The Beginning: The Department was born in April 2010 with the hiring of the Chair – Dr. Moji Adeyeye. There was no other DBPS faculty except Dr. Arun Jadhav whose major focus at that time was mostly administrative. The immediate challenge was to commence the hiring and development of the PharmD curriculum.

Curriculum Development and Hiring: The two activities were of great urgency due to the impending pre-accreditation visit in November 2010. The college was successfully awarded the status having recruited three more faculty members and developed the Departmental syllabi. The curriculum development and hiring continued along with preparation for the second accreditation visit in April 2012. We also needed to build research laboratories and the tasking process culminated in the completion of two labs – Pharmaceutics and Translational lab, and Biochemistry/Medicinal Chemistry and Pharmacology/Physiology lab in April 2012. The department now has 10 faculty members and an on-site affiliate faculty!

We were very successful in getting the candidate status in June 2012. The success of the two visits is an indication of the hard work of all the members of the department and the College as a whole. The faculty has demonstrated excellence and commitment to teaching our PharmD students with emphasis on developing students that are committed, competent and compassionate. Our students voted Dr. Larry Potempa and Dr. Kirk Dineley as two of the Teachers of the Year.

Community Partnership Building: Meanwhile the Chair, Dr. Adeyeye started developing community partnerships with the sole purpose of enhancing the education of our students and development of the faculty. An educational trip was organized for the inaugural class to visit Fresenius-Kabi manufacturing plant in Melrose Park, IL as an experiential part of the Pharmaceutics lab in November 2011. The trip was extremely successful. It gave our students an edge in the expansion of their horizons, knowing the pharmaceutical industry perspectives of the pharmacy profession. Relationships have also been developed with institutions such as Roquette Corporation, Gurnee, IL, Fitzpatrick-Idex Co., of Elmhurst, IL, Hospira Inc, Forrest Park, Abbott Corporation. Waukegan, IL and Illinois Institute of Technology, Chicago, IL.

Educational Support: Fresenius-Kabi, and Hospira Inc. in Lake Forrest, IL supported our Pharmaceutics
lab in needed lab supplies. In a continued effort to distinguish our PharmD students with excellent education, we applied for an educational grant from Simulations Plus and Pharsight® Corporation respectively for GastroPlus® and WinNonlin® software in 2011 and 2012. The goal is to provide a simulation-based experiential in Biopharmaceutics/Pharmacokinetics course to our students.

A Roller Compactor and Fitzmill were donated by Fitzpatrick Co. of Elmhurst, IL to support teaching of Pharmaceutics II and research. In addition, donations of laminar flow hoods were made by DPT Corporation through Dr. Frank Sorgi, a RAC member. A significant equipment donation was also made by a Roosevelt alumnus – Dr. Norman Frankel to facilitate research in the department.

Immediate Departmental Goals: Part of the DBPS academic plan or strategy goals include the following:

- **PharmD Electives**
  The plan for the coming year is to develop short courses with relevance to pharmacy and pharmacy practice that our PharmD students can take.

- **Teaching**
  Teaching and learning by continuous quality improvement of our course delivery. Workshops for faculty development and offered intermittently for this purpose.

- **Future Academic Programs**
  - BSPS: A BS in Pharmaceutical Sciences program is being planned. A draft curriculum is being developed for presentation to the College Council
  - MS/PhD: Pharmaceutical Sciences
    A draft graduate program curriculum in Pharmaceutical Sciences is being developed with emphases in Pharmaceutical or Biopharmaceutical Technology and Medicinal Chemistry. Plans are also underway for co-advising in the existing Biotechnology graduate program resident at the Department of Biology, Chemical and Physical Sciences.
  - MS/PhD: Clinical Translational Science
    A graduate program in Clinical Translational Sciences is being planned with other institutions. The focus will be on community engagement and multidisciplinary perspective.

Students’ Research
The unique PharmD curriculum of the College of Pharmacy that included research electives has provided 12 students out of a class of 66 the opportunity to engage in research in Summer 2012. Through an existing NIH grant obtained by the Department of Biological, Chemical and Physical Sciences, DBPS faculty mentored 6 students from Elgin Community College in various Pharmaceutical Sciences research. The experience was highly successful as many of the students were able to make poster presentations on July 27, 2012.

Exchange Student from France for Summer Research
A student from Descartes University in Paris, France is working with Dr. Adeyeye on In Situ Ophthalmic Delivery System. His experience includes a lot of analytical or characterization techniques including microbiological assay.
Dr. Amusa Adebayo

Research Interests: Dosage form design, Bioavailability/Bioequivalence & Pharmacokinetic studies

Grants
1. Moji Adeyeye, Ravikiran Panakanti and Amusa Adebayo and Ruth Adewuya, Undergraduate Honors Research Opportunity Program Grant, Characterization of In-Situ Gelling Polymer-Preservative Interaction in Ophthalmic Delivery Systems. 2011/2012. Funded: $1650.00
2. Ravikiran Panakanti, Amusa Adebayo, and Moji Adeyeye, Development of antiretroviral formulations for treating children with AIDS. Funded: $1250.00
4. Moji Adeyeye, Ravikiran Panakanti and Amusa Adebayo, Characterization of In-Situ Gelling Polymer-Preservative Interaction in Ophthalmic Delivery Systems. Funded: $1250.00
5. Amusa Adebayo, Ravikiran Panakanti and Moji Adeyeye, Design and Evaluation of Dosage Form for the Circadian Rhythmic Delivery of Drugs. Funded: $1250.00

Grant-in-aid

Presentations
2. Age-appropriate pharmacokinetic prediction for fixed dose combination (FDC) of lamivudine, nevirapine, zidovudine using adult data obtained in phase 1 clinical trial; 2012 AAPS Annual Meeting & Exposition October 14 – 18, 2012, McCormick Place, Chicago
3. Simulated ocular bioavailability of Estradiol Based on Data in rabbits 2012 AAPS Annual Meeting & Exposition October 14 – 18, 2012, McCormick Place, Chicago

Publications
Dr. Moji Adeyeye

*Research Interests:* Preformulation, Dosage Form Design Pediatric HIV/AIDS Drugs Dosage Forms, Ophthalmic Delivery Systems, Investigational New Drug Application filing, Bioequivalence and Clinical Trials

**Grants**

1. Moji Adeyeye, Ravikiran Panakanti and Amusa Adebayo and Ruth Adewuya, Undergraduate Honors Research Opportunity Program Grant, Characterization of In-Situ Gelling Polymer-Preservative Interaction in Ophthalmic Delivery Systems. 2011/2012. **Funded two students: $1650.00**
2. Ravikiran Panakanti, Amusa Adebayo, and Moji Adeyeye, Development of antiretroviral formulations for treating children with AIDS. **Funded: $1250.00**
3. Amusa Adebayo and Moji Adeyeye, Modeling & Simulation of ADME of Pediatric HIV/AIDS Patients on Powder for Reconstitution & Fast Disintegrating Tablets. **Funded: $1250.00**
4. Moji Adeyeye, Ravikiran Panakanti and Amusa Adebayo, Characterization of In-Situ Gelling Polymer-Preservative Interaction in Ophthalmic Delivery Systems. **Funded: $1250.00**
5. Amusa Adebayo, Ravikiran Panakanti and Moji Adeyeye, Design and Evaluation of Dosage Form for the Circadian Rhythmic Delivery of Drugs. **Funded: $1250.00**

**Grant-in-aid**

2. Moji Adeyeye and Amusa Adebayo: Pharsight Phoenix WinNonlin Pharmacokinetic Teaching License Simulation Software Donation. **Funded: $92,510.00.**
4. Moji Adeyeye, Sonali Kurup and Ravikiran Panakanti: Research Equipment donated by Dr. Norman Frankel to set up research labs. **Funded: $72,205.00**

**Presentations/Meetings**

1. Providing Care and Developing Drug Products for HIV/AIDS Children: The Journey, Board of Trustees, Roosevelt University, March 17, 2011
2. Nigeria-Based Clinical Trial of Fixed Dose Combination Antiretroviral Drugs Intended for Pediatrics. Faculty of Pharmacy, Obafemi Awolowo University, Ile-Ife, Nigeria, May 31, 2011
4. From Bench to Bedside: Pharmaceutical Development in Academia, Moji Adeyeye, Biological and Chemical Engineering Sciences Department, Illinois Institute of Technology. Invited Presentation, October 12, 2011
PharmD students’ performance in a Biopharmaceutics and Pharmacokinetics Course using simulation software, AACP Annual Meeting, Kissimmee, FL.


Publications


Dr. Balwant Chauhan

Research Interests: Screening of plant extracts for their antibacterial and anticancer properties, if any. Identification of stem cell- types and process of stem cell differentiation involved in regeneration using the “reptilian tail regeneration” model. Study of benzanthrone's dermal-toxicity and the signal transduction process involved in carcinogenesis leading to melanoma.

Presentations

Dr. Kirk Dineley

Research Interests: Role of zinc and calcium homeostasis in neuronal injury, such as that resulting from stroke and seizure. Failure to properly regulate these metals is associated with production of reactive oxygen species and mitochondrial damage. A mainstay technique for these studies is fluorescence live-cell microscopy.

Presentations
1. Advice on Teaching Careers. University of Pittsburgh August 6-8, 2012
2. Illuminating the role of zinc in neurotoxicity. Roosevelt University

Publications

Dr. Arun Jadhav

Research Interests: Mechanisms in hypertension: Role of renal dopaminergic mechanisms in tubular sodium transport processes and 2) Neurobehavioral toxicity: Role of central dopaminergic mechanisms in neurobehavioral toxicity.

Publications
A model for demonstrating interdependence of mission, vision, strategic and assessment plans, and educational outcomes to increase awareness of these connections among faculty and administrators. Pharmacy Education, 2011; 11 (1): 183 – 185.

Dr. Paiboon Jungsuwadee


Publications

Dr. Sonali Kurup

Research Interests: Design, Synthesis and Evaluation of Multi-targeted HIV Inhibitors and Fragment Based Screening Approaches for the Identification of Novel Enzyme Inhibitors

Grants
1. Summer Faculty Grant ($1500). Office of the Provost, Roosevelt University, Schaumburg, IL 2011
3. Kimax new lab start-up grant this May. Funded: $1000

Grant-in-aid
$72,205.00 (Research Equipment received from Dr. Norman Frankel to set up research labs)

Presentations
Dr. Paul Ornstein

Research Interests: Optimization of structure activity relationships of anti-tuberculosis drugs toward treatments that target novel mechanisms. The goal is to decrease the treatment burden while also providing more effective drugs for TB.

Grant-in-aid
Travel Support: Medicinal Chemistry Gordon Research Conference at Colby Sawyer College in New London, NH, August 5-10, 2012. Funded: $1400

Dr. Ravikiran Panakanti

Research Interests: Gene delivery systems, pediatric HIV/AIDS dosage forms and Ophthalmic Delivery Systems

Grants
1. Moji Adeyeye, Ravikiran Panakanti, Amusa Adebayo and Ruth Adewuya, Undergraduate Honors Research Opportunity Program Grant, Characterization of In-Situ Gelling Polymer-Preservative Interaction in Ophthalmic Delivery Systems. 2011/2012. Funded: $1650.00
2. Development of antiretroviral formulations for treating children with AIDS. Funded: $1250.00
4. Characterization of In-Situ Gelling Polymer-Preservative Interaction in Ophthalmic Delivery Systems. Funded: $1250.00
5. Design and Evaluation of Dosage Form for the Circadian Rhythmic Delivery of Drugs Funded: $1250.00

Grant-in-aid
$72,205.00 (Research Equipment received from Dr. Norman Frankel to set up research labs)

Presentations

Publications

Dr. Lawrence Potempa

Research Interests: Innate immunity and inflammation; specifically, evaluation of structure/function relationships of C-reactive protein as a biological response modifier. The focus is on potent pro-inflammatory molecule termed modified, monomeric CRP (mCRP)

Grant-in-aid
ELISA plate reader, Plate washer, and Plate shaker ApDia – of Belgium

Presentations

Publications

Dr. Ruth Adewuya (Affiliate Faculty)

Grant
Moji Adeyeye, Ravikiran Panakanti and Amusa Adebayo and Ruth Adewuya, Undergraduate Honors Research Opportunity Program Grant, Characterization of In-Situ Gelling Polymer-Preservative Interaction in Ophthalmic Delivery Systems. 2011/2012. Funded: $1650.00

Presentations