College of Science Strategic Plan
Implementation Plan

**Goal-1: Integrated Learning**

*Achieve excellence in integrating multiple learning approaches in science, with breadth and depth of knowledge and skills at the undergraduate through postgraduate levels.*

**Key Strategic Initiatives:**

- **Undertake curricular transformation** to deploy evidence-based pedagogies to assure optimal learning in all courses enhanced by co- and extra-curricular experiences.
  
  September 2017: Appoint Task Force to Develop Strategies and Implementation
  Responsible Party: Associate Dean for Undergraduate Education/Department Heads

- **Define and inform the University core curriculum to assure science literacy for all undergraduate students as a distinct hallmark of a Purdue education.**
  
  January 2018: Appoint Task Force that includes members from other colleges to define level of scientific literacy reasonably expected for all graduates from Purdue. Task Force will also develop proposal for learning objectives that must be included for courses to meet the Core requirements.
  
  August 2018: Submit proposal to University Undergraduate Curriculum Committee for adoption of learning objectives to achieve scientific literacy.
  Responsible Party: Associate Dean for Undergraduate Education

- **Develop first year orientation programs** in all College of Science undergraduate curricula that focus on disciplines/majors, with exposure to all science areas in the College.
  
  By Fall 2018, each Department will have a first year orientation course approved that is required for all majors in their Department.
  Responsible Party: Department Heads/Associate Dean for Undergraduate Education

- **Establish academic programs in Data Sciences** as interdepartmental initiatives at the undergraduate and graduate levels.
  
  Spring 2017: Finalize approval of interdepartmental data sciences major.
  Fall 2018: Admission of first students to data sciences major
  Responsible Party: Associate Dean for Undergraduate Education

  Fall 2017: Appoint Task Force to assess viability of interdepartmental graduate program in data sciences
  Responsible Party: Associate Dean for Research and Graduate Programs

- **Enhance collaborative Science Education programs within the College of Science** in partnership with the College of Education, in order to optimize effectiveness and efficiency of program delivery and operations.
  
  Fall 2018: Appoint Task Force to assess and recommend means to optimize Science Education programs
  Responsible Party: Associate Dean for Undergraduate Education
**Goal-2: Impactful Discovery**

Demonstrate leading-edge discovery and scholarship at the frontiers of fundamental sciences, science knowledge, and learning, with worldwide impact.

**Strategic Initiatives:**

- **Identify established preeminent research areas, and emerging areas of research focus that are positioned for preeminence** in which to invest in new faculty hires to achieve a critical mass needed to establish these as other signature areas for the College.  
  January 2017: Appoint a Task Force to develop a transparent process for identifying key signature areas for investment.  
  Responsible Party: Associate Dean for Research and Graduate Programs

- **Establish Data Science as an interdepartmental signature area of research** through the creation of an identifiable faculty cluster with a roadmap for developing national prominence.  
  Fall 2017: Appoint Task Force to create a roadmap  
  Responsible Party: Associate Dean for Research and Graduate Programs

- **Enhance College engagement in the newly established research institutes**—Purdue Institute of Integrative Neuroscience (PIIN), and Purdue Institute of Inflammation, Immunology and Infectious Diseases (PI4D) through focused faculty recruitment.  
  Spring 2017: Identify key opportunities to align faculty hires with areas of focus in newly established research institutes.  
  Responsible Party: Associate Dean for Academic Affairs/Department Heads

- **Review and revise promotion and tenure criteria and processes** to assure that diversity of scholarly contributions, including interdisciplinary research, high-risk research, and global collaborations are appropriately encouraged, recognized, and rewarded.  
  September 2017: Appoint a Task Force to review and recommend revisions to criteria and process.  
  Responsible Party: Associate Dean for Academic Affairs

- **Establish a College-level professional development program** that creates an environment in which faculty and staff are equipped and empowered to reach their full potential.  
  December 2016: Create and appoint a Staff Professional Development Committee to develop and implement a professional development program for staff members. Plan to be developed and implemented by August 2017.  
  Responsible Party: Dean  
  January 2017: Create and Appoint a Faculty Professional Development Committee to develop and implement a professional development program for faculty. Plan to be developed and implemented by August 2017.  
  Responsible Party: Dean
**Goal-3: Innovative Engagement**

Promote innovative public engagement facilitating impactful science awareness, and the societal impact of science.

**Strategic Initiatives:**

- **Formalize career-mentoring programs** for undergraduate students, graduate students, and postdoctoral fellows, by engaging and networking with a diverse and inclusive body of alumni, industry, and academic constituents.
  
  September 2017: Appoint a Career Development Committee to develop a comprehensive and integrated approach to career development. Program proposal to be submitted by March 2018.

  Responsible Party: Dean

- **Optimize K-12 engagement** to reach at-risk, underrepresented, and underprivileged students to nurture their interests in pursuing ‘STEM’-based careers.
  
  Fall 2017: K-12 engagement assessed and plan to optimize developed

  Responsible Party: Director of Outreach/Associate Dean for Academic Affairs

- **Develop and enhance formalized global partnerships** to expand study abroad offerings, and identify academic and industrial research collaborations.
  
  Fall 2019: Structure for prioritizing and initiating college-level global partnerships put in place

  Responsible Party: Dean/Associate Dean for Undergraduate Education

- **Create public communication programs** to facilitate the development of data-informed public policy, and to educate the public on the importance of scientific advances.
  
  Spring 2019: Task Force appointed to develop strategy, which should include implementation plan

  Responsible Party: Dean

- **Fulfill the College’s role in the University’s on-going ‘Ever True’ capital campaign** to develop transformational philanthropic support for the College.
  
  June 30, 2019: Fulfill campaign goal of $117 MM in philanthropic support

  Responsible Party: Dean and Director of Advancement