

## Curriculum Vitae

George Kwame Yeboah, Ph.D, MPH, M.Phil., MT.

### **PERSONAL INFORMATION**

Address:

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Citizenship: United States of America.

### **EDUCATION**

1. 12/2007 – Professional Compounding Centers of America, Houston, TX.  
(Pharmaceutical Compounding Training)
2. 01/2004-10/2007) Pharmaceutical Sciences, College of Pharmacy and Health Sciences, Mercer University, Atlanta, GA. - Ph. D (Pharmaceutical Sciences)
3. 01/2001-12/2002- Mercer University School of Medicine, Macon, GA- MPH  
(Epidemiology).
4. 09/1993-06/1996- University of Ghana, Legon, Ghana- M. Phil (Zoology- Parasite Immunology)
5. 02/1991-07/1991- Danish Bilharziasis Laboratory, Copenhagen, Denmark. Diploma  
(Epidemiology and Control of Schistosomiasis and other vector-borne diseases)
6. 09/1977-06/1981- University of Science and Technology, Kumasi, Ghana- B. Sc  
(Hons) Biological Sciences.
7. 01/2001, Medical Technology Certification – American Medical Technologists.

### **KNOWLEDGE**

Pharmaceutical Compounding

Pharmaceutical Sciences (Pharmaceutics) - 60 Graduate semester hours

Biology/Physical/Environmental and Biochemical Sciences: -63 Graduate semester hours

Epidemiology and other Public Health Related disciplines: -39 Graduate semester hours

Biological Sciences: -120 Undergraduate semester hours

## **EMPLOYMENT EXPERIENCE**

07/2022 till now – Professor and Chair of the Department of Pharmaceutical Sciences  
(Duties: Coordinate the activities of the Department)

*College of Pharmacy, Harding University, Searcy, Arkansas.*  
Dean of the College of Pharmacy: Professor Daniel Atchley

09/2007 till now – Professor, Pharmaceutics (Duties: Lecturer and course coordinator of Pharmaceutical Calculations, Pharmaceutics, Pharmaceutical Compounding Laboratory core courses, and Major World Diseases elective course. Lecturer in Foundations of Pharmaceutical Sciences, Principles of Pharmaceutical Sciences, and Medical Microbiology)

*College of Pharmacy, Harding University, Searcy, Arkansas.*  
Dean of the College of Pharmacy: Professor Daniel Atchley

07/2016 to 2017 – Associate Professor, Pharmaceutics (Duties: Lecturer in Pharmaceutics, Pharmaceutical Compounding Laboratory and Pharmacokinetics

*Gregory School of Pharmacy, Palm Beach Atlantic University, West Palm Beach, Florida:* Dean: Professor Jeff Lewis

2015 till now – Member of Graduate Faculty (Principal Investigator and Project Advisor for PhD students).

*University of Maryland Eastern Shore*  
Head of Department: Ali B. Ishaque

11/2007 – 07/2016 - Associate Professor, Pharmaceutics (Duties: Lecturer and course coordinator of Introduction to Pharmaceutical Sciences, Pharmaceutics, Pharmaceutical Compounding Laboratory core courses and Major World Diseases elective course, lecturer in Pathophysiology, Medical Microbiology, Principles of Drug Action, Basic Pharmacokinetics/Biopharmaceutics, Research Techniques, Special Populations and Pharmacy in Public Health. Lecturer in Infectious Diseases, Clinical Medicine, Physician Assistant Program, Harding University).

*College of Pharmacy, Harding University, Searcy, Arkansas.*  
Head of Department: Professor Bill Yates.

08/2005 -2007 - Research Scientist- (Duties: Formulation, process development, clinical (GMP) manufacturing and content analysis of drugs for transdermal delivery. Maintenance of inventory and control substance logs used in formulation and clinical manufacturing).

*Altea Therapeutics Corporation, Atlanta, Georgia*

Supervisor: Dr. Malik Rafi

2005 - 2007 - Teaching Assistant (Teach graduate [Doctorate degree] students in Research Techniques with special emphasis on immunoassay development and Pharm. D students in drug delivery systems as well as compounding laboratory).

*Mercer University College of Pharmacy and Health Science, Atlanta GA.*

Supervisor: Dr. Matesic

07/2005–01/2006- Medical Technologist (Part time), (Duties: Analysis of blood serum and plasma for the chemical markers with Hitachi 747 – 100 and 200).

*Antech Clinical Laboratory, Chemistry Department, Smyrna, Georgia*

Supervisor: George Sweeney

03/2001- 03/2005- Medical Technologist. (Duties: GMP manufacturing of biologics and screening of blood for HIV1/2, HEPATITIS B, C and Core antigens, and Human T lymphocyte virus I and II, using Abbott Dynamic Processor and Ortho Summit Processor).

*National Testing Laboratory, American Red Cross, Norcross, GA.*

Supervisor: Peter Cruetkaw

09/2002 – 08/2003 Research Scientist. (Duties: 1. Analyze insect samples by PCR for the presence of *Mycobacterium ulcerans* DNA with the intention of elucidating possible transmission cycle; 2. Investigate the antibiotics susceptibility in *Mycobacterium ulcerans*).

*King's Laboratory, Infectious Disease Division, Department of Medicine, Emory University School of Medicine, Atlanta, Georgia.*

Supervisor: Dr. Daniel Okenu,

11/2000 –03/2001- Medical Technologist. (Duties: Testing of clinical specimens-blood, stool, urine and other specimen for disease causing microorganisms).

*Microbiology Department, Quest Diagnostics, Atlanta, GA.*

Avani Patel

02/1992-03/1993- Research Scientist. (Duties):

1. Production and characterization of Monoclonal antibodies and their use in dipstick assay for the diagnosis of schistosomiasis:
2. Assisted the Principal investigators on an epidemiology and control of Schistosomiasis project. In charge of field investigation, testing of sample, and training of technical staff).

*Noguchi Memorial Institute for Medical Research, University of Ghana, Accra, Ghana.*  
Supervisor: Dr. Kwabena Bosompem

02/1992-06/1996- Regional Biologist (Disease Control), (Duties: Management of and surveillance on communicable diseases in the region with the view of formulating protocol for the control or prevention of diseases such as HIV/AIDS, Malaria, Guinea worm, Yaws, TB, leprosy and the vaccine preventable diseases, operational research and survey, health education and training of technical and community officials in disease control activities).

*Epidemiology Division, Ministry of Health, Upper West Region, Wa, Ghana*  
Dr. Appiah Denkyirah

07/1984-02/1992- Assistant Biologist. (Duties: Assisted in disease surveillance and control activities of the department).

*Ministry of Health, Disease Control/Epidemiology Unit, Ghana 1984-1996*  
Supervisor: Dr Kofi Ahmed and Ms Aba Baffoe

#### **VOLUNTEER SERVICE** (including internships)

##### ***Journal Manuscript Peer Reviews***

2023 – *Journal of Microencapsulation*

2022 – *Vaccines*

2021 – *Journal of Drug Targeting, Journal of Microencapsulation*

2020 – *Vaccine, Journal of Microencapsulation, Journal of Drug Delivery Science and Technology*

2019 - *Oncology*

2018 – *Journal of Microencapsulation*

2017 – *Neuroscience Letters, Journal of Microencapsulation*

2016 - *Journal of Microencapsulation, Journal of Pharmaceutical Sciences*

2015 – *Journal of Pharmaceutical Sciences*

2014 – *Vaccines, Journal of Microencapsulation, European Journal of Chemistry*

2013 – *Advances in Analytical Chemistry, Neuroscience Letters*

2012 – *Drug Development and Industrial Pharmacy, Neuroscience Letters*

2010 – *Journal of Drug Targeting, Journal of Pharmaceutical Sciences*

2009 – *Journal of Microencapsulation.*

### ***American Association of Pharmaceutical Sciences***

2019 to date – *American Association of Pharmaceutical Sciences (AAPS)* – Review of members' abstracts for presentations at annual meetings

2018 to date – Member of the Executive Committee of the Active Pharmaceutical Ingredients (API) Community. Member of Global Health, Oral Biopharmaceutics and Absorption Modeling, Nanotechnology; Inhalation and Nasal, Pharmacometric, and Bioanalytical Communities

### ***Adjunct Professorship for Doctoral Students***

#### ***Over 45 Dissertations have been adjudicated up to date***

2019 – To date: Adjunct Professor (Dissertation Adjudication), Acharya Nagarjuna University, Nagarjuna Nagar, Andhra Pradesh, India

2015 – To date: Adjunct Professor (Dissertation Adjudication), Gandhi Institute of Technology and Management, Visakhapatnam, India

2011 – To date: Adjunct Professor (Dissertation Adjudication), Department of Pharmaceutical Chemistry, Faculty of Pharmacy, University of Karachi, Karachi, Pakistan

2009 - To date – Adjunct Professor (Dissertation Adjudication), University College of Pharmaceutical Sciences, Andhra University, Visakhapatnam, Andhra Pradesh, India

### ***University/College-Level Services***

2007 to date: Member of the Admissions Committee, Harding University College of Pharmacy

2016 – 2017: Member of the Admissions Committee, Palm Beach Atlantic School of Pharmacy

2017 to date: Member of the Assessment Committee, Harding University College of Pharmacy

2020: Member of the Curriculum Committee, Harding University College of Pharmacy

2020 to date - External Assessor for Faculty Promotions, University of Ghana School of Pharmacy

### *Others*

2021 to date – Grant Reviewer/Member of Panel of Experts- Low and Lower-Middle Income Countries (LMICS) for the Cures Within Reach (CWR) ReGRoW Initiative Funding Agency

2009 – NIH RO1 Grant Reviewer

2007 - 2014- Research Advisory Committee Member of Doctoral Students of Mercer University College of Pharmacy and Health Sciences.

2005 -2007 Research Advisory Committee Member of one Master of Public Health Student of Emory University Rollins School of Public Health.

06/2002-12/2002- Internship - Macon Coalition to End Homelessness, Macon, Georgia.

-Duties: Developed a comprehensive operational guide for the organization of Health Fairs for the poor and homeless in central Georgia: Identified and recruited doctors, clinics and other stakeholders to participate; identified possible funding sources and wrote grants for funding of the health fairs.

-Sponsored by Mercer School of Medicine. Kathryn Martin, (478) 301-2723), can be contacted.

09/1994-06/1996- Project research for thesis – Parasitology Unit, Noguchi Memorial Institute for Medical Research, University of Ghana, Legon.

Duties: Characterized anti-Schistosoma haematobium monoclonal antibodies and investigated their reactivity in the Western Immunoblot assay.

-Sponsored by Japanese International Cooperation Agency and University of Ghana, Dr. Supervisor: Kwabena M Bosompem.

## **PROFICIENCIES**

Have extensive experience in formulation, process development and clinical manufacturing of controlled released delivery systems; clinical and medical research including proficiency in the following among others:

### Computer skills:

MS Word: excellent Epi-info: fair  
Power Point: excellent SPSS: excellent  
Excel: excellent GIS: introductory  
Microsoft Publisher: good  
Computer-based Research: excellent.

### Laboratory skills:

Basic assays: Bioanalysis of whole blood, serum, urine and stool: excellent  
ELISA: excellent, gel electrophoresis: excellent  
Western Blot: excellent, PCR: Introductory  
Cell Culturing: excellent  
Microscopic identification of parasites: excellent  
Protein purification: excellent

### Drug formulation:

Drug compounding  
Controlled released dosage forms  
-microspheres: excellent  
-transdermal patches for proteins and small molecules: excellent  
-oral vaccine formulation: excellent  
Pharmacokinetic analysis: excellent  
HPLC: Average  
FTIR SPECTROSCOPY: Good  
Differential Scanning Calorimetry: Good  
Spectroscopy: Excellent

## **HONORS AND AWARDS**

AACP 2020 Excellence in Assessment Award

Academic Excellence Award: MPH program, Mercer University School of Medicine, 2001/2002 Course.

Student Leadership Award: MPH program, Mercer University School of Medicine, 2001/2002 Course.

## **COMMUNITY ACTIVITIES**

Member of International Academy of Compounding Pharmacists, 2013 - Present

Member of the American Association of the Colleges of Pharmacy, 2007 – Present

Member of the American Association of Pharmaceutical Scientists, 2004 – Present

Member of American Public Health Association, 2001-Present.

Member of American Society of Tropical Medicine and Hygiene, 2001-Present.

Member of the Danish Association of Parasitologists, 1991-1992.

President of Students' Hall of Residence, Independence Hall, Kwame Nkrumah

University of Science and Technology, 1978-1979.

Presenter of Africa Heritage Radio Program, Ghana Broadcasting Corporation, 1986-1991.

## **CONFERENCES AND PRESENTATIONS**

1. AAPS PharmSci 360 Annual Meeting,
2. AAPS PharmSci 360 Annual Meeting, Boston, MA. October, 2022
3. AAPS Annual Meeting and Exposition, Philadelphia, PA, October, 2021
4. AAPS Annual Meeting and Exposition Virtual Conference, November, 2020
5. AAPS Annual Meeting and Exposition, Washington DC, November 2018
6. AAPS Annual Meeting and Exposition, San Diego, California, November 2017
7. AACP Annual Meeting, Anaheim, California, July 2016
8. Harding University Technology in Teaching Showcase 2015 (Presentation of the use of "Explain Everything Videos" in teaching pharmaceutical calculations in the PharmD. program.
9. AAPS Annual Meeting and Exposition, Orlando, Florida, October 2015
10. AAPS Annual Meeting and Exposition, San Diego, California, October 2014.
11. AAPS Annual Meeting and Exposition, San Antonio, Texas, October 2013
12. AAPS Annual Meeting and Exposition, Chicago, Illinois. October 2012
13. AAPS Annual Meeting and Exposition, Washington D.C. October 2011
14. AAPS Annual Meeting and Exposition, New Orleans, Louisiana, November 2010
15. AAPS Annual Meeting and Exposition, Los Angeles, California, November 2009.
16. AAPS Annual Meeting and Exposition, Atlanta, Georgia. November 2008.



17. AACP Annual Meeting and Seminar, Disney's Yacht and Beach Club Resort, Lake Buena Vista, Florida. July 14<sup>th</sup> – 18<sup>th</sup> 2007.
18. 34<sup>th</sup>. Annual Meeting and Exposition of the Controlled Release Society, Long Beach, California, USA. July 7 – 11<sup>th</sup>. 2007
19. Conference on Prevention of HIV: Beyond the ABC's. Emory University. April 17<sup>th</sup>. 2007
20. Symposium on Vaccine Induced Immunity. Emory University. March, 2007.
21. 55<sup>th</sup> Annual Meeting of the American Society of Tropical Medicine and Hygiene, November 12<sup>th</sup> to 16<sup>th</sup> Atlanta, Georgia. (Poster Presentation).
22. 2006 AAPS Annual Meeting and Exposition, October 29<sup>th</sup> to November 2<sup>nd</sup> 2006, San Antonio, Texas. (Poster Presentation).
23. 33rd Annual Meetings and Exposition of the Controlled Release Society. July 22-26, 2006. Vienna, Austria (Poster Presentation).
24. Second International Conference on TB Vaccines for the World (TBV2006) - April 19-21, 2006. Vienna, Austria (Poster Presentation).
25. 24th Graduate Research Association of Students in Pharmacy Conference, Atlanta, Georgia. June, 2004. (Poster Presentation).
26. 13th Annual Molecular Parasitology/Vector Biology Symposium, Center for Tropical and Emerging Global Diseases, University of Georgia, Athens, April, Georgia. 2003.
27. American Public Health Association Annual Meeting, Atlanta, Georgia, USA, 2001
28. American Society of Tropical Medicine and Hygiene, Atlanta, Georgia, 2001

## PUBLICATIONS

1. Aladin A. Siddig, Olivier M. Tchimou, Mohammad N. Uddin, and **Kwame G. Yeboah**. (2023). Evaluation of topical microbicides for their acute toxicities and ability to induce proinflammatory cytokines TNF- $\alpha$ , IL-1 $\beta$ , IL-6 and IL-8 in peripheral blood mononuclear cells (PBMC) and Macrophages. *Acta Scientific Pharmaceutical Sciences*, 7 (2): 23 - 36
2. Siddig, A. A., Bui, T. D. M., Readon, D. R., Ven, M., Bailes, Z., Hefner, J., Gillig, A., Singh, D., **Yeboah, K. G.** (2020). Analytical comparison of Continuous Subcutaneous Insulin Infusion and Multiple Daily Injections in children and adolescents with Type 1 Diabetes Mellitus. *Journal of Drug Research and Development*, 6 (2).
3. **Yeboah, K. G.** and Siddig, A (2020). Formulation and characterization of Albumin/Glycine microspheres as oral delivery system for Resveratrol. *Acta Scientific Pharmaceutical Sciences*, 4 (11): 14 - 29

4. Siddig, A., Ramirex, R., Wood, M. K., Sun, X., Smith, G., **Yeboah, K. G.** (2020). Formulation and comparative characterization of Methylcellulose, Carbomer and Petrolatum gels for tropical and transdermal delivery of Zosyn (Piperacillin/Tazobactam) antibiotics. *Journal of Pharmacy Practice and Pharmaceutical Sciences*, (1): 96 – 114
5. Addo, R.T., **Yeboah, K.G.**, Siwale, R.C., Siddig, A., Jones, A., Ubale, R.V., Akande, J., Nettey, H., Patel, N.J., Addo, E., and D'Souza, M.J. (2015). Formulation and characterization of atropine sulfate in albumin-chitosan microparticles for in-vivo ocular drug delivery. *Journal of Pharmaceutical Sciences*, 104: 1677 – 1690.
6. **Yeboah, K. G.**, Akande, J., Addo, R.T., Siwale, R.C., Aninkorah-Yeboah, K., and Siddig, A. (2014). In vivo and ex vivo characterization of lectin-labeled Mycobacterium tuberculosis antigen-containing microspheres for enhanced oral delivery. *Journal of Drug Targeting*, 22(1): 34 - 47
7. Siddig, A., Addo, R.T., and **Yeboah, K. G.** (2013). Evaluation of over the counter vaginal lubricants nonoxymol-9 and KY Jelly as potential inducer of proinflammatory cytokines in human immune cells. *European Journal of Chemistry*, 4(2): 172 – 175
8. Weston, G. S and **Yeboah, K. G.** (2013). Site-specific drug delivery to the gastrointestinal tract. *Molecular Pharmaceutics and Organic Process Research*, 1(3): 1000e106
9. Siddig, A., Musik, L., Oyelowo, O., Sun, X., Addo, R., and **Yeboah, K.G.** (2013). Formulation and characterization of novel riboflavin containing albumin/glycine microspheres. *International Journal of Pharmacy and Integrated Life Sciences*, 1(110): 1 - 25
10. Akande, J., **Yeboah, K. G.**, Addo, R.T., Siddig, A., Oettinger, C.W., and D'Souza, M.J. (2010). Targeted delivery of antigens to the gut-associated lymphoid tissues: 2. Ex vivo evaluation of lectin-labeled albumin microspheres for targeted delivery of antigens to the M cells of the Peyer's patches. *Journal of Microencapsulation*, 17(4): 325 - 336.
11. **Yeboah, K. G.**, and D'Souza, M.J (2009). Evaluation of albumin microspheres as oral delivery system for *Mycobacterium tuberculosis* vaccines. *Journal of Microencapsulation*, 26 (2): 166 – 179
12. Siwale, R. C., **Yeboah, K. G.**, Addo, R., Oettinger, C.W., and D'Souza, M.J. (2009). The effect of intracellular antioxidant delivery (catalase) on hydrogen peroxide and proinflammatory cytokine synthesis: a new therapeutic horizon. *Journal of Drug Targeting*, 17(9): 710 – 718
13. Aryeetery, M. E., Wagatsuma, Y., **Yeboah, G.**, Asante, M., Mensah, G., Nkrumah, F.K., and Kojima, S. (2000). Urinary Schistosomiasis in Southern Ghana. 1. Prevalence and morbidity assessment in three (defined) rural areas drained by the Densu River. *Parasitology International*, 49 (1): 155 – 163.

**PRESENTATION (POSTER)** – AAPS PharmSci 360 Annual Meeting, Boston, MA. 2022

1. Aladin A. Siddig, Olivier M. Tchimou, Nasir Udine Mohammed, and Kwame G Yeboah (2022). *Evaluation of Topical Microbicides for Their Ability to Induce Proinflammatory Cytokines TNF- $\alpha$ , IL-1 $\beta$ , IL-6 and IL-8 in Peripheral Blood Mononuclear Cells and Macrophages.*

**PRESENTATION (POSTER)** – AAPS Annual Meeting and Exposition, Washington DC, 2018

1. Siddig, A., Shatnawi, A., Ramirex, R., Fandy, T, and Yeboah, K.G (2018). *Formulation and Characterization of Albumin/Glycine Microspheres encapsulated with Resveratrol as a model drug*
2. Yeboah, KG., Stubblefield, J., Hatvany, J.B., Hug, A., Siddig, A. (2018). *Physico-chemical and cell viability studies of chitosan/alginate microparticles containing Mycobacterium smegmatis as a model Mycobacteria species.*

**PRESENTATION (POSTER)** – AAPS Annual Meeting and Exposition, San Diego, California, 2017

**Kwame G. Yeboah**, Kimberly Benavente, Matthew Routhier, Aladin Siddig and Kris Dougherty (2017). *Evaluation of physico-chemical and bioactivity characteristics of Mycobacterium whole cells in Chitosan/Alginate microparticles*

**PRESENTATION (POSTER)** (AACP Annual Meeting, Anaheim, California, July 2016)

Kwame G. Yeboah, Gretchen Smith, Hope Stanger, Bill Yates (2016). *Multiple Approaches to Improve Pharmacy Students' Calculations Outcomes*

**PRESENTATION (POSTER)** (AAPS Annual Meeting and Exposition, Orlando, Florida, 2015).

Siddig, A., Ramirez, R., Wood, M., Sun, X., Smith, G., Yeboah, K.G. *Formulation and Characterization of Methylcellulose Gel for Topical and Transdermal Delivery of Zosyn Antibiotics (Piperacillin/Tazobactam)*

**PRESENTATION (POSTER)** (AAPS Annual Meeting and Exposition, San Antonio, Texas, 2013)

Aladin A. Siddig, Linda Musik, Richard T. Addo, Kwame Yeboah (2012): *Formulation and chemical stability of Riboflavin encapsulated in Albumin/Glycine.*

**PRESENTATION (POSTER)** (AAPS Annual Meeting and Exposition, Chicago, Illinois, 2012).

Aladin A. Siddig, Linda Musik, Richard T. Addo, and **Kwame Yeboah** (2012): *Formulation and characterization of Albumin/Glycine microspheres encapsulated with Riboflavin.*

**PRESENTATION (POSTER)** (AAPS Annual Meeting and Exposition, Washington D.C, 2011).

Aladin A. Siddig, Richard T. Addo and **Kwame Yeboah** (2011). *Formulation, characterization and in vitro evaluation of Resveratrol loaded glycine microspheres.*

**PRESENTATION (POSTERS)** (AAPS Annual Meeting and Exposition, New Orleans, Louisiana, 2010).

1. Aladin A. Siddig, Olutossin Oyelowo, Linda Muscik, Syei Ayodele, Xiaoping Sun, Davind Hass and **Kwame Yeboah** (2010). *Formulation, characterization, and evaluation of Resveratrol loaded albumin microspheres*
2. Aladin A. Siddig, Syei Ayodele, Linda Muscik, Olutossin Oyelowo, Xiaoping Sun, Davind Hass and **Kwame Yeboah** (2010). *Development of microsphere formulation using chemically modified Bovine Serum Albumin and chitosan as the matrix*
3. Aladin A. Siddig, Syei Ayodele, Linda Muscik, Olutossin Oyelowo, Xiaoping Sun, Davind Hass and **Kwame Yeboah** (2010). *Formulation, characterization, and evaluation of TNP-470 Angiogenic drug loaded albumin and chitosan Microspheres.*

## **AUTHOR OF BOOK CHAPTER**

**Title of Chapter:** “Evaluation of albumin microspheres as oral delivery system for *Mycobacterium tuberculosis* vaccines”.

**Book Title:** “Nanoparticulate Vaccine Delivery Systems”

**Editor:** Dr. Martin J. D’Souza

**Publishers:** Pan Stanford Publishing

**Date of Publication:** October 2022

## **AUTHOR OF TEST BOOK**

**Title of Book:** “Pharmaceutical Calculations: An Introductory Textbook with Exercises”

**Target Users:** Students of Doctor of Pharmacy (PharmD) program, compounding and clinical pharmacists.

**Publishers:** Pan Stanford Publishing

**Expected date:** October 2025

## **ON GOING & PREVIOUS RESEARCH PROJECTS**

1. Pathophysiology of Corona Virus-2 disease (Covid-19) – Harding University College of Pharmacy students project (Spring 2022).
2. The development of novel Pyruvate Dehydrogenase Kinase 4 Inhibitors using Structure-Based Drug Design to treat Diabetes.
3. Formulation of tuberculosis vaccine for pulmonary delivery
4. Metallic nanoparticles of selected leaf extract and evaluation of the antibacterial and anticancer activities
5. Application of microsponges in the treatment of bowel diseases
6. Formulation of silver-based medication for the prophylaxis and wound healing of infections caused by *Mycobacterium ulcerans*
7. Management of Traumatic Brain Injury (TBI) – Evaluation of therapeutic methods for inhibition of the different pathways of TBI development.
8. Integrated control and elimination of schistosomiasis, soil transmitted helminthiasis and taeniasis in the Upper East region of northern Ghana
9. Comparative study of the cytotoxicity of glutaraldehyde and genipin cross-linked microparticulate drug delivery systems
10. Evaluation of the physic-chemical, rheological, toxicity, microbial and stability characteristics of selected naturally occurring gums/mucilage for the design of oral drug delivery systems
11. Evaluation of drug-drug interaction of the synthetic and semi-synthetic derivatives of erythromycin and fluoroquinolone
12. Evaluation of the effect of drugs in food animals on their interaction with drugs in human patients
13. Micro particulates as delivery system to induce T cell immune response to antigens of *Mycobacterium tuberculosis*

14. Micro particulates as mucosal delivery system for *Mycobacterium tuberculosis* antigens
15. Transdermal drug delivery system for insulin
16. Mucosal delivery systems for insulin
17. Transdermal delivery of antigens
18. Delivery of drugs subject to high first-pass metabolism by
  - a. Gastric retention drug delivery systems
  - b. Transdermal drug delivery systems
  - c. Mucosal delivery
19. Design and characterization (biopharmaceutical) of self-nanoemulsifying drug delivery systems for improving the oral bioavailability of BCS class II and IV drugs
20. Evaluation of the use of drugs in farm animals in the White County, Arkansas, USA. (2012)
21. Targeted Delivery of Antigens to the gut-associated lymphoid tissues. 1. Formulation and In vitro characterization of lectin-labeled albumin microspheres for targeted delivery to the M cells of the Peyer's patches (2012).
22. Production and characterization KY jelly microbicide containing anti-HIV ingredients (2011)
23. Development of a transdermal delivery system for Anti-Alzheimer peptides (Industrial funded drug development project - 2008).
24. Development of a particulate delivery system to increase the bioavailability of an Innate Defense Regulator (IDR) peptide (Industrial funded drug development project - 2008).
25. Development of transdermal antimicrobial formulation for the treatment of *Mycobacterium ulcerans* infections – 2008.
26. Formulation, process development, clinical (GMP) manufacturing and content analysis of drugs (Insulin, Fentanyl and Apomorphine) for transdermal delivery (2005 to 2007).
27. Formulation of oral *Mycobacterium tuberculosis* vaccines (Ph. D thesis project, 2006).
28. Induction of mucosal immune response to *mycobacterium tuberculosis* using microparticle encapsulated dead cell antigens, 2006.

29. Microencapsulation of Proteins and bacterial cell by Spray-Drying technique (2006).
30. Evaluation of mucoadhesive albumin microparticle-based formulations for oral drug targeting, 2006.
31. Analysis of environmental samples by PCR for the presence of *Mycobacterium ulcerans* DNA with the intent of elucidating possible transmission cycle; Investigate the antibiotics susceptibility of *Mycobacterium ulcerans*. 2003.
32. Operational guide for the organization of health fairs for the poor and homeless in Central Georgia, USA. 2002.
33. Guidelines for the Control of West Nile Virus in the United States of America, 2002.
34. Mental and Behavioral Health Needs of Rural Women of the United States of America, 2001.
35. Characterization of Anti-*Schistosoma haematobium* Monoclonal Antibodies and Investigation into their Reactivity in the Western Immunoblot Assay - (Thesis for Master of Philosophy degree –Parasite Immunology) 1996.
36. Yaws (Frembesia) Survey in the Upper West Region of Ghana, 1994.
37. Community-Based Disease Surveillance System: PHC-Approach to Disease Surveillance System, 1993. (The use of self-administered community based questionnaire through the existing administrative machinery).
38. A KABP- Knowledge, Attitudes, Beliefs & Practices Survey on AIDS in the Upper West Region of Ghana, 1993
39. The Status of the Expanded Program on Immunization (EPI) in the Upper West Region of Ghana. 1993.
40. The Surveillance of HIV Infection among Pregnant Women in the Upper West Region, 1993