

# 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:

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

**Fall 2017: Establish academic programs in Data Sciences** as interdepartmental initiatives at the undergraduate and graduate levels. **Appoint Task Force to assess viability of interdepartmental graduate program in data sciences.** **Responsible Party: Associate Dean for Research and Graduate Programs.**

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

**January 2018: Define and inform the University core curriculum to assure science literacy for all** undergraduate students as a distinct hallmark of a Purdue education. **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. **Responsible Party: Associate Dean for Undergraduate Education.**

**August 2018: Define and inform the University core curriculum to assure science literacy for all** undergraduate students as a distinct hallmark of a Purdue education. **Submit proposal to University Undergraduate Curriculum Committee for adoption of learning objectives to achieve scientific literacy.** **Responsible Party: Associate Dean for Undergraduate Education.**

**Fall 2018: 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. **Each Department will have a first year orientation course approved that is available to all majors in their Department.** **Responsible Party: Department Heads/Associate Dean for Undergraduate Education.** **Completed August 2017.**

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

**Fall 2018: 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. **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:

**December 2016: 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. 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. **Committee appointed and began meeting January 2017.**

**January 2017: 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. 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. **Committee appointed and began meeting March 2017.**

**January 2017: 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. **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. **Task Force created and began meeting March 2017. May of 2017 the group crafted a report to heads and deans.**

**Spring 2017: 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. **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. **Center Directors met with Leadership Team April 17, 2017 to discuss strategies. Department Heads will work directly with Center Directors when appropriate hires are being made that will mesh with the Institute's research endeavors.**

**Fall 2017: 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. **Appoint Task Force to create a roadmap.** Responsible Party: Associate Dean for Research and Graduate Programs. **This was handled by the preeminent research areas task force. May of 2017 the group crafted a report to heads and deans.**

**September 2017: 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. **Appoint a Task Force to review and recommend revisions to criteria and process.** Responsible Party: Associate Dean for Academic Affairs. **Task Force created to begin work August 2017.**

### *Goal-3: Innovative Engagement*

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

Strategic Initiatives:

**Fall 2017: Optimize K-12 engagement** to reach at-risk, underrepresented, and underprivileged students to nurture their interests in pursuing 'STEM'-based careers. **K-12 engagement assessed and plan to optimize developed.** **Responsible Party: Director of Outreach/Associate Dean for Academic Affairs.**

**September 2017: 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. **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.**

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

**June 30, 2019: Fulfill the College's role in the University's on-going 'Ever True' capital campaign** to develop transformational philanthropic support for the College. **Fulfill campaign goal of \$117 MM in philanthropic support.** **Responsible Party: Dean and Director of Advancement.**

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