Nominations Invited

ANNUAL AWARD

for

OUTSTANDING INNOVATION IN "HELPING STUDENTS LEARN"

To improve the educational experiences of Purdue University students and to recognize those who develop innovative advancements in teaching, the alumni of the Class of 1922 have established a fund from which an annual award is to be given for outstanding innovations in helping students learn. If a single recipient is selected, the \$6,000 prize will be divided between a \$4,000 cash award and a \$2,000 academic expense account. If there are multiple winners, the distribution of the prize will be modified accordingly.

Eligibility

All Purdue University faculty, staff, and graduate students who have developed innovative techniques to help students learn are eligible for consideration. The work presented must be your own creation. Candidates may either petition directly for this award or be nominated by Purdue colleagues, students, or alumni. Previous recipients of this award will not be considered for their work on the same innovation. However, they are eligible for consideration for innovative work using a different technique. An innovation in teaching at any level (graduate, undergraduate, extension, continuing education, etc.) will be considered. Please note that the nominee must have used the innovation during a class in the academic year for which the award will be given.

Criteria

For purposes of this award, an *innovation* is defined as something which is new, involving creativity and change, and which has for its purpose helping students learn. It includes any procedure, concept, or format which differs significantly from established or traditional teaching methodologies and which purports to help students learn more effectively.

Applications may not exceed five pages. Please address the following questions:

1. How does the improvement facilitate learning? Describe the pedagogical method and theories driving the innovation as well as the innovation itself.

Criteria, continued

- 2. How is this work creative and/or innovative? Discuss the novelty and practicality of the current advancement.
- 3. What are the broad impacts? Make sure to discuss the number of students affected as well as the applicability of the method to other domains and universities.
- 4. What is the evidence of student learning? It is extremely important to show evidence of actual student learning. In the past, successful applicants were very detailed in their demonstration of the effects of the intervention.

Nominations

Nominations should be accompanied by a completed cover sheet, which is attached, and a statement of <u>no more than FIVE double-spaced single pages</u>. The statement should describe the innovation, its rationale and objectives, <u>the impact the innovation has had on student learning</u>, and the potential the innovation has for further development and/or application in other disciplines. Other information which the nominee feels is pertinent also may be incorporated; however, the selection committee will not read more than five single pages. *Since the initial screening, at least, will be based on a review of the statement and references, additional materials - tapes, disks, CDs, syllabi, etc. - should not be submitted.*

Nominations need to be sent <u>electronically</u> to <u>cie@purdue.edu</u>. <u>Nominations must be</u> received no later than 5 pm, Friday, January 31, 2020.

Selection

The recipient(s) of this award will be determined by a selection committee composed of students, faculty, and alumni.

Purdue University

NOMINATION FORM FOR

HELPING STUDENTS LEARN AWARD

Zachary A. Weber, PharmD, BCPS, BCACP, CDC	ES	
Name of Nominee		
Director of Interprofessional Education and Clinical Associate Professor		
Title		
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Department	Phone Number and email address	
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Campus	Building	

Title of Innovation

Implementation of a Required Interprofessional Education (IPE) Curriculum in the Doctor of Pharmacy Program on a non-Academic Medical Center Campus

Name of Nominator
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The Centre for the Advancement of Interprofessional Education (CAIPE) and World Health Organization (WHO) provide definitions of interprofessional education (IPE) and interprofessional practice (IPP) that serve as a basis for contemporary healthcare education and practice, while highlighting the need for effective interprofessional teams to accomplish the healthcare quadruple aim. The importance of IPE and IPP have been apparent in pharmacy education since 2007, when there started to be an additional focus on IPE and preparing pharmacy graduates to deliver care in collaborative healthcare teams. This emphasis was strengthened in the 2016 Accreditation Council for Pharmacy Education (ACPE) accreditation standards with Standard 11 requiring IPE to be a part of pharmacy education. Notably, ACPE Standard 11 requires pharmacy learners to have interprofessional team exposure that "includes prescribers as well as other healthcare professionals." Like many other Schools/Colleges of Pharmacy (S/COP), Purdue COP needed to adapt its curriculum to meet this Standard and appropriately prepare its graduates for team-based practice. Since Purdue COP is not located on an academic medical center campus, it was at an inherent disadvantage for providing exposure to, and interaction with, the breadth of healthcare disciplines encountered in clinical practice.

By definition, IPE and IPP require collaboration with other healthcare disciplines. To fulfill this requirement, Purdue COP entered a partnership with the Indiana University Interprofessional Practice and Education Center (IU IPE Center) in Fall 2016. This partnership helped Purdue COP implement the Team Education Advancing Collaboration in Healthcare (TEACH) curriculum. During this same time, Dr. Zach Weber was appointed as the Director of IPE for Purdue COP and led the finalization of this partnership, implementation of the TEACH curriculum, and formalizing a novel longitudinal IPE curriculum. These opportunities provided a foundation for Purdue COP students to learn with, from, and about other healthcare learners on a scale that had never previously been done in the College or by other Purdue health science-based programs.

The new required IPE curriculum was implemented in the 2017-2018 academic year for all

entering Doctor of Pharmacy (PharmD) students. All PharmD students were now required to complete a series of IPE activities called Interprofessional Learning Anchors (Anchors). These Anchors ensured PharmD students were exposed to the same minimum level of IPE/IPP during the non-experiential portion of the professional degree program and had equivalent opportunities to interact with learners and faculty from other healthcare disciplines (including medicine, physician assistant, nursing, physical therapy, dentistry, nutrition science and more). Many of these learners and faculty represent healthcare disciplines with whom pharmacy students would not otherwise have interactions with on the Purdue West Lafayette campus. The Anchors are threaded throughout the PharmD curriculum and include an IPE Introduction and Anchors 1 and 2 during the first-professional (P1) year, Anchors 3 and 4 during the second-professional (P2) year, Anchor 5 during the third-professional (P3) year, and Anchor 6 during the fourth-professional (P4) year. Uniquely, students participate in the Anchors on both the Indiana University Purdue University Indianapolis (IUPUI) campus in Indianapolis and Purdue campus in West Lafayette. Innovative scheduling accommodations have been implemented by Dr. Weber to allow students to participate in the new IPE Anchors while minimizing impact on other COP classes. These accommodations include bussing approximately two-thirds of P1 and P2 students to the IUPUI campus for Anchors 1-4; working with course coordinators and faculty to excuse students from required lectures and having no points associated with attendance or participation in classes on the date(s) of an IPE Anchor, while ensuring students have access to recorded lecture content from any missed class(es); collaborating with Professional Program Laboratories (PPL) and Purdue University Pharmacy leadership to avoid overlap between IPE Anchors and these skills-based classes; and offering a nearly equivalent interprofessional learning experience for students participating on either the IUPUI or Purdue campuses.

The IPE Anchors include live seminars, live activities, simulated patient encounters and interactions with trained standardized patients, synchronous and asynchronous events, and experiential

collaboration and documentation of IPE. IPE Anchors take students through a progression of skills from Exposure (P1 year), Immersion (P2 year), and Entry-to-Practice (P3 and P4 years). Uniquely, Dr. Weber created, and serves as coordinator for, five new IPE-specific courses (PHRM 838, 839, 854, 855, and 875), each worth 0.5 credits. These courses represent an innovative change to the PharmD curriculum, in that it's the first time IPE-specific credits are required for graduation from Purdue COP. Based on Dr. Weber's involvement outside of Purdue in the Big Ten Collaborative IPE Workgroup, having credits in a PharmD plan of study designated for IPE activities is unique among peer institutions.

The innovative IPE curriculum at Purdue COP also includes a geriatric medication game for P1 students, an interprofessional cultural-based patient case activity with standardized patients for P3 students, and the inclusion of IPE-related reflections in the Annual Performance Evaluation (APE) for P1-P3 students. As a whole, Dr. Weber has been able to implement an innovative and required IPE-related curriculum in Purdue COP with nine required IPE or IPP-based experiences for all PharmD students. In addition, students can participate in selective/elective IPE-related activities, which represent experiences available to smaller cohorts of students based on their areas of interest. Since 2017, Dr. Weber has helped facilitate student participation in an HIV-related elective course through the Midwest AIDS Training and Education Center (MATEC), an interprofessional health promotions project with IU School of Medicine using the Regenstrief EHR Clinical Learning Platform, an interprofessional Opioid Workshop for Future Prescribers, a Peer-Led Team Learning experience for the TEACH Anchors, and multiple high fidelity simulations on both the IUPUI and Purdue West Lafayette campuses.

The new IPE curriculum has allowed PharmD students in the didactic curriculum to interact with learners and faculty from other disciplines on a scale not previously offered in the College. Between the IUPUI and Purdue campuses, PharmD students have been able to interact with over 500 learners and 30 faculty representing 9 disciplines each semester since Fall 2017. Understanding of interprofessional

team roles is required when entering healthcare practice and is an extremely important skill for early learners to develop. On a 5-point Likert scale (1-strongly disagree and 5-strongly agree), P1 Purdue COP students were able to describe how an interprofessional team works together to improve health, healthcare, community outcomes and prevent disease (4.3 ± 0.7) ; encourage ideas and opinions of others to improve understanding and team outcomes (4.3 ± 0.7) ; identify ways that all members of the health care team can share accountability to improve outcomes relevant to prevention and healthcare (4.2 ± 0.9) ; and learn more about roles and responsibilities of other professions (4.3 ± 0.8) . P2 students were able to demonstrate successful collaboration during interprofessional simulations with standardized patients. (Table 1)

Table 1	
Identifies goals in the team huddle (for the team)	1.8 ± 0.6
Empowers each other to speak (including the patient/client/caregiver)	1.8 ± 0.6
Works as a team to problem solve	1.9 ± 0.4
Includes patient/client/caregiver in communication	2.3 ± 0.8
Actively collaborates with each other	1.9 ± 0.3
Provides brief, understandable, specific, useful and timely information	2.0 ± 0.6
Addresses conflict appropriately	2.4 ± 0.8
Uses communication tools (SBAR, CUS, call-outs, check-backs, and handoff techniques	2.1 ± 1.1

0=NEVER1=SOMETIMES2=OFTEN3=N/ABehavior Never ObservedBehavior Observed 1-2 timesBehavior Observed 3 or more timesBehavior Does not Apply to this Situation

As P3 students near the end of the required IPE curriculum, they have shown improvements in many facets needed to demonstrate a strong readiness for interprofessional learning. (Table 2)

Table 2	Pre	Post
1. Learning with other students will help me become a more effective member of the health care team.	1.9±0.8	1.4±0.8
2. Shared learning with other health care students will increase my ability to understand clinical problems.	1.9±0.9	1.4±0.8
3. Learning with other health care students before licensure would improve relationships after licensure.	1.8±0.8	1.4±0.6
4. Shared learning will help me think positively about other professionals.	2.0±1.0	1.5±0.8
5. Team-working skills are essential for all health care students to learn.	1.6±0.7	1.4±0.7
6. Shared learning will help me understand my own limitations.	2.0±1.0	1.5±0.7
7. It is not necessary for health care students to learn together.	5.7±1.2	5.9±1.5
8. Clinical problem-solving skills can only be learned with students from my own health care profession.	5.6±1.5	5.4±1.8
9. Shared learning with other health care students will help me to communicate better with patients and other professionals.	2.1±1.2	1.7±0.9

10. I would welcome the opportunity to work on small group projects with other health care students.	2.4±1.3	1.9±1.2
11. Shared learning will help to clarify the nature of patient problems.		1.7±0.8
12. Shared learning before licensure will help me become a better team worker.	2.0±0.9	1.6±0.7
13. I have to acquire much more knowledge and skills than other health professional students.	4.1±1.5	3.5±1.7

1=strongly agree, 2=agree, 3=somewhat agree, 4=neutral, 5=somewhat disagree, 6=disagree, and 7=strongly disagree

To further highlight the novelty and impact of the IPE curriculum led by Dr. Weber, the partnership between Purdue COP and the IU IPE Center, and the implementation of the TEACH curriculum across multiple institutions served as the basis for a submission that won the 2019 Award for Institutional Excellence and Innovation in Interprofessional Education and Collaborative Health Care from the Association of Schools Advancing Health Professions (ASAHP).

Interprofessional collaborative practice is the basis for effective healthcare and all health science learners should now be prepared to be collaborative members of these teams. Health science programs not physically located on an academic medical center campus can present a challenge for their learners to be able to engage with faculty and students from other healthcare disciplines. Under the direction of Dr. Weber, the Purdue COP has implemented a truly innovative learning experience for the approximately 600 students in the PharmD program that includes both required and optional interprofessional collaborations across multiple academic campuses. This curriculum also contains many features that can be used to implement similar learning experiences for other programs. These include the development of a formal curricular plan for progression of IPE across an entire plan of study; identifying other campus locations or partners for students to interact with learners and faculty not available at their same location; creating IPE-specific courses to facilitate ease of student tracking, enrollment, grading, and credit; meeting with College leadership, course coordinators, and faculty to accommodate new IPE events into an already-hectic plan of study; and novel scheduling accommodations to split COP learners across campuses to equally engage allied health science programs at both IU and Purdue.