Top, left to right: Michael Smith, Angela Bingham, Young Ran Lee, Rachel Lowe, Lanae Fox, Melissa Badowski, Golden Peters, Zackary Jenkins
Bottom, left to right: Janene Marshall, Emily Laswell, Thomas Zlatic, Samantha Karr, Julianna Fernandez, Nicole Kitts.

"Graduation!"

All of these people are smiling because, after completing 28 hours of instruction and creating a teaching portfolio, they achieved certification within the ACCP Academy Teaching and Learning Certificate Program (TLCP).

At the ACCP Annual Meeting in Austin, 101 participants were awarded certificates by the four ACCP Academy programs:

Teaching and Learning, Leadership and Management, Research and Scholarship, and Career Advancement. Of the 101 awardees, 45 earned the Teaching and Learning Certificate.

Presiding at the ceremony was ACCP Past-President Gary Yee, Pharm.D., FCCP, BCOP, who welcomed the gathering of participants, faculty, and mentors. ACCP Past-President William A. Kehoe,

Contents:

Pharm.D., M.A., FCCP, BCPS, delivered an engaging address of congratulations and encouragement. Since 2006, 142 have completed the TLCP, and 218 are currently enrolled.

TLCP Webinars

Completion of the TLCP requires participation in four 1-hour ACCP webinars on teaching and learning. Two of the webinars were presented in December and January.

Team-Based Learning in Pharmacy Education: Tools and Tips for Success

On January 21, 2015, Andrea S. Franks, Pharm.D., BCPS, presented the ACCP Academy webinar titled "Team-Based Learning in Pharmacy Education: Tools and Tips for Success." The webinar provided an overview of team-based learning (TBL), highlighting its benefits for application in pharmacy education. TBL is a specific, structured, highly interactive learning strategy that helps students

Franks

develop critical thinking and problem-solving skills while collaborating and communicating with others to make decisions and achieve consensus. This learning strategy is ideally suited for health professional education, as it prepares students for collaborative, interprofessional practice where they will solve complicated problems and patient issues.

The key components of TBL include team formation, the readiness assurance process (preparation before class, individual and team quizzes), and team application exercises. The in-class application exercises use higher-order thinking and challenge the students to apply the basic knowledge they gained through the readiness assurance process. It is recommended that team application exercises be patient cases with several questions, each using the "4 S Framework." The cases should explore a significant, relevant problem, and all teams should work on the same cases, commit to a specific answer choice, and report their answers simultaneously.

The webinar also explored facilitation skills as well as perceived barriers and possible solutions for implementing or expanding TBL. Franks describes TBL as "a highly efficient active learning method that allows one faculty member who is a content expert to facilitate the session for a large class of students, even on multiple campuses."

Suggested Resources and References:
1. Team-Based Learning™ Collaborative. Available at www.teambasedlearning.org. Accessed February 3, 2015.

2. Farland MZ, Sicat BL, Franks AS, Pater KS, Medina MS, Persky AM. Best practices for implementing team-based learning in pharmacy education. Am J Pharm Educ 2013;77:Article 117.
3. Michaelsen LK, Parmelee DX, McMahon KK, Levine RE, eds.

Teaching and Technology Methods to Engage Students

In December, Renato Cataldo, Pharm.D., presented a webinar titled "Teaching and Technology Methods to Engage Students," in which he demonstrated the value and strategies of the Flipped Classroom approach to education. Cataldo recommended the presentation package Ink2Go as an economical and simple means to provide video for flipped class-

Cataldo

rooms. ACCP is providing an Ink2Go license free to all members. See details at http://www.pharmedsupport.com.
Cataldo is the founder and CEO of an international education group that focuses on using technology to improve student outcomes and foster academic achievement.

Upcoming Webinars for Spring 2015

The final two webinars for this "academic year" will be delivered in February and March. On February 24 from 7:30 p.m. to 8:30 p.m. (EST), Dawn Havrda, Pharm.D., FCCP, BCPS, professor and chair of the department of Pharmacy Practice at the Shenandoah University Bernard J. Dunn School of Pharmacy, will present a webinar titled "Teaching Residents

Havrda

to Teach." Havrda will discuss the opportunities within a postgraduate residency program for teaching a resident to teach. The discussion will be conducted within the context of the requirements of the American Society of Health-System Pharmacists (ASHP) postgraduate year one (PGY1) and postgraduate year two (PGY2) accreditation standards for teaching experiences; the ACCP white paper "Guidelines for Resident Teaching Experiences," and the American Association of Colleges of Pharmacy (AACP) policy statement recommendations for residency teaching experiences.

I am sure my fellow-scientists will agree with me if I say that whatever we were able to achieve in our later years had its origin in the experiences of our youth and in the hopes and wishes which were formed before and during our time as students.

– Felix Bloch

On March 25, from 7:00 p.m. to 8:00 p.m. (EST), Jo Ellen Rodgers, Pharm.D., FCCP, BCPS, will present a webinar on case writing that will identify the attributes of a well-constructed patient case and provide pedagogical strategies for implementing case-based teaching in various settings. Effective methods for minimizing the difficulties that learners and instructors encounter with case-based learning (CBL), as well as for managing CBL discussion and debate, will be addressed. Rodgers is a clinical associate professor at UNC Eshelman School of Pharmacy, University of North Carolina School at Chapel Hill, North Carolina.

Rodgers

The webinars are free to all ACCP Academy enrollees. ACCP members not enrolled in an Academy may participate for a $69.00 fee. To register for the webinars, visit http://www.accp.com/meetings/webinars.aspx.

Teaching Scholarship and Research

Educational research is an important factor in developing effective teaching and learning. At the fall ACCP Annual Meeting in Austin, Jacqueline McLaughlin, Ph.D., M.S., and Mary T. Roth, Pharm.D., MHS, FCCP, presented "Educational Research and Scholarship," in which they defined educational research, described key steps for conducting research, explained common flaws to be avoided, and identified resources for designing and conducting education-based studies. Here is an extension of their presentation.

Pharmacy educators are uniquely positioned to examine research questions within education that are not only of importance to themselves, but also of increasing importance and interest to larger audiences within the health professions. Topics such as experiential learning, the flipped classroom, layered learning, clinical training, faculty development, and interprofessional education can reach well beyond pharmacy to inform educational practices across the country. Well-designed educational research will play a critical role in pharmacy as we work to advance strategic initiatives, improve the education and training of our students, and position pharmacy education as a model of innovation and excellence.[1]

McLaughlin

Roth

Educational research generally refers to the systematic and critical investigation of any aspect of education that advances knowledge and benefits society.[2] Although process descriptions vary slightly from text to text, educational research tends to follows these basic steps[1]:

1. Identify and clarify a problem.
2. Link the study to relevant theory.
3. State a research question(s) or hypothesis.
4. Select a research design.
5. Identify measures.
6. Obtain IRB approval.
7. Collect and analyze data.
8. Report, discuss, and disseminate findings.

Designing and implementing an educational research study is not trivial; numerous approaches exist and include a vast array of theories, methodologies, and analytic techniques. Broadly speaking, common approaches include the following: quantitative research, which investigates phenomena using statistical or computational methods; qualitative research, which draws from data sources that are descriptive in nature; and mixed methods, which involves the use of quantitative and qualitative data in a single study. Because educational research often requires a range of skills and expertise, creating a diverse and effective research team can serve to strengthen the design and implementation of any study.

The following resources may provide guidance for those interested in learning more about educational research:

- Creswell JW. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, 3rd ed. Los Angeles: Sage Publications, 2009.
- McLaughlin JE, Dean MJ, Mumper RJ, Roth MT. A roadmap for educational research in pharmacy. Am J Pharm Educ 2013;77:Article 218.
- McMillan JH, Schumacher S. Research in Education: Evidence-Based Inquiry, 7th ed. New York: Pearson, 2014.
- Patton MQ. Qualitative Research & Evaluation Methods, 3rd ed. Los Angeles: Sage Publications, 2001.

Amid the many changes facing health professions and higher education, pharmacy educators are uniquely positioned to re-engineer the learning environment. As such, thoughtful consideration should be given to the ability of educational research to inform, empower, and transform the academy as we strive to understand and improve curricula and optimize the training of pharmacy learners.

Jacqueline McLaughlin, Ph.D., M.S., is an assistant professor, Educational Innovation and Research, and director,

Office of Strategic Planning and Assessment, at UNC Eshelman School of Pharmacy, University of North Carolina at Chapel Hill.

Mary Roth McClurg, Pharm.D., MHS, FCCP, is an associate professor and executive director of The Academy, UNC Eshelman School of Pharmacy, University of North Carolina at Chapel Hill.

REFERENCES
1. McLaughlin JE, Dean MJ, Mumper RJ, Roth MT. A roadmap for educational research in pharmacy. Am J Pharm Educ 2013;77:Article 218.
2. McMillan JH. Educational Research: Fundamentals for the Consumer, 6th ed. New York: Pearson, 2012.
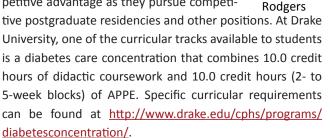
Designing and Implementing Curricular Tracks

In another elective offered at the ACCP Annual Meeting in Austin, Renae Chesnut, RPh, MBA, Ed.D., and Philip T. Rodgers, Pharm.D., FCCP, BCPS, presented an informative workshop titled "Successful Design and Implementation of Focused Educational Tracks." The presentation was sponsored by the Education and Training PRN and served as an elective opportunity for the TLCP. Chesnut and Rodgers have provided some further thoughts on the topic below.

Chesnut

Rodgers

Programs that design and implement curricular tracks can provide an opportunity for students to develop additional knowledge and skills while offering them a competitive advantage as they pursue competitive postgraduate residencies and other positions. At Drake University, one of the curricular tracks available to students is a diabetes care concentration that combines 10.0 credit hours of didactic coursework and 10.0 credit hours (2- to 5-week blocks) of APPE. Specific curricular requirements can be found at http://www.drake.edu/cphs/programs/diabetesconcentration/.

Recommended steps and considerations for creating and implementing a curricular track include the following.

Step 1: Identify the curricular "area" – Potential tracks may be developed around areas where elective coursework is already offered. Offering a curricular track requires a commitment by the faculty and college because of time and workload demands. In addition, student interest must exist, which can be garnered from ad hoc requests, student advisory groups, or a survey.

Step 2: Determine the learning objectives – Before determining coursework requirements, begin with the end in mind, and consider the knowledge, skills, and attitudes that students should possess after completing the track.

Step 3: Develop the proposed curricular requirements and placements – When determining the courses and experiences, consider the core courses and elective options. It is helpful to provide students information regarding where in the curriculum the coursework will fit to ensure that they are able to complete the requirements.

Step 4: Pursue institutional/college approvals – Obtain the appropriate approvals, whether through the department, the college and university curriculum; or the committee and faculty.

Step 5: Implement a track – Implementing a track includes developing any new courses as well as promoting the opportunity to students and advisers.

Step 6: Measure the outcomes and impact – A variety of options are available to assess the impact of the track, including performing student surveys after the track is completed and at the point of graduation as well as obtaining the number of students completing the track. Also beneficial is determining the students' accomplishment rate at the point of graduation and the types of positions (residencies, specialized positions) obtained after graduation.

Step 7: Refine and adjust – Once the outcomes and impact have been identified, revisions and adjustments can be made in the course requirements as well as in the content within the courses. In addition, it is likely that faculty changes such as sabbaticals, maternity leaves, and departures will affect the course offerings and create the need for adjustments.

Throughout these steps, several barriers may exist. On the one hand, obstacles may include faculty concern regarding the specialization of students completing a general pharmacy degree and the commitment needed by the college and faculty to make the courses available on a consistent basis. In addition, many programs have faculty who are already overloaded with other courses and commitments, making it difficult to consistently offer the coursework needed for the track. Despite having identified student interest in step 1, the risk of having too few students for the resources expended may be a challenge. On the other hand, too much student interest can create potential barriers for the quality of the course offerings and experiential requirements. It is recommended that programs plan for these barriers; engage multiple faculty to provide flexibility for sabbaticals,

leaves, and departures; and continue to evaluate the program for curricular adjustments.

Curricular tracks provide a way to offer students a unique experience, not just in obtaining a position upon graduation, but also in securing the position desired. When offering a track option, the interest of students and a commitment from the program and faculty must be among the factors considered. Throughout the offering of tracks, flexibility and innovation are essential to create a track that will further provide advancement in the profession and opportunities for students.

Rodgers is assistant dean of Pharmacy Practice Partnerships, and a clinical associate professor, UNC Eshelman School of Pharmacy, University of North Carolina at Chapel Hill, and Chesnut is an associate dean for Academic and Student Affairs and a professor of Pharmacy Practice, Drake University College of Pharmacy & Health Sciences.

TLCP Programming for Rosemont, April 11–12, 2015

Register now for TLCP programming offered in conjunction with *ACCP Updates in Therapeutics® 2015*, from April 11 to 12, 2015, in Rosemont, Illinois. An abbreviated schedule for each TLCP session is listed below.

Saturday, April 11, 2015

Implementing Teaching and Learning Strategies (Module 2)
1:00 p.m. to 5:00 p.m.
Faculty:
- *Krystal K. Haase, Pharm.D., FCCP, BCPS*
  Texas Tech University Health Sciences Center
  School of Pharmacy
  Amarillo, Texas
- *Kamakshi V. Rao, Pharm.D., BCOP*
  University of North Carolina Hospital
  Chapel Hill, North Carolina
- *Thomas D. Zlatic, Ph.D.*
  St. Louis College of Pharmacy
  St. Louis, Missouri

> *The only person who is educated is the one who has learned how to learn and change.*
>
> – Carl Rogers

Sunday, April 12, 2015

Assessing Student Learning (Module 3)
8:00 a.m. to noon
Faculty:
- *Sara L. Lanfear, Pharm.D., BCPS*
  Henry Ford Hospital
  Detroit, Michigan
- *Zachary A. Stacy, Pharm.D., BCPS*
  St. Louis College of Pharmacy
  St. Louis, Missouri
- *Thomas D. Zlatic, Ph.D.*
  St. Louis College of Pharmacy
  St. Louis, Missouri

Tips from the Trenches: TLCP Participant Insights on Teaching and Learning (Elective)
1:30 p.m. to 3:30 p.m.
Presentation 1: Set Up for Success
Faculty:
- *Samantha A. Karr, Pharm.D., FCCP, BCPS, BCACP, BC-ADM*
  Midwestern University, College of Pharmacy-Glendale
  Glendale, Arizona
- *Shareen Y. El-Ibiary, Pharm.D., FCCP, BCPS*
  Midwestern University, College of Pharmacy-Glendale
  Glendale, Arizona

Presentation 2: Best Practices for Writing Multiple Choice Questions
Faculty:
- *Kamila Dell, Pharm.D., BCPS*
  University of South Florida
  Tampa, Florida
- *Gwendolyn Wantuch, Pharm.D., BCPS*
  University of South Florida,
  Tampa, Florida

Educational Care Revisited (Elective)
3:45 p.m. to 5:45 p.m.
Faculty:
- *Nicholas G. Popovich, Ph.D.*
  University of Illinois-Chicago, College of Pharmacy,
  Chicago, Illinois
- *Matthew K. Pitlick, Pharm.D., BCPS*
  St. Louis College of Pharmacy,
  St. Louis, Missouri

To obtain a full programming schedule and register, visit the ACCP Web site at www.accp.com/acad. Register by February 27 for discounted early-bird rates.

Serve the Profession and Yourself as a Mentor

If you have completed the TLCP, you are in an ideal position to serve as a mentor to those beginning the program. Your familiarity with the principles, content, and strategies of the TLCP enables you to provide very helpful feedback. And, of course, because the best way to learn anything is to "teach" it, serving as a mentor enhances your personal growth. If you are interested, please contact zmiti@accp.com.

Keeping Track
Portfolio Assignments

The online portfolio system is available at www.accp.com/academy. If you have not already done so, please visit the site today to begin assignments for the modules you've completed. Online portfolio assignments must be completed within 6 months of participating in a module.

Progress Reports

Progress reports are available at any time in your online portfolio. Progress reports will be updated within 14 days after the end of each ACCP meeting. To view your updated progress report, visit www.accp.com/academy.

An education isn't how much you have committed to memory, or even how much you know. It's being able to differentiate between what you know and what you don't.

– Anatole France

Registration opens February 20, 2015.
Visit www.accp.com/gc for details.

—2015—

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