

FROM

# MOLECULES

# ≡ MEDICINES

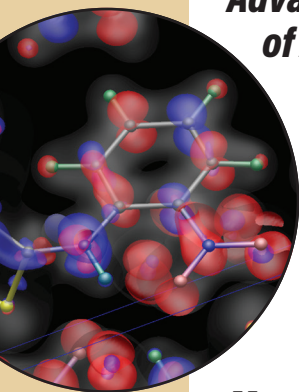
RESEARCH AND GRADUATE EDUCATION  
INDUSTRIAL & PHYSICAL PHARMACY



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# RESEARCH AREAS

[www.ipph.purdue.edu](http://www.ipph.purdue.edu)



***Advanced Methods  
of Analysis***

***Drug Delivery***

***Drug Stability***

***Drug Transport***

***Manufacturing Science***

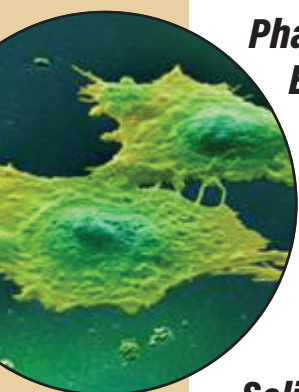


***Materials Science***

***Modeling***

***Nanomedicine***

***Pharmaceutical  
Biotechnology***



***Pharmaceutical  
Engineering***

***Pharmaceutics***

***Pharmacokinetics  
and Metabolism***

***Solid State Chemistry***

# SUMMARY OF FACULTY RESEARCH INTERESTS

## PHARMACEUTICAL SOLIDS FORMULATION

[www.ipph.purdue.edu/graduateprogram/](http://www.ipph.purdue.edu/graduateprogram/)

**Stephen R. Byrn** (*Charles B. Jordan Professor*)

solid state formulation and stability of small molecules

**Tonglei Li** (*Allen Chao Chair*)

intermolecular interaction and crystal packing, nucleation and phase transition, computation and visualization

**Eric J. Munson** (*Kildsig Chair and Department Head*)

solid state characterization of excipients, amorphous solid dispersions, protein formulation and stability

**Lynne S. Taylor** (*Retter Distinguished Professor*)

amorphous solids, role of moisture in pharmaceutical solids, development of analytical methods to characterize solids

**Elizabeth M. Topp** (*Professor*)

solid-state formulation and stability of biologics, control of protein aggregation

## PHARMACEUTICAL SOLIDS MANUFACTURING

[www.ipph.purdue.edu/graduateprogram/](http://www.ipph.purdue.edu/graduateprogram/)

**Stephen R. Byrn** (*Charles B. Jordan Professor*)

regulatory science, Sustainable Medicines in Africa

**Eric J. Munson** (*Kildsig Chair and Department Head*)

solid state characterization of excipients, amorphous solid dispersions, protein formulation and stability

**Rodolfo Pinal** (*Associate Professor*)

layer-by-layer assembly of solid dosage forms

**Qi "Tony" Zhou** (*Associate Professor*)

particle engineering, advanced manufacturing of solid dosage forms

## PHARMACEUTICAL SOLIDS DELIVERY & BIOPHARMACEUTICS

[www.ipph.purdue.edu/graduateprogram/](http://www.ipph.purdue.edu/graduateprogram/)

**Hyunyoung (Young) Jeong** (*Professor*)

pharmacokinetics, drug metabolism, preclinical drug development, toxicology, gut microbiota

**Gregory T. Knipp** (*Associate Professor*)

oral drug delivery, peptide transporters in the GI tract, porcine model for oral formulations, pediatric drug delivery

**Tonglei Li** (*Allen Chao Chair*)

development and delivery of nanocrystal-based therapeutic and bioimaging systems

**Sandro Matosevic** (*Assistant Professor*)

immunotherapy, cell therapy, bio-nanotechnology, cryopreservation, controlled delivery, biopharmaceutical engineering

**Kinam Park** (*Professor, Showalter Distinguished Professor of BME*)

controlled release, nano/micro particles, polymer micelles, fast dissolving tablets, hydrogels

**Severin T. Schneebeli** (*Associate Professor*)

affinity reagents and polymers for the manufacturing, formulation, and controlled release of biopharmaceuticals

**Yoon Yeo** (*Professor and Associate Dept. Head*)

particle engineering, nanoparticles, drug delivery in cancer, drug delivery to lung

# BACKGROUND REQUIREMENTS

- Subject backgrounds suitable for graduate study in pharmaceuticals are pharmacy, pharmaceutical sciences, life sciences, physical sciences, and engineering.
- Requirements for entry into the PhD program are a BS or MS in an appropriate discipline.

## **The Graduate School**

Ernest C. Young Hall, Room 170  
155 South Grant Street  
Purdue University  
West Lafayette, IN 47907-2114  
Phone: 765-494-2600

**Applications or requests for  
information are submitted at  
[www.gradschool.purdue.edu](http://www.gradschool.purdue.edu)**

## **College of Pharmacy Graduate Admissions**

Heine Pharmacy Building  
(RHPH 104)  
575 Stadium Mall Drive  
Purdue University  
West Lafayette, IN 47907-2091  
Phone: 765-494-1362  
Fax: 765-494-7880  
[phrmgrad@purdue.edu](mailto:phrmgrad@purdue.edu)

## **Department of Industrial and Physical Pharmacy Graduate Admissions Committee**

Heine Pharmacy Building  
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# FOR MORE INFORMATION

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