Vision
The Vision for the Department of Industrial and Physical Pharmacy at Purdue University is to advance the development, manufacturing, regulation and biodistribution of medicines to improve global human health.

Mission
The Mission of the Department of Industrial and Physical Pharmacy at Purdue University is to:

1) Educate and train students to become leading pharmaceutical scientists and pharmacists,
2) Advance scientific discovery and development, with an emphasis on pharmaceutical manufacturing, formulation and drug delivery, and
3) Contribute to the advancement of the pharmaceutical sciences through outreach and public service.

We will accomplish this mission through learning, discovery and engagement by:

- Attracting and retaining talented and diverse faculty, staff and graduate students.
- Delivering contemporary and innovative curricula that empower students to advance pharmaceutical research and development, to form regulatory policy, and to provide scientifically-informed patient care.
- Generating, integrating and applying knowledge across disciplines to advance discovery, learning and engagement in the pharmaceutical sciences.
- Producing world-class scientists who are prepared to assume positions of leadership in academia, government and industry.
- Establishing new synergies by creating partnerships, collaborations and strategic alliances within Purdue and at the local, regional, national and global levels.
GOALS:

GOAL 1. INCREASE THE DEPARTMENT’S CONTRIBUTIONS TO SCIENTIFIC DISCOVERY AND DEVELOPMENT IN THE PHARMACEUTICAL SCIENCES.

Strategic Direction 1.1. Strengthen the Department’s research in pharmaceutical manufacturing.

Objective 1.1.1. By 2011, hire an Associate or Full Professor with expertise in pharmaceutical manufacturing research to fill the Endowed Professorship in Pharmaceutical Manufacturing.

Objective 1.1.2. By 2012, renovate pharmaceutical manufacturing laboratories located on the ground level of the Robert Heine Pharmacy Building (RHPH).

Objective 1.1.3. By 2013, hire an Assistant Professor with expertise in pharmaceutical manufacturing research.

Objective 1.1.4. Develop and maintain strategic collaborations with Purdue engineering departments and faculty members to promote interdisciplinary research in pharmaceutical manufacturing.

Strategic Direction 1.2. Strengthen the Department’s research in pharmaceutical solids.

Objective 1.2.1. By 2012, hire an Assistant Professor with expertise in pharmaceutical solids to fulfill the position committed to the Engineering Research Center in Structured Organic

Strategic Direction 1.3. Strengthen the Department’s research in biopharmaceutics and drug delivery.

Objective 1.3.1. By 2014, hire an Assistant Professor with expertise in formulation and/or delivery of biologics, which may include vaccines, cell-based drugs and/or DNA/RNA therapeutics.

Objective 1.3.2. By 2015, hire an Assistant Professor with expertise in small molecule drug delivery and biodistribution.

Strategic Direction 1.4. Increase the Department’s level of research funding.

Objective 1.4.1. By 2015, increase the department’s research funding to at least $3.5 million per year (see Appendix I for 2009-2010 funding baseline).

Objective 1.4.2. By 2015, acquire funding for one new extramural training grant based in the department.

GOAL 2. IMPROVE THE DEPARTMENT’S GRADUATE (PhD, MS) AND CERTIFICATE PROGRAMS.

Strategic Direction 2.1. Strengthen the Department’s doctoral (PhD) program.
Objective 2.1.1. By 2012, revise and restructure IPPH 562 (Manufacturing Processes).

Objective 2.1.2. By 2012, develop and offer a graduate course in drug stability and chemical kinetics.

Objective 2.1.3. By 2013, develop and offer a graduate course in pharmaceutical biotechnology.

**Strategic Direction 2.2. Strengthen the Department’s masters’ (MS) and graduate certificate programs in regulatory science.**

Objective 2.2.1. By 2012, conduct an internal review of the masters’ and graduate certificate programs in regulatory science.

Objective 2.2.2. By 2012, develop a succession plan for the masters’ and graduate certificate programs in regulatory science.

Objective 2.2.3. By 2012, develop a new regulatory science course on biologics (“big molecules”).

Objective 2.2.4. By 2013, develop a master’s degree program in regulatory science based in Africa.

**GOAL 3. IMPROVE THE DEPARTMENT’S CONTRIBUTIONS TO PROFESSIONAL (PharmD) AND BACHELOR’S (BSPS) DEGREE PROGRAMS IN THE COLLEGE OF PHARMACY.**

**Strategic Direction 3.1. Develop courses and modules for the 2012 revision of the PharmD curriculum.**

Objective 3.1.1. By 2010, develop a course outline and objectives for PHRM 82800 (Dosage Forms I) with other faculty in the College of Pharmacy.

Objective 3.1.2. By 2010, develop a course outline and objectives for PHRM 82900 (Dosage Forms II) with other faculty in the College of Pharmacy.

Objective 3.1.3. By 2011, develop a course outline and objectives for PHRM 84600 (Principles of Pharmacokinetics) with other faculty in the College of Pharmacy.

Objective 3.1.4. By 2012, develop a course outline and objectives for PHRM 86600 (Biotechnology / Advanced Parenteral Dosage Forms) with other faculty in the College of Pharmacy.

Objective 3.1.5. Participate in course development committees for other courses in the new curriculum.

**Strategic Direction 3.2. Develop courses and course content for the new BSPS curriculum.**

Objective 3.2.1. By 2011, evaluate the suitability of PHRM 82800 (Dosage Forms I) for use as the Pharmacuetics I course in the new BSPS curriculum.
Objective 3.2.2. By 2011, evaluate the suitability of PHRM 82900 (Dosage Forms II) for use as the Pharmaceutics II course in the new BSPS curriculum.

Objective 3.2.3. By 2012, evaluate the suitability of IPPH 521 (Drug Development) for use as the Drug Discovery and Development I course (PHRM 48000) in the new BSPS curriculum.

Objective 3.2.4. By 2012, evaluate the suitability of IPPH 522 (Good Regulatory Practice) for use as the Drug Discovery and Development II course (PHRM 48100) in the new BSPS curriculum.

**Strategic Direction 3.3. Improve IPPH courses in the current PharmD and BSPS curricula.**

Objective 3.3.1. By 2010, acquire new ergonomic chairs and other equipment for IPPH 471 (Parenteral Products) to facilitate student learning.

Objective 3.3.2. By 2011, complete restructuring of IPPH 363 (Basic Pharmaceutics II).

**GOAL 4. ENGAGE AND COMMUNICATE WITH THE DEPARTMENT’S EXTERNAL CONSTITUENCIES.**

**Strategic Direction 4.1. Establish and maintain channels for regular communication with alumni, donors and other external constituencies.**

Objective 4.1.1. Prepare and distribute a twice-yearly departmental newsletter.

Objective 4.1.2. By 2010, establish a department presence on LinkedIn and other professional and social networking sites.

Objective 4.1.3. Maintain a current and informative department website.

**Strategic Direction 4.2. Host events that connect the Department with its external constituencies.**

Objective 4.2.1. Host an alumni dinner or reception at each AAPS annual meeting.

Objective 4.2.2. Host the annual Garnet E. Peck Research Symposium.

Objective 4.2.3. Host weekly departmental seminars and include speakers from outside the department.

**GOAL 5. IMPROVE THE DEPARTMENT’S SYSTEMS AND INFRASTRUCTURE TO SUPPORT THE MISSION.**

**Strategic Direction 5.1. Develop and support Department faculty.**

Objective 5.1.1. Continue to conduct annual written and oral performance reviews for all Department faculty.
Objective 5.1.2. Continue to provide orientation and mentoring for all newly hired faculty members and those at the Assistant and Associate Professor level.

Objective 5.1.3. Identify opportunities for faculty development; encourage and document participation.

**Strategic Direction 5.2. Develop and support Department administrative/professional and clerical staff.**

Objective 5.2.1. By 2010, develop procedures for the annual assessment and review of Department administrative/professional and clerical staff.

Objective 5.2.2. By 2011, hire a new, part-time clerical staff member to handle communication, events planning and other duties.

Objective 5.2.3. By 2011, establish a formal orientation and mentoring process for all new administrative/professional and clerical staff.

Objective 5.2.4. Identify opportunities for administrative/professional and clerical staff professional development; encourage and document participation.

**Strategic Direction 5.3. Develop and support Department scientific staff (i.e., postdoctoral research associates, research scientists and visiting scientists).**

Objective 5.3.1. By 2011, establish a formal orientation process for all new scientific staff.

Objective 5.3.2. Identify opportunities for scientific staff professional development; encourage and document participation.

**Strategic Direction 5.4. Improve the Department’s research laboratory space and supporting office space.**

Objective 5.4.1. By 2010, move the Park and Byrn groups to new rental space in Purdue Research Park.

Objective 5.4.2. By 2010, move Greg Knipp and his group to RPH; renovate laboratory and office space if needed.

Objective 5.4.3. By 2011, provide desk space for all staff, graduate students, postdocs and research scientists outside laboratory areas.

Objective 5.4.4. By 2012, renovate space in the G-level of RPH for the pharmaceutical manufacturing labs and other research groups.

Objective 5.4.5. Participate in the design and development of the Drug Discovery Building.
Objective 5.4.6. Participate in the design and development of the new College of Pharmacy Building.

Objective 5.4.7. By 2012, work with REM to qualify the Department’s laboratory space for an Integrated Safety Plan.