Curriculum Vita

Personal info:

Full name: Mohammed Hassan Mohammed Ewis Elkomy

First name: Mohammed

Last name: Elkomy (may be written as El-Komy or El Komy)

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Email: melkomy@pharm.bsu.edu.eg, mhalkomy@ju.edu.sa

Education:

The University of Iowa, Iowa city, IA, USA

School: College of pharmacy, Department of Pharmaceutical Sciences and Experimental Therapeutics (PSET)

Degree: Ph.D. **Field:** Pharmaceutics **Advisor:** Dr. Peter Veng-Pedersen

Study years: 2007-2012 **GPA:** 3.9

Cairo University, Cairo, Egypt

School: Faculty of pharmacy, Department of Pharmaceutics

Degree: M.Sc. **Field:** Pharmaceutics **Study years:** 2001-2005
Grade: Very Good

Cairo University, Beni-Suef Branch, Beni-Suef, Egypt

School: Faculty of pharmacy

Degree: B.Sc. **Field:** Pharmaceutical Sciences **Study years:** 1995-2000 **Grade:** Excellent

Work experience:

2018- Assistant professor, Department of Pharmaceutics, College of Pharmacy, Jouf University, Sakaka, KSA

Duties involved:

1. Supervising student graduation projects.
2. Teaching the following courses at the undergraduate level:
   - Basic Pharmacokinetics
   - Industrial Pharmacy
   - Pharmaceutics II (Liquid Dosage Forms)
3. Supervisor of the college academic advising unit.
4. Member of the University Bioethics Committee.
5. Member of the college annual report committee.
6. Member of the college postgraduate studies and scientific research committee.
7. Member of the college academic plan committee.
8. Member of the college strategic plan follow-up committee.

2014-2018 Assistant professor, Department of Pharmaceutics and Industrial Pharmacy, Faculty of Pharmacy, Beni -Suef University, Beni -Suef, Egypt

Duties involved:

1. Teaching the following courses at the undergraduate level:
   - Biopharmaceutics and Pharmacokinetics
   - Physical pharmacy
   - Dosage form I & II

- Orientation to Pharmacy
- Pharmaceutical technology

2. Teaching the following courses at the graduate level:
    - Advanced Biopharmaceutics and Pharmacokinetics
    - Advanced Physical Pharmacy
3. Supervising two M.Sc. theses and two PhD theses.
4. Member of the college postgraduate studies committee.
5. Member of the college quality assurance and academic accreditation committee (scientific research axiom).

Research projects involved in:

1. Co-investigator on the following projects:
    - Development, optimization and pharmacokinetic evaluation of Carvedilol nanoparticles for intra-nasal delivery.
    - Development, optimization and pharmacodynamic evaluation of Ketoprofen and Tenoxicam nanoparticles for topical delivery.
    - Development, optimization and pharmacokinetic evaluation of loratadine transferosomes for buccal delivery.
    - Development and pharmacokinetic evaluation of mucoadhesive dosage forms for delivery of Betahistine dihydrochloride.

2. Co-investigator on the following projects in collaboration with **Stanford University, Stanford, CA, USA**:
    - Pharmacokinetics of Magnesium in pregnancy.
    - Optimization of maternal magnesium sulfate administration for fetal neuroprotection.
    - Pharmacokinetics of dexmedetomidine in infants and children following isolated orthotopic liver transplantation.
    - Pharmacokinetics of Morphine and its metabolites in pediatric cardiac patients.
    - Time-to-event modeling of morphine rescue dose administration in pediatric cardiac patients.
    - Ex-vivo Pharmacokinetics of antimicrobial agents in Continuous Renal Replacement Therapy.

2013-2014 Postdoctoral fellow, Stanford University, Stanford, USA

Projects involved in:

1. Pharmacokinetics of Ketamine in pediatric cardiac patients.
2. Pharmacokinetics of Cefazolin in cesarean surgery and newborns.
3. Pharmacokinetics of Ondansetron in pregnant women and newborns.
4. Pharmacokinetics of Vancomycin in newborns.
5. Pharmacokinetics of Etomidate in newborns with heart disease.

2011 (May-July) Intern, Research & Development department , Abbott Laboratories, Abbott Park, IL, USA

Projects involved in: Model based meta-analysis of the efficacy of anti-psychotic drugs in treatment of positive symptoms of schizophrenia.

2007-2012 Research assistant, Department of Pharmaceutical Sciences and Experimental Therapeutics, College of Pharmacy, Iowa University, Iowa city, Iowa, USA

Projects involved in:

1. Optimization of Erythropoietin therapy in neonates.
2. Pharmacokinetics of Continuous Erythropoietin Receptor Activator (C.E.R.A.).
3. Toxicokinetics of Pentachlorobiphenyl compounds.

2000-2007 Instructor and lecturer, Department of Pharmaceutics and Industrial Pharmacy, Faculty of Pharmacy, Cairo University, Beni-Suef Branch, Beni-Suef, Egypt

Training Courses Attended:

Title	Date (day/month/year)
Thinking Skills Development	2-4/5/2006
Presentation Skills	9-11/5/2006
Novel Trends in Teaching	10-12/4/2007
Effective Teaching	14-17/4/2007
Research Team Management	18-19/1/2014
University Management	26-27/1/2014
University Legal and Financial Aspects	28-29/1/2014
Egyptian Knowledge Bank	14-15/11/2017
Presentation Skills	26-27/6/2018
Quality Standards in Teaching	2-3/7/2018
International Publishing of Research	4-5/7/2018

University Management	8-9/7/2018
Integrity, Transparency and Anti-corruption	10-11/7/2018
Use of Technology in Teaching	15-16/7/2018

Google Scholar Account:

https://scholar.google.com/citations?user=qExur50AAAAJ&hl=en

Scopus Accounts:

https://www.scopus.com/authid/detail.uri?authorId=56176656800

https://www.scopus.com/authid/detail.uri?authorId=36126224000

ORCID ID:

https://orcid.org/0000-0003-4083-6024

Peer Review Publications:

A-Drug Delivery Field

[1] N.A. El-Gendy, G.A. Abdelbary, M.H. El-Komy, A.E. Saafan, Design and evaluation of a bioadhesive patch for topical delivery of gentamicin sulphate. Current drug delivery 6(1) (2009) 50-57.

[2] M.H. Elkomy, S.F. Elmenshawe, H.M. Eid, A.M.A. Ali, Topical ketoprofen nanogel: artificial neural network optimization, clustered bootstrap validation, and in vivo activity evaluation based on longitudinal dose response modeling. Drug delivery 23(9) (2016) 3294-3306.

[3] H.M. Aboud, M.H. El komy, A.A. Ali, S.F. El Menshawe, A. Abd Elbary, Development, Optimization, and Evaluation of Carvedilol-Loaded Solid Lipid Nanoparticles for Intranasal Drug Delivery. AAPS PharmSciTech 17(6) (2016) 1353-1365.

[4] Elkomy, M. H., El Menshawe, S. F., Eid, H. M., & Ali, A. M. Development of a nanogel formulation for transdermal delivery of tenoxicam: a pharmacokinetic–

pharmacodynamic modeling approach for quantitative prediction of skin absorption. Drug development and industrial pharmacy, 43(4) (2017) 531-544.

[5] Elkomy, M. H., El Menshawe, S. F., Abou-Taleb, H. A., & Elkarmalawy, M. H. Loratadine bioavailability via buccal transferosomal gel: formulation, statistical optimization, in vitro/in vivo characterization, and pharmacokinetics in human volunteers. Drug delivery, 24(1) (2017) 781-791.

[6] Elkomy, M. H., El-Menshawe, S. F., Ali, A. A., Halawa, A. A., & El-Din, A. S. S. Betahistine dihydrochloride transdermal delivery via optimized thermosensitive gels: percutaneous absorption evaluation using rat growth as a biomarker. Drug delivery and translational research, 8(1) (2018) 165-177.

[7] Eid, H.M., Elkomy, M.H., El Menshawe, S.F., Salem, H.F. Development, optimization, and in vitro/in vivo characterization of enhanced lipid nanoparticles for ocular delivery of ofloxacin: the influence of pegylation and chitosan coating. AAPS PharmSciTech (2019) (published ahead of print).

B-Drug Pharmacokinetics Field

[1] I. Kania-Korwel, M.H.M.E. El-Komy, P. Veng-Pedersen, H.-J. Lehmler, Clearance of Polychlorinated Biphenyl Atropisomers is Enantioselective in Female C57Bl/6 Mice. Environmental science & technology 44(8) (2009) 2828-2835.

[2] M.H. El-Komy, J.A. Widness, P. Veng-Pedersen, Pharmacokinetic analysis of C.E.R.A. disposition using a target-mediated, physiologic recirculation model and a tracer interaction methodology. Drug Metab Dispos 39(4) (2011) 603-609.

[3] M.H. El-Komy, R.L. Schmidt, J.A. Widness, P. Veng-Pedersen, Differential pharmacokinetic analysis of in vivo erythropoietin receptor interaction with erythropoietin and continuous erythropoietin receptor activator in sheep. Biopharm Drug Dispos 32(5) (2011) 276-288.

[4] I. Kania-Korwel, C.D. Barnhart, M. Stamou, K.M. Truong, M.H.M.E. El-Komy, P.J. Lein, P. Veng-Pedersen, H.-J. Lehmler, 2, 2', 3, 5', 6-Pentachlorobiphenyl (PCB 95) and its hydroxylated metabolites are enantiomerically enriched in female mice. Environmental science & technology 46(20) (2012) 11393-11401.

[5] A. Frymoyer, A.L. Hersh, M.H. El-Komy, S. Gaskari, F. Su, D.R. Drover, K. Van Meurs, Association between Vancomycin Trough Concentration and Area under the Concentration-Time Curve in Neonates. Antimicrobial agents and chemotherapy 58(11) (2014) 6454-6461.

[6] M.H. Elkomy, P. Sultan, D.R. Drover, E. Epshtein, J.L. Galinkin, B. Carvalho, Pharmacokinetics of prophylactic cefazolin in parturients undergoing cesarean delivery. Antimicrobial agents and chemotherapy 58(6) (2014) 3504-3513.

[7] M.H. Elkomy, P. Sultan, B. Carvalho, G. Peltz, M. Wu, C. Clavijo, J.L. Galinkin, D.R. Drover, Ondansetron Pharmacokinetics in Pregnant Women and Neonates: Towards a New Treatment for Neonatal Abstinence Syndrome. Clinical Pharmacology & Therapeutics 97(2) (2015) 167-176.

[8] M.H. Elkomy, D.R. Drover, K.L. Glotzbach, J.L. Galinkin, A. Frymoyer, F. Su, G.B. Hammer, Pharmacokinetics of Morphine and Its Metabolites in Infants and Young Children After Congenital Heart Surgery. The AAPS journal. 18(1) (2016) 124-33.

[9] M.H. Elkomy, D.R. Drover, G.B. Hammer, J.L. Galinkin, C. Ramamoorthy, Population pharmacokinetics of ketamine in children with heart disease. International journal of pharmaceutics 478(1) (2015) 223-231.

[10] F. Su, M.H. El-Komy, G.B. Hammer, A. Frymoyer, C.A. Cohane, D.R. Drover, Population pharmacokinetics of etomidate in neonates and infants with congenital heart disease. Biopharmaceutics & drug disposition 36(2) (2015) 104-114.

[11] M.H. Elkomy, D.R. Drover, J.L. Galinkin, G.B. Hammer, K.L. Glotzbach, Pharmacodynamic Analysis of Morphine Time-to-Remedication Events in Infants and Young Children after Congenital Heart Surgery. Clinical pharmacokinetics 55(10) (2016) 1217-1226.

[12] K.F. Brookfield, F. Su, M.H. Elkomy, D.R. Drover, D.J. Lyell, B. Carvalho, Pharmacokinetics and Placental Transfer of Magnesium Sulfate in Pregnant Women. American journal of obstetrics and gynecology 214(6) (2016) 737-e1.

[13] Brookfield, K. F., Elkomy, M., Su, F., Drover, D. R., & Carvalho, B. Optimization of Maternal Magnesium Sulfate Administration for Fetal Neuroprotection: Application of a Prospectively Constructed Pharmacokinetic Model to the BEAM Cohort. The Journal of Clinical Pharmacology 57(11) (2017) 1419-1424.

[14] Damian, M. A., Hammer, G. B., Elkomy, M. H., Frymoyer, A., Drover, D. R., & Su, F. Pharmacokinetics of Dexmedetomidine in Infants and Children After Orthotopic Liver Transplantation. Anesthesia and analgesia (2018) (published ahead of print).

[15] Elkomy, M. H., Alruwaili, N., Elmowafy, M., Shalaby, K., Drover, D. R., & Ramamoorthy, C. (2019). Assessment of Ketamine Adult Anesthetic Doses in

Pediatrics using Pharmacokinetic Modeling and Simulations. Pharmacotherapy: The Journal of Human Pharmacology and Drug Therapy (2019) (published ahead of print).

Conferences & Meetings:

[1] M. El-Komy, O. El-Gazayerly, A. Abdulbary, POTENTIALS OF SURFACE TREATMENT FOR MODIFYING THE PROPERTIES OF METRONIDAZOLE. The IXXX Conference of Pharmaceutical Sciences and The VIII Conference of the Colleges of Pharmacy in the Arab World, Nasr City, Cairo, Egypt 2004.

[2] M. El-Komy, J. Widness, P. Veng-Pedersen, PHARMACOKINETIC ANALYSIS OF CERA NONLINEAR DISPOSITION USING A TRACER INTERACTION METHODOLOGY AND A TARGET-MEDIATED RECIRCULATION MODEL., American Association of Pharmaceutical Sciences annual meeting, New Orleans, LO 2010.

[3] B. Carvalho, P. Sultan, M.H. Elkomy, G. Peltz, M. Wu, C. Clavijo, J.L. Galinkin, D.R. Drover, PHARMACOKINETICS OF ONDANSETRON IN NONPREGNANT AND PREGNANT WOMEN. Society for Obstetric Anesthesia and Perinatology (SOAP) Annual Meeting, Toronto, Canada 2014.

[4] M. Damian, G. Hammer, M. El-Komy, A. Frymoyer, D. Drover, F. Su, THE PHARMACOKINETICS OF DEXMEDETOMIDINE IN INFANTS AND CHILDREN FOLLOWING ISOLATED ORTHOTOPIC LIVER TRANSPLANTATION. The SCCM Critical Care Congress Meeting, Orlando, Florida, USA, 2016.

[5] R.H. Bahmdana, O.A. Ahmed, K.H. Hosny, M.H. Elkomy, DEVELOPMENT OF NANO-LIPID FORMULA CONTAINING RALOXIFENE AND VITAMIN D TO OVERCOME BARRIERS IN THE MANAGEMENT OF OSTEOPROSIS. The Faculty of Pharmacy, Egyptian Russian University International Conference, Cairo, Egypt 2018.

[6] Al-Nuwayfi, M., Alruwaili, F., Alanzi, A., Alruwaili, N., &Elkomy, M. H., STUDY OF KETAMINE PHARMACOKINETICS IN CHILDREN POPULATION: AN ATTEMPT TO RECOMMEND A PEDIATRIC ANESTHETIC DOSE REGIMEN. The DUPHAT, Dubai, UAE, 2019.