidine (7-deazapurine) Derivatives as Non-Nucleoside Hepatitis C Virus NS5B Polymerase Inhibitors Bioorganic & medicinal chemistry 24(9) · March 2016 Impact = 2.7
5. Dina H. Dawood. Rasha Z. Batran Thoraya A. Farghaly. **Mohammed A. Khedr** and Mohamed M. Abdulla. New Coumarin Derivatives as Potent Selective COX-2 Inhibitors: Synthesis, Anti-Inflammatory, QSAR, and Molecular Modeling Studies. Arch. Pharm. Chem. Life Sci. 2015, 348. 1–14 (impact factor =1.5)
6. Farghaly TA, Gomha, SM, Sayed AR, and **Khedr MA**. Hydrazonoyl Halides as Precursors for Synthesis of Bioactive Thiazole and Thiadiazole Derivatives: Synthesis, Molecular Docking and Pharmacological Study. Current Organic Synthesis, (2015) Volume 12 (E-pub ahead of print) (impact factor =2.4)
7. Essa BM, Sakr TM, **Khedr MA**, El-Essawy FA, El-Mohty AA. 99m Tcmitrole as a novel selective imaging probe for solid tumor: In silico and preclinical pharmacological study. European Journal of Pharmaceutical Sciences (2015) 76, 102-109. (impact factor =3.5)

8. **Khedr MA**. Stepwise design, synthesis, and in vitro antifungal screening of (Z)-substituted-propenoic acid derivatives with potent broad-spectrum antifungal activity MA Khedr. *Drug Design Development and Therapy* (2015) 9, 4501—4513. (impact factor =3.5)
9. Venugopala KN, Govender R, **Khedr MA**, Venugopala R, Aldhubiab BE. Design, synthesis, and computational studies on dihydropyrimidine scaffolds as potential lipoxygenase inhibitors and cancer chemopreventive agents, *Drug design, development and therapy* (2015) 9, 911. (impact factor =3.5)
10. Repositioning of 2,4-Dichlorophenoxy acetic acid as a potential anti-inflammatory agent: In Silico and pharmaceutical formulation study. *In press*, *European Journal of Pharmaceutical Sciences*, 2014.
11. Synthesis, molecular docking and antibacterial evaluation of various quinoline Schiff bases: labelling and biodistribution of  $^{99m}\text{Tc}$ -2-(p-hydroxybenzylidene)-1-(quinoline-4-yl) hydrazine. *Medicinal Chemistry Research*, 2014, 23, 4011-4020
12. Synthesis, Molecular Docking and Preliminary in-Vitro Cytotoxic Evaluation of Some Substituted Tetrahydro-naphthalene (2',3',4',6'-Tetra-O-Acetyl- $\beta$ -D-Gluco/-Galactopyranosyl) Derivatives. *Molecules* 2012, 17, 4717-4732
13. Synthesis, antitumor activity and molecular docking study of novel benzofuran-2-yl pyrazole pyrimidine derivatives. *Acta Poloniae pharmaceutica – Drug research*. 2011, 68 (3).
14. Synthesis, biological evaluation and molecular docking of quinazoline-4 (1H)-one derivatives as anti-inflammatory and analgesic agents. *Acta Pol Pharm*. 2011, 68(5):665-75
15. Synthesis, Biological Evaluation and Molecular Docking of Novel Series of Spiro[(2h,3H)quinazoline-2,1'-cyclohexan]-4(1H)-one Derivatives as Antiinflammatory and Analgesic Agents. *Eur. J. Med. Chem*. 2010. 45 (6), 2117-2131
16. 2-Arylamino-4-Amino-5-Aroylthiazoles. "One-Pot" Synthesis and Biological Evaluation of a New Class of Inhibitors of Tubulin Polymerization. *J. Med. Chem*. 2009. 52 (17), 5551-5555
17. West Nile Virus Helicase: Homology Modeling and Docking Studies, *Antiviral research*. 2009, 82, 2, 60.

### Presentations and Abstract

1. **QSAR-Based Virtual Screening: Computational tool for discovering potential inhibitors of West Nile Virus NS3 Protease.** 'Fragment- and Ligand-based *Drug Design Conference*' at Oxford University, United Kingdom.
2. "Personal strategic planning and grant writing", College of clinical pharmacy, 17-12-2012. KFU.
3. **Mohammed Abdou**, "Molecular Modeling 'concepts and applications' that was held in Helwan University, Egypt. 17-01-2012
4. **Mohammed Abdou**, "Computer-aided drug design and synthesis of novel antivirals", Cardiff university, UK.

**Ph.D**, Cardiff University, Welsh School of Pharmacy, Cardiff, UK.

"Computer-aided drug design"

### DSR (KFU) Projects :

◆ *Design and Synthesis of Novel Dipeptidyl Peptidase IV Inhibitors for the Treatment of Type-2 Diabetes Mellitus, KFU annual Research Grant, DSR 2012-2013, SAR 77000. 2012-2013*

◆ *Dr. Mohammed Abdou Khedr, Dr. Ibrahim Al-Haider, Dr. Bandar Al-Dhubiab, Dr. Tamer Mustafa, Dr. Maged El-Sayed, Design and Synthesis of Novel Phosphate Containing molecules that could be used in Treatment of cancer. KFU annual Research Grant, DSR 2013-2014, SAR 96000. 2013-2014*



Room Location : College of  
Clinical Pharmacy,  
Ph.: 035817175  
Email :  
heahmed@kfu.edu.sa

### Professional Services

- ◆ **Board member of a special Pharmaceutical and Herbal Products Unit. Faculty of Pharmacy, Minia University, Minia, Egypt. 2010-2012**
- ◆ **2-Board member of Crisis management and Quality assurance unit Faculty of Pharmacy, Minia University, Minia, Egypt. 2010-2012**
- ◆ **3-Executive manager of Electronic Portal Faculty of Pharmacy, Minia University, Minia, Egypt. 2010-2011**

## Dr. Hany Ezzat Khalil Ahmed

*Diploma in Clinical Ph, Minia Uni, B.Sc Pharm Sci; Ph.D. Kumamoto University, Japan*

### ASSISTANT PROFESSOR, PHARMACOGNOSY

**TEACHING EXPERIENCE** : Total of 12 years in teaching pharmacognosy, Natural products and Alternative medicine.

### RESEARCH INTEREST :

1. Isolation of naturally occurring compounds from plants.
2. interpretation of the isolated compounds by using Physical and chemical analyses and biological investigation.
3. Discover novel biologically active compounds that could be used to develop new therapeutic medical agents.

### LIST OF PUBLICATIONS:

1. Dina F. El-Kashef, Ashraf N.E. Hamed, **Hany E. Khalil**, Mohamed S. Kamel, Botanical studies of the leaf of *Pachypodium lamerei* Drake, family Apocynaceae, cultivated in Egypt, *Journal of Pharmacognosy and Phytochemistry*; 3 (5): 40-45, 2015.
2. Nada Mohamed Abdel-Wahab, Ashraf Nageeb El-Sayed Hamed, **Hany Ezzat Khalil** and Mohamed Salah Kamel, Leaf Morphoanatomy Studies of *Parmentiera cereifera* Seem., Family Bignoniaceae, Cultivated in Egypt, *Journal of Pharmacognosy and Phytochemistry*; 3(6): 47-57, 2015.
3. Nada Mohamed Abdel-Wahab, Ashraf Nageeb El-Sayed Hamed, **Hany Ezzat Khalil** and Mohamed Salah Kamel, Stem botanical studies of *Parmentiera cereifera* Seem., family Bignoniaceae, cultivated in Egypt, *Journal of Pharmacognosy and Phytochemistry*; 3(6): 01-07, 2015.
4. Nada Mohamed Abdel-Wahab, Ashraf Nageeb El-Sayed Hamed, **Hany Ezzat Khalil** and Mohamed Salah Kamel, Pharmacotherapeutic Evaluation of *Parmentiera cereifera* Seem. (Family Bignoniaceae) Cultivated in Egypt on Albino Rats, *European Journal of Medicinal Plants* 8(1): 29-38, 2015,
5. Dina Faek El-Kashef, Ashraf Nageeb El-Sayed Hamed, **Hany Ezzat Khalil** and Mohamed Salah Kamel, Bioactivities of *Pachypodium lamerei* Drake, Family Apocynaceae, Cultivated in Egypt, *European Journal of Medicinal Plants* 9(1): 1-11, 2015.
6. Mamdouh Nabil Samy, **Hany Ezzat Khalil**, Sachiko Sugimoto, Katsuyoshi Matsunami, Hideaki Otsuka and Mohamed Salah Kamel: Biological studies on chemical constituents of *Ruellia patula* and *Ruellia tuberosa*; *Journal of Pharmacognosy and Phytochemistry*; 4(1): 64-67, 2015.
7. Mamdouh Nabil Samy, **Hany Ezzat Khalil**, Sachiko Sugimoto, Katsuyoshi Matsunami, Hideaki Otsuka and Mohamed Salah Kamel: Amphipaniculosides A–D, triterpenoid glycosides, and amphipaniculoside E, an aliphatic alcohol glycoside from the leaves of *Amphilophium paniculatum*; *Phytochemistry*, 115, 261–268, 2015.
8. **Hany Ezzat Khalil** and Mohamed Salah Kamel: Phytochemical and biological studies of *Cichorium endivia* L. leaves; *Journal of Pharmaceutical Sciences and Research*, 7(8), 509-513, 2015.
9. **Hany Ezzat Khalil**, Yousef Mohammed Aljeshi and Fahad Abdullah Saleh: Authentication of *Carissa macrocarpa* cultivated in Saudi Arabia; botanical, phytochemical and genetic study; *Journal of Pharmaceutical Sciences and Research*, 7(8), 497-508, 2015.
10. Dina F. El-Kashef, Ashraf N.E. Hamed, **Hany E. Khalil**, Rehab Mahmoud Abd El-Baky and Mohamed S. Kamel: Phytochemical and antimicrobial studies of *Pachypodium lamerei* ; *J medicinal plant research* 9(47):1123-1130, 2015.

## A DEPARTMENT OF PHARMACEUTICAL SCIENCES

11. Marwa H. H. Mohammed, Ashraf N. E. Hamed, **Hany E. Khalil** and Mohamed S. Kamel, Phytochemical and pharmacological studies of *Citharexylum quadrangulare* Jacq. Leaves; *Journal of medicinal plant research* 10 (18):232-241, 2016.
12. Ashraf N. E. Hamed, Marwa H. H. Muhammad, **Hany E. Khalil**, Mohamed S. Kamel. Pharmacognostical Studies of the Leaf of *Citharexylum quadrangulare* Jacq. Cultivated in Egypt. *Journal of Pharmacognosy and Phytochemistry*; 2 (5): 98-103(2014)
13. Nada M. Abdel-Wahab, Ashraf N. E. Hamed, **Hany E. Khalil**, Mamdouh N. Samy, Amira S. Wanas, Mostafa A. Fouad, Mohamed S. Kamel. Phenolic acid glycosides from *Parmentiera cereifera* Seem. (Candle tree). *Phytochemistry Letters*, 9, 74–77 (2014).
14. El-Kashef, Dina F.; Hamed, Ashraf N. E.; **Khalil, Hany E.**; Kamel, Mohamed S. Investigation of the unsaponifiable and saponifiable matters of *Pachypodium lamerei* drake leaves and stems by GC/MS. *Journal of Pharmacognosy and Phytochemistry* 3(1), 128-132(2014)
15. **H. E. Khalil**, H. Ismail, A. Taye and M. S. Kamel. Gastroprotective effect of *Lippianodiflora* extracts in ethanol-induced gastric lesions. *Phcog Mag. Vol 3, Issue 12, Oct-Dec, 2007*.
16. Mamdouh Nabil Samy, **Hany Ezzat Khalil**, Sachiko Sugimoto, Katsuyoshi Matsunami, Hideaki Otsuka and Mohamed Salah Kamel: Three new flavonoid glycosides, byzantionoside B 6'-O-sulfate and xyloglucoside of (Z)-hex-3-en-1-ol from *Ruellia patula*; *Chem. Pharm. Bull.*59(06) 725-729 (2011).
17. **Hany Ezzat Khalil**, Liva Harinantenaina, Katsuyoshi Matsunami, Hideaki Otsuka and Mohamed Salah Kamel. Antioxidant Activity of Chemical Constituents from aerial parts of *Cichorium endivia*. XXXII conference of pharmaceutical sciences, December 2011.
18. M. N. Samy, **H. E. Khalil**, A. S. Wanas, M. S. Kamel, S. Sugimoto, K. Matsunami, and H. Otsuka. Chemical Constituents from the Leaves of *Ruellia tuberosa*. *Chemistry of Natural Compounds*, 49(1), 175–176 (2013).
19. Amira S. Wanas, Mostafa A. Fouad and **Hany E. Khalil**. Phytochemical and Biological Studies of *Clerodendrum glabra* Leaves. *International Journal of Pharmacognosy and Phytochemistry*, 28(2), 2051-7858(2013).

## Presentations and Abstracts

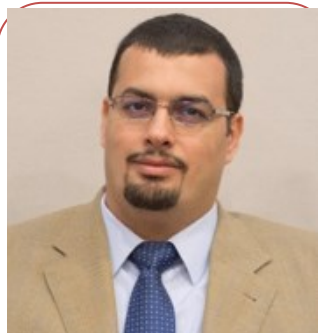
1. M.M.H. Muhammad, A.N.E. Hamed, **H.E. Khalil**, M.S. Kamel, A Phytochemical Study of *Citharexylum quadrangulare* Jacq., 4th International Scientific Conference of Faculty of Pharmacy, Cairo University "Pharmacy Education and Community Expectations" April 24th and 25th, 2013.
2. Wanas A.S., **Khalil H. E.**, Fouad M. A., Kamel M. S., Radwan M. M., Elsohaly. M. A. Phytochemical Study of the leaves of *Clerodendrum glabra* (verbenaceae). Annual meeting of the ASP, July 14-17, 2013, St. Louis. Missouri, USA
3. Ashraf N. E. Hamed, Marwa H. H. Muhammad, **Hany E. Khalil** and Mohamed S. Kamel, biological studies of *citharexylum quadrangulare* jacq. Family verbenaceae, Assiut Univ. 9th International Pharmaceutical Sciences Conference; Assiut, March 12th&13th, 2014.
4. Nada M. A. Abdel-Wahab, Ashraf N. E. Hamed, **Hany E. Khalil** and Mohamed S. Kamel, a pharmacognostical study of the leaf of *parmentiera cereifera* seem., family bignoniaceae, Assiut Univ. 9th International Pharmaceutical Sciences Conference; Assiut, March 12th&13th, 2014.

**Research Highlights**

I have gained an experience in a wide range of isolation of naturally occurring compounds from plants (Verbenaceae, Asteraceae, Acanthaceae, Proteaceae and Araliaceae) using normal and advanced tools such as column chromatography, **MPLC, HPLC and DCCC** with different stationary phases as well as interpretation of the isolated compounds by using Physical and chemical analyses, **IR, UV** and advanced techniques such as **EI, FAB/MS** in addition to **1- and 2-D NMR** procedures including **H-H COSY, H-H NOESY, HSQC, HMBC. ....etc.** during my Ph.D. studies in **Hiroshima University in Japan**. In addition, I have gained an experience in **biological investigation** of the identified compounds and the extracts such as; antihyperglycemic, antioxidant, gastroprotective actions, DPPH assay, Multi drug resistance assay, A549 cytotoxicity assay, anti-leishmanial assay and routine antimicrobial activities.

**Grants:**

- ◆ Egyptian Government Ph.D. Scholarship to Hiroshima Univ. Japan.
- ◆ Ministry of Higher Education, Egypt. 2007-2009



Room Location : College of  
Clinical Pharmacy,  
Ph.: 035817175  
Email :  
memohamed@kfu.edu.sa

#### Date and Palm Research Center grant.

- ◆ Evaluating the therapeutic potential of water-soluble compounds extracted from *Phoenix dactylifera* (Date fruits) in myocardial infarction: Role of circulating progenitor cell, (Co-investigator)
- ◆ Estimating the potential of water soluble extract from *Phoenix dactylifera* (Date fruits) as a circulating progenitor cell enhancer: A possible drug discovery for myocardial infarction (under investigation)

#### Thesis supervision

*Phytochemical and micropropagation studies on the yellow hornpoppy (Glaucium flavum)*

## Dr. Maged El-Sayed Mohammed

*B.Sc. Pharmacy, M. Ph, Zagazig University, Egypt, Ph.D. University of Bristol, United Kingdom*

**ASSISTANT PROFESSOR,** Pharmacognosy and Natural Product Chemistry

**TEACHING EXPERIENCE :** Teaching and laboratory experience for 10 years in Pharmacognosy, natural product chemistry, plant tissue culture and plant biotechnology for pharmaceutical production.

#### RESEARCH INTEREST :

1. Plant tissue culture techniques.
2. DNA manipulation, PCR amplification and DNA cloning in *E coli*, *Saccharomyces cerevisiae* and *Arabidopsis thaliana*.
3. Gateway technology for cloning and transferring of DNA fragments.
4. Heterologous expression of genes in bacteria, yeast, fungi and plants.

#### LIST OF PUBLICATION

1. **Maged E. Mohamed**, Khomaizon A. K. Pahirulzaman and Colin M. Lazarus (2015) Production of 3-Oxo-2-(20-pentenyl)-cyclopentane-1-octanoic Acid in the Fungus *Aspergillus oryzae*: A Step Towards Heterologous Production of Pyrethrins in Fungi, *Mol Biotechnol* (2016) 58:172–178
2. Asmaa M. Arafa, **Maged E. Mohamed** and Sameeh I. Eldahmy (2016) The aerial parts of yellow horn poppy (*Glaucium flavum* Cr.) growing in Egypt: Isoquinoline alkaloids and biological activities, *J. Pharm. Sci. & Res.* Vol. 8(5), 2016, 323-332
3. **Maged E. Mohamed** (2016) The interaction between the gall wasp *Leptocybe invasa* and *Eucalyptus camaldulensis* leaves: a study of phyto-volatile metabolites, *Journal of Pharmacognosy and Phytotherapy*, Vol. 8(4), pp. 90-98, April 2016
4. **Mohamed ME** and Lazarus CM (2014) Production of prostanoids in the plant *Arabidopsis thaliana* *Phytochemistry* 102: 74–79
5. **Maged E. Mohamed**, Asmaa M. Arafa, Saeed Soliman and Sameeh I. Eldahmy (2014) Plant germination and production of callus from the yellow hornpoppy (*Glaucium flavum*): the first stage of micropropagation *Die pharmazie* 69: 1–6
6. Mohammed A. Khedr, Tamer M. Shehata and Maged **E. Mohamed** (2014) Repositioning of 2,4-Dichlorophenoxy acetic acid as a potential anti-inflammatory agent: *In Silico* and pharmaceutical formulation study. *European Journal of Pharmaceutical Sciences*, 65: 130–138
7. **Mohamed M E** (2014) Infection of *Eucalyptus camaldulensis* leaves with the gall swap *Leptocybe invasa* alters its phytovolatile constituents *journal of essential oil research* under peer review .



8. Dalia I. Hamdan, Maged E. Mohamed, Rehab H. Abdulla, Sabah M. Mohamed and Assem M. El-Shazly (2013) Anti-inflammatory, insecticidal and antimicrobial activities and chemical composition of the essential oils of different plant organs from navel orange (*Citrus sinensis* (L.) Osbeck var. Malesy) grown in Egypt *Journal of Medicinal Plants Research* 7(18):1204-1215.
9. **Mohamed ME** and Lazarus CM (2009) Prostanoid production in *Saccharomyces cerevisiae* provides a novel assay for nonsteroidal anti-inflammatory drugs *FEMS Yeast Res* 9: 420-427.
10. Tatyana Savchenko, Justin W. Walley, E. Wassim Chehab, Yanmei Xiao, Roy Kaspi, Matthew F. Pye, **Maged E. Mohamed**, Colin M. Lazarus, Richard M. Bostock and Katayoon Dehesh (2010) Arachidonic Acid: An Evolutionarily Conserved Signaling Molecule Modulates Plant Stress Signaling Networks *Plant Cell* 22: 3193–3205
11. Mekky H, **Mohamed ME**, Lazarus CM, Power JB and Davey MR (2011) Biosynthesis of very long chain polyunsaturated fatty acids in the leafy vegetable chicory *Agricultural and food science* 20: 327-340.
12. Dalia I. Hamdan, Maged E. Mohamed, Rehab H. Abdulla, Sabah M. Mohamed and Assem M. El-Shazly (2013) Anti-inflammatory, insecticidal and antimicrobial activities and chemical composition of the essential oils of different plant organs from navel orange (*Citrus sinensis* (L.) Osbeck var. Malesy) grown in Egypt *Journal of Medicinal Plants Research* 7(18):1204-1215.

### Conferences

1. Plant Transformation Technologies. Vienna, Austria, February 04-07, 2007 with poster and published abstract
2. Plants for Human Health in the Post Genomic Era in Helsinki, Finland, 26-29 August 2007 with a poster and published abstract.
3. Agrigenomic World Congress, Amsterdam Netherlands 29-30 September 2008 with the prize of the best poster and published Abstract.
4. Oral presentation on the School of Chemistry open day conference, University of Bristol 2008
5. Accepted abstract and poster in the 5<sup>th</sup> international conference of pharmaceutical and drug industries division, National research centre, Cairo, March, 2011
6. Accepted abstract and poster in the Trends in natural products research: Phytochemical society of Europe young Scientific meeting, in Kolymvari, Crete 12-15 June 2011
7. Oral presentation in the Faculty of Pharmacy First scientific conference, March 2011
8. Poster presentation in the Department of Pharmacognosy first scientific meeting November 2011.
9. Oral presentation in the 2<sup>nd</sup> Annual International Conference on Pharmaceutical Sciences, 5-8 May 2014, Athens, Greece
10. Accepted presentation in 13<sup>th</sup> IUPAC International Congress of Pesticide Chemistry, being organized by the AGRO Division of the American Chemical Society (ACS) during August 10-14, 2014 in San Francisco.

### DSR (KFU) Projects :

- ◆ *Phytochemical and biological screening of essential oils from some aromatic plant families in the eastern area (Al-Ahsa) of Saudi Arabia, (PI)*
- ◆ *Evaluation of the effect of Arugula, Lupin and Sage oils on levels of different adipokines in obese rats, (Co-investigator)*
- ◆ *Interactions between the Red palm weevil (*Rhynchophorus ferrugineus*) and its host the date palm (*Phoenix dactylifera*): a Metabolomic study, (Co-I)*
- ◆ *Design and synthesis of novel phosphonate-containing molecules that could be used in the treatment of cancer, (Co-investigator)*
- ◆ *Subchronic administration of mitoxantrone and influence of inducing and inhibiting agents on the introduction of cardiotoxicity- A metabolite evaluation in mice, (Co-I)*
- ◆ *Phytochemical study and anti-*

### Training

- ◆ *Introduction to molecular biology techniques" a course of Plant Molecular Biology, in the Agriculture genetic engineering Research institute (AGERI): 27<sup>th</sup> November to 8<sup>th</sup> December 2004*
- ◆ *Diploma in genetic engineering form scientific informatics research academy (SIRA) from 18<sup>th</sup> December 2004 to 16<sup>th</sup> February 2004.*
- ◆ *Training for one month of genetic manipulation techniques in VACSERA genetic laboratories (March 2005)*



Room Location : College of  
Clinical Pharmacy,  
Ph.: 035898842  
Email :  
kvenugopala@kfu.edu.sa

#### Research Grant

- ◆ *Design, synthesis and characterization of pyrimidine molecular scaffolds for anti-TB activity, 2014.*
- ◆ *Design, synthesis and characterization of novel pyrimidine analogues as antitubercular agents against MDR and XDR strains, 2012.*
- ◆ *Design and synthesis of natural cyclic depsi-peptide analogues as antitubercular agents against MDR and XDR strains 2010.*

## Dr. Venugopala K. N

*M.Pharm & Ph. D, Rajiv Gandhi Uni. Health Sciences, India*

**ASSISTANT PROFESSOR,** Pharmaceutical Chemistry

**TEACHING EXPERIENCE :** 13 years of teaching medicinal chemistry, pharmaceutical organic chemistry and biochemistry

#### RESEARCH INTEREST :

1. Design and multi-step synthesis of heterocyclic compounds for MDR and XDR-TB, antimicrobial, analgesic, anti-inflammatory, antimosquito, and anti-oxidant activities.
2. Design and synthesis of natural cyclic depsi-peptide analogues for MDR and XDR-TB by solid and solution phase peptide synthesis method and current methods of isolation and characterization of products.
3. Crystallography and polymorphism of pharmacologically active heterocyclic compounds

#### LIST OF PUBLICATIONS:

1. Mariela ES-B, Maria EM, Virginia M, Raquel MG, Odhav B, Venugopala KN, Daniel AG. Membrane effects of dihydropyrimidine analogues with larvicidal activity, *Colloids Surf B Biointerfaces* 2017;150:106-113.
2. Sandeep C, Venugopala KN, Raquel M. Gleiser, Abeen Chetram, Basavaraj, Padmashali, Rashmi S. Kulkarni, Rashmi Venugopala, Bharti Odhav. Greener synthesis of indolizine analogues using water as a base and solvent: study for larvicidal agents against *Anopheles arabiensis*. *Chem Biol Drug Design* 2016;88(6):899-904.
3. Venugopala KN, G B Dharma Rao, Subhrajyoti Bhandary, Melendhran Pillay, Deepak Chopra, Bandar E Aldhubiab, Mahesh Attimarad, Osama Ibrahim Alwassil, Sree Harsha, Koleka Mlisana. Design, synthesis and characterization of (1-(4-aryl)-1H-1,2,3-triazol-4-yl)methyl, substitutedphenyl-6-methyl-2-oxo-1,2,3,4-tetrahydropyrimidine-5-carboxylates against *Mycobacterium tuberculosis*. *Drug Des Devel Ther* 2016;10:2681-2690.
4. Venugopala KN, Susanta K. Nayak, Raquel M. Gleiser, Mariela E. Sanchez-Borzone, Daniel A. Garcia and Bharti Odhav. Synthesis, polymorphism and insecticidal activity of methyl 4-(4-chlorophenyl)-8-iodo-2-methyl-6-oxo-1,6-dihydro-4h-pyrimido[2,1-b]quinazoline-3-carboxylate against *Anopheles arabiensis* mosquito. *Chem Biol Drug Design* 2016;88(1):88-96.
5. Venugopala KN, Reshme G, Mohammed AK, Rashmi V, Bandar E. Aldhubiab, Sree Harsha, Odhav B. Design, synthesis, and computational studies on dihydropyrimidine scaffolds as potential lipoxygenase inhibitors and cancer chemopreventive agents. *Drug Des Devel Ther* 2015;9:911-921.
6. Piyush P, **Venugopala KN**, Odhav B, Chopra D. Polymorphism in two biologically active dihydropyrimidinium hydrochloride derivatives: quantitative inputs towards the energetics associated with crystal packing. *Acta Cryst* 2014;B70:681-696.

7. Piyush P, **Venugopala KN**, Odhav B, Chopra D. Quantitative analysis of intermolecular interactions in 7-hydroxy-4-methyl-2*H*-chromen-2-one and its hydrate. Proc Natl Acad Sci India, B 2014;84(2):281-295.
8. **Venugopala KN**, Manjula K, Nayak SK, Bhat KS, Jayashankaragowda PV, Krishna RC, Raquel MG, Odhav B. Synthesis and antimosquito property of 2,6-substituted benzo[*d*]thiazole and 2,4-substituted benzo[*d*]thiazole analogues against *Anopheles arabiensis*. Eur J Med Chem 2013;65:295-303.
9. **Venugopala KN**, Rashmi V, Odhav B. Review on natural coumarin lead compounds for their pharmacological activity. BioMed Research International 2013;963248.v1:1-15.
10. **Venugopala KN**, Nayak SK, Pillay M, Renuka P, Coovadia YM, Bharti O. Synthesis and antitubercular activity of 2-(substitutedphenyl/benzyl-amino)-6-(4-chlorophenyl)-5-(methoxycarbonyl)-4-methyl-3,6-dihydropyrimidin-1-ium chlorides. Chem Biol Drug Design 2013;81:219-227.
11. **Venugopala KN**, Albericio F, Coovadia YM, Kruger HG, Maguire GEM, Pillay M, Govender T. Total synthesis of a depsidomycin analogue by convergent solid phase peptide synthesis and macro-lactonization strategy for anti-tubercular activity. J Pep Sci 2011;17:683-689.
12. Nayak SK, **Venugopala KN**, Chopra D, Row TNG. Insights in to conformational and packing features in a series of aryl substituted ethyl-6-methyl-4-phenyl-2-oxo-1,2,3,4-tetrahydropyrimidine-5-carboxylates. CrystEngComm 2011;13:591-605.
13. Mahapatra S, **Venugopala KN**, Row TNG. A device to crystallize organic solids: ciprofloxacin, medazolam and ofloxacin as targets. CrystGrowthDes 2010;10:1866-1870.
14. Neithnadka PR, **Venugopala KN**, Govender T, Manuprasad BK, Sheena S, Pirama NA. Design, synthesis, characterization, and anti-bacterial activity of {5-chloro-2-[(3-substitutedphenyl)-1,2,4-oxadiazol-5-yl]-methoxy}-phenyl)-(phenyl)-methanones. Eur J Med Chem 2010;45(6):2677-2682.
15. Nayak SK, **Venugopala KN**, Chopra D, Vasu, Row TNG. Effect of substitution on molecular conformation and packing features in a series of aryl substituted ethyl-6-methyl-4-phenyl-2-thioxo-1,2,3,4-tetrahydropyrimidine-5-carboxylates. CrystEngComm 2010;12,1205-1216.

### Presentations and abstracts

1. **Venugopala, KN**, Chalannavar, RK, Odhav B. Anti-mosquito properties of novel synthetic 3,6-dihydropyrimidine analogues. 6<sup>th</sup> Brazilian Symposium on Medicinal Chemistry, Hotel Continental, Canela, Brazil. October 28 - 31<sup>st</sup>, 2012.
2. Chalannavar R.K., **Venugopala K.N.**, Baijnath H and Odhav B. Effect of Psidium spp. extracts on malaria causing mosquitoes *Anopheles arabiensis*. (MCNP 52) BrazMedChem 2012, 28<sup>th</sup> – 31<sup>st</sup> October 2012, Canela Brazil.
3. Girija CR, **Venugopala KN**, Noor Shahina Begum, Srinivasa Murthy M. Structure of  $\alpha$ ,  $\alpha'$ -bis-(*p*-dimethylaminobenzylidene)-*g*-methylcyclohexanone. 38th National Seminar on Crystallography, University of Mysore, Manasagangothri, Mysore. February 11 - 13<sup>th</sup>, 2009.
4. Vasu KA, Nirmala, Nagappa Shetty, **Venugopala KN**. Crystal and molecular structure of 5-[ethoxy (hydroxy)methyl]-6-hydroxy-4-(4-methoxyphenyl)-3,4-dihydropyrimidine-2(1*H*)-thione. 38th National Seminar on Crystallography, University of Mysore, Manasagangothri, Mysore. February 11 - 13<sup>th</sup>, 2009.
5. Aakanksha Joshi, Arun Pathak, **Venugopala Katharigatta Narayanaswamy**, Kalpana Devi, Rao GK. Sanjay Pai. Synthesis of new Biologically active 2,3,8a-tetrahydro-(1*H*)-5-substituted arylthiazolo-[3,2-*a*]pyrimidine-3-one derivatives and their antibacterial and antioxidant activity. 60th Indian Pharmaceutical Congress, New Delhi, December 12 - 14<sup>th</sup>, 2008.



Room Location : College of  
Clinical Pharmacy,  
Ph.: 0135817175  
Email :  
ctradrat@hkf.u.edu.sa

#### Research Grant

- ◆ Preparation and development through computer-aided molecular drug design of isoxazolidine nucleosides, and isoxazolidinyl and nucleosidyl podophyllotoxin derivatives with potential antiviral and anticancer activities. KACST, Co-I, March 2011.
- ◆ Rational development of novel ellipticines that target p53 deficiency by activation of p73 and their delivery using nanotechnology for cancer therapy. KACST, Co-I, September 2011.
- ◆ Design, synthesis and biological evaluation of novel psorospermin analogs that rely on topoisomerase II-directed alkylation of DNA and activity against drug-resistant tumors. KACST, Co-I, March 2012.

## Dr. Christopher Tradrat

Ph. D Université René Descartes, Paris V, France

### ASSISTANT PROFESSOR, Pharmaceutical Chemistry

**TEACHING EXPERIENCE** : 13 years of teaching medicinal chemistry, pharmaceutical organic chemistry and Pharmaceutical Analytical Chemistry

#### RESEARCH INTEREST :

1. Design and synthesis of novel heterocyclic compounds as anticancer agents
2. Multi-step organic syntheses at the forefront of the discovery of active compounds
3. Solid phase synthesis for combinatorial chemistry application
4. Computer-aided molecular modeling drug design

#### LIST OF PUBLICATIONS:

1. A convenient route to quinolone-fused imides and lactams: synthesis of pyrrolo[3,4-b]quinoline-3,9-diones and 1,3,9-triones by oxydation of indole derivatives. C. Tradrat, S. Giorgi-Renault, H.-P. Husson, *Synlett*, **1998**, 1071.
2. Oxidative cleavage of indole- $\alpha$ -lactones with *m*-chloroperbenzoic acid: First Synthesis of Spiroindoline-2-one- $\alpha$ -lactones. C. Tradrat, S. Giorgi-Renault, H.-P. Husson, *J. Org. Chem.*, **2000**, 65, 6773.
3. Palladium-Catalyzed N-arylation of Tetrahydroquinoline and Tetrahydroisoquinoline with Arylhalides. J. Meneyrol, P. Helissey, C. Tradrat, S. Giorgi-Renault, H.-P. Husson, *Synthetic Communications*, **2001**, 31, 987.
4. A Multicomponent Reaction for the One-Pot Synthesis of 4-aza-2,3-dehydropodophyllotoxin and derivatives. C. Tradrat, S. Giorgi-Renault, H.-P. Husson, *Organic Letters*, **2002**, 19, 3187.
5. A'-Ketoamino ester as valuable tool for the asymmetric construction of substituted homopiperic esters. Application to a synthesis of (+)-Calvine. S. Rougnon-Glasson, C. Tradrat, J.-L. Canet, P. Chalard, Y. Troin, *Tetrahedron Asymmetry*, **2004**, 1562.
6. New Approach of Ethyl Substituted Isoquinoline-3 Carboxylate Synthesis Michelyne Haroun, Mohamad Abdul-Ghani, Christophe Tradrat, *Jordan Journal of Chemistry*, **2009**, 4, 325.

7. Molecular modeling design, synthesis and cytotoxic evaluation of certain substituted 2-(3,4,5-triacetoxybenzoylamino)benzo[d]thiazole and 2-(galloylamino)benzo[d]thiazole derivatives having potential topoisomerase -I inhibitory activity. Mohamed A.H. Ismail, Christophe Tratrat. Michelyne Haroun. Journal of Enzyme inhibition and Medicinal Chemistry, online on September **2012**.
8. Thiazole-based thiazolidinones as potent antimicrobial agents. Design, synthesis and biological evaluation. Michelyne Haroun, Tratrat Christophe, Geronikaki Athina, *Combinatorial Chemistry & High Throughput Screening*, **2016**, 19(1), 51-57.

### Presentations and abstracts

1. Ninth fechem Conference on Heterocycles in Bio-Organic Chemistry, Aussois. May 1998, A convenient route to quinolone-fused imides and lactams: synthesis of pyrrolo[3,4-b]quinoline-3,9-diones and 1,3,9-triones by oxydation of indole derivatives.
2. 35<sup>th</sup> International Meeting on Medicinal Chemistry. Rouen, France. July 1999, Synthesis and reactivity studies of pyrroloquinolines: pyrrolo[3,4-b]quinoline-1,3,9-triones, 1,9-diones and 3,9-diones.
3. 37<sup>th</sup> International Meeting on Medicinal Chemistry. Tours, France. July 2001, Les 4-azapodophyllotoxines: nouvelles molécules à forte activité antitumorale, inhibitrices de la polymérisation de la tubuline.
4. 17<sup>th</sup> French-Japanese Symposium on Medicinal and Fine Chemistry. Tohoku University, May 2004, A-Ketoamino ester as valuable tool for the asymmetric construction of Homopipecolic esters.
5. 11<sup>th</sup> IBN SINA International Conference on Pure and Applied Heterocyclic Chemistry, Faculty of Science and Faculty of Pharmacy, Ain Shams University, Cairo, 13-16, December 2008, Efficient Synthesis of Ethyl 1,4-Disubstituted Isoquinoline-3-Carboxylate by Regioselective Cross-Coupling Reactions.
6. The Fourth International Chemistry Conference, King Saud University, KSA, November 2011, Synthesis and Biological Evaluation of New Aromathecin Analogues.
7. International Conference on Global Trends in Pure and Applied Chemical Sciences, Udaipur (Rajasthan) India, March 2012, Design, Synthesis and Antitumor Evaluation of New Camptothecin Analogues
8. 33<sup>rd</sup> National Medicinal Chemistry Symposium, Faculty of Pharmacy, University of Arizona, Tucson, May 2012, A Novel Series of Aromathecins as Antitumor Agents.

### Patents:

*New tricyclic quinoline derivatives useful as anticancer agents, H.-P. Husson, S. Giorgi-Renault, C. Tratrat, G. Atassi, A. Pierre, P. Renard, B. Pfeiffer.*

FR 2801310 May 2001; EP 1103554 May 2001; JP 2001151756 June 2001; KR 10200000070290 June 2001; HK 1036983 January 2002; US 6548515 April 2003; CA 2326710 June 2006.

### DSR Research Grant

◆ *Thiazole-based chalcones and thiazole-based thiazolidinones as potent antimicrobial agents. Design, synthesis and biological evaluation. DSR, 2014*

◆ *Design, synthesis and cytotoxic evaluation of novel aza-podophyllotoxin analogues as potential anticancer agents. DSR, 2014*

◆ *Molecular Modeling Screening, Synthesis and Antidiabetic Evaluation of New Thiazolidinedione Analogues As Potential Antidiabetic Type 2 Agents. DSR, 2015*

◆ *Design, synthesis and biological evaluation of thiazole derivatives with dual anti-inflammatory and antimicrobial activity. DSR, 2015*

**Room Location :**

College of Clinical Pharmacy,

Ph.: 03-5899823

**Email :**

mharoun@kfu.edu.sa

**Dr. Michelyne Haroun**

Ph.D. Université René Descartes, Paris V, France

**ASSISTANT PROFESSOR, Pharmaceutical Organic Chemistry****TEACHING EXPERIENCE :** 12 Years of teaching experience in Pharmaceutical Organic Chemistry, analytical chemistry.**RESEARCH INTEREST :**

1. Design, synthesis and biological evaluation of novel heterocyclic compounds as anticancer agents
2. Multi-step organic syntheses at the forefront of the discovery of active compounds.
3. Computer-aided drug design molecular modeling

**LIST OF PUBLICATIONS:**

1. Thiazole-based thiazolidinones as potent antimicrobial agents. Design, synthesis and biological evaluation. Michelyne Haroun, Tratrath Christophe, Geronikaki Athina, *Combinatorial Chemistry & High Throughput Screening*, **2016**, 19(1), 51-57.
2. Molecular modelling design, synthesis and cytotoxic evaluation of certain substituted 2-(3,4,5-triacetoxybenzoylamino)benzo[d]thiazole and 2-(galloylamino)benzo[d]thiazole derivatives having potential topoisomerase-I inhibitory activity. Mohammed Abdel Hamid Ismail, Christophe Tratrath, Michelyne Haroun, *Journal of Enzyme Inhibition and Medicinal Chemistry*, on line since September 2012.
3. Multiclass Analysis on Repaglinide, Flubendazole, Robenidine Hydrochloride and Danofloxacin Drugs. Taleb T. Al-Nahary, Mohamed Abdel Nabi El-Ries, Gehad G. Mohamed, Ali Kamal Attia, Yahia Nassser Mabkhot, Michelyne Haroun, Assem Barakat, *Arabian Journal of Chemistry*, 2013, 6, 131-144.
4. New Approach of Ethyl Substituted Isoquinoline-3-Carboxylate Synthesis Michelyne Haroun, Mohamad Abdul-Ghani, Christophe Tratrath, *Jordan Journal of Chemistry*, 2009, 4 (4), 325.
5. Dioxyphenazines as Potential Anti-Cancer Agents. Michelyne Haroun, Proceedings of the 5<sup>th</sup> Congress Research Outlook in the Arab World, SRO5, Scientific Innovation and Sustained development, Medicine and Pharmacology, 23-25 2008, Fez-Morocco.

**DSR Research Grant**

◆ *Thiazole-based chalcones and thiazole-based thiazolidinones as potent antimicrobial agents. Design, synthesis and biological evaluation. DSR, 2014*

◆ *Design, synthesis and cytotoxic evaluation of novel aza-podophyllotoxin analogues as potential anticancer agents. DSR, 2014*

◆ *Molecular Modeling Screening, Synthesis and Antidiabetic Evaluation of New Thiazolidinedione Analogues As Potential Antidiabetic Type 2 Agents. DSR, 2015*

◆ *Design, synthesis and biological evaluation of thiazole derivatives with dual anti-inflammatory and antimicrobial activity. DSR, 2015*

**PRESENTATIONS AND ABSTRACTS**

1. "Design, Synthesis and Antitumor Evaluation of New Camptothecin Analogues", The 12<sup>th</sup> Ibn Sina International Conference on Pure and Applied Heterocyclic Chemistry Luxor, Egypt, Feb, 16-19, 2013.
2. " Synthesis and Cytotoxic Screening of New Aromathecins ", The First International Conference on Science Diplomacy and Developments in Chemistry, Alexandria, Egypt, Nov. 24-26, 2012.
3. "A Novel Series of Aromathecins as Antitumor Agents", 33<sup>rd</sup> National Medicinal Chemistry Symposium, Faculty of Pharmacy, University of Arizona, Tucson, USA, May 2012.
4. "Design, Synthesis and Antitumor Evaluation of New Camptothecin Analogues", International Conference on Global Trends in Pure and Applied chemical Sciences", Udaipur (Rajasthan) India, March 2012.
5. "Synthesis and Biological Evaluation of New Aromathetin Analogues", The 4<sup>th</sup> International Chemistry Conference, King Saud University, Ryad, KSA, November 2011.
6. "Synthesis and pharmacological studies of trifunctional combilexins where a ligand of the minor groove is coupled to two intercalating chromophores", *The 4th International Meeting On Molecular Chemistry and Development "RICMD4"*, Marrakech, November 2010.
7. "Efficient Synthesis of Ethyl 1,4-Disubstituted Isoquinoline-3-Carboxylate by regioselective Cross-Coupling Reactions", *11 Ibn Sinaa International Conference on Pure and Applied Heterocyclic Chemistry*, Faculty of Science and Faculty of Pharmacy, Ain Shams University, Cairo, December 2008.
8. "Dioxyphenazines as Potential Anti-Cancer Agents", 5<sup>th</sup> Congress Research Outlook in the Arab World, SRO5, Scientific Innovation and Sustained development, Medicine and Pharmacology, October 2008, Fez-Morocco, Conference, Proceedings.
9. "Design, Synthesis and Pharmacological Evaluation of New Heterocyclic Compounds as Novel Anticancer Drugs", *International Conference on Research Trends in Science and Technology*, Lebanese American University, Lebanon, March 2005.
10. "Synthèse de nouveaux ligands dans lesquels la nétoprosine est couplée à deux chromophores". *14 Journée Franco-Belge de Pharmacochimie*, Lille, May 2000.
11. "Nouvelle synthèse de l'acide 5,10-dioxyphénazine-2 carboxylique", *Journée de Chimie Organique et Chimie Organique-Biologique de la Montagne-Sainte-Genève*, Paris, March 2000.

*Room Location : College of  
Clinical Pharmacy,  
IP Phone : 03589823  
Email : @kfu.edu.sa*

**Research:** *Principal investigator in the project "Design, Synthesis, and Biological Evaluation of Novel Psorospermin Analogs That Rely on Topoisomerase II—Directed Alkylation of DNA and Activity against Drug-Resistant Tumors" funded for 2 million riyals by NPSTI (KACST).*

*Principal investigator in the project: "Rational Development of Novel Ellipticines That Target p53 Deficiency by Activation of p73 and Their Delivery Using Nanotechnology for Cancer Therapy" funded for 2 million riyals by NPSTI (KACST).*

*We don't know half of one millionth of 1 percent of anything. -  
Thomas Alva Edison*

*Room Location :*

*College of Clinical Pharmacy,*

*Ph.: 03-5899833*

*Email : [Helsewedy@kfu.edu.sa](mailto:Helsewedy@kfu.edu.sa)*

## **Dr. Heba Sadik Tawfek EL Sewedy**

*B. Ph. & M. Ph (Pharmaceutics) Zigazig University, Egypt*

### **LECTURER, Pharmaceutics**

**TEACHING EXPERIENCE :** Teaching Physical Pharmacy, Fundamentals of Pharmaceutics and related courses

#### **RESEARCH INTEREST :**

1. Formulation and evaluation of different pharmaceutical dosage forms.
2. Bioavailability and Pharmacokinetics analysis
3. Target Drug Delivery designs and evaluation

#### **LIST OF PUBLICATIONS:**

1. **Heba S. Elsewedy** . Mahmoud A. Mahdy and Mahmoud M. Ibrahim. In-Vitro And In-Vivo Evaluation Of Lornoxicam Transdermal Patches As Promising Delivery System. Pharma Science Monitor, Vol - 4, Issue - 4, 2013.

#### **PRESENTATIONS AND ABSTRACTS**

1. **Heba S. Elsewedy**, Mahmoud M. Ibrahim & Mahmoud A.Mahdy. Transdermal patches as promising delivery systems for lornoxicam. Fue International Conference on Pharmaceutical Technologies (ICPT). 2012, Cairo, Egypt.
2. **Heba S. Elsewedy**, Mahmoud M. Ibrahim and Mahmoud A. Mahdy. Formulation and Evaluation of Meloxicam in Various Topical Pharmaceutical Preparations. Poster presentation, the 29<sup>th</sup> meeting of Saudi Biological Society, Dmmam, Saudi Arabia.



**Dr. Nancy Safwat Abd El-Daium Younis**

B. Pharmacy, M. Pharmacy & Ph. D University of Zagazig, Egypt

**ASSISTANT PROFESSOR**

**TEACHING EXPERIENCE :** Teaching Physiology and related courses

**RESEARCH INTEREST :**

1. Diabetes and its complications
2. Stroke and related disorders
3. Tool like receptor signaling cascade
4. Cardiovascular pharmacology and pharmacotherapy

**LIST OF PUBLICATIONS:**

1. Barakat W, Safwet N, El-Maraghy NN, Zakaria MN Candesartan and glycyrrhizin ameliorate ischemic brain damage through down regulation of the TLR signaling cascade. *European Journal of Pharmacology*, Volume 724, 5 February 2014, Pages 43–50.

**Presentations and Abstracts**

1. Oral presentation in the Faculty of Pharmacy second scientific conference, March 2013
2. Poster presentation in the Department of Pharmacology second scientific meeting November 2013.

**Research Grants Received**

- ◆ British heart foundation (BHF): in the department of Physiology and Pharmacology, School of Medical Sciences, University of Bristol, United Kingdom from March 2007 to March 2009.

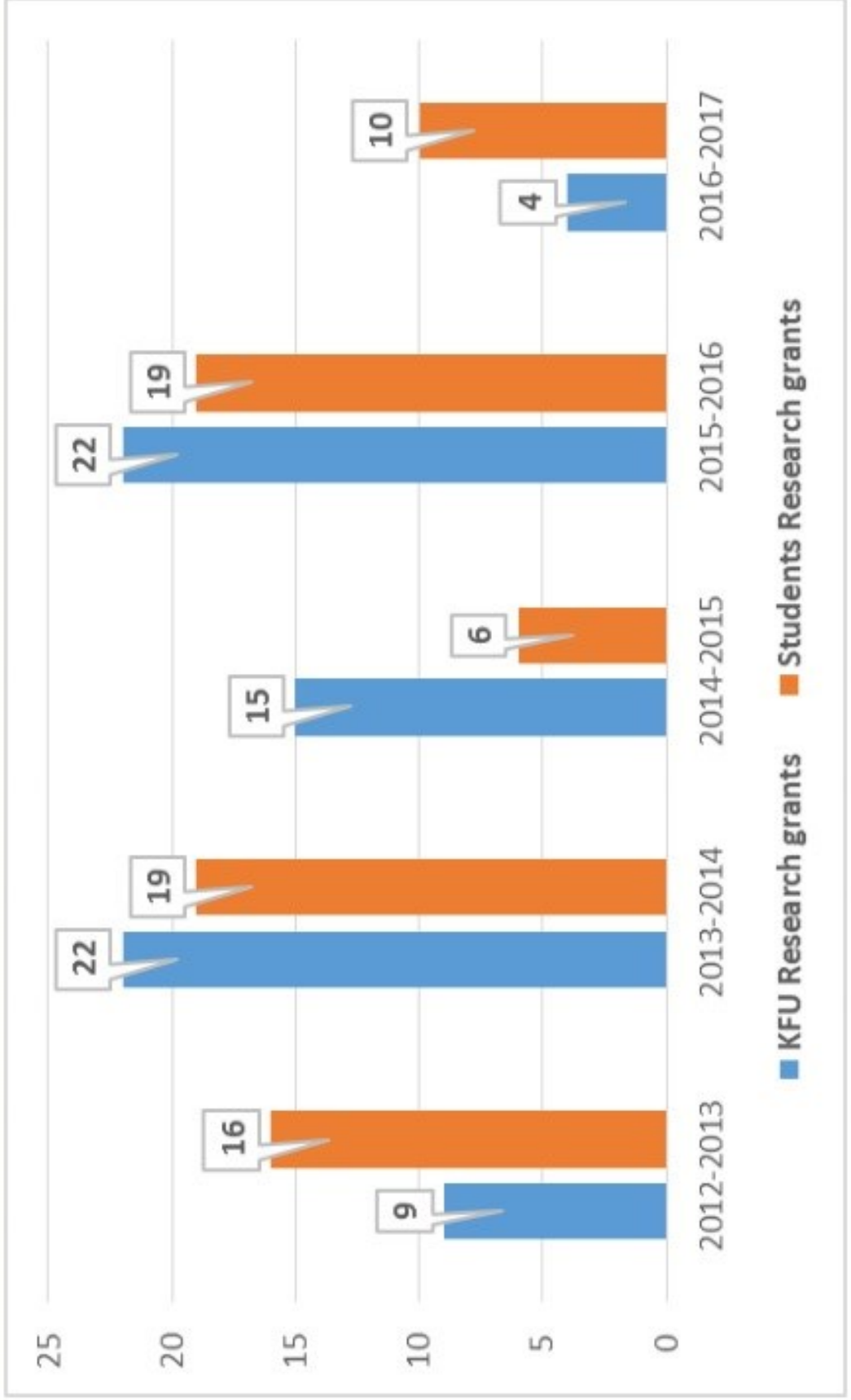
Project name : Functional investigations of Mitsugumin23, a novel cation channel of cardiac sarcoplasmic reticulum

*Room Location : College of  
Clinical Pharmacy,  
Ph.: 035817175  
Email: nsafwat@kfu.edu.sa*

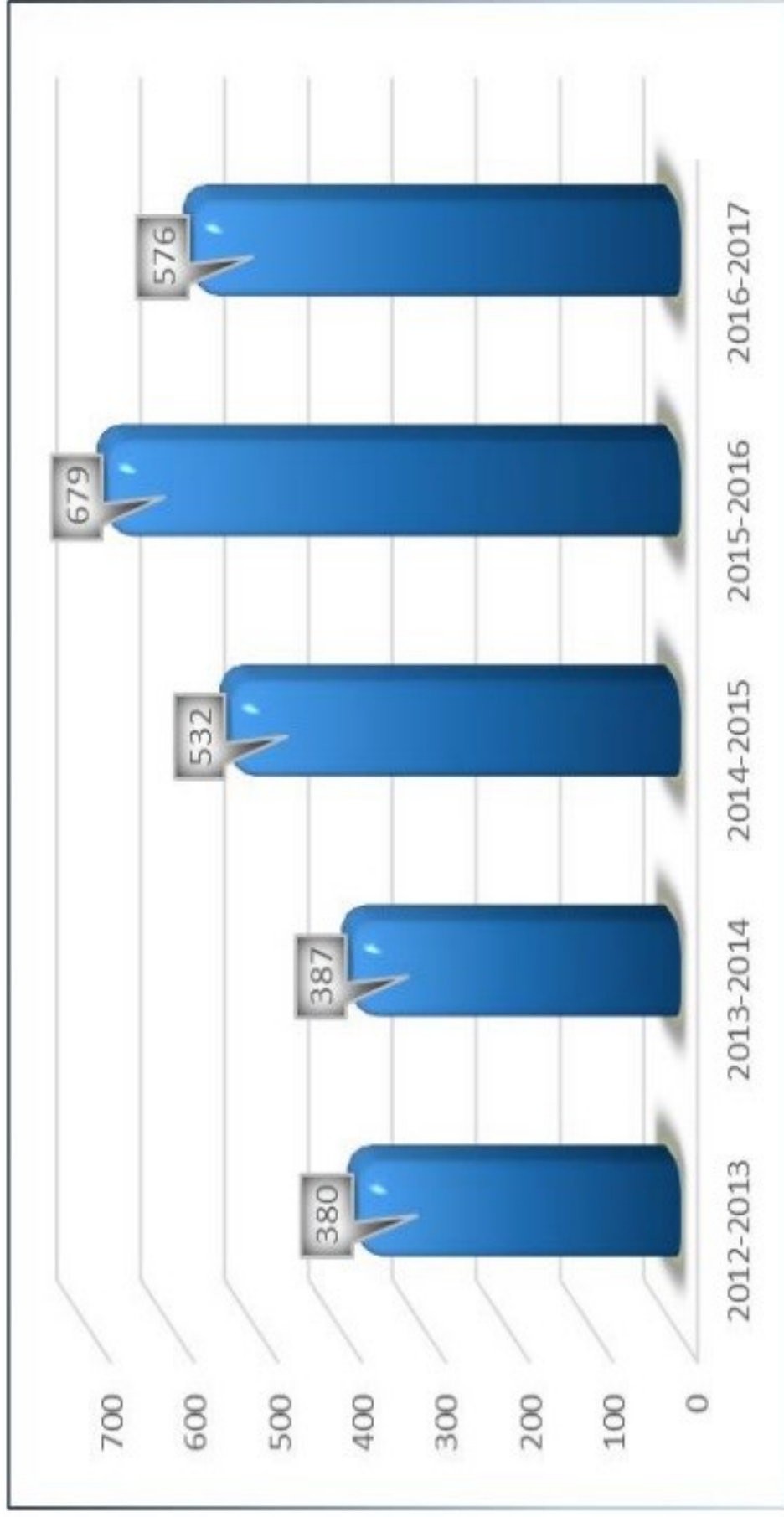
◆ *American Board  
Pharmacotherapy spe-  
cialist in July 2014*

◆ *Clinical practice in  
pharmacotherapy in  
the Zagazig university  
hospitals*

# Research at COCP



# Citations 2012 - 2017





**Room Location :** College of  
Clinical Pharmacy,  
**Room No :** 1027  
**Ph.:** 035899886  
**Email :**  
srasool@kfu.edu.sa

#### **Workshops:**

*The 2<sup>nd</sup> Sino-German Symposium on Hepatology "Viral Hepatitis, from basic research to clinical application" May 18-19 2007, Wuhan, Hubei, PR China*

*National Conference of Biotechnology Society of PR China, Dec 5-6 2006, Wuhan, Hubei, PR China*

#### **Projects submitted to KACST**

*Syed G H A, Sahibzada Tasleem R, Abdullah Al J, Design and fabricate Sulfur doped Zinc Oxide (S-doped ZnO) array-nanorods based biosensor for glucose detection*

*Syed GHA, Abdullah Al Xintang H, Sahibzada Tasleem R, Design and Fabricate S-doped ZnO based Exhaled Breath Biosensors*

## **Dr. Sahibzada T. Rasool**

MBBS, University of Punjab, MA, University of Scranton, USA, PhD, Wuhan University, China

### **ASSISTANT PROFESSOR , MICROBIOLOGY AND IMMUNOLOGY**

**TEACHING EXPERIENCE :** 11 years of experience in teaching biochemistry, microbiology, molecular biology, immunology,

**RESEARCH INTEREST :** Viruses disrupt immune system and among various other aberrations, expression of several immunologically important cytokines is also altered during viral infections. My research is focused on elucidation of the interplay between viruses and the novel cytokines. On one hand I am interested in finding the effects of viruses on interleukins while on the other hand I am also keen to explore the mechanisms through which these cytokines affect different viruses.

#### **LIST OF PUBLICATIONS:**

1. S Hussain, ST Rasool, Analysis of Synonymous Codon Usage in Zika Virus, *Acta Tropica*, 173, 2017, 126-136.
2. **Sahibzada T Rasool**, Mokhtar Jawad and Abdul Sattar, *Microbial Contamination of Potable Water in Al Ahsa Region, Saudi Arabia*, *Poll Res.* 33 (4) : 9-12 (2014).
3. Rubab Satti, Farah Mustafa, Muhammad Imran Khan, Tahmina Sultana Haq, Ziad Umar Khan, Muhammad Zubair, Sahibzada Tasleem ur Rasool, Maleeha Azam, Muhammad Ajmal and Raheel Qamar, Prevalence of Hepatitis C Virus in Urban Ghettos of Twin Cities, Pakistan *J. Zool.*, vol. 44 (4), pp. 937-943, 2012.
4. Afzal H. Asif , Sahibzada T. Rasool and Tahir M Khan, Pyridoxal Phosphate a Possible Intervention to Prevent Aminoglycoside Induced Electrolyte Imbalance, *J Clinic Res. Bioeth* 2012, 3:1
5. Tahir Mehmood Khan, Mohamed Azmi Hassalib, Sahibzada Tasleem Rasool, A study assessing the impact of different teaching modalities for pharmacy students in a Cardio-Pulmonary Resuscitation (CPR) course. *Saudi Pharmaceutical Journal* (2012).
6. Zhu C, Zhang R, Liu L, Rasool ST, Mu Y, Sun W, Hao Q, Liu F, Zhu Y, Wu J. Hepatitis B virus enhances interleukin-27 expression both in vivo and in vitro. *Clin Immunol.* 2009 Apr; 131(1):92-7.
7. Mukhtar MM, Li S, Li W, Wan T, Mu Y, Wei W, Kang L, Rasool ST, Xiao Y, Zhu Y, Wu J. Single-chain intracellular antibodies inhibit influenza virus replication by disrupting interaction of proteins involved in viral replication and transcription. *Int J Biochem Cell Biol.* 2009, 41(3): 554-60
8. N. Sree Harsha, Kumar GS, Mohammed S. Al-wesali Sahibzada Tasleem Rasool Farag Ali Saleh Ibrahim " Exploring the Anti-leishmaniasis activity of Phoenix dactylifera (Date Palm)" Grant No.10030, Year 2009. King Faisal University, Dean Ship of Scientific Research, Al-Ahsa, Saudi Arabia. *Pharmacologyonline* 3: 791-799 (2009).
9. Syed Ghazanfar Hussain,, Sahibzada T. Rasool et al. "Effects of temperature on ZnO nano- and microspheres: synthesis and optical properties" *International Journal of Nanoparticles* 2(1-6) 2009 PP 443 - 450.
- 10.

11. Sibghatullah Sangi , Sree Harsha, Sahibzada Tasleem-ur-Rasool, Afzal Haq Asif Formulation and evaluation of mucoadhesive Nigalla Sativa and Olive oils for vaginal infection Der Pharmacia Lettre, 2011, 3(2):39-46
12. Wei Li, Yan Liu, Muhammad Mahmood Mukhtar, Rui Gong, Ying Pan, Sahibzada T Rasool, and others, "Activation of Interleukin-32 Pro-inflammatory Pathway in Response to Influenza A Virus Infection" PLoS ONE. 2008 ;3 (4):e1985
13. Muhammad Sahibzada T Rasool and others, "Increased level of IL-32 during Human Immunodeficiency Virus infection suppresses HIV replication" Immunology Letters 117 (2008) 161–167
14. Mahmood Mukhtar, Sahibzada T Rasool and others, "Origin of highly pathogenic H5N1 Avian influenza virus in China and genetic characterization of donor and recipient viruses" Journal of General Virology (2007), 88, 3094-3099
15. S T Rasool, et al. "Malathion, a pharmacological and toxicological review", Medical Forum, July 2004.
16. A. Hamid, A. Salaam, A.H. Asif, Shabir, R.Firdaus, T. Rasool, Syed Mudassar "Effect of Exercise on Body weight and Blood Pressure" Medical Forum, September 2004
17. A. Hamid, A. Salaam, A.H. Asif, Shabir, R.Firdaus, T. Rasool, Syed Mudassar "Effects of Exercicio on Glucose, Lipid profile and Apo-Protein B Medical Forum" September 2004

#### CONFERENCE PRESENTATIONS.

1. Syed Ghazanfar Hussain, Sahibzada T. Rasool et al "Synthesis, properties morphological and optical of highly S-doped ZnO flower-like nanostructures" 4th Saudi Science conference 21- 24 March, 2010, at Al-Madinah Al-Munawwarah, KSA.
2. Sahibzada T Rasool, Jianguo Wu, Ying Zhu. "Interplay between Interleukin-32 and Human Immunodeficiency Virus". Frontiers In Immunology Research 2008 International Conference, Florence, Italy (July 22-26, 2008)
3. Syed Ghazanfar Hussain, Deming Liu , Sahibzada-T-Rasool et al Morphological and optical properties of ZnO nanoparticles and porous Microspheres" The 2nd Technology and Innovation for Sustainable Development Conference, January 28-29,2008 Khon Kaen, Thailand.
4. Syed Ghazanfar Hussain, Sahibzada-T-Rasool et al, "Synthesis and optical properties of heterostructured ZnO:S/ZnO nanorotors" International Conference on Smart Manufacturing Application (ICSMA 2008) April. 9-11, 2008 in KINTEX, Gyeonggi-do, Korea.
5. Sahibzada T Rasool et al. "Comparison of IL-32 and IL-27 expression in the sera of HIV infected patients and healthy individuals" The 2<sup>nd</sup> Wuhan International Symposium on Modern Virology, Division of Virology, Chinese Society for Microbiology, Wuhan, China, October 26-30, 2007
6. Huma Tooba, Naila Asif, Tasleem Rasool, et al " Routine HCV PCR Screening of Donated Blood" Oral Presentations at 1st National Conference on Infectious Diseases, 19-21 March, 2004, Islamabad, Pakistan.

#### **Experimental Skills**

##### **Biochemical and Molecular**

##### **Biology**

*E. coli transformation, isolation and purification of plasmid and chromosome DNA, total RNA and mRNA; PCR technique such as RT-PCR and over-lap PCR; site-directed mutagenesis. Expression and purification of recombinant protein in E coli, Preparation of polyclonal antibody.*

##### **Cellular Experiment**

*Cell culture, skilled at 293, 293T, Hela cells, Jurkat T cells, U251, U937 cells etc. MTT cytotoxicity assay, Cell transient transfection.*

*Detection of Protein expressing by SDS-page, Western Blot, ELISA and Immuno-Fluorescence. Gene knock down with RNAi. Test protein-protein interaction with Mammalian Two-Hybrid Assay, Co-localization and immuno-precipitation in vivo.*

##### **Virus Experiment**

*Package, isolation and purification of recombinant adenovirus and Human Immunodeficiency Virus with 293T cells.*

##### **Bioinformatics**

*Familiar with Vector and DNASIS software for both primer designing and DNA, protein analysis; familiar with GeneBank web sites to carry out all kinds of analysis.*



*Room Location : College of  
Clinical Pharmacy,  
Ph.: 035899818  
Email: @kfu.edu.sa*

### **Research Grants**

#### **Received**

*Ruth L. Kirschstein National Service Award, Department of Health and Human Services, USA. Duration: September 2006 – August*

## **Dr. Mohammed Monirul Islam**

*B.Sc. & M. Sc., Univ of Dhaka., Bangladesh, Ph.D. Rutgers Univ, USA.*

### **ASSISTANT PROFESSOR, BIOCHEMISTRY & MOLECULAR BIOLOGY**

**TEACHING EXPERIENCE :** .16 years in teaching Molecular biology, Basic Medical and Clinical Biochemistry

### **RESEARCH INTEREST :**

- Regeneration of neurons from neural stem cells (NSC) for replacement therapies of central nervous system (CNS) disease and injury.
- Understanding the complex transcriptional networks controlling the fate of the NSCs.
- Identification and characterization of the novel conserved enhancers in the developing CNS.

### **LIST OF PUBLICATIONS:**

1. **Islam, M. M.**, Smith, DK., Niu, W., Fang, S., Iqbal N., Sun, G., Shi, Y. and Zhang, CL. (2015) Enhancer Analysis Unveils Genetic Interactions between TLX and SOX2 in Neural Stem Cells and In Vivo Reprogramming. *Stem Cell Reports* , Volume 5 , Issue 5 , 805 – 815.
2. **Islam, M. M.** and Zhang, CL. (2014) *TLX: The master regulator for neural stem cell maintenance and neurogenesis*. *Biochimica et Biophysica Acta (BBA) - Gene Regulatory Mechanisms*. Volume 1849, Issue 2, February 2015, Pages 210–216. doi:10.1016/j.bbagr.2014.06.001. Epub 2014 Jun 13.
3. **Islam, M. M.**, Li, Y., Luo, H., Xiang, M. and Cai, L. (2013) *Meis1 regulates Foxn4 expression during retinal progenitor cell differentiation*. *Biology Open*. doi: 10.1242/bio.20132279
4. **Islam, M. M.**, Doh, S. T. and Cai, L. (2012) *In ovo electroporation in embryonic chick retina*. *J. Vis. Exp.* 60, 3792. doi: 10.3791/3792.
5. Kim, J.\*, **Islam, M. M.\***, Hao H, Li Y, Tawil HY, Doh, S. T., Tzatzalos, E. and Cai, L. (2013) *Computational and experimental approach for the identification of mesencephalon-specific cis-element of Dbx1 gene*. *JSM Biotechnol Bioeng* 1(2):1017. (\*Equal contribution)

## Dr. Muhammad Shahzad Chohan

*M.phil Uni Health Sc, Lahore. M.B.B.S. Nishtar Med College, Multan, Pakistan*

### ASSISTANT PROFESSOR, ANATOMY AND HISTOLOGY

1. TEACHING EXPERIENCE : 12 years of Teaching experience in teaching Gross anatomy, Embryology, Neuroanatomy and Histology.

### CURRENT PROJECTS & RESEARCH INTEREST :

1. Paraquat induced spleen toxicity (in progress)
2. Paraquat induced hepatotoxicity
3. Paraquat induced adrenal toxicity(in progress)

### Publications

1. Paraquat induced hepatotoxicity in Albino Mice, published in Journal of Zoology. Zoological Society of Pakistan. 2010 Vol. 42 No. 1 pp. 69-73
2. Paraquat induced toxicity in spleen of Albino Mice, published in Journal of Pakistan Institute of Medical Sciences. Ann. Pak. Inst. Med. Sci. 2011; 7(1): 6-9
3. Paraquat induced toxicity in Adrenals in Albino Mice published in American Journal of Biomedical Sciences. Am. J. Biomed. Sci. 2011, 3(3), 228-235

### Workshops attended

1. A research workshop on RESEARCH METHODS at University of health sciences Lahore. Pakistan in 2005
2. REAL TIME PCR WORKSHOP at University of health sciences Lahore. Pakistan in 2005
3. Work shop on Academic Advising At king Faisal university, KSA in 2011



*Room Location : College of  
Clinical Pharmacy,*

*Ph.: no: 05895447*

*Email :  
[mshwhan@kfu.edu.sa](mailto:mshwhan@kfu.edu.sa)*

### **DSR (KFU) RESEARCH PROJECT**

*Muhammad shahzad chohan,  
Shibzada Tasleem RI, Omar  
Mohafez, Reversal effects of  
vitamin C on paraquat  
induced hepatic and renal  
toxicity in Albino mice, SR  
60200, 2014-2015*



*Room Location : College of  
Clinical Pharmacy,*

*Ph.: 035899924*

*Email :*

[shhussain@kuf.edu.sa](mailto:shhussain@kuf.edu.sa)

## Dr . Snawar Hussain

*B.Sc. M. Sc. University of Karachi, Pakistan Ph.D. Wuhan University, P.R.China*

### ASSISTANT PROFESSOR, BIOCHEMISTRY

**TEACHING EXPERIENCE :** .4 years in teaching Molecular biology, Bio-chemistry and Clinical Biochemistry

### RESEARCH INTEREST :

1. Host-virus interactions and role of cellular factors in viral infection.
2. Mechanisms of entry, assembly and egress of Hepatitis C Virus.
3. Role of host Lipid metabolism in Hepatitis C Virus infection and its clinical implications.
4. Molecular mechanisms of Coronavirus entry, host cell tropism and determinants of zoonotic (cross-species) transmission.

### LIST OF PUBLICATIONS:

1. **S Hussain**, ST Rasool, Analysis of Synonymous Codon Usage in Zika Virus, Acta Tropica, 173, 2017, 126-136.
2. **Hussain, S**, Sainz, B. Jr., Marsh, KA, Barretto, N and Uprichard, SL. Dynamic interactions between host lipid metabolism and Hepatitis C Virus infection. Manuscript in preparation.
3. Barretto N, Sainz B Jr, Hussein S, Uprichard SL. Determining the involvement of host cellular factors in HCV cell-to-cell spread and the therapeutic implications. Virol. 2014 May;88(9):5050-61.
4. **Hussain S**, Barretto N and Uprichard SL. New hepatitis C virus drug discovery strategies and model systems. Review. Expert Opin Drug Discov. 2012 Sep;7(9):849-59.
5. Sainz B Jr, Barretto N, Martin DN, Hiraga N, Imamura M, **Hussain S**, Marsh KA, Yu X, Chayama K, Alrefai WA, Uprichard SL. Identification of the Niemann-Pick C1-like 1 cholesterol absorption receptor as a new hepatitis C virus entry factor. Nat Med. 2012 Jan 8;18(2):281-5.
6. **Hussain S** and Gallagher TM. Interaction of SARS-Coronavirus Protein 6 with nuclear import machinery is conformation dependent. Virus Research 2010; 153(2), 299-304.
7. Zhou H, Ferraro D, Zhao J, **Hussain S**, Shao J, Trujillo J, Netland J, Gallagher T, Perlman S. The N Terminal Region of Severe Acute Respiratory Syndrome Coronavirus Protein 6 Induces Membrane Rearrangement and Enhances Virus Replication. J Virol. 2010 84(7) : 3542-3551
8. Yang Y, Hussain S, Wang H, Ke M, Guo D. Translational control of the sub-genomic RNAs of severe acute respiratory syndrome coronavirus. Virus Genes. 2009; 39(1):10-8.



9. Sarfraz S, Hamid S, Siddiqui A, **Hussain S**, Pervez S, Alexander G. Altered expression of cell cycle and apoptotic proteins in chronic hepatitis C virus infection. *BMC Microbiol.* 2008; 8:133.
10. **Hussain S**, Perlman S, Gallagher TM. Severe acute respiratory syndrome coronavirus protein 6 accelerates murine hepatitis virus infections by more than one mechanism. *J Virol.* 2008; 82(14):7212-22.
11. **Hussain S**, Pan J, Xu J, Yang Y, Chen Y, Wu Y, Li Z, Zhu Y, Tien P, Guo D. Identification and characterization of severe acute respiratory syndrome coronavirus subgenomic RNAs. *Adv Exp Med Biol.* 2006; 581:85-8.
12. Li Z, Xiong Y, Peng Y, Pan J, Chen Y, Wu X, **Hussain S**, Tien P, Guo D. Specific inhibition of HIV-1 replication by short hairpin RNAs targeting human cyclin T1 without inducing apoptosis. *FEBS Lett.* 2005; 579(14):3100-6.
13. **Hussain S**, Pan J, Chen Y, Yang Y, Xu J, Wu Y, Li Z, Zhu Y, Tien P, Guo D. Identification of novel subgenomic RNAs and noncanonical transcription initiation signals of severe acute respiratory syndrome coronavirus. *J Virol.* 2005; 79(9):5288-95.

## POSTER PRESENTATIONS

1. Snawar Hussain and Susan L. Uprichard. Poster presentation at 20th International Symposium on Hepatitis C Virus and Related Viruses to be held in Melbourne, Australia, October 6th-10th 2013.
2. **Snawar Hussain** and Thomas M. Gallagher. Poster presentation at XIth International Nidovirus Symposium (St. Catherine's College Oxford, June 22-27 2008).
3. **Snawar Hussain**, Ji'an Pan, Jing Xu and Guo Deyin. "Identification and characterization of SARS Coronavirus subgenomic RNAs". Poster presentation at the Xth International Nidovirus Symposium: Toward the Control of SARS and other Nidovirus Diseases. June 24-30, 2005, Colorado Springs, CO. USA.

## Oral Presentations

1. **Snawar Hussain** and Thomas M. Gallagher. 2007. "SARS coronavirus accessory protein 6 accelerates MHV infections by more than one mechanism". *American Society of Virology—26th annual meeting (July 2007, Corvallis, Oregon, USA).*
2. **Snawar Hussain**, Jian Pan, Yu Chen, Zhao-Yang Li, Yu Peng, Ying Zhu, and Deyin Guo. 2003. "Novel Subgenomic RNAs and Noncanonical Transcription Initiation Signal of Severe Acute Respiratory Syndrome Associated Coronavirus (SARS-CoV)". *3rd annual meeting of the China RNA society and 1st international RNA workshop in China. October, 2003, Wuhan University, Wuhan, China.*
3. **Snawar Hussain**, Ji'an Pan, Jing Xu and Guo Deyin. *Transcriptional control of SARS-CoV subgenomic RNAs. International Symposium on Emerging Viruses: from genomics and Therapy. Nov. 18-19, 2004, Wuhan University, Wuhan, China*

Room Location : College of  
Clinical Pharmacy,  
Ph.: 03589825  
Email : [asiat-aha@kfu.edu.sa](mailto:asiat-aha@kfu.edu.sa),  
[meetasia@gmail.com](mailto:meetasia@gmail.com)

#### Awards :

**Senior Research Fellow**  
ICMR "Metabolic and molecular changes in diabetic rat tissues, their control and reversal by antidiabetic compounds" 2008.  
<http://www.icmr.nic.in>

**Senior Research Fellow**  
(CSIR) Tachykinin neuropeptides in ageing rats. 2005-2006.  
<http://www.csir.res.in>

**Senior Research Fellow**  
CSIR Effect of DHEA on aging rat brain (2004- 2005 at Jawaharlal Nehru University, India. <http://www.jnu.ac.in>

**Junior Research Fellow**  
UGC mechanism of antidiabetic and anti-oxidant action of certain trace metals and plant extracts on experimentally induced diabetic rats. <http://www.ugc.ac.in>

Cleared **National Eligibility Test (NET)** for Lectureship

## Dr. Asia Taha

B.Sc(General Sci), M. Sc (Biochem), & Ph.D. Jamia Millia Islamia, New Delhi , India

### ASSISTANT PROFESSOR, BIOCHEMISTRY

**TEACHING EXPERIENCE :** 5 years of teaching experience in teaching Biochemistry. Guest Faculty for teaching Animal Physiology and Biophysical Chemistry.

**RESEARCH INTERESTS:** Finding alternate ways of treatment of type 1 diabetes, mechanism of action of antidiabetic agents, effect of antidiabetic compounds on general metabolism of the body. Research on anti aging drugs on aging brains using rat animal model system.

#### LIST OF PUBLICATIONS:

1. Saira Azhar, Mohamed A Hassali, **Asia Taha**, Shujaat Ali Khan, Ghulam Murtaza and Izhar Hussain "Evaluation of the Perception of Community Pharmacists Regarding their Role in Pakistan's Healthcare System: A Qualitative Approach" *Tropical Journal of Pharmaceutical Research*, 2013; 12 (4): 635-639
2. PardeepKumar, Asia Taha, R.K. Kale, P.McLean and Najma Zaheer Baquer "Beneficial effects of Trigonella foenum graecum and sodium orthovanadate on metabolic parameters in experimental diabetes." *Cell Biochemistry & Function*, 2012;30(6):464-473.
3. Baquer NZ, Kumar P, **Taha A**, Kale RK, Cowsik SM, McLean P. Metabolic and molecular action of Trigonella foenum-graecum (fenugreek) and trace metals in experimental diabetic tissues. *J Biosci.* 2011;36 (2):383-396.
4. Kumar P, Taha A, Kale RK, S M Cowsik, Baquer NZ, Physiological and Biochemical effects of 17 $\beta$  estradiol in Aging female rat brain. .Exp Gerontol. 2011 2011 46(7):597-605.
5. Baquer NZ, Taha A, Kumar P, McLean P, Cowsik SM, Kale RK, Singh R, Sharma D. A metabolic and functional overview of brain aging linked to neurological disorders. *Biogerontology*. 2009 Aug;10(4):377-413.
6. Taha A, Mishra M, Baquer NZ, Sharma D. Na+K(+)-ATPase activity in response to exogenous dehydroepiandrosterone administration in aging rat brain. *Indian J Exp Biol*. 2008 46(12):852-4
7. Pradeep Kumar, Asia Taha, Deepak Sharma, R. K. Kale and Najama Baquer. Effect of Dehydroepiandrosterone (DHEA) on membrane functions in aging rat brain regions *Biogerontology*, 2008.

8. Sameer Mohammad, Asia Taha, Kamal Akhtar, RNK Bamezai, and Najma Zaheer Baquer. In vivo effect of *Trigonella foenum graecum* on the expression of Pyruvate kinase, Phosphoenolpyruvate carboxykinase and distribution of glucose transporter (GLUT4) in alloxan-diabetic rats. *Canadian Journal of Physiology and Pharmacology*, 2006; 84(6):647.
9. Nupur Sinha, Asia Taha, N. Z. Baquer and Deepak Sharma. Exogenous administration of Dehydroepiandrosterone attenuates loss of superoxide dismutase activity in the brain of old rats *Indian Journal of Biochemistry and Biophysics*. 2007, 45, 2008, 57-60
10. Anju Preet, M.R. Siddiqui, A. Taha, J. Badhai, M.E. Hussain, P.K. Yadava and N.Z. Baquer. Long-term effect of *Trigonella foenum graecum* and its combination with sodium orthovanadate in preventing histopathological and biochemical abnormalities in diabetic rat ocular tissues. *Molecular and Cellular Biochemistry*, 2006; 289(1-2):137-147.
11. Mohammad Rizwan Siddiqui, K. Moorthy, Asia Taha, Mohd. Ejaz Hussain, Najma Z Baquer. Low doses of vanadate and *Trigonella* synergistically regulate Na<sup>+</sup>/K<sup>+</sup> ATPase activity and GLUT-4 translocation in alloxan diabetic rats. *Molecular and Cellular Biochemistry*, 2006; 285(1-2):17-27
12. Mohammad Rizwan Siddiqui, Asia Taha, K Moorthy, Mohd. Ejaz Hussain, S F Basir and Najma Z Baquer. Amelioration of altered antioxidants status and membrane linked functions by vanadium and *Trigonella* in alloxan diabetic rat brains. *Journal of Biosciences* 2005;30(4):483-490.
13. Sameer Mohammad, Asia Taha, RNK Bamezai and Najma Z Baquer. Modulation of Glucose transporter (GLUT4) by Vanadate and *Trigonella* in alloxan-diabetic rats. *Life Sciences*, 2006; 78(8):820-824.

#### Conference

1. Anti-Diabetic Effect of *Trigonella foenum graecum* on Altered Membrane Functions in Alloxan Diabetic Rats. 2nd International Conference on Trends in Cellular and Molecular Biology. January 5-7, 2008, School of Life Sciences, Jawaharlal Nehru University, New Delhi, India.
2. Antiaging Effect of Dehydroepiandrosterone (DHEA) on Membrane Functions in Aging Rat Brain Regions. 34th Annual conference of Clinical Biochemists of India (ACBICON 2007) Dec 18- 20, 2007, Indian Habitat Center, New Delhi. (Abstract published in the Indian Journal of clinical biology).
3. Regulation of Glucose Homeostasis in experimental Diabetes by Insulin and Antidiabetic compounds *Trigonella Foenum Graecum* and Vanadium. 34th annual conference of Clinical Biochemists of India (ACBICON 2007) December 18th to 20th, 2007, Indian Habitat Center, New Delhi, India. (Abstract published in the Indian Journal of clinical biology).
4. Effect of Experimental Diabetes on DNA Degradation, GLUT4 translocation and Membrane linked function in rat tissues and their reversal by insulin and antidiabetic compounds. 76th Annual meeting of Society of Biological Chemists (India), 25-27 Nov 2007. Sri Venkateswara University, Tirupati, India.

#### Technical expertise:

**Molecular Biology**  
Isolation of genomic DNA and RNA from animal tissues, DNA elution, PCR, RTPCR, SDS-PAGE, Native-PAGE.

**Enzymatic work:**  
Extraction and purification of enzymes from animal tissues. Determination of enzymatic activities and study of enzyme kinetics.

**Animal work:**  
Collection and processing of tissues, Separating subcellular fractions.

**Biochemical techniques:** DNA and protein estimation, protein purification, Gel Exclusion



**Room Location :** College of  
Clinical Pharmacy,  
Ph.: 03589822  
**Email :**  
yibrahim@kfu.edu.sa

### **Skills:**

*Different analytical methods include HPLC, GC, FTIR, UV, DSC, TGA and Atomic absorption, in addition to pharmacokinetic soft-wares that include WinNonlin, and Scientific.*

### **Projects completed**

*“A randomized trial of once daily levofloxacin versus once daily ceftriaxone for treatment of nursing home-acquired pneumonia and prospective pharmacokinetic study of levofloxacin.” Residency Graduation Project . Advisor: Allan C. Anderson, Pharm. D.*

*“Enhancement of amphotericin B fungicidal activity with Echinecea in a murine model of disseminated candidiasis” Honor project. College of Pharmacy, The University of Iowa .*

## **Dr. Yasir A. Ibrahim**

*Pharm D, M.Sc. The University of Iowa, USA*

### **ASSISTANT PROFESSOR,**

**TEACHING EXPERIENCE :** More than 13 years experience in Experiential Teaching and Didactic Teaching (pharmacotherapy, therapeutics, clinical pharmacology, pathology, Emergency First Care, Patient assessment, Marketing and Pharmacoeconomics

### **RESEARCH INTEREST :**

1. ICU
2. Infectious diseases
3. Drug Utilization

### **LIST OF PUBLICATIONS:**

1. Ur Rahman M, Ibrahim Y, Hashmey R, Abuhasna S, Quinine induced Bronchiolitis Obliterans and Organizing Pneumonia, A Case Report, submitted for publication.
2. Tahir Mehmood Khan, Yasir Ibrahim, A qualitative exploration of the non-prescription sale of drug and incidence of adverse events in community pharmacy settings in the Eastern Province of the Kingdom of Saudi Arabia, *EJHParm*, 2012;0:1-5.
3. Lewis M, Ibrahim Y, Richie D. Pharmacological Options for the Management of Diabetic Peripheral Neuropathy, *Fromulary*, 2005;40:438-452.
4. Ibrahim Y, Pharmacy practice, *International Journal of Toxicology*, May-June 2003; 22 (3):256-58.

### **RESEARCH/ SERVICE PROJECTS**

- ◆ “Glucose Control in Tawam ICU”
- ◆ “Line Sepsis in Tawam ICU
- ◆ “DVT prophylaxis in Tawam ICU”
- ◆ “Ventilator Associated Pneumonia”
- ◆ “Extended Study of Prevalence of Infection in Intensive Care (EPIC) II”
- ◆ “Stewardship Program”
- ◆ “ER antibacterial prescribing habits”
- ◆ “Antibacterial Surgical Prophylaxis”
- ◆ “Comparative Study Ketoprofen Tablet Dosage Forms Containing Bio-adhesives.”

## 1. CONFERENCE/SEMINAR/WORKSHOP:

2. [Ibrahim Y](#), Labbidi A, Obeid K, Hashmey R. *IV Zanamivir in the Treatment of Novel Influenza H1N1; Report of the First Case in the Gulf*. DUPHAT Meeting Poster Presentation. March 2010, Dubai, UAE.
3. [Ibrahim Y](#), Hashmey R. *Rosiglitazone Medication Utilization Evaluation*. DUPHAT Meeting Poster Presentation. March 2009, Dubai, UAE.
4. [Ibrahim Y](#), Salahuddin S, Obeid K, Khan A, Hashmey R. *Surveillance of Antimicrobial Consumption in a Tertiary Care Hospital in the UAE 2005-06* 1st International Pharmacy Conference, Nov 2008, Al-Ain, UAE.
5. Ur Rahman M, [Ibrahim Y](#), Hashmey R, Abuhasna S. *Ventilator Associated Pneumonia: A 22-Month Prospective Observational Study from a Tertiary Care Centre in United Arab Emirates*. 13<sup>th</sup> International Society of Infectious Diseases, June 2008, Kuala Lumpur, Malaysia.
6. [Ibrahim Y](#), Hashmey R. *Emergency Room Antibacterial Prescribing Patterns*. DUPHAT Meeting Poster Presentation. March 2008, Dubai, UAE.
7. Ur Rahman M, [Ibrahim Y](#), Abu-Zidan F, Abuhasna S. *Care of Terminally Ill Patients: An Opinion Survey among Health Care Providers in the Middle East*. 28<sup>th</sup> International Symposium on Intensive Care and Emergency Medicine, March 2008. Brussels, Belgium.
8. Ur Rahman M, [Ibrahim Y](#), Hashmey R, Abuhasna S. *Impact of Institute for Health Improvement (IHI) Ventilator Bundle measures on the incidence of Ventilator Associate Pneumonia (VAP) rate at a tertiary care medical center in UAE: A prospective 15 month study*. Society of Critical Care Medicine's 37<sup>th</sup> Critical Care Congress, Feb. 2008, Honolulu, USA.
9. [Hashmey R](#), [Ibrahim Y](#), Ur Rahman M, Abuhasna S, Obeid K, *Impact of Infection Control Measures On Catheter Associated Blood Stream Infections In The ICU*. International Pan Arab Critical Care Medicine Society (IPACCS), and International Critical Care Conference and Exhibition (ICCC), April 2007, Dubai, UAE.
10. Ur Rahman M, [Ibrahim Y](#), Hashmey R, Abuhasna S, Obeid K, *One Year Surveillance Data on Ventilator Associated Pneumonia at Tawam Hospital*. International Pan Arab Critical Care Medicine Society , and International Critical Care Conference and Exhibition, April 2007, Dubai, UAE.
11. [Ibrahim Y](#), Hashmey R. *Antibacterial Surgical Prophylaxis*. DUPHAT Meeting Poster Presentation. March 2007, Dubai, UAE.
12. Calmes HM, [Ibrahim Y](#), Nguyen ST, Riche DM. *A Retrospective Review of Vancomycin Use at the Medical Center of Louisiana - New Orleans (MCLNO)* ASHP Midyear Meeting Poster Presentation. December 2004, Orlando, Florida.
13. Zaghoul, A. A. Kassem, E. A. Hosny, I. K. Reddy, [Y. Ibrahim](#), and M. A. Khan. *Comparative Study Ketoprofen Tablet Dosage Forms Containing Bioadhesives*. AAPS Annual Meeting and Exposition, October 2001, Denver, Colorado.
14. [Ibrahim YA](#), Anderson AC. *A randomized trial of once daily levofloxacin versus once daily ceftriaxone for treatment of nursing home-acquired pneumonia and prospective pharmacokinetic study of levofloxacin*. ASHP Midyear Meeting Poster Presentation. December 2000, Las Vegas, Nevada.

**MONOGRAPHS**

*Cetorelix (Cetrotide®). Tawam Hospital in affiliation with Johns Hopkins Medicine. New drug addition for the PTC 2005.*

*Moxifloxacin (Avelox®). Iowa Drug Information Network. A perquisite project for completion of Drug Information clerkship. March 2000.*

**MEDICATION EVALUATION UTILIZATION PROJECTS**

*"DVT prophylaxis in inpatients on Thalidomide and Lenalidomide in Tawam" [Ibrahim Y](#) 2010.*

*"Pharmacoeconomic impact of switching IV pantoprazole to IV famotidine in ICU stress ulcer prophylaxis" [Ibrahim Y](#) 2009*

*"Levosimendan Use in Tawam" [Ibrahim Y](#) 2009*

*"Nesiritide Use in Tawam" [Ibrahim Y](#) 2008*

*"ER antibacterial prescribing habits" [Ibrahim Y](#), Hashmey R. 2008*

*"Antibacterial Surgical Prophylaxis" Hashmey R, [Ibrahim Y](#). 2007*



*Room Location : College of  
Clinical Pharmacy,  
Room No : 1022  
IP. Phone:03589790  
Email : ahasif  
@kfu.edu.sa*

**Research Projects  
Under Supervision/ Co-  
supervision/ Guidance :**

*Effect of alcoholic/aqueous  
extract of Nigella Sativa on  
healing of Aspirine induced  
gastric ulcer in albino rats.*

*Effect of Nigella Sativa on  
Analgesic induced nephrop-  
athy in albino rats.*

*Antidiabetic activity of  
Alpenia Galanga.*

*Effects and interaction of  
tobramycin with piperacillin  
and diclofenac on rabbit  
kidney.*

## Dr. Afzal H. Asif

MBBS, Bahauddin Zakariyya University, M.Phil University of Pujab, Pakistan,

**ASSOCIATE PROFESSOR, PHARMACOLOGY & THERAPEUTICS**

**TEACHING EXPERIENCE :** 24 years experience in teaching and research in pharmacology

### RESEARCH INTEREST :

1. Nephrotoxicity of drugs and its protection
2. Anti-diabetic, Antihyperlipedemic and Anti-atherosclerotic Activity of indige-  
nous plants
3. Education and Learning in Health Professions

### LIST OF PUBLICATIONS:

1. Naveed Ullah, Mir Azam Khan, Taous Khan, **Afzal Haq Asif** and Waqar Ah-  
mad. Mentha piperita in nephrotoxicity; a possible intervention to ameliorate  
renal derangements associated with gentamicin. Indian Journal of Pharmacol-  
ogy 2014,46(2): 166-70
2. Naveed Ullah<sup>1</sup>, Mir Azam Khan, **Afzal Haq Asif**, Taous Khan, Waqar Ahmad:  
Citrullus colocynthis failed to combat against renal derangements, in spite of  
its strong antioxidant properties. Acta Poloniae Pharmaceutica ñ Drug Re-  
search 2013, 70(3): 533-38. <http://www.ncbi.nlm.nih.gov/pubmed/23757944>
3. **Afzal H. Asif** , Sahibzada T. Rasool and Tahir M Khan: Pyridoxal Phos-  
phate a Possible Intervention to Prevent Aminoglycoside Induced Electrolyte  
Imbalance. J Clinic Res Bioeth 2012, 3:1 <http://dx.doi.org/10.4172/2155-9627.1000124>
4. Naveed U, Asif AH, Khan MA, et al: Chemical screening of Naswar and Cig-  
gerette: a comparative study IJBCR Vol.1 Issue: 1: 2011
5. Naveed Ullah, Mir Azam Khan, Afzal Haq Asif et al: A comparative study of  
*Morven gold* and *Tander Virginia* cigarettes with respect to its spasmogenic,  
spasmolytic and chemical screening. African Journal of Pharmacy and Phar-  
macology Vol. 5(3), pp. 347-351, March, 2011
6. Sibghatullah Sangi, Sree Harsha, and Afzal Haq Asif: Formulation and evalu-  
ation of mucoadhesive Nigalla Sativa and Olive oils for vaginal infections.  
Der Pharmacia Letter, 2011, 3(2): 39-46.
7. Khan T M , Afzal Haq, Khan A , Tahir H , Ejaz M. A pilot study evaluating  
health literacy towards breast cancer among multiethnic students. Journal of  
Clinical and Diagnostic Research.2010 June, 7; 4:2504-2511
8. Naveed Ullah, Habib Ahmad, Afzal Haq Asif, Qadar khan, Rabia Anwar. An-  
tibacterial activities of genetic variants of Mirabilis jalapa, Phcog J 2010: 7  
(2): 181-184
9. A.Turabi, ADanyal, S.Hassan, Y.Salat, MAhmad, AH Asif: Evaluation of  
suspected chronic pesticide poisoning among residents near agriculture fields,  
Biomedica Dec 2007;23:76-82.

10. MS Khan , MA Sheikh , A Danyal, F Tahir , M.Bashir , N Rahat , AH Asif: forum of 2004 Does LH/Testo And Testo/LH Ratio Affect Male Fertility?. Med Forum 2006; 17(6)
11. A Hamid, AH Asif, A Salam Effect of Exercise on Glucose, Lipid Profile and Apo-Protein B. Med Forum 2004; 15(9):19-20)
12. A Hamid, AH Asif, A Salam Effect of Exercise on Body Weight and Blood Pressure. Med Forum 2004; 15(9):16-18.
13. H.Subhani, B.Khizar, AH Asif, N.Javid, Seroprevalence of Hepatitis B and C among patients of Hepatocellular Carcinoma. Med Forum 2004, 15(7).
14. M.Zahid, AH Asif, NI Ansari, Biochemical/Functional Derangements produced by Aminoglycoside induced nephrotoxicity. Pak PGMJ 2004; 15(2)
15. ST Rasool, AH Asif, A.Hamid Malathion: A Biochemical and Pharmacological Review. Medical Forum. 2004
16. A.Hamid, AH Asif, Azhar Masud Bhatti, Shahid Rauf, Dilawar Khan Trends of Drug Dependence in Hazara Division. Med Forum 2003 14(2).
17. AH Asif , A.Hamid, SH Shah HHKhan, Effect of Pyridoxal-5-Phosphate on Gentamicin induced Nephrotoxicity in rabbits. Med Forum 2003; 14:7.
18. A Hamid, D Khan, AH Asif,; M Naeem,; S Rauf, Incidence of Road Traffic Accidents in Hazara Division. Med Forum 2003; 14(3): 10-12.
19. A Hamid; AH Asif, M.; Jalil, Asif; Hanif, M.; Anwar, A., Trend of Cigarette Smoking among the College Students, Medical Students and Doctors. Med Forum 2003; 14(7):13-15
20. A.Hamid , SRauf , M.Ashraf , , N Azhar , M.Asif Jalil , AH Asif , bEffect of oral contraceptive agent on serum level of total proteins, albumin, Copper and Zinc in women. Med Forum: 13 (9); 2002.
21. S Rauf , N Sharif , A Hamid , M Naeem , AHAsif, Comparative study of serum Vitamin-A levels in Breast-fed, weaned properly and bottle-fed, weaned improperly children less than 2 years of age. Med Forum:13; 2002.
22. A.Hamid , AHAsif , D Khan , N Azhar , Asif Jalil & Rozina Noreen Drug, driving and traffic safety in Hazara division. Med Forum: 13(8);2002.
23. MA Jaleel , R Noreen , A Hameed , AH Asif , D Khan Levels of Heavy Metals, pH, and TDS in drinking water in different areas of Multan. Med Forum: 13(8); 2002.
24. M Naeem, SRauf, A Hamid, A.H. Asif Echocardiographic Determination of left Ventricular Pump Function in essential Hypertension. Med Forum 2002; 13(9):
25. A. Hamid , Dilawar Khan , M. Asif Jalil , AHAsif , Rozina Noreen , Iqbal Mughal , Altaf H A Survey of District Jail Abbottabad. Med Forum.2002; 13(10):11-13
26. NA Noor, GMD Chauhdry, M.Masood, AH Asif, Acute poisoning in Adults in Multan (letter); JPMA: 38(11); 1988.
27. AH Asif, Aminoglycoside Nephrotoxicity and its prevention. Presentation made at Aga Khan University in Aug, 1997
28. AH Asif, Role of Pyridoxal-5-Phosphate in Protection Against Aminoglycoside induced Nephrotoxicity Thesis approved by the University of Punjab, for Postgraduate Degree in Pharmacology: 1995.

### **Research Projects**

*Under Supervision/ Co-supervision/Guidance:*

*Effect of alpha-tocopherol and selenium on Aminoglycoside induced nephrotoxicity*

*Effect of alpha-tocopherol on coagulation profile of normal and aspirin treated albino rats.*

*Effect of alcoholic extract of Crataegus oxyacantha on serum lipids of high cholesterol diet fed albino rats*

*Effect of Nigella sativa on coagulation profile of normal and aspirin treated albino rats.*

*Effect of Nigella sativa on Aminoglycoside induced nephrotoxicity*

*Effect of glycine on alcohol induced changes in rat liver*

*Effect of Alpha tocopherol alone and in combination with simvastatin or gemfibrozil on serum lipid profile in hyperlipidemic diet fed albino rats*

*Effect of Alpha tocopherol on healing of aspirin induced gastric ulcer in albino rats*



*Room Location : College  
of Clinical Pharmacy,*

*Ph.: 03589930*

*Email :*

[kyusuff@kfu.edu.sa](mailto:kyusuff@kfu.edu.sa)

#### Peer-reviewer:

- ◆ European Journal of Clinical Pharmacology
- ◆ International Journal of Pharmacy Practice
- ◆ Pharmacoepidemiology & Drug Safety
- ◆ Journal of the American Pharmacists Association
- ◆ Clinical and Experimental Pharmacology
- ◆ Current Drug Safety
- ◆ Pharmacy Practice
- ◆ International Journal of Diabetes in Developing Countries
- ◆ Nigerian Medical Journal
- ◆ West African Journal of Pharmacy
- ◆ Pan African Medical Journal
- ◆ African Journal of Medicine & Medical Science

## Dr. Kazeem Babatunde Yusuff

*B. Pharm (Ife), M. Sc, Ph. D , University of Lagos, Nigeria*

### ASSISTANT PROFESSOR, CLINICAL PHARMACY

**TEACHING EXPERIENCE :** Fourteen year Experience of teaching Clinical Pharmacy, Health Care System, Pharmaceutical care, Therapeutics, Institutional Pharmacy Practice, Pharmacy management, Pharmacoeconomics, Pharmacoepidemiology, Communication skills & Patient counseling.

### RESEARCH INTEREST :

1. Pharmaceutical care,
2. Pharmacoepidemiology,
3. Medicines use problems,
4. Medicines advertisement, medication history,
5. Rational prescribing,
6. Patient adherence and drug supply management

### LIST OF PUBLICATIONS:

1. Kazeem Babatunde Yusuff, Promise Madu Emeka and Mahesh Attimarad, Concurrent Administration of Date Palm Fruits with Lisinopril Increases Serum Potassium Level in Male Rabbits, *Int. J. Pharmacol.*, 2018,
2. **Yusuff KB.** Does self-reflection and peer-assessment improve Saudi pharmacy students' academic performance and metacognitive skills? *Saudi Pharmaceutical Journal*, 2015; 25: 266-275
3. Unyime IE, **Yusuff KB.** Anti-hypertensive medicines prescribing for medical outpatients in a premier teaching hospital in Nigeria: a probable shift of paradigm. *Pharmacy Practice*. 2014; 12(2): 419-425
4. **Yusuff KB.** Perceived medications use challenges and self-initiated coping strategies used by medical outpatients. *International Journal of Clinical Pharmacy*. 2013, 35: 65-71
5. **Yusuff K.B,** Omarusehe L. Determinants of self-medication practices among pregnant women in Nigeria. *International Journal of Clinical Pharmacy* 2011, 33(5): 886-875
6. **Yusuff K.B,** Sanni A. Itinerant vending of medicines inside buses in Nigeria: vending strategies, dominant themes and medicine-related information provided. *Pharmacy Practice* 2011; 9(3): 128-135
7. **Yusuff K.B** , Tayo F. Frequency, types and severity of medication use-related problems among medical outpatients in Nigeria. *International Journal of Clinical Pharmacy* 2011; 33(3): 558-564
8. **Yusuff K.B** , Tayo F & Aina B.A. Pharmacists' participation in the documentation of medication history in a developing setting: An exploratory assessment with new criteria. *Pharmacy Practice* 2010; 8(2): 139-14



9. **Yusuff K.B**, Tayo F & Aina B.A. What probable factors underlie inadequacy of medication history information recorded in patients' case notes by physicians in a Nigerian teaching hospital? *International Journal of Pharmacy Practice* 2009; 17: 317-321.
10. **Yusuff K. B** & Balogun O.B. Pattern of Drug utilisation among hypertensive patients in a Nigeria teaching hospital. *Pharmacoepidemiology & Drug safety* 2005; 14: 69-74.
11. **Yusuff K. B.** & Tayo F. Drug supply strategies, constraints and prospects in Nigeria. *African Journal of Medicine & Medical Science*, 2004; 33: 389-94.
12. **Yusuff K. B.** & Awotunde A.M. The Frequency of Drug history documentation in an institutionalised care setting in Nigeria. *Journal of Pharmacy & Pharmaceutical Sciences* 2005; 8(2): 141-146.
13. **Yusuff K. B.** & Balogun O. B. Physicians' prescribing of anti-hypertensive combinations in a tertiary care setting in southwestern Nigeria. *Journal of Pharmacy & Pharmaceutical Sciences* 2005; 8(2): 235-242.
14. **Yusuff K.B** & Alabi A. Assessing patient adherence to anti-hypertensive drug therapy: Can a structured pharmacist-conducted interview separate the wheat from the chaff? *International Journal of Pharmacy Practice* 2007; 15(2): 295-300.
15. **Yusuff K.B** & Yusuf A. A cross media analysis of educational information contents of adverts of OTC medicines in a Nigerian urban setting. *International Journal of Pharmacy Practice* 2008; 16(3): 167-173.
16. **Yusuff K.B**, Ajayi A & Joseph Y.B. Laboratory monitoring of hematological and hepatic parameters in ambulatory hypertensive patients receiving alpha-methyldopa in a Nigerian tertiary care setting. *Current Drug Safety* 2008; 3: 63-66.
17. **Yusuff K.B** & Tayo F. Does a Physician's specialty influence the recording of medication history in patients' case notes? *British Journal of Clinical Pharmacology*. 2008; 66(2): 308-312.
18. **Yusuff K.B** & Yusuf A. Advertising OTC medicines in a Nigerian urban setting: content analysis for indications, targets and advertising appeals. *Journal of the American Pharmacists Association*. 2009;49(1): 86-89
19. **Yusuff K.B**, Obe B & Joseph Y.B. Adherence to anti-diabetic drug therapy and self management practices among type-2 diabetics in a Nigerian tertiary care setting. *Pharmacy World & Science*. 2008; 30: 876-883

**Project Supervision:**

20 Undergraduate 2 postgraduate research projects

**DSR Project :**

**Yusuff KB, Emeka PM, Attimarad M.** Does concurrent administration of date palm fruit with hydrochlorothiazide correct thiazide-induced hypokalemia in rabbits. 2014. Deanship of Scientific Research, King Faisal University, Kingdom of Saudi Arabia. 56900SAR

**Yusuff KB, Emeka PM, Attimarad M.** Effect of concurrent administration of date palm fruit with Lisinopril on serum potassium level in rabbits. 2013. Deanship of Scientific Research, King Faisal University, Kingdom of Saudi Arabia. 62000SAR

**Yusuff KB.** Anti-hypertensive medicines use, and adherence to treatment guidelines at a primary care centre in Grahamstown: A cross-sectional study. 2010 Joint Research Grant, Rhodes University, South Africa. 18,000Rands

**Yusuff KB.** Frequency, types and severity of medication use-related problems among patients diagnosed with hypertension and diabetes in primary care setting in Grahamstown. 2011 Joint Research Grant,



**Room Location :** College of  
Clinical Pharmacy,  
Ph.: 03-5817175  
**Email :**  
[eelhassan@kfu.edu.sa](mailto:eelhassan@kfu.edu.sa)

### **BCPS Certification**

**October 2013: Board certified pharmacist (BCPS) Pharmacotherapy (American Pharmacist Association DC Washington)**

## **Dr. El Walid El Hassan**

*B.Sc AL Ahliyya Amman University . M. Phharmcy Jordan University of Science & technology*

### **LECTURER**

**WORK EXPERIENCE :** 8 Years of training experience in Institutional Pharmacy Practice Experience And Advanced Pharmacy Practice Experience.

### **PROFESSIONAL ACTIVITY :**

#### **Patient Counseling and education**

- ◆ My Main Work to See the patient Upon Discharge and do counseling to the patients or the care givers regarding many aspects of their treatment:
- ◆ Treatment plan.
- ◆ Drug Food interactions.
- ◆ Drug Drug interactions.
- ◆ Adverse effects.
- ◆ Signs of toxicity and when to report to the physician.
- ◆ Duration of treatment.
- ◆ Storage of medications. and providing them with printed materials.
- ◆ My main patients are cardiac, renal, diabetic, Transplant patients and most of the high risk patients who are on High alert medications.

#### **Medication reconciliation upon discharge**

- ◆ This process of comparing a patient's medication orders to all of the medications that the patient has been taking.
- ◆ It is done to avoid medication errors such as omissions, duplications, dosing errors, or drug interactions by reviewing medication profile with the patient to assure it is correct and up-to-date.
- ◆ Ensure appropriate drugs and dosages are being used according to diagnosis and protocols.
- ◆ Discontinue all non-active medications.
- ◆ Renew all expired medications.
- ◆ OTC, herbal, and traditional medications to be reviewed and mentioned.

## C. DEPARTMENT OF PHARMACY PRACTICE

**Dr. Maitham Abdullah Al Hawaj**

*B. Pharm, King Saudi University, Ph. D. Virginia Commonwealth Uni, USA*

**ASSISTANT PROFESSOR, PHARMACOTHERAPY**

TEACHING EXPERIENCE : Teaching and facilitating various theoretical and practical scientific sessions (Therapeutics, Physiology, Pathophysiology) for students of different classes .

**RESEARCH INTEREST:**

1. Drug for Thrombotic and Non-Thrombotic Disorders

**PUBLICATIONS :**

- ◆ **Al Hawaj MA**, Martin EJ, Venitz J, Barrett JC, Kuhn JG, Nolte ME, Brophy DF. Monitoring rFVIII prophylaxis dosing using global haemostasis assays. *Haemophilia*. 2013;19(3):409–14.

**PRESENTATIONS:**

1. Alhammad AM, Alhashem YN, **Al Hawaj MA**, Van Tassell BW, Harpe SE. Is anemia associated with heart failure? NHANES database (2005–2006) analysis [abstract PCV27]. *Value in Health*. 2011; 14(3):A37.
2. Alhammad AM, **Al Hawaj MA**, Alhashem YN, Harpe SE, Smith WR, Brophy DF. Drug-induced acute renal failure using the FDA adverse event reporting system database [abstract PUK3]. *Value in Health*. 2011;14(3);A74
3. **Al Hawaj MA**, Martin E, Barrett JC, Kuhn J, Nolte ME, Brophy DF. Characterizing global hemostasis throughout the FVIII prophylaxis dosing interval: a pilot study. XXX International Congress of the World Federation of Hemophilia; 2012 July 9; Paris, France.
4. **Al Hawaj M**, Martin E, Venitz J, Barrett JC, Kuhn J, Nolte ME, Brophy DF. Pharmacokinetic-pharmacodynamic (PK/PD) modeling of factor VIII using its plasma concentration and global hemostasis biomarkers. XXX International Congress of the World Federation of Hemophilia; 2012 July 9; Paris France.



*Room Location : College  
of Clinical Pharmacy,*

*Ph.: 03-5 817175*

Email :

*hawaj@kfu.edu.sa*



## Dr. Ahmad Adel

*M. Pharmacy Universiti Sains Malaysia (USM), Penang, Malaysia*

### LECTURER

**TEACHING EXPERIENCE** : Three years of teaching experience in Pharmaceutical care related subjects and clinical training.

### PUBLICATIONS:

Adel M. Aly and **Ahmad A. Mohammed** "Preparation and Evaluation of Sildenafil Rapidly Disintegrating Tablets". Volume 5, Issue 1, April–June, 2011."International Journal of Pharmaceutical Sciences and Nanotechnology".

*Room Location : College of  
Clinical Pharmacy,  
Room No : 1067  
Ph.: 035817175  
Email :  
[asarsour@kfu.edu.sa](mailto:asarsour@kfu.edu.sa)*



## Dr. Mohamed Mukhtar

*M. Sc., University of Medical Sciences and Technology, Sudan*

### LECTURER,

**TEACHING EXPERIENCE** : Clinical lecturer in clinical pharmacy department

### Presentations

- ◆ Attended course in Sterile Compounding of Preparations (Blue Nile Centre-May2013)-Sudan
- ◆ Attended Acute Coronary Syndrome Management workshop held by Sudanese Clinical Pharmacists Association-August 2014 in Khartoum-Sudan

*Room Location : College  
of Clinical Pharmacy,*

*Ph.: 03-5817175*

*Email :  
[mmali@kfu.edu.sa](mailto:mmali@kfu.edu.sa)*

**B. DEPARTMENT OF PHARMACY PRACTICE****Dr. Kareem Ahmed El-Fass**

*B. Pharm, Pharm D, University Of Alexandria, Egypt*

**LECTURER,**

**TEACHING EXPERIENCE :** Teaching and facilitating various theoretical and practical scientific sessions (Pharmacology, Pharmacotherapeutics, Physiology, Toxicology, Pharmacokinetics, Biochemistry, Cell and Molecular Biology, Pharmaceutical Calculations) for students of different classes .

**RESEARCH INTEREST:**

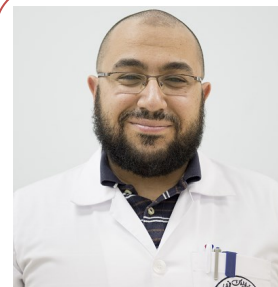
1. Drug-related problems identification and evaluation
2. Pharmaceutical Care in community pharmacy
3. Antibiotic Drug-Use Evaluation

**PRESENTATIONS:**

1. Dose adjustment in Renal Patients (Alexandria Pharmacists' Syndicate )
2. Phenytoin Therapeutic Drug Monitoring...Practical Approach (Alexandria Pharmacists' Syndicate )
3. Albumin use in Kidney and Liver Diseases (Weekly Scientific Club of Kidney and Urology Centre in Alexandria , Egypt)
4. Dyslipidemia .....New Highlights ( Alexandria Internal Medicine Scientific Club)

**PROFESSIONAL SERVICES**

1. Reviewing Patient records and developing Pharmaceutical care plans and recommendations regarding Drug-related problems
2. Provide timely responses to requests for drug information for patients and health care providers
3. Patient education regarding discharge medications
4. IV admixture for Chemotherapy and adjuvant medications
5. Management of chemotherapy-related symptoms
6. Dose adjustment of medications given to CKD patients and Patients on different modes of Dialysis



*Room Location : College  
of Clinical Pharmacy,*

*Ph.: 03-5 817175*

*Email : [Kel-  
fass@kfu.edu.sa](mailto:kel-fass@kfu.edu.sa)*

*Room Location : College of  
Clinical Pharmacy,  
Ph.: 03-5817175  
Email :  
[hshokr@kfu.edu.sa](mailto:hshokr@kfu.edu.sa)*

*Room Location : College of  
Clinical Pharmacy,*

*Ph.: 035899830  
Email :  
[Aabualhomo@kfu.edu.sa](mailto:Aabualhomo@kfu.edu.sa)*

*Room Location : College  
of Clinical Pharmacy,*

*Ph.: 03-5899827  
Email :  
[Delmaghrawy@kfu.com](mailto:Delmaghrawy@kfu.com)*

## Dr. Ha1a Abdelmohaimen A Shokr

*B.Sc., Pharm, D Alexandria university, Egypt. Clinical Pharmacy Diploma Collage of Cambridge"*

**LECTURER,**

**TEACHING EXPERIENCE :** 2 Clinical lecturer in clinical pharmacy department – Faculty of pharmacy Alexandria university.

## Dr. Ama1 Khalil Ahmad Abu Alhomos

*B. Pharm, M. Ph, Jordan University of Science and Technology, Jordan*

**LECTURER,**

**TEACHING EXPERIENCE :** 7 years of experience in teaching Therapeutics, physical assessment, Pharmaceutical Care. And training experience in Institutional Pharmacy Practice Experience And Advanced Pharmacy Practice Experience.

**CURRENT PROJECTS & RESEARCH INTEREST :**

1. Any topic related to pharmacy practice and clinical benefits.
2. "Detection of Leaflet Information Error in Mucolytics, Systemic Nasal Decongestants and Cough Preparations in Jordan

**PROFESSIONAL ACTIVITY :**

- ◆ In King Fahad Hospital/ Corporate with physician to obtain a correct regimen for patient case/ 2011-until now.
- ◆ Community Service: In Al Othium Mall-Second Semester 2011-2012.

## Dr. Dalia Mohamed Elmaghraby

- ◆ Counseling about Patient's medications.

*B. Pharm, B. Biotech, Pharm D, Alexandria university, Egypt.*

**LECTURER,**

**TEACHING EXPERIENCE :** 2 years of experience in teaching Therapeutics, And training experience in Institutional Pharmacy Practice Experience And Advanced Pharmacy Practice Experience.

- ◆

## Titles of the Students' Research projects 2017

No	Student Name	Supervisor Name	Final Project Title
1	Abdullah Al-khulaif	Dr. Yasir Ibrahim	Assessing Al-hasa society awareness about habits that may affect gastroesophageal reflux disease symptoms
2	Ali Alsumaeel	Dr. Sahar	Assessment of hypothyroidism patients awareness about the disease and levothyroxine
3	Ammar Al-Hamid	Dr. Mohd mukthar	Evaluation of undergraduate pharmacy student's knowledge of new drug therapies for hepatitis C in KFU
4	Mohammed Alsalim	Dr. Didi Mohammed	Assessing School Teachers' Knowledge and Attitude toward students with Epilepsy in Al Ahsaa, Saudi Arabia
5	Ali Alkhalifah	Dr. Yasir Ibrahim	Misuse Of Vitamins
6	Ali Al-Shawaf	Dr. Hala	Awareness of soccer players about medications used with football injuries in Al-Hasa
7	Yousef al-khalaf	Dr. Hala	Awareness of medication food interaction among general population
8	Mohammad Al-Ghadeer	Dr. Mohd mukthar	Assessment of the awareness of Middle East Respiratory Syndrome-Coronavirus infection in Al-Ahsaa: A cross-sectional survey
9	Turki Aldakheel	Dr. Ahmad Adel	Evaluation of extended community pharmacists practice roles and barriers against these roles in Al-Ahsa
10	Abdulaziz Alkhamees	Dr. Sahar	Pharmacists' knowledge of issues in pharmacotherapy of epilepsy using antiepileptic drugs: A cross-sectional study in Al-Ahsa'a pharmacy practice
11	Ali Al-Dairam	Dr.El Walid	Knowledge of diabetic children's family about diabetes and self practice
12	Mohammad Algassar	Dr. Yasir Ibrahim	The knowledge of Travelers about the use of over the counter medications in AL-Hassa population
13	Moayad Al-faraj	Dr. Mohd mukthar	Evaluation of the stress among the health care providers, at Al-Ahsa governmental hospitals.
14	Ali Hadi Al-alawi	Dr. Amal K. A	Assessment Of Clinical Pharmacy Students Knowledge About Controlled Medications
15	Abdullah Al-Amer	Dr.El Walid	Saudi Community Awareness on signs and precautions of Prediabetics in Al-Ahsa
16	Ahmed Bojlia	Dr. Amal K. A	Evaluate Knowledge of Pharmacy Students about the Use of Natural Products as an Alternative Therapy in Al Hasa
17	Jafar Al-Mayouf	Dr. Dalia A. E.	Assessment of patients awareness about risk factors of Non-communicable diseases in Al-Hassa

### Titles of the Students' Research projects 2017

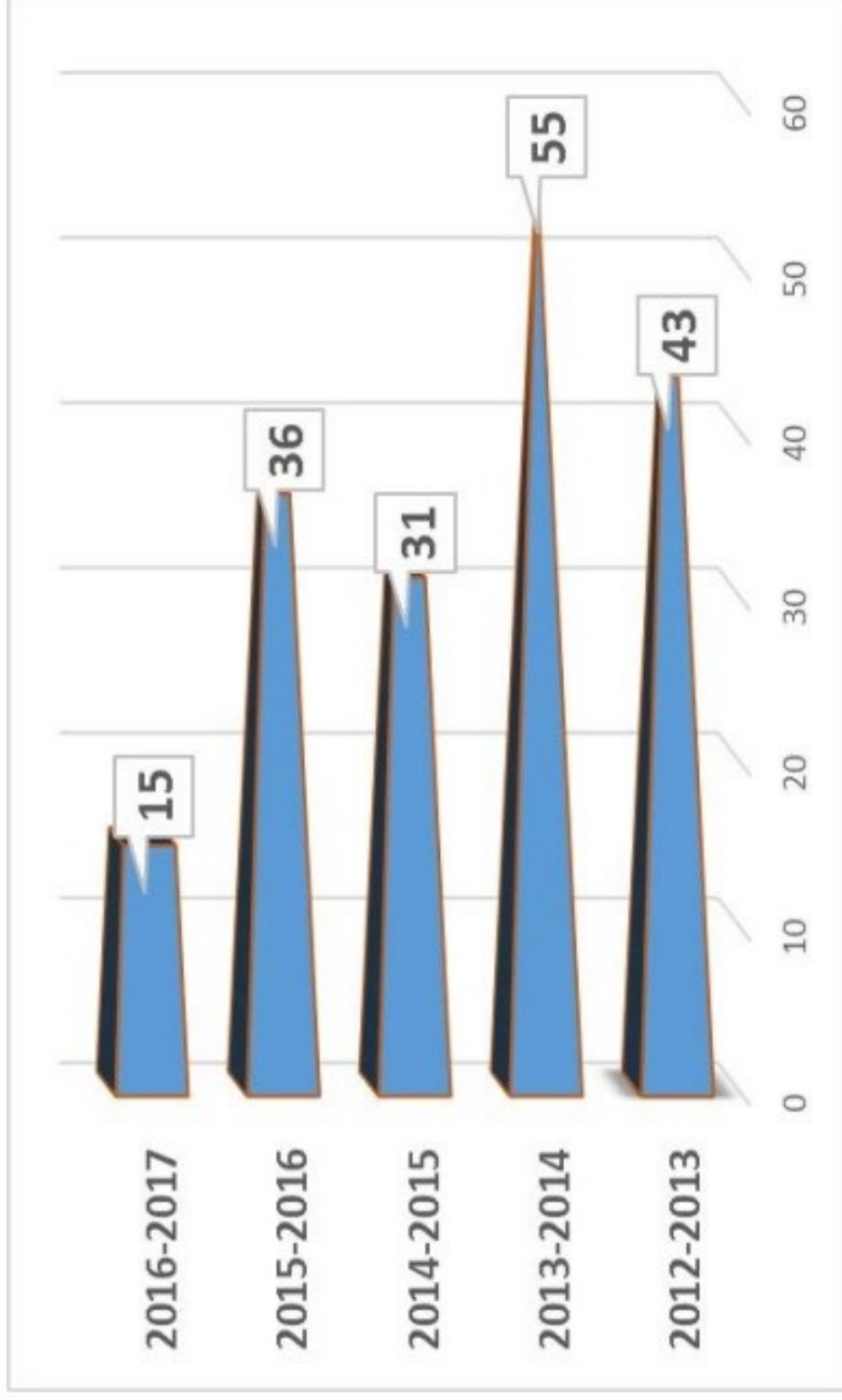
No	Student Name	Supervisor Name	Final Project Title
18	Ammar Al-ameer	Dr. Hala	Knowledge and Attitudes toward Hydroxyurea among Health care Providers in Al-Ahsa
19	Hussain Al-Hubail	Dr. Didi Mohammed	Evaluation of medication adherence of Saudis hypertensive adult in eastern province
20	Muntazar Al-Shakhs	Dr. Dalia A. E.	Estimation and Awareness of daily caffeine intake in Al-Hasa population
21	Abdulsalam Al-yousef	Dr. Ahmad Adel	Diabetes mellitus Patient's wariness about the symptoms of increase or decrease of the blood glucose level in AL-Hasa
22	Sufyan Alo-mair	Dr. Kareem Elfass	Community pharmacists' knowledge ,attitude and practice about counseling diabetic patients in Ramadan.
23	Essam bu saad	Dr. Mohd mukthar	Assessment of knowledge of chronic obstructive pulmonary disease among pharmacy students
24	Yousef Aljeshi	Dr. Didi Mohammed	Assessment of Sickle Cell Disease Awareness and Knowledge
25	Abdulmalek Balgoname	Dr. Ahmad Adel	Evaluation of introductory pharmacy practice experiences course feedback of site preceptors and pharmacy students at the College of Clinical Pharmacy at King Faisal University,
26	ABDULAZIZ ALSAQER	Dr. Ahmad Adel	Awareness of caregivers of diabetic patients about the appropriate using of insulin in KFU students
27	Muneerah Alhadi	Dr. Amal K. A	Assessment of cinnamon effect to reduce primary dysmenorrhea and improve quality of life among females in eastern region
28	Musaab Alo-dail	Dr. Amal K. A	Assessment of Community Pharmacist's Attitude Towards Antitussive Products Abuse in Saudi Arabia Al-Ahsa
29	Batool Rashid Ali	Dr. Amal K. A	Assessment of the Population Awareness about Schizophrenia Disease among Al-Ahsa
30	Sara Batyour	Dr. Didi Mohammed	Assessment of Childhood Immunization Knowledge and Attitudes, Among Parents in Saudi Arabia
31	Nassrallah Alsliman	Dr. Kareem Elfass	Assessing the pharmacoeconomics knowledge among medical and pharmacy interns and residents in Saudi Arabia
32	Saja AlHawas	Dr. Didi Mohammed	Assessing Knowledge and Practice of Hand hygiene among Pharmacy, Nursing and Medical Schools Interns in Al-Hasa City
33	Anfal Almulla	Dr. Hala	Efficacy, misuse and side effects of nicotine patch in smoking cessation
34	Sara Alsafar	Dr.El Walid	Knowledge of Attention defect and hyper activity disorder among students of Medicine collage and clinical pharmacy collage
35	Hawra Alghannam	Dr. Dalia A. E.	Knowledge of clinical pharmacy students in Al-ahsa, Saudi Arabia about use of drugs in sports, a cross sectional study



### Titles of the Students' Research projects 2017

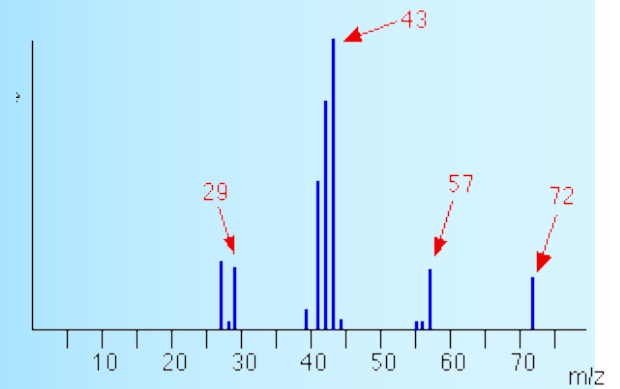
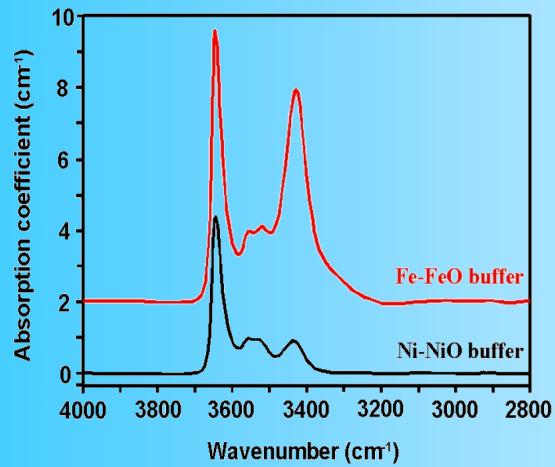
No	Student Name	Supervisor Name	Final Project Title
36	Maha Alkhalidi	Dr. Sahar	Assessment of Energy Drinks Consumption Pattern and Beliefes Among King Faisal University Students
37	Razan Alshuaibi	Dr. Sahar	The relation Ship between sleep pattern , lifestyle, stress, and headache
38	Reem shoail alshahrani	Dr. Kareem Elfass	Evaluation of Saudi community pharmacy delivered oral contraception services a cross-sectional study
39	Sarah AlFalah	Dr.El Walid	Awareness about the Risk of Using Unregistered Weight Loss Products among Saudi Population
40	Fahad Almulhim	Dr. Sahar	Assessment of Saudi Population awaerness and practice towards non-pharmacological approaches in hypertention prophylaxis and treatment
41	Mashael Fehid Aldossari	Dr. Kareem Elfass	Community pharmacists' knowledge, practice for registered herbals products in Alahsa, kingdom of Saudi Arabia
42	Zainab Alshagag	Dr. Dalia A. E.	Awareness about effect of Vitamin D supplementation during pregnancy
43	Athbah Alowaifeer	Dr. Didi Mohammed	Evaluation of sun exposure attitude and level of knowledge among saudi community
44	Nouf Alshehri	Dr. Ahmad Adel	Assess the knowledge of pharmacists about topical corticosteriods and the proper counseling
45	Sulafa Al Sahlawi	Dr. Dalia A. E.	The prevalence of HER-2 overexpression among patients with breast cancer, at National Guard Hospital, Al Ahsa, Saudi Arabia.
46	Alaa AlShehri	Dr. Yasir Ibrahim	Evaluate the Level of Knowledge and Awareness of Saudi Community about First Aid; A Cross Sectional Study
47	Hawraa J Alsuwaiket	Dr. Dalia A. E.	The Influence of body mass index on menstrual irregularities in alolescent grils on Eastern Saudi Arabia
48	Abdulrahman AlMubireek	Dr. Hala	Assessment of pharmacy students' performance and satisfaction with objective structured clinical examination early in the internship period in Al-Hasa, Saudi Arabia
49	Abdurahman AlTaysan	Dr.El Walid	Awareness and assess knowledge of liver toxicity among population during use of paracetamol
50	Latifah Alarfaj	Dr. Hala	Prevalence And Associated Factors Of Sleeping Pills Use Among The Students In Eastern Province : A Cross-Sectional Study
51	Anas Al Ahmed	Dr. Kareem Elfass	Perception of healthcare providers regarding the Role of Clinical Pharmacists in Saudi Arabia

# Number of Research Publications





# RESEARCH INSTRUMENTS



*“Analysis of a sample is not the true aim of analytical chemistry... the real purpose of the analysis is to solve a problem.”*



### Gas Chromatograph / Mass Spectrometer (GC/MS)

GCMS is the technique for separation of thermally stable and volatile compounds and detection of these compounds by mass spectrometer.

Make / Model : Shimadzu, GCMS-QP2010

Carrier gas : Helium

Mass Range : 10-1500 m/z

Resolution :  $R > 2M$  (FWHM)

Maximum temp : 450°C

This instrument is used for qualitative and quantitative determination of organic and Pharmaceutical compounds in biological samples, separation and identification of unknown compounds, trace analysis and determination of isotopic contents, analysis of herbicides, pesticides, structural elucidation of molecules etc.



### Liquid Chromatograph / Mass Spectrometer (LC/MS)

LC-MS, (alternatively HPLC-MS) is a technique that combines the physical separation capabilities of HPLC with the mass analysis capabilities of mass spectrometry. If the molecules are a nonvolatile and polar macromolecule, the choice would be LCMS for the separation and identification.

Make / Model : Aligent LCMS- 1200 series

Mass Range : 10-1500 m/z

Mass Accuracy :  $\pm 0.13$  U

LC-MS is very commonly used for qualitative and quantitative analysis in pharmacokinetic studies of pharmaceuticals, proteomics, Drug discovery and development.

## High Performance Liquid Chromatography (HPLC)

HPLC, the most powerful of all the chromatography techniques, can often easily achieve separations and analyses that would be difficult by other techniques. HPLC methods use a special kind of column and a mobile phase

Make / Model : Shimadzu class LC-20AT

Detectors : UV/Visible and fluorescence

HPLC is one of the most widely used analytical techniques. The speed, versatility and reliability of HPLC have been major factors for its acceptance both as a research tool and for routine analysis. With a variety of column packings and solvents, HPLC can be used in various areas.

FTIR can be routinely used to identify the functional groups and identification/

## FTIR Spectrophotometer

quality control of raw material/finished products. High signal to noise ratio makes FTIR more useful for difficult samples.

Make/Model : Shimadzu, FTIR-8400S

scan range :  $4000\text{ cm}^{-1}$  to  $400\text{ cm}^{-1}$

Resolution :  $1\text{ cm}^{-1}$

IR absorption has numerous applications in qualitative and quantitative analysis.

The optical absorption by samples in the ultraviolet and visible regions are measured with this instrument. The absorption of light is directly proportional to the concentration of the components. In this region of the electromagnetic

## UV-Visible Spectrophotometer

spectrum, molecules undergo electronic transitions.

Make/Model : Shimadzu, UV-1700

Spectrum Range : 1100-190 nm

Wavelength accuracy :  $\pm 0.1\text{ nm}$

UV/Vis spectroscopy is routinely used in the quantitative determination of solutions of transition metal ions and highly conjugated organic compounds.





## Atomic Absorption Spectrophotometer

Atomic absorption spectrophotometry provides accurate quantitative analyses of trace elements (ppm level) in a variety of samples from different fields including organic matters, pharmaceutical samples, medical samples, rocks etc. Samples are analyzed in solution form, so solid samples must be leached or dissolved prior to analysis.

Make / Model	:Shimadzu, AA-6300
Carrier gas	:Acetylene
Wavelength Range	:185-900 nm
Detector	: Photo multiplier and semiconductor

This instrument is used for Qualitative and Quantitative determination of metal ions in biological samples. Further it is very useful in the quality control of most of the industries.

Spectrofluorophotometer is a type of electromagnetic spectrophotometer

## Spectrofluorophotometer

which analyzes fluorescence from a sample. It involves using a beam of light, usually ultraviolet light, that excites the electrons in molecules of certain compounds and causes them to emit light of a lower energy.

Make / Model	:Shimadzu, RF-5301PC
Wavelength Scan Range	: 220-900 nm and zero order light
Wave length accuracy	: $\pm 1.5$ nm
Detector	: Photomultiplier tube

It is used in biochemical, medical, and chemical research fields for analyzing organic compounds.



*"Anger is a destroyer for the heart of a sage; and he who does not have his anger under his control does not have his wisdom under his control, either."*

## Differential Scanning Calorimeter (DSC)

**Differential scanning calorimetry** is a thermoanalytical technique in which the difference in the amount of heat required to increase the temperature of a sample and reference are measured as a function of temperature. Both the sample and reference are maintained at nearly the same temperature throughout the experiment.

Make / Model	: Perkin Elmer
Temperature Range	: -150 °C to max. 700°C
Measurement range	: ± 350 mW at RT
Temperature Accuracy	: ± 0.2°C
Temperature reproducibility	: ± 0.1°C
Heating rate	: RT to 700°C in 7 min
Cooling rate	: + 100°C to - 100°C in 15 min

The main application of DSC is in studying phase transitions, such as melting, glass transitions, or exothermic decompositions, chemical kinetics etc.

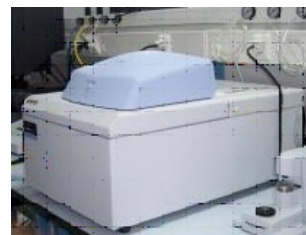
The TC-412 provides the researcher with the means of accurately controlling

## Thermal Cycler

the temperature profile of samples.

Make/Model	: Techne/ TC 412
Temperature	: Range : 4 °C to 99 °C
Temperature accuracy	: ± 1 °C
Heating rate	: 2.5 °C/sec
Cooling rate	: 1.3 °C/sec

It has many scientific applications including DNA amplification, sequencing and polymerase chain reactions (PCR).





### Tunable Microplate Reader

The VERSAmax reader is used to detect biological, chemical or physical events of samples during different types of assay. The narrowly focused light beam and optical design give the same high performance with round bottom, flat bottom, or half area well plates. The dual-wavelength readings report the actual absorbance at each wavelength. The reader also provides controlled temperatures, up to 45° C, for kinetics at ambient and elevated temperatures.

Make / Model	:VERSAmx
Wavelength Range	:340-850 nm
Wavelength Accuracy	: ±1.0 nm
Detector	: Silicon Photodiode

The VERSAmax reader covers a wide range of applications. Microbial growth/MIC IC 50s/LD 50s, Endpoint ELISAs/EIAs, Cytoproliferation/cytotoxicity, Colorimetric protein, Kinetic ELISAs/enzyme assays, Platelet aggregation Bacterial identification, Clotting/clot lysis.

Polarimeter can be used to measure various optical properties of a material,



### Poralimeter

including linear birefringence, circular birefringence (also known as optical rotation or optical rotary dispersion), linear dichroism, circular dichroism and scattering.

Make/ Model	: Bellingham, Polarimetry ADP220.
Range	: -90 to +90 °A
Resolution	: 0.01
Accuracy	: 0.02
Light source	: LED/Interference filter (589.3 nm)
Reading time	: 15 sec
Temperature	: 5-40 °C
Optical density range	: 0.0 to 2.0 OD

Used for the determination of PURITY, Specific Rotation, Concentration and inversion f optically active compounds.



## Densitometer

Double beam scanning densitometer is employed for both the *accurate identification* of the spot position and the *precise quantitative estimation* of TLC plate, one-dimensional and two-dimensional electrophoregrams, and micro plates content. The zigzag scanning method using flying spot method will eliminate errors caused by irregular shape of chromatographic spots.

Make /model	: Shimadzu, CS-9301PC
Measuring wavelength range	: 200-650 nm
Photometric system	: Double-beam monitor, dynode feedback system
Measuring mode	: Transmission- or reflection-absorption photometry in single or dual wavelength method.
Sample scanning mode	: Zigzag scanning with the flying spot method
Scanning range	: X direction 5 ~ 195 mm Y direction: 2 ~ 185 mm
Scanning speed	: Linear scanning: 125 mm/min. Zigzag scanning: 0.4W x 0.4H mm/min

The reliable densitometry of TLC, DNAs, electrophoretic gels, micro plates and even study of solid surface can be used for qualitative and quantitative analysis of proteins and DNAs.



*The only disability in life is a bad attitude.*



## Elemental Analyzer

. This analyzer measures the amount of C, H, N, O, and S in samples by the rapid combustion of small amounts (1-2 mg) of the sample in pure oxygen (Dumas method or "flash combustion"). Catalysts are present at high temperature of around 1100° Celsius.

Make / Model	: Euro EA3000
Front Furnace	: up to 1100°C
GC Oven	: temperature from 40 up to 190°C
TCD detector	: Thermal Conductivity detector
Lab Conditions	: Room Temp. max. 30OC, Humidity max 75%.
Gas Needed	: He:99.995% (GC Grade), O <sub>2</sub> :99.998% (Transistor grade)

Micro and macro determination of total nitrogen, carbon, sulphur and hydrogen present in a wide range of organic and inorganic compounds of any type, soil, plant material, pharmaceuticals, foodstuffs and drinks, waste material, carbon and oil, tobacco, polymers and many more.

**Gel electrophoresis** is process in which molecules (such as proteins, DNA,

## Gel Electrophoresis

or RNA fragments) can be separated according to size and electrical charge by applying an electric current to them while they are in a gel.



Make/ Model	: Biotech Fisher, MASETRO 101.
Used power in standby mode	: Developing unit      6 W Migration mode      6 W
Used power in running mode	: Developing unit      150 W Migration mode      16 W
Fuses	: 2x 1,25 A slow Blow (developing unit) 2 x 500mA Slow blow (Migration unit)

Speed : :approx. 8 tests / hour

Gel electrophoresis is used in forensics, molecular biology, microbiology and biochemistry. Gel electrophoresis is used to provide genetic information, to separate and identification of proteins, scientific dyes. Human DNA can be analyzed to provide evidence in criminal cases, to diagnose genetic diseases, and to solve paternity cases.

## Benchtop Tablet Press

Rotary tablet press is used for pressing various granular/powdered raw material into shaped tablets or compacts. It is an important type of tablet punching machine. Also known as multi-station tableting presses, rotary tablet press make use of a punch and die system together with multiple stations or punches for compacting raw material into tablets.

Make /model : Erweka, TRB 16

For round - and odd shaped tablets

TRB 16 max. diameter / length 18 mm

The compression force can be adjusted up to 4 tons

Max. Filling Depth 17 mm

Up to 38,000 tablets/h (TRB16) maximum output.

Rotary tablet press is used to press medicinal tablets, catalysts, calcium coffee pills, candies. It can also be used to compress various tablets of pesticide and fertilizer in small-batch production.



## Freeze-dryer

Freeze drying, (lyophilization) uses both a vacuum and a freezing process to remove water from perishable foods and medicines. The result is a product that can be stored at room temperature for years without spoilage, or packed in limited storage spaces and reconstituted with water later. Freeze drying is also used in the pharmaceutical industry to preserve the integrity of air or moisture-sensitive medicinal compounds, particularly those of biological origin, such as enzymes, blood plasma, vaccines, etc.



*Experience is a hard teacher because she gives the test first, the lesson afterwards.*



**King Faisal University  
College of Clinical Pharmacy**

PO Box 400, Al-Ahsa:31982

Phone: 00966-3-5817175,

00966-3-5800000, Extn:1783

Fax: 00966-3-5817174

E-mail: [clinicalpharmacy@kfu.edu.sa](mailto:clinicalpharmacy@kfu.edu.sa)



*“When man takes one step to God, God takes ten steps towards him. But the first step is to be taken by man”*