

viaticum

ASBURY UNIVERSITY JOURNAL
OF RESEARCH & SCHOLARSHIP

VOL. 11

FEB
2018

Search for Truth

In disciplines from Chemistry to Psychology, Asbury faculty partner with students on special research projects that challenge and inspire.

▸ Finding the Story

Understanding History as narrative

▸ Succeeding in Psych

A legacy of mentorship lives on

▸ Also Featured...

- Laboratory lessons, life-long learning
 - Models of collaboration
 - Literature and guided learning
-

MISSION STATEMENT

Asbury University, a Christian Liberal Arts University in the Wesleyan-Holiness tradition, equips students, through academic excellence and spiritual vitality, for lifelong learning, leadership and service to the professions, society, the family and the Church, preparing them to engage their cultures and advance the cause of Christ around the world. ▶

PUBLISHER: Asbury University Office of the Provost

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vī-'a-ti-kəm I. n., 1. travelling money, provisions for a journey (in the form of food, money, etc.). 2. (transf.) intellectual or similar resources for the journey of life.

Understanding Required

Known for designing structures that challenge timeless conventions and measures, celebrated Danish architect Bjarke Ingels proposes that "accumulation and addition [have] replaced higher forms of organization such as hierarchy and composition." In other words, Ingels asserts that spread has replaced depth, and that volume has replaced understanding. Though his statement applies to buildings, one can draw parallels with academia, especially when acknowledging the persistent pressure for students to earn more degree(s) in quicker ways.

Understanding requires exploration through contemplation and reflection. The ideas and questions that arise from these practices result in a person who reaches beyond knowledge gathering and distribution towards a higher mindset of celebrating the engagement of the head, heart and life (Raymond, 2015). At the same time, and inasmuch as a question motivates thinking about comprehension, the purpose of understanding is not merely to answer a problem but also to lead to "discovering, envisaging, [and] going into deeper questions" (Wertheimer & Wertheimer, 1959).

In this issue of "viaticum," we share stories about several professors who advance student learning and comprehension through their own research. These individuals revel in the craft of their discipline and believe deep understanding is liberating (Chilcote, 2004).

I hope you enjoy this edition of "viaticum." ▶

Timothy G. Campbell, Ph.D.

Academic Dean, Asbury University



Ingels, B. (2009). *Yes is More*. Taschen.

Raymond, J. S. (2015). *Higher Higher Education*. Aldersgate Press.

Wertheimer, M., & Wertheimer, M. (1959). *Productive thinking*. Harper New York.

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Legacy of Learning

Dr. Janet Dean is part of a long legacy of learning — and as a professor at Asbury, she is passing on the gift.

Growing up in rural Virginia, there was no reason for Janet Dean to assume she would go to college. By the time she graduated high school, she had already continued her education further than anyone in her immediate family. Throughout her education, however, she experienced amazing support. Family and teachers took special interest and made extra efforts that would become transformative.

Now a licensed psychologist and professor of Psychology at Asbury University, Dr. Dean looks back on the long line of influencers in her life and sees, not disjointed interactions, but God's grace at work through people. It changed her life, shaping her desire to give back to students.

"I always had teachers who took me under their wing," Dean said. "I don't know what it was, but from day one, I always had extra attention, support, mentorship. I have a long line of teachers who have done this for me, and I attribute everything I am to them. There's no reason I should be here."

The many influences in Dean's education shaped the person she is today, and indirectly, they continue to touch lives through Dean's one-on-one research projects with Asbury students. Since 2008, she has advised more than 50 student research projects and helped lay the foundation for Asbury's SEARCH Symposium (p. 9).

"Very soon after I joined the faculty at Asbury, I talked to Dr. Bruce Branan and we were able to include Psychology students in the poster presentations he had organized for Science students. Through that, I got the vision to do a cross-disciplinary research event."

"I love what research does for students. There's such joy in working with them and building confidence... building their questioning and investigative skills."

Working with students gives Dean the opportunity to share her love of research and to continue passing on the gift so many mentors gave her.

"I love what research does for students," Dean said. "There's such joy in working with them and building confidence through that; building their questioning and investigative skills. Some students begin with some hesitation, but by the end of the semester, they're proud of their work, excited about it, and they want to share it. That's so much fun."

Dean credits her parents with setting her on the path to a life they had never known themselves. Her grandfather, born in Frog Holler, Va., was given up by his parents and lived in a barn, working to earn his keep. Her father dropped out of school in the eighth grade in order to support himself. Her mother married early, to get out of the home, never finishing high school. By the time Dean came along, her parents were determined that she would have a better life.

"They were very passionate about making sure we stayed in school," Dean said. "I got to go to college for free, because

1st grade: Ms. Chapman

Kindergarten: **MRS. DEADWYLER**
(my mom remains in touch with her)

2nd grade: **MRS. WALNUT**
(first one to have me tutor other students)

3rd grade: **Mrs. Cox** 4th grade: **Mrs. Phillips**

5th AND 6th grade: **Mrs. Haines**
(She really pushed me in my studies)

“I always had teachers who took me under their wing. I don’t know what it was, but from day one, I always had extra attention, support, mentorship.”

7th grade: **Mr. Johnson**
(He taught me diagramming and the basics of good writing... worked with me outside of class)

8th grade: **MRS. COOK**
(She got me involved on the ecology team, helping me connect to the best students in the school)

High School: **Mr. Fox**
(mentor in and out of the classroom)
Mr. Darkow (had confidence in me that I could do the math, and because of that, I could.)
Mrs. Young (taught me how to write well) & **Mrs. Freeder** (she believed that I would do great things and that was a huge encouragement)

College: **DR. POPPLESTONE & DR. MCPHERSON**

Seminary: **Dr. Van Tatenhove, Dr. Burgess & Dr. Bauer**

Grad School: **Dr. Mirels**

published through InterVarsity Press in April 2018. The study seeks to respectfully listen to students who entrust these researchers with their stories as they navigate the intersection of sexual and spiritual identities.

Research was led by Dr. Mark Yarhouse (Hughes Endowed Chair and Professor of Psychology at Regent University), Mike Lastoria (retired Director of Counseling Services at Houghton College), Dr. Steve Stratton (Professor of Counseling at Asbury Theological Seminary) and Dean complete the research team. Dean said the team has worked together for more than 13 years on journal articles and presentations, but this is their first book endeavor.

“It was especially rewarding to see this ‘work’ — work to which we’ve dedicated so much of our careers — come together in this way,” Dean said. “For all of us, this work is not about the research, but it’s about the students that we’ve been able to get to know, and hopefully help, through this research. They are why we do what we do. The book, in many ways, is our gift back to them.”

Whether in research or teaching, Dean says students are always her first priority.

“Students are why I’m here,” Dean said. “I couldn’t imagine going to a school where I didn’t have that involvement. As much as I love research, I don’t want my job to be research — I want my job to be students. Even my personal research is all about helping students.”

my dad had become a master electrician and was head electrical supervisor at the University of Akron.”

Even so, when Dean decided to pursue a Ph.D. in Psychology, her mother cried.

“I asked her about that, and she was afraid I would never talk to the family again, because I was too educated,” Dean said. “My kids are at a completely different place starting college than I was.”

In her undergraduate work, Dean initially focused on math and science but soon switched to psychology. Part of the draw was her natural curiosity about people; another significant element was trying to understand her own heritage.

“I’m always trying to figure people out,” Dean said. “Early on, there was a lot of alcoholism in my extended family; I was trying to figure that out. My grandmother suffered from depression and had shock therapy; I tried to make sense of that. I wanted to understand more about Appalachian folklore and the experiences that are so richly shown throughout that culture.”

In her Ph.D. program at Ohio State, Dean found one of her most significant mentors in Dr. Herbert Mirels. Their differences in worldview challenged Dean significantly, but that only sharpened the affectionate challenge they posed to one another in research.

“I was just thrown into one of the top clinical Psych programs in the nation, where, from day one, you’re doing research,” Dean said. “My adviser was a liberal Jew, and I’m a conservative Christian, and we would get into disagreements and resolve them by doing research projects. I fell in love with research there. It was the one on one, gaining confidence, learning that I could answer questions. Dr. Mirels was neurotic, sarcastic and a good, good person. I adore him, and we still keep in touch.”

Mirels’ mentorship powerfully shaped the way Dean continues to approach student research. Any given semester she directs up to 10 student research projects with one-on-one weekly meetings.

“I decided a couple of years ago that we would meet every week,” Dean said. “The growth in students is so much

more incredible that way. You’re walking through each step, talking about it and getting to live life with them. In a meeting, you might sense a mood change, and they can tell you what’s going on — you build a different kind of relationship. It’s made a huge difference not only in the quality of work we’re getting, but also in students’ experience. It’s really fun to get to work with them that closely.”

Dean knows she owes much to the long line of influencers in her life, but she didn’t become a mentor and supporter of student research out of duty or obligation. It just comes naturally.

“I don’t know any other way of being,” Dean said. “I get frustrated that I can’t know all of the students. Part of it is because I’m a therapist; part of it is all the teachers I’ve had. That relationship is so important.”

Dean’s personal research is student-focused, as well. Dean, along with a team of colleagues from private Christian institutions, recently completed a first-of-its-kind study, “Listening to Sexual Minorities: A Study of Faith and Sexual Identity on Christian College Campuses,” which will be



Dr. Janet Dean

Dr. Janet Dean, a licensed psychologist, is an associate professor of Psychology at Asbury University. She mentors students interested in research, advises the local chapter of the Psi Chi Honor Society in Psychology and co-facilitates Asbury’s annual undergraduate research symposium SEARCH. She has more than 20 years of experience in psychological assessment and treatment across a variety of settings, including university counseling, community mental health, correctional and forensic psychology and her ongoing private practice.

Sharing Discovery

Dr. Bruce Branán thrives on discovery — especially when he can include students in his chemistry research.

On the hard surface of a lab table, Dr. Bruce Branán cracked a black walnut with a claw hammer. The tough hull splintered and spun across the table.

“Very scientific,” he said, grinning, as he collected the fragments of hull and removed the nut meat.

Jokes aside, Branán was engaged in serious research, testing locally harvested walnuts for the presence of Ochratoxin A, a fungal toxin occurring in many foods. Building on existing research, the continuing project is not only a contribution to the scientific discussion — it’s also an outstanding opportunity for Biology major Bryce Forry ’20, who is working closely with Branán on the project.

Forry, who plans to attend medical school, is just one of the many students Branán has mentored throughout his time at Asbury. The Ochratoxin A project illustrates Branán’s dedication to student research at Asbury. He enjoys the sense of discovery research provides — and even more, he enjoys sharing it.

“There is an appeal to finding something that no one has seen before,” Branán said. “Being able to do this with students is a bonus. They learn some area that isn’t part of the usual curriculum (or is an extension of it), they learn new instruments and techniques, and together we both try to find answers to the problem at hand.”

For student research to be effective, Branán says, it needs to focus on real issues, scaled to proportions that undergraduate students can integrate in their full schedules. This dynamic requires creativity on the part of professors — a challenge Branán seems to relish.



“Graduate projects in science benefit from having grad students work full time for two to four years in the lab,” Branán said. “They are able to work six to 10 hours a week. That difference means we have to think carefully about our plans so we can be efficient with our time in the lab. When I learn about something new and interesting I frequently ask myself, ‘What can we do with this at Asbury?’ ‘What is a new question we can investigate,’ or ‘How would doing it this different way make a difference?’”

Branán’s passion for sharing research has led to a rich variety of experiences and challenges. His projects with students have included research on pharmaceuticals in treated wastewater (Allegra Forwith ’16, Rebecca Bolinger ’17, Hunter Mitchell ’18 and Caleb Hartley ’21); building an ozone generator (Josh Butcher ’05); the effect of growth elevation on chemicals in tea (Kenton Sena ’12) and many, many more.

“I want students to take ownership of their project, and I soon step back and allow them to come to me with their findings,” Branán said. “This develops independence and hopefully the ability to begin finding answers and solving problems themselves before asking for my help. Tyler Ogden ’16, in our research comparing tea steeping methods on the chemicals in tea, was the best example I’ve seen of this. He became the expert on our HPLC instrument, and helped train his peers when they learned that instrument in CHE 322, Chemical Instrumentation.”

It’s not only students who benefit from Branán’s projects — his constant quest for discovery, grounded in a teaching framework at Asbury, sparks personal and professional growth, as well.

“Research at Asbury has afforded me a chance to try on new hats,” Branán said. “I was trained as a synthetic organic chemist. If I were a full-time researcher, I’d be doing that. But here, we’ve gotten much more into analytical chemistry, studying teas, learning new instruments and methods, and now getting into environmental chemistry with antidepressants in water, food chemistry, toxins in black walnuts. I feel like I’ve grown professionally in ways I never imagined when you come out of graduate school and start teaching.”

Branán’s prioritization of student research has impacted campus well beyond the sciences. The science poster presentations he began seven years ago directly inspired the SEARCH Symposium, an interdisciplinary celebration of student research.

“This is what SEARCH is about — celebrating what students have learned and achieved through hard work and study”

“I wanted to highlight in the spring the research projects our seniors were doing in their required senior research projects,” Branán said. “Some of the students were working all summer at large research institutions on NIH or NSF funded projects. These were top-notch, very sophisticated investigations, and the students had contributed greatly to the progress of the research and had a solid grasp of the intricacies of the work. I felt strongly that they should have the opportunity to display this to their peers in science, the faculty, and the general Asbury community.”

Now, through SEARCH, students from all disciplines can share their work, giving the Asbury community an opportunity to celebrate the excellent research being done across campus.

“This is what SEARCH is about — celebrating what students have learned and achieved through hard work and study,” Branán said. “It gives participants (the students) the opportunity to enjoy the fruits of their labors (which in academia is usually the sharing/publishing of what one has learned), and plant seeds of inspiration in the underclassmen of what they can do.”



Dr. Bruce Branán

Dr. Bruce Branán has been teaching chemistry at Asbury since 2000. He hails from N.C., but went to Ohio State for his Ph.D. where he meets his bride, Laura. They are the parents of 10 children, two of whom are currently Asbury students. Branán has worked with students on a variety of projects including determining the extent that pharmaceuticals may be released into Jessamine Creek from treated wastewater. He serves as the advisor for the Health Professions at Asbury, and also as the faculty advisor for the Asbury chapter of CMDA.

Finding the Story

Dr. David Swartz encourages students to experience history as a narrative.

As a young child, fascinated by family history, David Swartz began a family tree on poster board. At the beginning of the project, he was obsessed with filling in the blanks — his mom, his dad, his grandparents. Eventually, though, his priorities shifted. He cared less about filling in the blanks and more about knowing the stories behind them. The experience changed how Swartz wanted to do his research — it became a search for narrative and texture, not just facts. Now, an associate professor of History at Asbury University, that's still Dr. Swartz's vision of history and research, and he's eager to pass it on to students.

Asbury History majors take Swartz's capstone class — an intensive research course culminating in a paper. Many students choose to submit their resulting papers to the SEARCH competition, and nearly all of them say the research is a highlight of their academic experience.

"There's obviously great joy in reading a good story, but I've found that I experienced joy on steroids when I can create that story myself and see others profit from it," Swartz said. "This class launches students on their own research journeys. They write a 25-page paper, which is hard to do, but most of them tell me at the end, 'I've never felt so fulfilled in an academic program in my life.'"

"In researching these topics, students have owned the creation of knowledge, very often for the first time."

The class reinforces discipline, persistence and creativity as students confront questions without defined answers — and a multiplicity of routes to take in their search.

"Sometimes you have to follow rabbit trails in research that don't lead anywhere, and that's an important thing to have to overcome," Swartz said. "I watch students go through the inevitable moments and phases of utter frustration and having to retrace their steps. And it's serendipitous in some ways, because they're following this path that leads somewhere fruitful in the end. I love seeing that happen."

Students learn plenty of practical skills through the course, too — topic selection, developing an argument, assessing others' arguments, prose styling, sourcing, citations. By maturing in these skills and putting them to work on original projects, students come to the end of the semester with in-depth knowledge they've earned themselves. They also enjoy more one-on-one work with Swartz, which pushes them in their research.

"They come into my office, we talk at length, we process difficult concepts and they get a level of education in those moments that they can't get in a Gen Ed class with 40 people in it," Swartz said. "I don't even think they know

they're learning in those moments, because they're not writing down notes from lecture. But that's where some real education is happening."

Ownership is a significant part of what makes student research so fulfilling. Students take control of their learning in a subject that interests them, moving beyond "filling in the blanks" to developing stories that touch real lives and, in many cases, continue to make a real-world difference.

"In researching these topics, students have owned the creation of knowledge, very often for the first time," Swartz said. "If they do well at SEARCH, they've realized that research is much more than Wikipedia. In many cases, it means going back and touching the old documents that are found in archives."

In recent classes, several students have chosen topics with special importance for their hometowns. Ashley Dickerson '17 — a native of Morehead, Ky. — researched how reporting of Appalachian feuds perpetuated negative stereotypes about Appalachian people. Josh Bowman '19 studied his hometown of Franklin, Ind., chronicling the decimating effects of Walmart on downtown businesses, as well as the potential for revitalization. For all students, Swartz says, research can serve



Swartz reviews the family tree he started as a young boy — the spark that fueled his passion for experiencing history as narrative.

as a platform for increased engagement with material and, in fact, a transformation of the way they think about history.

“My goal is to show students how those facts are ordered, how they are put together, is itself an interpretation,” Swartz said. “If all 40 of us in my Early American History class this past fall had sat down to write a history of the Civil War, even though many of us come from remarkably close cultures and backgrounds, we would all put together 40 very different histories. That shows, in the end, that history is interpretive. It’s malleable, and it changes because of the lens we view it through.”

In addition to the appeal of interesting topics, many of Swartz’s students have an added incentive in the SEARCH Symposium. The event allows them to share what they’ve learned with the campus community — yet another joy of research.

“At the beginning of the semester, I tell them ‘You’re going to do this project for me, but three months after the class ends, you can submit it to a community much broader than this discipline,’” Swartz said.

Learning to think clearly, creatively and independently has always been important — but now, more than ever, there are pragmatic career benefits to be gleaned, as well.

“Your employer will teach you the specific tasks of what you need to do, but what they can’t manufacture is the good, raw material that come from being in a rigorous liberal arts environment for four years,” Swartz said. “That’s exactly what SEARCH can do. If you can survive in SEARCH, you have the

beginning skills to be very successful in life. And that’s just the instrumental argument. The more holistic argument is, ‘Are we trying to raise up good employees or good people?’”

For students, SEARCH is an outstanding opportunity exemplifying Asbury’s values and educational approach. Asbury’s insistence on both academic excellence and spiritual vitality necessitates a holistic vision. Throughout their four years at Asbury — enriched by close interactions with faculty and opportunities for undergraduate research — students develop discipline, skills and habits of mind that transfer to many areas of future impact.

“I just read an article recently that showed that recent college graduates will have five vocations in the first 15 years of their career,” Swartz said. “Not just five jobs; five vocations. It is very possible to overspecialize in your undergraduate education, which can actually, ironically, leave you with fewer choices in the end. What the liberal arts education can do for students is teach them to think critically, to communicate well and to think empathetically with other people, which is a skill that is critically important whether you’re a pastor, a marketer or anything else.”



Dr. David Swartz

Dr. David Swartz is an associate professor of History at Asbury. Areas of teaching and research interest include American religious history, 20th-century American culture, global religion, Anabaptism and Mennonitism, and issues of war and peace. He is the founder and faculty sponsor of Plowshares, a Central Kentucky group that promotes peace and reconciliation. Swartz’s first book, “Moral Minority: The Evangelical Left in an Age of Conservatism,” earned positive reviews from the “New York Times,” the “Journal of American History,” and “Christianity Today.” His second project, under contract with Oxford University Press, explores transnational religion.

SEARCH for Truth

Asbury’s annual SEARCH Symposium showcases student research.

An Asbury University education goes far beyond the classroom — and Asbury’s annual SEARCH Symposium is just one more example of Asbury’s commitment to excellence and impact across the disciplines.

Celebrating student research, the SEARCH Symposium includes poster presentations and creative works, a research paper competition and a keynote speaker. The event offers a forum for students to share their work with a broader audience with the additional opportunity to submit papers in the research competition for one of three cash prizes.

“The SEARCH Symposium highlights the quality academic work our students are doing under the direction of our faculty,” said Tim Campbell ’99, academic dean at Asbury. “The faculty-student scholar relationship is one of the things we’re well positioned to do and you’re seeing the fruits of that at SEARCH. This quasi-apprenticeship is personalized attention you simply do not get at some other institutions and it will serve students well as they go on to graduate school and professional careers.”

In 2017, students’ research posters covered an impressive range of ideas and disciplines. Among many others, a Math poster tackled metrics for sustainable city growth (Eric Brown ’19, Dakota Owens ’19, Deborah Burgess ’18 and Elijah Morgan ’20), a Biology poster examined the

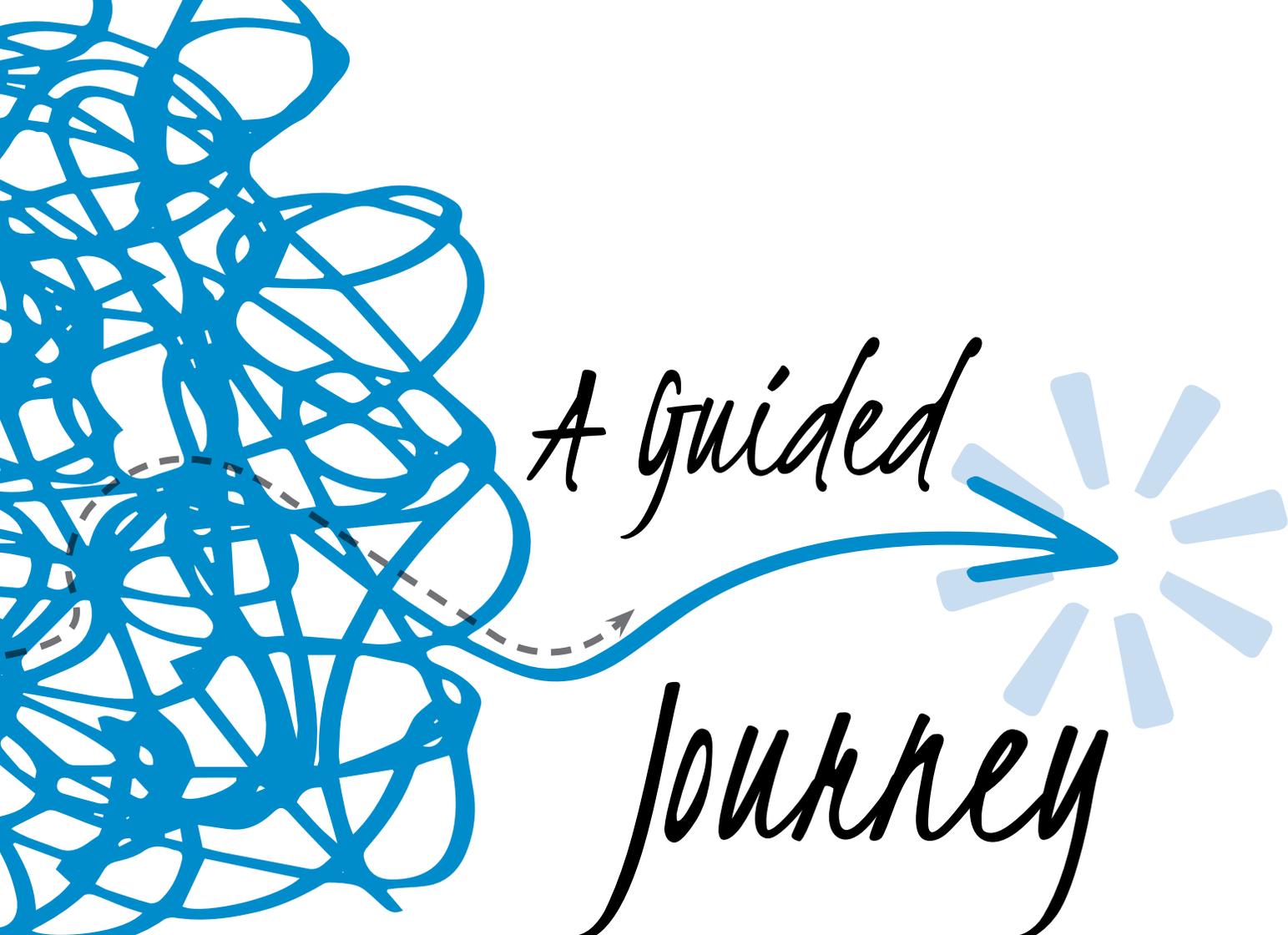
effect of transportation stress on horses (Mary Eastham ’17) and a poetry presentation focused on sex trafficking and sexual violence (Megan Gieske ’17). Thirteen students presented research in Psychology, ranging from “Right-Wing Authoritarianism and Cultural Ideologies” (Rachel Winger ’17) to “Medical Family Therapy: Immersing Family Therapy in a Healthcare Context” (Claire Webb ’17).

Ashley Dickerson ’17, who presented the findings of her 20-page research paper on feuds in Appalachia, says SEARCH is an invaluable opportunity for students to share and celebrate the excellent work being done outside the classroom.

“Having the venue to share research is crucial for students,” Dickerson said. “You feel like what you’re doing matters. If no one but professors read it, it’s not making much of an impact. The chance to let your research make a difference is one thing that makes SEARCH important for students.”

For more on SEARCH, visit asbury.edu/searchsymposium





A Guided Journey

Dr. Marcia Hurlow accompanies students in their search for discovery.

Cramped with stacks of books, manuscripts, exams and syllabi, Dr. Marcia Hurlow's office always looks busy in the best sense. Pick up a stack of papers, and chances are good you'll find a student's work, marked with Hurlow's unerring pen. A professor of English, Journalism and Creative Writing at Asbury University, Hurlow edits ruthlessly, but notes of encouragement, handwritten across the top of each page, evince her educational philosophy: encouragement and accompaniment in learning.

Hurlow sees herself as a facilitator. Yes, she polishes students' grammar and prose style, but she also equips students to become habitual learners and to reach beyond what they could have accomplished on their own. That personal touch is one reason Hurlow loves teaching at Asbury — small class

sizes and independent research opportunities like the SEARCH Symposium allow her to invest in students in a unique way.

"So many students have inklings of things they'd like to explore, and you can recognize this," Hurlow said. "You're starting with that and seeing if you can push them into their potential as scholars, thinkers, creative writers. You're their cheerleader."

Cathryn Lien '18, an English major currently working with Hurlow on a paper for SEARCH, says Hurlow has indeed been a cheerleader, helping transform her understanding of writing. In an upper-level class, Hurlow required students to turn in a 250-page portfolio of fiction and non-fiction and kept them engaged to finish the project.

"When I started the major, I looked at writing, and any artistic form, as something I only do when I'm inspired," Lien said. "Now I understand that when it's a craft, you need to do it all the time. That 250-page portfolio sounds like a lot, but the idea is that we write two pages every day and it adds up to 250 by the end of the semester. That's really what Dr. Hurlow teaches you. She's seeing that you produce every day, and making sure that you look at it as not just a passion, but a craft."

By encouraging students to work closely with faculty members on research questions, the SEARCH Symposium gives even greater scope to the personal educational dynamic Hurlow values in Asbury's classrooms. Hurlow says the "Zone of Proximal Development," a concept developed by psychologist Lev Vygotsky, helps explain why SEARCH is such a powerful learning experience.

"The 'Zone of Proximal Development' is the difference between what students can do on their own and what they can do with the help of the teacher or other helpers," Hurlow said. "What I take from this: I can help students recognize their gifts and strengths. What do the students have that is special? I can help them see what writers and researchers are doing that helps them push forward in their work. If they know their gifts, then can invest them, and if they know the research and creative work already done, they can climb on those shoulders to contribute their own work."

Frequently, Hurlow's Creative Writing students choose research topics that intersect with other disciplines. Part of accompanying students in their research means knowing how to direct them to other sources of expertise.

"Intense mentorship can't just say, 'Go explore this,'" Hurlow said. "You can walk beside them, say 'You're good at such-and-such; this is a great idea; why don't you put this together? The SEARCH event is a real gift in this way. It's a gift to the students and to the faculty.'"

Hurlow also appreciates the skills SEARCH gives students who are interested graduate school. It's an outstanding way for students to show their ability to think creatively and independently.

"So many students have inklings of things they'd like to explore...You're starting with that and seeing if you can push them into their potential as scholars, thinkers, creative writers. You're their cheerleader."

"Really honest research is a joyous thing, because you can say, 'I was wrong,' and 'I made a real discovery for myself,'" Hurlow said. "This is gold for anybody going to graduate school, to show that they have followed through on original research. Even if you don't do the competitive part of SEARCH, just doing original research, working through a mentor, can be of value to you as you apply to the next level of education."

Whether for SEARCH papers or any other project, Hurlow says accompanying students on their educational journeys is one way to fulfill the larger goal of

an Asbury education — whole-person growth. Asbury affords faculty to invest not just in students minds, but in their lives.

"Because our classes are small, our faculty are really concerned about the individual," Hurlow said. "Because they're God's children, they have remarkable worth far beyond our interaction, and we want to help them be fully who they can be. That's our job, as far as we can take it." ▸



Dr. Marcia Hurlow came to Asbury in 1983, and teaches journalism, composition, linguistics and creative writing. Her research on the writing process and the teaching of writing has focused on psycholinguistic and sociolinguistic effects. Her feature articles, poetry and fiction have appeared in more than 300 magazines. Her six books of poetry have won national competitions. She earned an M.A. in journalism, a Ph.D. in rhetoric and applied linguistics from the Ohio State University and an M.F.A. in creative writing from Vermont College.

Modeling Collaboration

Dr. Dave Coulliette '81 invites students into a collaborative vision of research.

When you are a researcher, you have to have “that moment,” says Dr. Dave Coulliette '81 — a moment when you realize your specialized expertise needs to be part of a larger conversation.

Coulliette's moment came while he was teaching at the Air Force Institute of Technology (AFIT). As a mathematician, he was unsure how his research could support the research program at AFIT, which primarily focused on engineering. Coulliette's specialty was in fluid dynamics, and he had just begun working on environmental research when a graduate student approached him with an idea he wanted to pursue. They agreed Coulliette would work on the math and the coding, and the graduate student would work on the application and modeling.

“That particular experience working with him was just amazing,” Coulliette said. “We had the best time working together. He was a believer also, so we clicked personally and spiritually. He wound up winning the best thesis for that year at AFIT. That's when the light really went off for me. I had been intimidated working with these engineers as a mathematician. And that's when I had a breakthrough — to work in a variety of applications, I don't have to be

expert, but I can contribute in a team setting and a research setting.”

Now, as a Math professor at Asbury University, Coulliette passes on the same approach to research. You don't have to know everything — in fact, you probably know less than you think — but as part of team, you can accomplish amazing things.

“When you get into Ph.D. level research, you find that no one wants to admit what they don't know,” Coulliette said. “But Ph.D.s don't know anything! I become an expert in this very tiny little thing. And so you need a willingness to sit around a table with a group of people and say, 'I really don't understand this process, but I've got some skills that might be able to help the team move forward; to do these simulations that work in conjunction with experiments that work in conjunction with theory.’”

As a professor at Asbury, Coulliette has promoted this collaborative approach through the COMAP (Consortium for Mathematics and Its Applications) contest in math modeling.

Math Modeling has become an annual tradition for math majors as they work intensively in teams to solve complex real-world problems.

“Math Modeling supports this kind of collaboration,” Coulliette said. “We had our 30th-anniversary celebration last year... I get more feedback from students telling me, ‘I learned more about real life and technical problem solving in Math Modeling than almost anywhere else. Because I learned how to play well with others, how to think creatively, how to write and speak. That has been a cornerstone for our students.’”

More recently, the SEARCH Symposium has further enriched students' opportunities for research and collaboration.

“When you go to SEARCH, even if you're a freshman or sophomore and you haven't participated, you realize there are a lot of students doing this; doing more than just the classroom work,” Coulliette said. “They're beginning to solve real problems that they're interested in. I think that opens students' eyes to think about how it's not about just passing courses and checking off boxes on the graduation list; it's actually about trying to learn skills that will help them in the type of research careers they may be interested in.”

Seeing students grow as thinkers is one of Coulliette's favorite aspects of student research. He loves to see students viewpoints shift from ‘just trying to find the answer in the back of the book’ to becoming researchers who really want to know how things work.

“We push students really hard in Math and Science here at Asbury, because we want them to get to jobs where they love what they're doing,” Coulliette said. “Our students really love solving real-life problems and contributing, in a team setting, to a solution.”

In a changing workforce, Coulliette says it's important for students to become good collaborators as well as independent thinkers.

“That's what the STEM world expects when you come into the workplace,” Coulliette said “Pretty soon you move from solving the standard problems to solving creative

“I had a breakthrough — to work in a variety of applications, I don't have to be expert, but I can contribute in a team setting and a research setting.”

problems. Today's problems are interdisciplinary and multidimensional. You want team approach. That's why I love the name of the new Collaborative Learning Center that Asbury is building through the Ignited campaign. We're not in stovepipes any more — we are trying to break down those walls and collaborate in a team setting.”

Coulliette says one of the most satisfying parts of his job in the Math Department at Asbury is seeing students make the transition from student to scholar.

“It's wonderful,” Coulliette said. “We send a lot of students to graduate school, and we've got an incredible record, with something like 15 Ph.D.s in the past 12 years, all doing really creative stuff. Our alums are doing environmental modeling; working in the Department of Defense and the intelligence community. We have an alum who is a computational astrophysicist and another who is a nuclear submarine officer. It's very exciting, and what I keep telling students is that the upfront investment is very difficult — but the Lord just opens the door for what you can do.”



Dr. David Coulliette '81 graduated from Asbury with a degree in mathematics and served for more than 20 years as a U.S. military officer, serving in both the Navy and the Air Force. He earned a Ph.D. in math from Florida State University (FSU). During his military career, David served as an educator and researcher in areas that include Navy nuclear power, geophysics, weapons systems development and environmental remediation. He retired in 2000 as an Air Force Lieutenant Colonel and joined the faculty at Asbury.



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