

PRINCIPIA PURPOSE

SUMMER '16



ENTREPRENEURSHIP *ON CAMPUS AND BEYOND*

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Making Aerospace History

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**Q+A: Get to Know a
Few Alumni Entrepreneurs**

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**The Acorn Program:
Perfect for Young Families**



JOIN US THIS FALL!

Our growing community of students and families looks forward to welcoming you. Space is still available for fall semester—as well as financial aid.

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collegeadmissions@principia.edu
618.374.5181



The mission of the *Principia Purpose* is to build community among alumni and friends by sharing news, updates, accomplishments, and insights related to Principia, its alumni, and former faculty and staff. The *Principia Purpose* is published twice a year.

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Dear Reader,

As always, this issue of the *Purpose* is brimming with news of the activities and accomplishments of current students and faculty—and especially of our alumni.

Perhaps more than usual, however, this issue underscores the *variety* of Principians' perspectives and pursuits with its sampling of alumni entrepreneurs, ranging from toffee makers to marketing consultants. It's not all about them, however. Prepare to see *yourself* in a more entrepreneurial light since, as the start of the cover story suggests, pursuing excellence and striving to improve are telltale signs that you're an entrepreneur at heart.

Speaking of heart, you'll find a lot of that in these pages as well. Professor, painter, and alum David Coughtry writes from his heart about the beauty he saw and experienced on his first-ever visit to the College campus (p. 14). And Professor Emerita Linda Bohaker shares the change of heart she experienced on the fall 2015 Japan Abroad (p. 56). Her essay encapsulates Principia's unique approach to character unfoldment—for faculty, staff, and students alike.

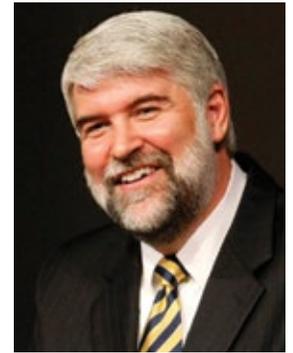
You'll also want to be sure to read about alum Kevin Pratt's work with Blue Origin, a private aerospace company started by Amazon founder Jeff Bezos (p. 16). And we're pleased to announce our expanded Acorn program for families with young children (p. 54). Our first-ever Acorn online option lets us share key aspects of Principia's educational approach with families around the world.

In addition, we introduce you to a new Upper School social studies teacher in our faculty spotlight (p. 18) and to a few members of the School and College Classes of 2016 in the graduate profiles (p. 50).

I'm confident you'll enjoy this jam-packed issue. Happy reading!



Jonathan W. Palmer (C'78)
President



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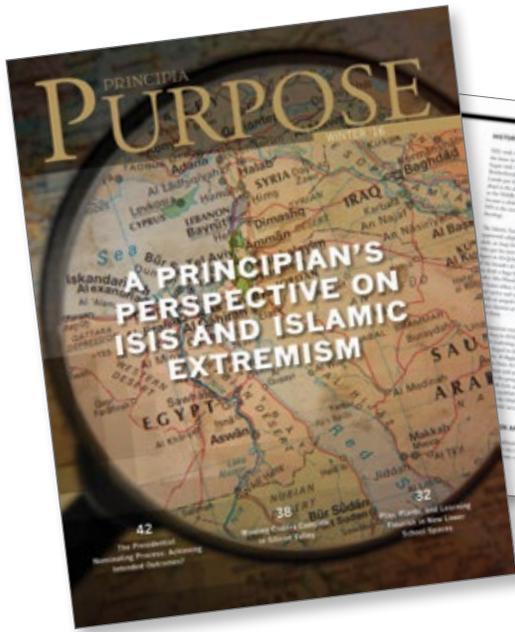


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I am feeling so much admiration and appreciation of the new issue of the *Principia Purpose*! Both layout and content achieve a high level of excellence, certainly, but the timeliness of the articles on ISIS and on the presidential nominating process is a great gift to readers. The information they provide is extremely valuable and surely inspires action, prayerful and practical. My special thanks to the authors, Ms. Janessa Wilder and Dr. Brian Roberts.

Always surrounding the main articles, the many reports of progress and outreach and campus news covered in the *Purpose* serve to rekindle a profound gratitude for all that is happening at Principia . . . and an ever-present awareness of how richly my own time there affected my life.

With thanks for the *Purpose*, and with love and lasting support for Prin,

Marilyn "Bunki" (Hocker, C'54)
Casanave

Congratulations for the stellar Winter '16 issue of the *Principia Purpose*. Best ever!

Bruce Strong (US'55, JC'57)

To submit your letters to the *Purpose*, e-mail purpose@principia.edu or write to Principia Purpose, 13201 Clayton Road, St. Louis, MO 63131.

Join the photo fun!



Winter '16 Photo Caption Contest Winner

"Last one to the Pub buys the milkshakes!"
— Liana (Jockey, C'81) Franklin



For the next contest, submit your caption for the photo above to purpose@principia.edu by October 31, 2016. The winner will be announced in the Winter '17 issue.



Service—with Smiles!

Upper School students loved being part of the first-ever Principia Global Days of Service in April. They served for more than 600 hours at 16 different locations, helping St. Louis-area organizations, including these:

- Team Activities for Special Kids
- Gateway Greening
- Community Women Against Hardship
- The Little Bit Foundation
- Helping Hand-Me-Downs

Our youngest Principians in the Acorn program pitched in, too. At a Dads' Play-In, dads and toddlers made suncatchers together. Then, a few days later, the Acorn children took their suncatchers to Peace Haven Association, a Christian Science nursing facility in St. Louis, where they gave each resident a suncatcher and sang songs for them.

Dance Concert Celebrates “Friendships in Ferguson”

A unique, six-week collaboration enabled Upper School dancers to train and work with students from Central Elementary School in nearby Ferguson, Missouri. As a culmination to the project, they performed together at the annual Spring Dance Concert before an enthusiastic audience of families from both schools. To learn more about the collaboration, see news.principia.edu/dance.



Student Mosaic Installed

A mosaic depicting Principia's Community Commitment—Strive, Conquer, Love, Give—was installed at the Middle School entrance this spring. It was made by sixth graders, with support from art teacher Louise Elmgren (C'84), for their Integrated Studies class.

Spring Production a Hit

It was all hands on deck for *42nd Street*, a glittering 1930s Broadway-style musical that involved about one-third of the Upper School student body—with a cast and stage crew of more than 30 members each. This year, along with three shows for the community, students performed a special Friday matinee for children from local schools.





Graduates Head to New Adventures

Eighty-six seniors received their diplomas on June 4. Sarah Hernholm (US'94), founder of the teen social entrepreneur program, WIT (Whatever It Takes) Inc., and of 360 Self Inc., delivered a pithy address about “packing” for the next adventure. Her encouragement to take along qualities of hard work, listening, kindness, and love—and to leave behind judgment, self-doubt, and mediocrity—resonated with students and families alike.

The class earned acceptances at many top schools, including Boston University, Northwestern University, UCLA, and, of course, Principia College. We wish them well!

Principia Musicians Garner Awards at ABC Festival

Hundreds of student musicians from Principia and three other independent schools filled our classrooms with music and song at the annual ABC Solo and Ensemble Festival in early February. Out of Upper School’s 21 instrumental and vocal entries, 17 earned a “Superior” rating, and four, an “Excellent.” Out of 17 instrumental and vocal entries from Middle School (grades 7 and 8), students obtained 13 “Superior” and four “Excellent” ratings. Four Principia ensembles won trophies, and five soloists won Outstanding Soloist Awards.

Senior Classes Host Community Events

For a unit on storytelling, the Upper School senior English classes took over two theatres at a local cinema for a “Doc Fest” in February. A packed audience viewed 15 video documentaries created by the students on issues of their choice, ranging from teen stereotypes to diversity in schools to deforestation. All the videos incorporated research and the views of experts within and beyond Principia.

Then in mid-April, the Senior Seminar class organized a leadership conference titled “Today, Not Tomorrow.” It was attended by many other Upper School students and by a group of students and teachers from MICDS (a nearby private high school). The event itself, featuring alum Lewis Howes (US’01, C’08, pictured below) as keynote speaker, was a great success, and the months of preparation leading up to it honed students’ planning, organizational, and presentation skills.



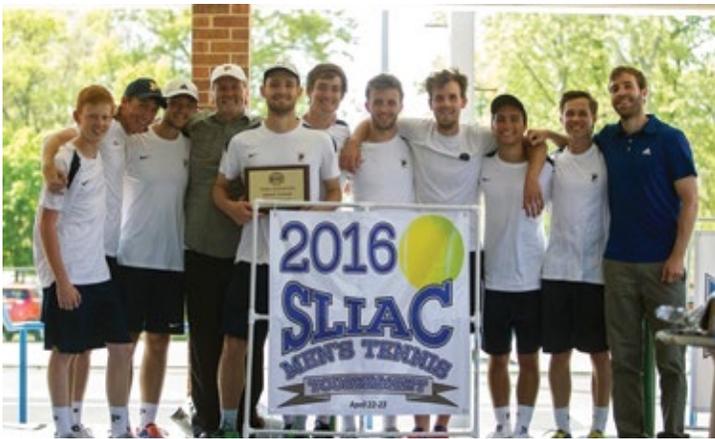


Tennis Sweeps Conference Championships

Both the men's and women's tennis teams won their St. Louis Intercollegiate Athletic Conference (SLIAC) Championship tournaments. It was the third conference win in a row for the men and the third in four years for the women.

On the women's team, freshman Paige Cooley, from Michigan, garnered both the SLIAC Women's Tennis Player of the Year and Newcomer of the Year Awards. By the end of the season, she was #14 in the Central Region NCAA Rankings and had completed three Golden Sets, i.e., winning without losing a point. Women's Head Coach Shannon Carney was named co-Coach of the Year (alongside David Dyson of Westminster College). She also earned Coach of the Year recognition in 2013 and 2014.

On the men's team, senior Joey Sander, from California, was named SLIAC Men's Tennis Player of the Year. The Panthers' team captain, Sander played in the #1 singles and doubles spots and was undefeated in conference singles play. Freshman Julian Kitchingman, from Australia, won SLIAC Newcomer of the Year recognition. He was undefeated in the #2 singles spot.

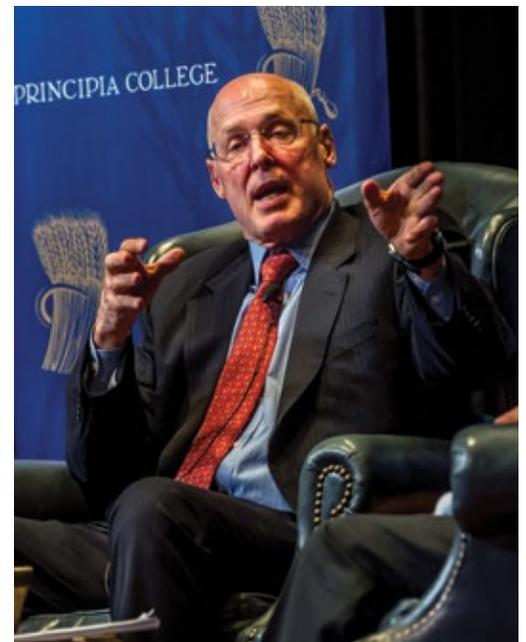


Former Treasury Secretary Henry Paulson Visits Campus

In April, the George A. Andrews Distinguished Speaker Series presented Henry M. Paulson Jr., former Secretary of the Treasury and founder and Chairman of the Paulson Institute at the University of Chicago. In a fireside-chat format—facilitated by John Yemma, former Editor and current columnist at *The Christian Science Monitor*—Paulson drew on his extensive experience in public service and the private sector to provide a dynamic analysis of issues confronting the U.S., particularly regarding its economic policy with China.

While on campus, Paulson visited political science, history, business, and economics classes, discussing topics ranging from the impact of China's one-child policy to the near-collapse of the U.S. economy during the Great Recession of 2008. And in a second campus-wide presentation, he and his wife, Wendy, shared how the study and practice of Christian Science is central to their lives, recounting healings and sharing their commitment to living its teachings.

Photo by Michael Weaver





Rugby Ranks Fifth in the Nation in Division II College 7s

In late May, Principia's rugby team, competed in the USA Rugby College 7s National Championships for the third year in a row, having won the Division II crown in 2013. Out of the 16 teams that made it to this year's Championship, Principia placed fifth, winning four of their six games. "The team demonstrated true sportsmanship, spiritual dedication, character, and teamwork throughout the tournament," said Coach Ward Patterson (C'82). "It was truly an honor to watch them achieve this excellent result."

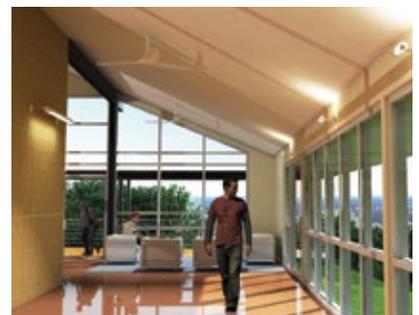
Dan Kistler Wins Teaching Award

This year's recipient of the Horace Edwin Harper Jr. and Evelyn Wright Harper Award for Teaching Excellence is Professor Dan Kistler (C'79), Chair of the Art and Art History Department. Kistler teaches courses in graphic design, web design, illustration, and photography and has led several Principia study abroad programs to Greece and Turkey. He has also designed print pieces for the College, including *Bernard Maybeck and Principia College: The Historic District*, written by former Principia professor Dr. Charles Hosmer Jr. (C'53). Prior to joining the faculty in 1995, Kistler worked for 10 years as a commercial illustrator in Detroit.



Renovation of Voney Art Studio Underway

Immediately following commencement in May, extensive renovation of Voney Art Studio began, with an expected completion date of fall 2017. While Voney will maintain its existing footprint, significant reconfiguration and renovation will create additional spacious and versatile studios, dedicated facilities and shop space for three-dimensional art, private work spaces for senior art majors, and gallery space properly equipped to effectively showcase exhibits. In addition, new classrooms and offices will allow the art history faculty to move from the School of Government into Voney, finally uniting the entire Art and Art History Department under one roof. To learn more about the project, visit www.principiagiving.org/voney.



Awards and Achievements

School



Middle School Magazine Wins High Marks

The National Council of Teachers of English recognized the first-ever issue of *Fiddlehead* for “excellence in student literary magazines.” Published in spring 2015, the magazine was created by a team of Principia Middle School writers, editors, and artists under the guidance of English teacher Holly Morris. It included work by students in grades 5–8.

Missouri State Music Awards

Senior **Emily Nack** and junior **Haydn Jones** received the highest rating—Division 1: Exemplary—at the Missouri State Solo and Ensemble Festival. Both students performed college-level solos: Haydn (violin) played Jules Massenet’s “Méditation” (from *Thaïs*) and Emily (trombone) performed “Andante et Allegro” by Guy Ropartz.

Speech and Debate Honors

Having earned 150 points, senior **Brittany Duke** became the second Principian in recent history to earn the “Excellence” rating from the National

Speech and Debate Association. One senior and two juniors were inducted at the “Honor” level (75 points), and two sophomores and two freshmen, at the “Merit” level (25 points).

Junior Wins 200 m at State

Corey Carter set records and brought home a State championship in May—winning the 200-meter dash with a time of 21.89! On his journey to gold at State, Corey set new School records in the 100 m and 200 m at Districts. He then set even faster School records at State, winning not only the 200 m championship but also a fourth-place finish in the 100 m.



Recognition in Robotics

In January, **Upper School Team Mecha Panteras** won the coveted Innovation Award at the regional FIRST Tech Competition in St. Louis. In March, competing in a three-team alliance, the **Upper School Optimus Prin** team placed fifth in the 2016 FIRST Robotics Competition regionals and won the Excellence in Engineering Award and a spot in April’s world finals.

Athletes Excel Academically

Four students from fall and winter sports earned Academic All-State recognition: softball players **Cameron Bania (US’18)**, **Katie Barthelmess (US’16)**, and **Lauren Daugherty (US’16)**, and basketball player **Anna Webster (US’16)**.

College

Mediators Compete in Greece

The College’s mediation team made a strong showing at the international mediation tournament in Greece in May. Team members (below, from left) **Namrata Roy (US’15, C’19)**, **Connor Fiddler (C’18)**, and **Elaina Cokinos (C’17)**, took home eighth, sixth, and second place trophies, respectively, for Individual Mediation. Principia also placed sixth in Team Advocacy and fourth in Team Mediation.



Photo by Dr. Jeff Steele

Students Selected to Present at Conferences

Junior **Noahy Johnson (C’17)** was the only undergraduate speaker on

Awards and Achievements

the “Ending Violence Against Women and Girls” panel in New York City in March—a parallel event to the 60th Session of the United Nations Commission on the Status of Women. Nohemy presented her research alongside a member of the Cambodian Parliament, among others.

In addition, several students’ research and creative works were chosen for presentation at conferences this spring:

- A religion major presented her senior capstone at the Midwest Regional Meeting of the American Academy of Religion, held at Ball State University.
- Three current students and a recent graduate presented original research from the India/Nepal abroad at the Central States Anthropology Society Meeting in Kansas City.
- A philosophy major presented her paper at two different undergraduate philosophy conferences, one in Oregon and one in Colorado.
- Six sociology and anthropology majors gave poster presentations at the Midwest Sociological Society Annual Meeting in Chicago.
- Five English majors read their creative works at the National Undergraduate Literature Conference at Weber State University.



Four-Time All-American Ends on a Season-Best Vault

Conrad Bollinger (US’12, C’16), entered his sixth and final NCAA D III Track and Field National Championship tied for 13th in the pole vault. He went on to clear 16’ 4”, earning eighth place and his fourth All-American title.

Alumni

Lyn Gerber (US’72, C’76)

The St. Louis Intercollegiate Athletic Conference (SLIAC) recently inducted Lyn Gerber into its Hall of Fame. Gerber was Head Coach of the Principia College women’s tennis team for over 25 years (and of the men’s team for four years), earning recognition as Coach of the Year four times. Gerber led the women to nine SLIAC Championships and eight SLIAC Tournament titles, coaching 90 SLIAC First Team All-Conference players along the way. At the national level, Gerber’s women’s teams included six All-American athletes and took first place once, third place twice, and seventh place once. Gerber has also been active in wheelchair tennis programs, including being selected as national coach for the U.S.

Women’s Wheelchair Tennis Team and as the Paralympic Women’s Wheelchair Tennis Coach in 2000–2001.

Steve Martin (C’82)

Dr. Steve Martin received the 2015 national award for Excellence in Wilderness Stewardship Research from the Chief of the U.S. Forest Service. Dr. Martin is a professor of natural resources recreation and the Chair of the Department of Environmental Science and Management at Humboldt State University in Arcata, California.

Michael LeVan (US’02, C’06)

Michael LeVan was recently inducted into the St. Louis Intercollegiate Athletic Conference (SLIAC) Hall

of Fame. A member of the Principia College men’s tennis team from 2004–2006, LeVan was undefeated in conference play. He was also selected for First Team All-Conference and named SLIAC Player of the Year three times.

Tanner Walters (US’14)

Tanner Walters has been named Editor in Chief of *The Daily Bruin*, the University of California-Los Angeles’s flagship student-run and -managed newspaper. Walters will lead the paper’s 500 employees in publishing five days a week during the school year and weekly during the summer for a readership of over 10,000. The post of Editor in Chief usually goes to a junior, but Walters was selected as a sophomore.

What's It Like to Work at Principia?

For answers to that question, we asked two new staff members to tell us about their first year at Principia.



GRETCHEN
STARR-LEBEAU

Can you share a highlight or two from your first year?

Working with the students has been fantastic, especially in my class on relations between Jews, Christians, and Muslims. Students wrestled with complex material and with how to respond metaphysically. That course in particular—but really all my courses—reassured me that coming here was a great career move.

What are you most looking forward to next year?

I'm eager to prepare some new courses—Global Christianity, World Religions, and one on the Holocaust. I'm also looking forward to getting to know our diverse student body better. They bring such a range of perspectives.

Can you share any advice for those thinking about working at Principia?

I highly recommend it. It's been a great intellectual challenge, the students are wonderful, and my colleagues are fantastic. Principia College is a special place.

Before joining the College's Religion and Philosophy Department, Dr. Gretchen Starr-LeBeau had been teaching at the University of Kentucky for just over 15 years.



PAUL
OLSEN

Can you share a highlight or two from your first year?

I love seeing the boys apply Christian Science without being prompted. For example, two young men sought me out to ask how to handle an issue with a peer. Moments like these make the work worth every late night and challenging conversation.

What are you most looking forward to next year?

I'm eager to use what I've learned about what speaks to these boys and how to motivate them so that they feel even more at home in the dorm.

Can you share any advice for those thinking about working at Principia?

Principia has potential to be the most impactful school in the world. Sometimes this means we have to think outside the box, get our hands dirty, and work on the edge of comfortable, but that is what will allow us to create the best school possible.

Before moving into the Boys' Dorm as a houseparent, Paul Olsen (C'11) designed home décor products and, during summers, served at Camp Leelanau in Northern Michigan.

Join us in serving the Cause of Christian Science!

A variety of job opportunities are available on our School and College campuses. And full-time, benefits-eligible employees receive free tuition for dependents enrolled at Principia from Preschool through College.

For current openings ranging from Admissions to IT to Development, visit www.principia.edu/jobs.

JOIN US FOR HOMECOMING AT PRINCIPIA COLLEGE

October 13–16, 2016

WEEKEND HIGHLIGHTS

- ▶ **October 13:** Ed Viesturs, 2016 George A. Andrews Distinguished Speaker
- ▶ **October 14:** Men's Soccer 50th Anniversary Kick-Off
Hall of Fame Keynote Address by Travis Thomas (C'95)
- ▶ **October 15:** Gold & Blue Athletic Hall of Fame Induction Ceremony
- ▶ **October 16:** Alumni Games



GOLD AWARD INDUCTEE

Charles Cale (C'61)

BLUE AWARD INDUCTEES

Dr. Paul Kilburn (C'50), Marcia Valentine Nelson (C'79), Matthew Elmes (C'87),
1987 Men's Tennis Team, 2001 Men's Soccer Team, Christina Speer (US'05, C'09)

www.principiaalumni.org/homecoming

Principia College's Center for Sustainability Is Having an Impact

by Armin Sethna



Established in 2011, the Center for Sustainability serves as a vibrant nexus for the exploration, study, and practice of sustainability across the campus.

From aquaponics and beekeeping to green purchasing guidelines, native gardens, energy modeling, and recycling, the Center supports a wide range of student activities that infuse sustainable concepts into campus life.

It has helped the College Dining Room—which serves roughly 1,000 meals a day—become a zero-waste facility. (This means that every last food scrap is composted and then turned into reusable, revitalizing soil for further food production.)

It also helped Principia attain Conference Champion status in the College and University Green Power Challenge because of our use of 100 percent green power. (That means Principia purchases energy generated exclusively from renewable sources such as wind or solar.)

Most important, the Center houses the academic minor in sustainability—a popular interdisciplinary program that encourages students to think from multiple perspectives. The Center also enriches the College's academic programs through a Change Agent speaker series, a Fellows program for faculty and staff, and internship, professional certification, and study abroad programs for students.

Supported largely by donor resources in its journey from idea to implementation, the Center for Sustainability is having a far-reaching impact on Principia students, faculty, staff, and community partners.

All donations make a difference in students' lives. Gifts of every size combine to make ambitious, long-term initiatives possible, such as the Center for Sustainability and the Institute for the Metaphysics of Physics. They also support everyday essentials such as printers, gasoline, heating, lighting . . .

To provide Principia students with everything from light bulbs to light-bulb moments, make a donation at www.principiagiving.org/donate. 



Get to know God in new ways this summer.

Join in the fun at a camp for Christian Scientists.



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My Principia Story

Principia is . . .

by David Coughtry (C'77)

Once upon a time there was a young man—actually a boy, for he would not really begin to feel like a man for at least another decade or two—who, out of the blue, went to visit a friend attending a college called Principia. For a long time, this boy had had a sneaking suspicion about this institution, disliking the unfriendly encounter he'd had in his hometown years before with an admissions recruiter who had led him to feel he was not up to the caliber Principia was looking for, financially if not socially.

Yet, the boy eventually visited his friend at the questionable college. En route, he was blown away by the earth's sudden shift—from the flat, flat and endless, Illinois cornfields to a great river flowing along a set of unexpected limestone cliffs. Arriving at the final destination entailed briefly winding through a miniature stone village nestled in a gap between cliffs, followed by a steady climb through woods to a high point in the landscape. There was a charmingly odd little building at the entrance to the school, and flanking this was gathered a class of students, surrounding and more or less concealing a teacher (whom the boy would later come to know as Mr. Green). There, among the group, was the friend the boy had come to see. Upon walking over and looking into the huddle of students, he joined them, watching and listening to the lessons being shared, and it all seemed to him absolutely inspiring and wonderful.

Seeing the campus unveiled during the rest of the visit was dreamlike and enchanting, something almost too good to be true. The strong and positive encouragement by his friend to join this community, enshrined within an atmosphere so stunningly awesome and beautiful, was almost painful for the boy to consider, fearing the probability that this place might not have anything to do with his future. As he lay on a bench at a lookout near a small, mounted telescope, his thought was in dust-devil mode as he wrestled with so many questions—the tuition, in partic-

ular, seeming like an impossible hurdle to clear. A better sense of foresight and openness to direction was in order.

It's hardly surprising, perhaps, that, only a few months later, the boy found himself living on the Principia College campus, which totally changed his life course—altering and cultivating transformations in a way only God would ordain. After walking the stage at commencement two years later, he went out into the world and immediately started his practice as an artist, contrary to worldly logic or practical sense.

Coda: This was written shortly after the fall 2015 Joint Faculty/Staff Meeting. The boy in the story is now a fully grown man, as well as a long-time faculty member in the Principia College Art and Art History Department. Teaching an art discipline has afforded him the potential to assure and prepare students in a way similar to the admonition he took to heart during his early studio training: *“If you are willing to be excellent, there will be a place for you in the world.”* This young artist went out after graduation to work toward successfully expressing excellence. Later, the art of teaching would become for him an opportunity to share with students the very real and beautiful idea that is Principia.

That afternoon at the Joint Faculty/Staff Meeting, looking out across the conference area with afternoon light streaming in, I could only think how beautiful the sense of place here has remained. The physical beauty at Principia has always been compelling, but what is undeniably persuasive is the deep care and love manifested by the talented and humbly loyal people working here—giving their all in assuring Principia's role as an effectual support for a great Cause—a manifestation that is most beautiful.

Everyone at the meeting was asked to submit a card, filling in this blank: “Principia is _____.” At least one of the cards read, “Principia is beautiful.” ■



Bluff Grass, 2015
David Coughtry



Kevin Pratt in front of the propulsion module during recovery operations after Blue Origin's M3 flight (first booster re-flight) in January 2016

Photo by Dean Taylor

OFF TO A ROARING START Making Aerospace History

by Heather Shotwell

Kevin Pratt (US'00, C'04) helped aerospace development company Blue Origin make history recently. After the company launched a rocket at its Texas test site in November 2015, both the capsule and propulsion module landed back on earth—right side up. Tests two and three were equally successful in January and April of this year, inspiring Pratt and colleagues to press onward in their effort to offer private individuals access to space. An avionics engineer at Blue Origin, Pratt oversees the computing and electrical systems, including ground support equipment such as power supplies and computer networks. That's no easy task when working with very cold (-423°F) cryogenic liquid

hydrogen and liquid oxygen and a rocket engine—with 110,000 lbf of thrust (lbf means pounds of force) and 5,000°F exhaust—that goes Mach 3+ on its way up to 333,000 ft. (63 miles). The third launch went even higher, almost 65 miles!

While at Principia College, Pratt earned a BS in computer science and took most of the courses offered in physics and chemistry. “This solid foundation in scientific areas, along with studying the liberal arts, prepared me,” Pratt says. “I gained valuable communication skills and a wide view of the world through subjects like ceramics, German, and graphic

design. Ceramics taught me many material science lessons, and I've found that making legible, understandable engineering drawings to communicate with colleagues is often a graphic design problem." Along with other students who shared an interest in space, Pratt convinced physics professor Dr. Paul Robinson (C'63) to teach a class in rocket science. There, Pratt learned about rocket engines, combustible materials, orbital mechanics, and other topics that have proved vital to his work.

Principia Solar Car—Excellent Hands-On Learning

Pratt raced with the solar car team all four years at the College, working on the mechanical and electrical aspects of Ra V. He served as team captain for three years, helping the team come in fourth at the 2003 American Solar Challenge and sixth at the 2003 World Solar Challenge. In 2004, Pratt traveled with the team to participate in Phaethon 2004, part of the Cultural Olympiad for the Summer Olympic Games in Athens, Greece, where Principia took third place. "Solar car provided numerous opportunities for hands-on learning and developing problem-solving skills," Pratt recalls. "We reassembled the battery pack after it was damaged during shipping to Australia in 2003, for example."

After graduating from Principia, Pratt earned an MS in computer science at the University of South Florida. His graduate study included working on disaster response robotics—testing small, unmanned aerial vehicles for urban search and rescue applications. From there he interned at Blue Origin and was subsequently hired full time. "Space travel was always an interest, even from childhood," Pratt says. "My dad was an Air Force pilot, and I was part of the first class of kids in the STARBASE program, attended a shuttle launch as a child, and earned my pilot's license while attending Principia College."

Headquartered in Kent, Washington, Blue Origin was established in 2000 by Amazon founder Jeff Bezos. Key to the company's business operations is the recovery and reuse of rocket vehicles in preparation for private space travel, academic research support, and corporate technology development—and Pratt's role is integral to that recovery effort. "If we're going to reuse a vehicle," Pratt explains, "the ground systems need to be even more robust and reliable so that we can turn operations around quickly and efficiently."



The New Shepard booster that flew to space and landed vertically in November 2015—and then flew and landed again. Photo courtesy of Blue Origin.

Looking ahead, Pratt anticipates additional microgravity experiments aboard Blue Origin vehicles, similar to those conducted during the April 2016 flight. In addition, new orbital vehicles and engines that are five times as powerful as the one currently in use are being developed. And as early as 2017, the company hopes to begin flights with human beings on board, first test engineers and then ordinary people.

Nominate a Young Alum

Our Off to a Roaring Start column features young alumni who graduated in the last 20 years and have had a significant impact on and/or demonstrated significant success in their professions or communities. Share the names of alumni you know who are "off to a roaring start" at www.principiaalumni.org/youngalum.

MEET DON STERRETT

Avid Learner and Enthusiastic Teacher

Head of the Upper School Social Studies Department, Don Sterrett (US'95) teaches U.S. history and serves as an instructional coach for teachers across all levels of the School. This past year, he introduced Presentation Nights at the Upper School, some of which featured over 100 students from more than 15 different classes presenting their work to over 100 parents, peers, and community members. As you'll discover, the one thing Don enjoys as much as teaching is learning!

Q. What led you to teaching?

A. I had always been drawn to working with kids at camps and in outdoor education. After graduating from Middlebury College, I went to Guatemala to study Spanish and figure out my next steps. While there, through prayer and my interaction with many teachers, it hit me that teaching would be a worthwhile profession—and that I would enjoy it. I returned home to Washington, DC, began substitute teaching, and enrolled in a master's program. Within 18 months, I had my first job as a full-time teacher.

Q. What do you love about teaching?

A. I love to ask questions, which I get to do all the time as a teacher. And I love getting others to ask questions, learn how to find information, analyze arguments, and present their information in a cohesive manner. I also appreciate interacting and working with young people at an interesting stage of their lives—especially helping them develop and improve skills and habits that will be important and useful later in life.

Q. What do you find most challenging about teaching?

A. The needs of the world are constantly changing—as are the skills and technologies to address them. Approaches that

worked last year may not work now. Fortunately, I enjoy the challenge of constantly having to learn and adapt and work with students and colleagues in new ways. That's what makes teaching exciting!

Q. Can you share a character education moment you've had at Principia that particularly stands out to you?

A. With our Presentation Nights, I've seen a number of students really step up. Before the events, a lot of them were nervous or told me they did not want to participate. But then I saw them come through and do a really good job, often using creativity—putting together new products and using new technologies (such as 3D printing and video graphics)—to help them overcome their fears about making presentations.

Q. Can you tell us about a recent professional development activity you participated in?

A. A colleague and I attended the annual conference of the National Council for the Social Studies, where we learned about effective ways to create and assess evidence-based dialogue and to better incorporate digital technology and social media into the classroom. We were then able to share what we'd learned with our colleagues here.

Another very valuable session was the three-day training on campus about how to strengthen critical thinking among students and better use formative assessment.

Q. What work would you pursue if you weren't a teacher?

A. I would like to join the Foreign Service—putting my love of languages to use with a focus on political and economic issues in U.S. relations with other countries.



Q. What would people be surprised to learn about you?

A. I enjoy the music of Gladys Knight—but I enjoy the Pips (her backup singers) even more! Also, I have a pet guinea pig. And thanks to students and staff here at Principia, I'm learning some Bosnian and some Swahili!

Q. If you had a day off and weren't allowed to use it to catch up on work, what would you do?

A. I would go see a movie, go to a baseball game, and go swimming—in the Pacific Ocean, preferably!

Q. If you could give students only one piece of advice, what would it be?

A. Be open to whatever you can get and give in a situation, and be present, not passive, in *every* situation. In too many instances, we determine whether we're going to enjoy something based on those we're with or whether we think the activity will meet our needs. So we sometimes just get through things or wait for them to end. Instead, each time, ask yourself: How can I get better or stronger by giving and participating in this particular activity?

Principia professors and entrepreneurs, from left: Dr. Karl Hellman, Colleen Vucinovich, and Dale Matheny



ENTREPRENEURSHIP ON CAMPUS AND BEYOND

A champion for change. A visionary. One who disrupts and transforms. A game changer. A Christian Scientist.

That's not how you'll find *entrepreneur* defined in the dictionary, but that's what emerges when the *Purpose* sits down with three Principia College professors who are also entrepreneurs.

Dale Matheny, of the Business Administration Department, offers this succinct summation of the term: "An entrepreneur is a thought pioneer who uses faith and conviction in his ideas to overcome perceived risk and fear. In that sense Christian Scientists are all spiritual entrepreneurs."

For Matheny, being a "spiritual entrepreneur" has a literal as well as metaphysical meaning. Developing electronic Christian Science books was his first entrepreneurial adventure—an idea that led, ultimately, to the first version of *Concord* (an electronic concordance to the Bible and Mary Baker Eddy's published writings). *Concord* transformed the way many Christian Scientists interact with "the books." In fact, those who use *Concord* on a daily basis likely wonder how they ever lived without it. That level of impact is a telltale sign for Matheny, who maintains that "true entrepreneurs transform the environment they're working in and change the game for everybody."

Building on that point, Dr. Karl Hellman, of the Economics Department, describes innovation as "the lifeblood of the entrepreneur," paraphrasing former management expert Peter Drucker. That may sound as though the thrill of newness would make entrepreneurs

inveterate risk-takers, but Hellman disputes that view. "Once they've found an opportunity," Hellman explains, "entrepreneurs do everything possible to eliminate risk."

At this point, Colleen Vucinovich, also in the Business Administration Department, interjects a reality check, noting that entrepreneurs often face high-risk stakes whether they're seeking them or not. "You have to have the stomach for it!" she says, speaking from more than a decade of experience running her own company.

Briefly, the risks all three faced in their individual entrepreneurial endeavors seem to flash before their eyes. Then someone cracks a joke, and memories of risk melt into laughter. So the conversation goes for at least an hour, ideas lapping one another among colleagues who clearly enjoy working together.

All three professors took very different paths to Principia (IT, consulting, cosmetics), but they were all drawn to teach at the College for the same reason—to make a difference in the lives of Christian Science students.

In the pages that follow, each professor shares a unique perspective on entrepreneurship. You'll also get a peek at College students' engagement with the topic.



The Spirit of Entrepreneurship

by Dale Matheny

We've all had our entrepreneurial moments. One of my most important ones happened in 1986. It was 1:00 a.m. in Boston, and I was still at my desk in the Administration Building of the Christian Science Church Center. I was so excited. The result of the first multi-word search query from *Science and Health—heal and God*—was about to display on my computer. (There would be no Google for another 12 years.) The query was successful, but it would

went on to envision and develop other new products for several tech companies, from startups to billion-dollar firms.

Your Inner Entrepreneur

The words *innovation* and *entrepreneurship* often evoke images of unusual adventure and new ideas that change our lives. Companies such as Apple or Google come to mind. But the spirit of entrepreneurship is a life quality that

necessary skill in an increasingly global and accelerated world. The more we look, the more we find that we all are entrepreneurs—we all have opportunities to generate and nurture new ideas or advocate for better ways of doing things.

Entrepreneurial Attitudes and Activities at the College

So, what is this entrepreneurial spirit? Principia College students use the words *passion, creative, driven, innovative, and persistent* to describe it (see the word cloud). And many of them are already honing the five traits that, according to Matt Ehrlichman in *Inc.* magazine (Jan. 9, 2015), characterize people who express an entrepreneurial spirit:

1. They are in tune with their passion.
2. They are always questioning how it can be done better.
3. They are optimistic about all possibilities.
4. They take calculated risks.
5. Above all, they execute.

Not only do Principia students approach class projects, clubs, and artistic opportunities with an entrepreneurial spirit, but they do so intentionally. In an on-campus survey this past spring, students scored the

“Entrepreneurial spirit can be a way of creatively adapting to change and enthusiastically seeking to improve.”

take a year and a half of hard work by many individuals to build and distribute the first *Concord* product through Christian Science Reading Rooms.

That moment was golden—I was hooked as an entrepreneur. After seven years of working for The Mother Church and several more versions of *Concord*, I left to earn my MBA and

everyone can develop—one that has more to do with a can-do attitude than the number of businesses you start.

Entrepreneurial spirit can be a way of creatively adapting to change and enthusiastically seeking to improve. In this light, the attitude of entrepreneurship is a passionate pursuit of excellence and purposeful progress, a



Small Businesses with Life-Changing Stakes

by Colleen Vucinovich

Whether or not one qualifies as an entrepreneur depends on the context.

In sub-Saharan Africa, someone who starts a small business or microenterprise employing herself and three other people is considered an entrepreneur. By North American or European Union standards, however, she wouldn't qualify since she probably hasn't cre-

ated a novel solution to an existing problem—a key differentiator that significantly raises the entrepreneurial bar in affluent Western nations.

Freedoms and Risks

In sub-Saharan Africa, the smallest of these microenterprises are often informal. That is, they are not registered sole proprietors, so they have no tax obligations and are not subject to regulation.

often don't exist. Usually, each person employed in a microenterprise supports at least one family and often an extended family. When these little businesses fail, the local community is devastated.

What's more, the little guys are left to fend for themselves, without funding or assistance. That was my experience even in Johannesburg, the third-largest city in South Africa, where I developed and marketed makeup products for dark-skinned women, a previously unserved market segment. Having to fend for oneself is an even starker reality in smaller, less well-resourced areas. Not until only the smallest amount of risk remains do financiers show interest in investing. This is the age-old problem with startups: they need capital in the early stages—when the risk is great and supporters are scarce. Unable to find funding, most microenterprise owners use life savings, pensions, or loans from family members to grow their venture. This ratchets up the pressure to succeed, since failure would have far-reaching effects on the family.

Another challenge for many startups is a lack of business experience. All too often, potential entrepreneurs go into business equipped with technical expertise but little, if any, business or

“... a business can be a game changer without being novel.”

ated a novel solution to an existing problem—a key differentiator that significantly raises the entrepreneurial bar in affluent Western nations.

But a business can be a game changer without being novel. Indeed, microenterprises and small businesses (employing from three to 30 people) are life-changing engines of growth in emerging economies. If enough small businesses start up and thrive, unemployment will be reduced and per capita income will increase. In short,

Of course, the knock-on effect of this is that they have no protection either.

In that context, the concept of risk means something very different than for large, well-established companies. The larger the organization, the greater the volumes of resources and expenditures—and the higher the cost of a risk that goes awry. A microenterprise might seem, then, to have less risk because the numbers are orders of magnitude smaller. But the opportunities for mitigating risk in a microenterprise



Beauty fundi products—one of the brands from Colleen Vucinovich’s former cosmetic company, based in South Africa

management experience. While the “big idea” comes from this expertise, that, in itself, is not sufficient to commercialize the innovation and create a thriving company. Generally, one is either the “technician” who works *in* the business or the “administrator” who works *on* the business. Finding both in the same unseasoned entrepreneur is rare. Recognizing this, investors often shy away from solo entrepreneurs who have neither business experience themselves nor a partner with that experience. This is a very delicate balance in a founder-led enterprise and the issue I found most challenging in my own company.

Learning—and Teaching—from Experience

To address this problem, I enrolled in an MBA program in the UK, part time at first, while still running my business, and then full time. Meanwhile, a behemoth multinational brand began

servicing “my” niche market. By then, my interest in the cosmetics industry was flagging and my engagement with academia increasing, so instead of returning to South Africa to take on Goliath, I remained in the UK and completed a second master’s degree.

Now, at Principia, I’m able to bring the material I teach to life with examples from my business of what worked and

what didn’t, of challenges I faced and how I overcame them. I want students to understand that being an entrepreneur isn’t a theoretical pursuit. It’s a matter of hands-on problem-solving every day.

After working for a decade as a makeup artist in the film industry, **Colleen Vucinovich** served as training manager for a direct-selling cosmetic company and as brand and trade marketing manager for an international cosmetic contract manufacturer. Building on that experience, she founded and directed her own cosmetic company for over a decade, including overseeing portfolios of up to R15 million (South African rand) annually. After relocating to the UK, she earned an MBA and an MS in strategic planning from the Edinburgh Business School at Heriot-Watt University. She began teaching at the College in 2015.



How To Be More Entrepreneurial

by Dr. Karl Hellman

We all delight in the legend of the entrepreneurial hero—the genius who, sitting in a dorm room somewhere, invents the new product that transforms the world. And the world has indeed produced wonderful entrepreneur heroes like Facebook’s Mark Zuckerberg and Google’s Larry Page and Sergey Brin.

But happily for the rest of us, entrepreneurial work is not typically flights of genius. It’s just work—“organized,

to be entrepreneurial as part of existing organizations, thanks to the availability of capital, people, brands, and other resources.

Turning Anomalies into Opportunities

At the heart of entrepreneurial work, according to Drucker, is the systematic search for anomalies—unsolved customer problems, incongruities, and surprises—that one then turns into

goes up and revenue goes up, profits ought to go up. But what if increased revenue results in lower profits? This scenario is not at all uncommon. It’s a symptom that something important has changed but has either not been properly acted upon or not yet been discovered. In short, some part of conventional wisdom no longer holds. What should an entrepreneur do? Identify the change, and convert it into an opportunity.

Spotting anomalies demands detailed, down-to-earth analysis. Then creativity and innovation come into play to turn the anomaly into an opportunity—one that’s more likely to succeed because it’s grounded in reality.

Two Keys to Success

As any entrepreneur can tell you, failure is a given. The key is to learn from each failure. This is just as true for organizations as individuals. Consumer goods marketing giant Procter & Gamble has developed one of the world’s most efficient and effective new product development machines, the genius of which is learning. They don’t get upset by failures. They don’t obsess on success. They focus their very talented, very skilled people on learning, because they know that, if they understand what

“Entrepreneurship can be an ongoing part of your day, whether you work for a large organization or on your own.”

systematic, rational work,” as Peter Drucker put it in his 1985 classic *Innovation and Entrepreneurship*.

Entrepreneurship can be an ongoing part of your day, whether you work for a large organization or on your own. In fact, you may find yourself better able

business opportunities by solving the inherent problem causing them and marketing the solution.

Take incongruities, for example. They are the differences between reality as it actually is and reality as you think it ought to be. For instance, if demand



Dr. Hellman (seated) working with managers of a leading financial services firm to develop strategies for launching their innovations
Photo by Catherine Trevor-Roberts

went wrong and correct it in the next round of experimentation, they will, step by step, achieve success.

Another key to successful entrepreneurship is self-reflection. In his book, *Immunity to Change*, Dr. Robert Kegan explains that we often don't accomplish our goals because we have one foot on the gas and one on the brake. We may genuinely want to be better at entrepreneurial work, but deep down, where our decisions and actions take form, we want something else even more. In most cases, we won't want to completely abandon the competing values, but we'll need to systematically examine and make the trade-offs that preserve the best of both sides.

With that balance readjusted, we're ready to roll up our sleeves and dig into the messy, surprising, exciting work of being an entrepreneur—whether on our own or in someone else's company. Look around you, find a promising anomaly, and begin exploring how to turn it into an opportunity.

Following early career experiences as an accountant, **Dr. Karl Hellman** earned an MS from Northwestern's Kellogg School of Management, which launched his career in marketing. He went on to start two consulting firms, The Learning Corporation in 1989 and Resultrek, a global marketing and sales consulting, training, and coaching firm, in 1998. He continues to serve as President of Resultrek. The author of *The Customer Learning Curve: Creating Profits from Marketing Chaos*, Hellman holds a DBA in marketing from Georgia State University. He began teaching at the College in 2015.

Innovation. Invention. Entrepreneurship. Intrapreneurship.

by Trudy Palmer



Students discuss innovation in a PAC breakout session

Focused on innovation, the College's 67th student-run Public Affairs Conference (PAC) took place the last weekend in March. In his inspiring keynote,* Dr. David Gutelius (C'93), a serial entrepreneur, challenged everyone in a packed Wanamaker Auditorium audience to be innovators. "Innovation is not something you do; it's who you are," he said. "It's how you're built."

Gutelius readily, even a bit gleefully, acknowledged that successful innovation often disrupts traditional practices and accepted norms. Yet he was anything but cavalier about that disruption. Noting that not all innovation is good, he offered the new financial instruments that led to the Great Recession of 2008 as an example of wrong-headed innovation with harmful results.

Building on that caution, Gutelius emphasized innovating in order to solve "worthy problems." Essential to this, he argued, is empathy, which helps one reframe problems or see them from other angles and perspectives. Persisting despite failure is also essential, he pointed out, emphasizing the need to learn from those failures.

Gutelius also shared impressive examples of problem-solving through innovation. In particular, he described using machine learning to "out-innovate" the opposition in its use of IEDs (improvised explosive devices) in Iraq. Among his prized possessions, in fact, is a letter from an Army General thanking him and his team for saving lives through the innovative solutions they devised to defend against IEDs.

Underscoring every individual's natural capacity and willingness to help, Gutelius concluded, "We were made to solve big problems—and we're needed to do that."

Like Gutelius, Mark Shaw, another PAC speaker, urged finding innovative solutions to worthy problems. That's what he did in developing technology used by the U.S. Department of Energy to dispose of radioactive and other hazardous waste in leak-free containers.

Describing annoyance as “the mother of invention,” he urged, “Don’t complain. Do something about it!” In other words, invent a solution. Then he warned against letting the solution languish in the idea stage. Either bring it to market yourself, he said, or find a partner to help you do that. In short, “Think like an inventor, act like an entrepreneur,” he exhorted.

A third speaker, Dr. Carole Basile, Dean of the College of Education at the University of Missouri-St. Louis, suggested ways to think and act innovatively without quitting one’s job and founding a startup. Introducing listeners to the term *intrapreneurship*, she shared the transformative possibilities of “What if?” and “Yes, and . . .” thinking within the confines (and constraints) of wherever one is employed. Basile noted two of the same elements essential to innovation that Gutelius and Shaw identified: a variety of perspectives (including non-expert ones) and a willingness to let go of traditions (even successful ones). She noted, however, that innovation is more likely to thrive where the workplace culture prizes creative input.

From these glimpses into this year’s PAC, it’s clear that innovative problem solving—i.e., entrepreneurship at its best—is not the purview of the talented few but a universal call to action.

*Watch the PAC keynote at www.principia.edu/PACkeynote.

Professionals With a Purpose

by Dale Matheny

Given Millennials’ strong interest in using their careers to improve the world, many colleges are expanding their focus on social entrepreneurship—the application of innovative business models to address social problems. Principia is one such college, much to the students’ delight (and success). In the 2014–2015 school year, Matiss Klava (C’17, pictured here) and Ashley Douglass (C’15) won the IdeaBounce business pitch contest at the Skandalaris Center for Interdisciplinary Innovation and Entrepreneurship at Washington University in St. Louis. Their winning idea was a plan to help restaurants operate more sustainably by using organic biogas to convert food waste into fuel.

This past semester, the Global Studies II class explored how to solve the complex issues posed by ISIS using a multidisciplinary approach involving cultural anthropology, mass communication, and social entrepreneurship. For the four weeks focused on social entrepreneurship, we considered how local, entrepreneurial empowerment of individuals, especially women, can re-establish economic opportunity even in conflict or post-conflict regions.

Students developed models for financially sustainable businesses that



address a social issue related to ISIS. Their proposals included creating a French group for at-risk youth that would counter ISIS’s attraction and starting a Tunisian organization that would trade education for local tapestries so that women could keep their children in school and away from ISIS.

As Adam Poswolsky notes in *Fast Company*, Millennials in the workforce show a growing desire to work “with purpose” and for innovative companies that have a higher social purpose (“What Millennial Employees Really Want” June 4, 2015). Principia graduates will find themselves at home in such purpose-driven workplaces.

Connecting Youth to Improve Europe

by Trudy Palmer

German social entrepreneurs Vincent-Immanuel Herr (C'13) and Martin Speer are working to create a more just and egalitarian Europe. That's a tall order, but they're enlisting help—youth from across the continent.

Herr and Speer met at Principia College during the 2008–2009 school year. Speer attended only for that year, but it

Freie Universität Berlin. All the while, however, they stayed in contact—close, productive contact.

From Dorm Rooms to Public Forums

What started as late-night conversations at the College moved into the public arena in 2013, when both men began sharing their vision for Europe

they see it, this would help youth overcome stereotypes, develop intercultural friendships, and feel more invested in the European Union.

No doubt, this proposal grows out of Herr and Speer's experience traveling, in 2014, to 14 European countries in six weeks, talking with youth across the continent. Describing the trip as a "life-changing adventure," the men found that, despite differences in nationality, the youth they met—mostly members of Gen Y, born between 1980 and 1998—were "connected by a sense of a shared future." Looming large over their view of the future, however, was fear. "What truly unites our generation in Europe is the fear of not being able to make a difference[,] of not being heard, and of not having the means to be part of something bigger," Herr and Speer explain in the epilogue to *Who If Not Us?—A Four-Step Guide to Empower Europe and Our Generation*, published in 2015.

Conquering Fear through Connection

Herr and Speer are dedicating themselves to addressing this fear. Along with two friends, they founded the Institute of Europe—"a next generation Think-And-Do Tank" based in >>

"Prin is a good place to meet like-minded people and find others who complement your experience."

—Martin Speer

gave the men plenty of time to discover shared interests as well as common concerns about the state of European society. Speer went on to complete his undergraduate degree in economics and business at the Berlin School of Economics and Law. And after graduating from the College, Herr earned a master's degree in North American studies, history, and political science at

in national and international newspapers, conference presentations, and television appearances. Among their top priorities are gender equality, marriage equality, youth empowerment, and youth mobility. Regarding the latter, Herr and Speer have proposed that, upon turning 18, every European citizen receive a free, one-month Inter-rail pass to be used within six years. As

Vincent Herr (left) and Martin Speer at the train station in Irun, Spain, during their 2014 European trip. Photo courtesy of Herr and Speer.





Berlin.

The institute's mission is to “unfold Europe's potential by connecting, empowering, and inspiring its people.” As idealistic as that sounds, Herr and Speer refuse to consider it unrealistic. They are, Herr says, “pragmatic idealists.” Indeed, founding the Institute of Europe is a pragmatic move. “Structure makes it easier to involve others,” they note. Also, having a legal identity will facilitate fundraising.

The institute's emphasis on “connecting” has been central to Herr and Speer's efforts all along. On the one hand, they work to connect European youth from across the continent in order to harness the power of unity. One fruit of this effort is The Young European Collective, a multinational group of youth who, working collaboratively, wrote *Who If Not Us?*

On the other hand, Herr and Speer work to connect the world of ideas—especially young people's ideas—with the world of influence. Toward that end, they held a two-day workshop in Berlin in early May that brought together 12 Gen Yers from across Europe (one of whom is a Syrian refugee) with five “agents of influence”—two members of the European Parliament, the editor of a major news magazine, a political science professor, and a representative of the German Foreign Ministry. The workshop, titled “Building Bridges: Overcoming Distances in the Age of Refugee and Migration Flows in Europe,” resulted in two project proposals that were presented to the public.

Grouping Up

For now, Herr and Speer are focusing their efforts in and on Europe, though they're convinced the trends in their

generation go beyond that continent's borders. The one place they've introduced their work in the U.S. is Principia College. Both men visited the campus in April, giving a presentation in Wanamaker and speaking with students in five different classes. Eager to give back to Principia, their goal was to inspire students to magnify their impact by “grouping up” as change-makers.

Herr and Speer are adamant about the importance of working with others (i.e., grouping up). And, as Speer points out, “Prin is a good place to meet like-minded people and find others who complement your experience.” That certainly proved true for these young men, who note on their website, “Both of us could not do our work alone, but together we complement each other and our abilities, thus enabling a wide variety of projects to be manifested.”

That type of complementarity—writ large and put to work building a better Europe—is the heart of Herr and Speer's mission and their *modus operandi*.

Budding Entrepreneurs Invent, Market, and Sell with Success

by Armin Sethna

Innovative products, business budgets, break-even points, and CVs aren't exactly typical content in a middle school curriculum. This past winter, however, our seventh-grade students and teachers not only explored but directly experienced these concepts. And in doing so, they took learning beyond "business as usual."

By the end of the Business Game unit in their Integrated Studies class, the 27 students were successfully selling unique, handmade products to peers and parents at two active pop-up markets in the Middle and Upper Schools. Items ranged from scented soaps and stress balls to elastic-band "Saturns" (to hold pens, pencils, and other student paraphernalia to a water bottle) and "survival bracelets" (made from paracord). As the marketing manager for Interprin explained, "You can easily unravel the bracelet to use the paracord in *any* emergency. That's what's so cool about it!"

Before they went to market, however, the students had to work through challenging and practical content and communication issues—starting with the understanding of what constitutes a business, key roles, and the qualities and skills needed to fill those roles. The "consulting firm" of Dry & Sheets



(i.e., teachers Sam Dry and Dan Sheets (US'81, C'85)) accepted applications—which had to include a concise cover letter as well as a CV. Once chosen, the CEOs reviewed résumés from the other students and chose marketing

managers and product designers. "Instead of just choosing friends, the students all learned the importance of matching skills and experience to the job at hand," Dry says.

Once the companies were fully "staffed," they worked on identifying products. Some students had a hobby or skill that could be put to use right away, but the majority—like all digitally savvy youth today—went directly to the Internet for ideas. YouTube was very popular for "how to" demonstrations and acquiring or improving manufacturing skills. After conducting "market research" by surveying peers, the companies went into production mode.

By the end of the two market sessions, some of the "companies" had grossed more than \$75 in earnings, and a few even had pending orders for more products! In a debriefing session after the event, students conducted a SWOT exercise to identify their companies' Strengths, Weaknesses Opportunities, and Threats. The main weakness that students identified—and said they learned from—was lack of clear communication within teams. General strengths—both students and teachers agree—were unique product ideas, enthusiasm, and good salesmanship.

OUT OF THE GATE

ALUM ENTREPRENEURS JUST BEGINNING THEIR BUSINESSES

Many Principia alumni have well-established enterprises. They're not on autopilot by any means, but the initial demands of getting started are behind them. For a peek at the Herculean effort required to launch a business, we asked two alums just out of the gate to share their experiences with us.



Photo by Chris Thorsen



Photo by Evan Woodbury

Meet meeperBots

by Kari Bradley

In less than two years, Jim Brandon (C'90) has put an idea that came to him while playing with LEGO with his then-six-year-old son, Will, onto toy store shelves across the country. Pondering the possibilities for play if they could make their LEGO creations come to life, Jim put his computer programming and app development skills to use creating meeperBOTS, motorized and studded wheel bases for brick blocks that can be driven with a smartphone app.

A serendipitous combination of Brandon's childhood tinkering with electronics, his local community's support of innovation and business, and the perseverance and confidence honed by working through problems as a math major at the College all contributed to the creation of Meeper Technology LLC. Regarding the latter, Brandon recalls his classes with Dr. David Gibbs (US'58, C'62), who gave take-home exams on the honor system. Brandon remembers spending nearly 12 hours on one of them over the course of a weekend. "You had this time to really put into it," he says, "to work hard, think hard, and focus on the

solution to problems. I think that, as much as anything, prepared me for the work world."

That work ethic has served Brandon well as he faces the daily challenges of getting a small business off the ground. "For over a year and a half," he explains, "it's been every day just grinding through all these things. I talked to a company trying to get the plastics, and when they came back, they weren't quite perfect . . . things like that."

Finding tires was a problem, too. "Everybody wanted a ton of money for these tires," Brandon says. But then he called alum Dan Roeming (C'05), whose family business was able to provide them at a reasonable price. That's how it's been, Brandon explains, step by step, from problem to solution. And Roeming isn't the only alum who has helped. Early on, a Kickstarter campaign drew support from a wide range of Principians, some of whom Brandon had never even met. "That helped a lot!" he says.

Response to meeperBOTS has been gratifying, including having them nominated for Toy of the Year by the American Specialty Toy Retail Association. But more important to Brandon is watching kids' faces light up when they realize they can drive their creations. "When I first started this product," he says, "I remember thinking, 'This is what I've wanted to do my whole life. It feels right.'"

Learn more at www.meeperbot.com.

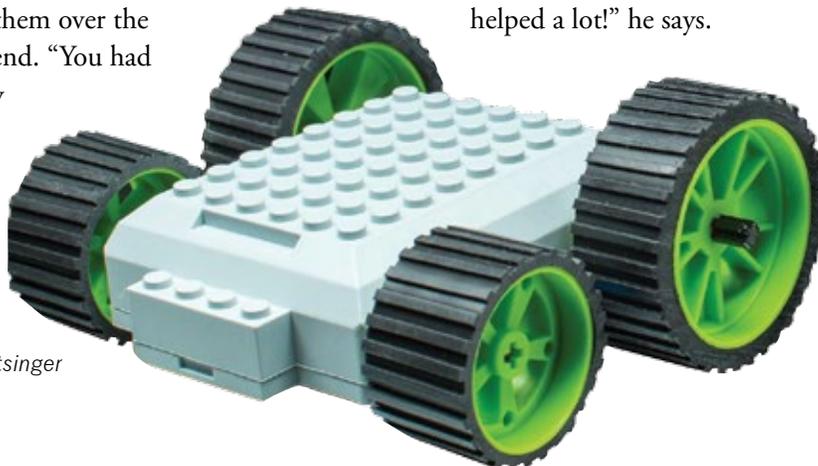


Photo by Christi Motsinger



Resolving Conflicts with Confidence

by Heather Shotwell

Soon after graduating from the College, Amy Rymer (C'02) earned a master's in journalism from the University of Missouri and worked as a photojournalist and videographer. After a few years, however, her desire to create more tolerance in the world took her in a new direction. Rymer trained as a mediator and conflict coach, working in Philadelphia with juvenile offenders and later with youth and adults in El Salvador for two years. Encouraged by the progress she witnessed while applying her training, she returned to the U.S. last year to establish an online conflict resolution business in San Diego. Her goal is to help women resolve difficulties in their families, at work, and in their communities.

“Conflicts may arise in our experience, but they don't need to dominate,” Rymer says. “The skills I teach create calm and consistency in women's lives, improving the relationships that are most important to them.” And, as Rymer points out, since she approaches clients' conflicts with no attachment to the outcome, she can “help them make decisions that are right for them.”

Rymer attracts clients by offering a free pocket guide to handling conflicts with confidence, doing in-person workshops, and writing a blog. And clients who have resolved conflicts under her guidance often refer friends to her. Rymer also reaches out to experienced, service-

based online business owners for guidance in developing her business. “I built a mentor support team to cheer me on, and their support is invaluable,” she says.

Rymer credits her time at Principia with cultivating the skills and confidence needed to strike out on her own. “I gained valuable communication skills, traveled on the Japan Abroad, enjoyed a variety of classes, and took part in an internship in San Francisco,” she comments. “All these experiences prepared me in ways I couldn't have expected and gave me the confidence to launch my own business.”

That confidence is evident in Rymer's encouragement to others who may be considering online entrepreneurial ventures. “It's definitely possible to succeed,” she says, “and the flexibility is a huge benefit. I can devote time to work and also pursue my other interests, such as rock climbing, cooking, and dancing.”

Learn more about Rymer's work at www.amyrymer.com.





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www.principiaalumni.org/youngalum

Q + A

GET TO KNOW A FEW ALUMNI
ENTREPRENEURS



R. Nichols

Original gift merchandise, including stationery, coasters, candles, magnets, and tote bags

Founder: Nick Hanzlik (US'85)

Est. 1996; based in Orlando, FL

www.r-nichols.com



Q. What is the most unique or innovative aspect of your business?

A. My craft—the artwork is really the core of the business and the vehicle for inspiration, joy, and fun. I learned it from Mrs. Dater, my sixth-grade teacher at The Sidwell Friends School in Washington, DC. She had us do immense and intricate social studies projects using paper collage—the skill I use today to create my designs. She also gave us a secret handshake as we left each day. I still remember it. She was incredible. Who knew she'd be laying the foundation for a career back in the sixth grade?

Q. What do you hope your products provide those who use them?

A. Our company mission statement is to create joy. As we discuss and create different products, we hold them to that test: Are these joyful and happy? Will they enrich people's lives and make them smile?

I collaborated with a wonderful fragrance designer (and legendary retailer) several years ago on our candle line. He approached me with the idea of making candles that were—in his words—“fun.” I knew he was the right partner. We combined my illustrations

with his brilliant scent design, and the result was a line of candles that was not only joyful but completely unique in the marketplace.

Q. What makes you an entrepreneur?

A. I certainly went my own route with this business. When I first started, I was surrounded by doubt. But I followed my inner voice each step of the way—or rather, THE inner voice—though it often contradicted advice I was getting from the outside. The result was a business that continues to grow today. Most recently, I've opened three small shops in New York City and have tiptoed into the retail world, instead of just selling wholesale. Continuing to find ways to expand is great fun.

Q. What do you find most challenging about your work?

A. Staying power. In the beginning you're the new kid with a fresh product, but as time goes on, that's when the real work begins. The marketplace is always looking for new, new, new, so it's critical that you keep evolving, which is not always easy. The comfort zone is called “comfort” for a reason. I often have to get pushed out of it.

Q. What do you enjoy most about your work?

A. Retail is my true passion, so having the opportunity to open retail shops (especially in New York City) is a thrill for me. I'm usually in my design studio, but occasionally I get to work in the shops, and having the chance to meet my customers and witness firsthand that we actually *are* making people's lives happier (even in small ways) is very fulfilling.

I'm also lucky to be surrounded by an exceptional team. We have somewhere around 20 employees and are growing. I value and adore each one of them, and I learn from them every day.

Q. How has your Principia experience contributed to your work?

A. Principia definitely gave me a spiritual foundation and some of the tools I needed to navigate the world. Combining spiritual discipline with daily life is essential, and at Prin, it's just the way of life, so it becomes natural. I'm hit with business challenges every day, sometimes coming from all directions, so being able to be at peace amidst it all is essential. I imagine that is not something that most high schools will give you.



The ZOOM team with Ellie, third from the left
Photo by Michael Victor (US'78, C'82)

ZOOM

Brand positioning for tech companies
Founders: Ellie (Clark, US'81, C'85) Victor and Nick Copping
Est. 1998; based in Palo Alto, CA
www.zoommarketing.com

Q. What is the most unique or innovative aspect of your business?

A. As far as I know, we're the only company focused on brand positioning for technology companies. Individuals and divisions within larger agencies sometimes provide this type of service, but it's rare to build a company around it. My business partner, who is a physicist, and I both saw the need to create a scientific method for coming up with a company's Point That Matters and aligning the team behind it. We call that methodology ZOOMing.

Q. How do you hope your services benefit your clients?

A. Once companies have answered their essential brand positioning questions—"Who am I?" and "What sets my business apart?"—they gain a sense of freedom, clarity, and purpose. I love seeing the creative ways clients build their differentiation into their

products and services for a sustainable advantage.

Q. What makes you an entrepreneur?

A. I suppose anyone who starts a business is an entrepreneur, but the harder part is sustaining the business. That's where entrepreneurship plays a bigger role because it means being willing to listen and change, while remaining true to your core.

Q. What do you find most challenging about your work?

A. We're constantly challenged to come up with a breakthrough idea for each client. That's the biggest challenge, but also the most fun.

Q. What do you enjoy most about your work?

A. Working in Silicon Valley with the most innovative companies in the

world and advising at the highest levels of these companies is the most fun you can have in business! I also love the creative banter with the ZOOM team and bringing my dog, Rio, to our office.

Q. How has your Principia experience contributed to your work?

A. I was involved in so many activities at Prin—from participating on the tennis team that won Nationals to being Sports Information Director for the College, sports editor for the *Pilot*, and a DJ on WTPC. I wouldn't have had the opportunity to try so many activities at a larger college. Also, I majored in English literature, and the analytical skills I learned in my studies are essential to the work I do today.

Shelter Works

Fiberglass buildings and equipment shelters

Founders: Tracy (C'86) and Peter (C'90) Switzer

Est. 1995; owned and managed solely by Tracy since 2001; based in St. Louis, MO

www.shelterworks.com



Q. What is the most unique or innovative aspect of your business?

A. Our willingness and ability to customize our product to meet the needs of our customers—creating innovative solutions has become part of our culture.

Q. What do you hope your products provide those who use them?

A. I hope we provide peace of mind to our customers because they know they can count on our shelters to protect their equipment from the elements.

Q. What makes you an entrepreneur?

A. I thought I was an entrepreneur when I started the company, but I wasn't. I was just self-employed. Not until several years later did I begin to understand that being an entrepreneur means working *on* the business, not just working *in* the business.

Q. What do you find most challenging about your work?

A. I really enjoy the challenges of the manufacturing process. I get excited about finding ways to improve our procedures to maximize efficiency. For example, last year we experienced a

level of growth in demand for our products that exceeded our production capacity. I studied the process for a few days and began to see how we could significantly speed up production by making a few changes in our procedures. I then retrained the team and supervised them for several hours each day for several weeks until I was certain they were doing it the “new” way. It worked and our production capacity is now able to more than meet the demand.

Q. What do you enjoy most about your work?

A. It is very gratifying to know that the business has matured to the point that it can operate effectively whether

I am at work or not. There is a team of skilled and experienced people, both in management and on the production floor, that can meet the needs of the customer just the way I would want them to. Everyone understands the principles by which we operate, and everyone strives to uphold those principles. That's a good feeling.

Q. How has your Principia experience contributed to your work?

A. As I have navigated through the last 20 years in business, I have always operated through a sense of principle and relied on critical thinking. Both of these are fundamental to a Principia education.





Raffles Toffee

English Toffee

Owners: Cathy (Reason, C'81) and Mark (C'78) Raffles

Purchased in 1989; managed solely by Cathy; based in Glenview, IL

www.etoffee.com

Q. What is the most unique or innovative aspect of your business?

A. Our hours of operation are unusual for a manufacturing business; we try to be as family friendly as possible. One of my goals is to enable working parents to be home by the time their children get home from school. In order to make that happen, we have a couple of different shifts. We have a cook who has been with us a long time, and he comes in to get things started at midnight; another group comes in at 3 a.m.; and yet another shift starts after morning school drop-off. This flex time allows us to get in a full day of production, and all the employees are finished working by 2 p.m.

Q. What do you hope your products provide those who use them?

A. Joy! We are so fortunate to make English toffee that people love.

Q. What makes you an entrepreneur?

A. I definitely had to be entrepreneurial in building the company from its very humble beginnings and being willing to take on a lot of varied responsibilities.

Q. What do you find most challenging about your work?

A. As President of the company, I am ultimately responsible for all aspects of the business, including areas where I have no expertise, such as logistics and government regulations. I have had to learn a lot on the fly.

Q. What do you enjoy most about your work?

A. The great feedback we get from our customers is very rewarding. They love our toffee!

Q. How has your Principia experience contributed to your work?

A. My Principia education instilled in me a belief that I had no limitations, that anything was possible. As a student at Principia, I felt like I was surrounded by a lot of self-starters, and I saw other students begin their careers fearlessly. This understanding of limitless opportunity has stayed with me to this day.



The Ballard Group

Automated testing and quality assurance for large-scale computer systems

Founder: Marini (Darmadi, C'88) Ballard

Est. 1998; based in Roseville, CA

www.theballardgroup.net



Photo by Target Studio

Q. What is the most unique or innovative aspect of your business?

A. Automated testing can be very expensive, but we have a copyrighted automation framework that makes it affordable for clients, especially those in the government. Additionally, we take work-life balance very seriously.

Q. How do you hope your services benefit your clients?

A. We work with a variety of customers—government agencies, publicly held corporations, and private companies. In each case, the customer, on the one hand, and the programmers, on the other, who are developing massive computer systems (for electronic voting or airline reservations, for example) don't speak the same language. So it's common for us to discover through testing that the system isn't working the way the customer expected.

If we're brought in early enough, we can troubleshoot problems and help the customers and programmers understand each other. This improves efficiency and can save millions of dollars—and when the customer is a government agency, that means we're saving taxpayer dollars.

Q. What makes you an entrepreneur?

A. I didn't start out thinking of myself as an entrepreneur—I just wanted to help people. But the more I saw employees in consulting firms traveling constantly and working around the clock, I wanted not only to help my customers with their computer systems but also to help myself and my employees live a balanced life. So I'm an entrepreneur because of the unique work we do and the work-life balance we maintain while doing it.

Q. What do you find most challenging about your work?

A. I learned the hard way that integrity has to be the #1 priority in hiring. Several years ago, I hired someone who was very bright but not trustworthy, and I almost lost the business as a result. I was advised to declare bankruptcy, but that wasn't the answer I was led to through prayer. Instead, I spent a lot of my own money to rectify the problems he'd created. It took five years and constant prayer, but we're whole again—even stronger. And a very large corporate client I had lost to this individual is back working with us again.

Q. What do you enjoy most about your work?

A. I like helping people. When I was 33, my father passed on, and I went home to Indonesia for a while. He had always helped others, and I wanted to do the same. When I returned to the U.S., my mom gave me \$10,000. I used half of that to start The Ballard Group—and God has helped me every step of the way.

Q. How has your Principia experience contributed to your work?

A. Dr. Tom Quirk's class on business ethics made a big impression on me, even though I just audited it. I'm often in the position of knowing what's not working or what went wrong, so I've been offered bribes and asked to lie about test results. Of course, I don't engage in any of that. And, now, when I'm hiring, smarts come second after integrity!





Erin's Faces

PETA-certified cruelty-free and eco-friendly makeup,
skin care, and body care products
Founder: Erin Williams (US'96)
Est. 2011; based in New York, NY
www.erinsfaces.com

Q. What is the most unique or innovative aspect of your business?

A. Having face time with my clients. Instead of depending on focus groups and projections, I have spent the last 16 years talking with women, face to face, about what they wish their makeup or skin care products would do, what they love about them, and what frustrates them. I've also worked as a professional makeup artist in New York City during Fashion Week and on TV shows and red carpets, so I have a working knowledge of makeup application.

Q. What do you hope your products provide those who use them?

A. Confidence! That is #1 for me. I launched Erin's Faces with the purpose of empowering and educating women by providing a makeup and skin care line that would be a gateway to women's self-worth. I work with women from all walks of life—from Broadway shows to the corporate world to stay-at-home moms—to provide products that help them value themselves and, therefore, serve others more effectively.

Q. What makes you an entrepreneur?

A. For the last four and a half years I've been the only employee, so that feels very entrepreneurial! I get to do the fun

parts like going on TV to be a beauty expert or traveling the country teaching green beauty workshops, and I also do all of the background bits that keep the engine running—stock counts, talking with labs, filling orders, answering client e-mails, bottling products in my kitchen, and so on. You name it, I do it.

Q. What do you find most challenging about your work?

A. It's definitely challenging doing everything myself. I recently hired someone part time to fill jars and bottles, and I'm so grateful to have the help! I'm competing with large corporations with multimillion dollar marketing budgets, which is certainly difficult, but I'm seeing great success and am thrilled when women, and occasionally gents(!), tell me that the products work well for them.

Q. What do you enjoy most about your work?

A. Helping people. I tried the path of fashion/red carpet, and, for me, it just didn't have enough purpose. I wanted to be useful and contribute in a more tangible way than just making people look pretty. I had no idea it would result in a full beauty line. I prayed for purpose, and Erin's Faces is what came out of months of listening and

following God's direction. So much expectation and judgment are put on women about how they look, and I love tearing that down and figuring out what's right for each person—what makes you, you. Helping woman feel empowered is my motive.

Q. How has your Principia experience contributed to your work?

A. There was such a sense of possibility when I was at Prin. If I wanted to do something, there was a support system to make it happen—running POMS, choreographing dances and water ballet routines, picking songs to sing in concerts. Later on, things that didn't make sense on paper (moving to New York City at 22 with \$2,000 and no job; starting a beauty line when my husband was unemployed; etc.) weren't shoved off of my radar because I felt that if they were a right idea, the "rules" didn't have to apply. Also, having my roots in starting activities in Christian Science and "pausing and waiting on God"—instead of just motoring through—is something I practiced at Prin . . . and am still working on!



Gaskets USA

Refrigerator and freezer gaskets and related hardware
for restaurants and grocery stores
Founder: Rod Snyder (C'82)
Est. 2006; based in Los Angeles, CA
www.gasketsusa.com

Q. What is the most unique or innovative aspect of your business?

A. The most unique aspect is the product itself. Most people wouldn't even know that refrigeration door gaskets could be a business. So, as you might imagine, we are a "niche" market business without much competition in the restaurant and grocery store industries.

Q. What do you hope your products provide those who use them?

A. We strive for our products to be long lasting and energy efficient while providing quality and value. Our goal is to see our customers often and yet have them always be excited to see us.

Q. What makes you an entrepreneur?

A. I have always been an entrepreneur, looking for ways to create business opportunities and for better, more efficient ways of doing things. I guess I'm also a little bit of a rebel and not necessarily the "go along with the norm" kind of guy. I love working for myself, but more important than that, I love to put together great, synergistic teams.

Q. What do you find most challenging about your work?

We are like a family and often refer to the hiring process as being more like an adoption. This makes it challenging if it comes time to part ways because the fit just isn't right. In other words, I dislike firing people, or I suppose the analogy would be that I dislike disowning my family members.

Q. What do you enjoy most about your work?

A. I really enjoy working with people, whether it be our team members or our customers. In fact, in our sales meetings, we don't talk about sales. Instead, we share connections and successes. We especially enjoy sharing connections based on almost anything but gaskets. We might find a connection around a common hobby or interest or where we grew up or went to school. And, of course, successes are not only about money but about landing a new customer or converting a grumpy person into a loyal customer. In fact, we won't allow a share that is only about how much money we made.



Q. How has your Principia experience contributed to your work?

A. By emphasizing the concept of the whole man, Principia prepared me to be a well-rounded, balanced individual with a knowledge base and attitude for success, completely independent of the actual career path I took. I received a degree in chemistry and mathematics and studied studio art and art history as well. And, yes, even with those studies, I was completely prepared for my career.

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June 17–24, 2017

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Upper School Artists Shine at Area Art Show

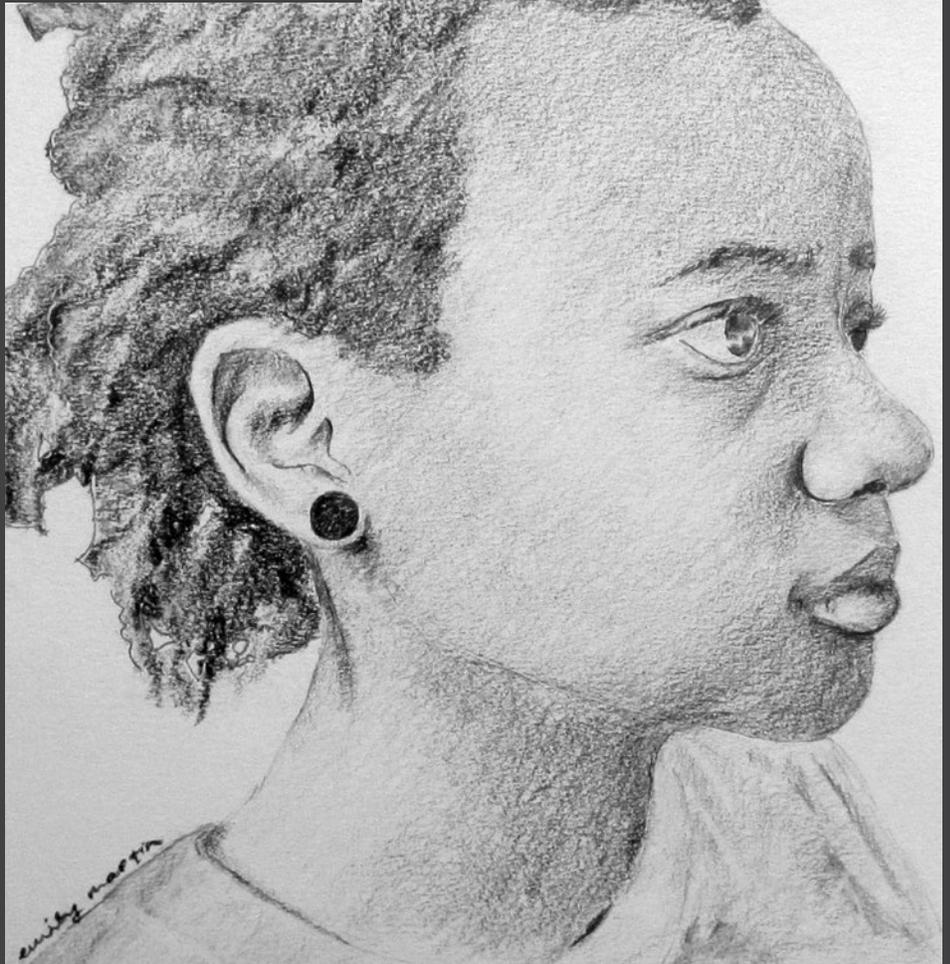
Each February, high school teachers within a 150-mile radius of St. Louis are invited to submit artwork from up to 10 students for the Young Artists' Showcase, an exhibition curated by the venerable St. Louis Artists' Guild.

Principia Upper School takes advantage of this opportunity for our students to gain wider exposure to the field and to peer work. Of the 183 pieces accepted into this year's exhibit, eight were created by Principia students. That's an impressive contribution, given our student-body size relative to other participating schools.

Even more impressive is that two of our students came away with special awards:

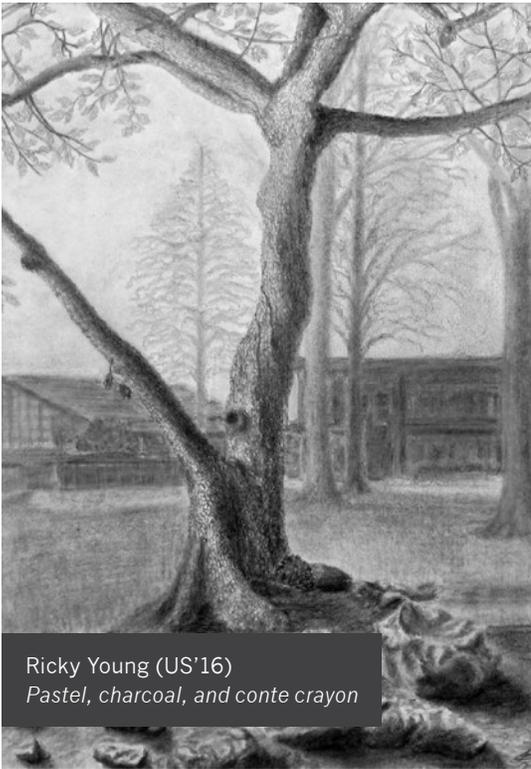
- Senior Emily Martin won the William and Elaine Small Prize for her pencil drawing, *MaryGrace*.
- Junior Marlaina Mathisen won the Susan Bostwick Award for her ceramic piece, *Pug*. (Ms. Bostwick is a ceramicist and was the juror for the 2016 show.) 📌

★ Emily Martin (US'16)
Pencil



★ Marlaina Mathisen (US'17)
Ceramic

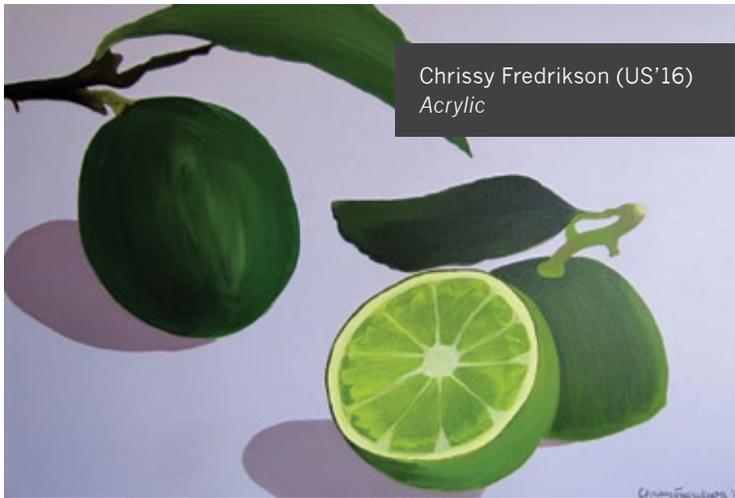




Ricky Young (US'16)
Pastel, charcoal, and conte crayon



Jover de los Reyes (US'17)
Watercolor



Chrissy Fredrikson (US'16)
Acrylic



Mackenzie McCarty (US'19)
Pencil



Anna Webster (US'16)
Oil



Gastuvas Balukake (US'17)
Scratchboard

Meet a Few of This Year's Graduates

by Armin Sethna and Heather Shotwell



Aya Maruyama

Making the Most of All That Principia Offers

From taking Advanced Placement classes (all of them) and participating in the performing arts (all of them) to heading up the Upper School student newspaper and the POMS team, Aya Maruyama has immersed herself in every aspect of Principia Upper School's whole man education.

"As long as you have the will and desire, there's nothing you can't do at Principia!" remarks Aya, adding that these myriad opportunities have "served me well—in time management, setting priorities, and learning how to do my very best."

Although she describes herself as "definitely more of an English language and arts kind of person"—confirmed by her first-place Upper School awards for both prose and poetry this year—Aya hasn't shied away from the sciences or mathematics. In fact, she's taken every AP class the Upper School offers as

well as College Chemistry. "Math and science have served me well in learning how to problem-solve and be okay with making mistakes and asking for help," Aya reflects. But, she admits, she's pleased that she won't be so focused on those areas during college.

Heading to the University of Georgia this fall, Aya plans to major in broadcast journalism and marketing management. She also expects to minor in Spanish and Japanese—honing her linguistic skills and potentially opening doors to a global career in journalism. (Right after graduating *cum laude*—and winning the World Languages Award for Spanish—Aya headed off on the 10-day Upper School trip to Spain.) Her love of dance is also something she hopes to continue while at the university.

Choosing to be at Principia as a boarder since seventh grade, Aya has only good things to say about the dorm experience. "It's cool that you get to live with your friends and a variety of people," she comments. But just as important, she says, "I learned life skills in the dorm—how to work and live together, be considerate about bedtimes and music, follow rules, and be aware of people's needs." After six years of living and studying at Principia, Aya says, "I'm ready to see how I can impact the world as a Christian Scientist and take what I've learned here into the world."



Dylan Hanser

Enriched by a Variety of Opportunities

Dylan Hanser came to Principia as a seventh-grade boarder, building on friendships started at summer camp and quickly coming to appreciate the "brotherhood" of the Boys' Dorm.

Dylan has enjoyed the challenge of advanced-level English and social studies classes—especially the high level of discussion and debate with teachers and peers. One of the things he says he most appreciates about Principia is that the teachers "are willing to put everything on pause and make themselves very available to help you succeed."

Mathematics has always been Dylan's favorite subject, so he delved into it, taking Advanced Placement Calculus AB and Statistics. And this past year, he has enjoyed studying computer science and programming—a skill he further developed during his senior project. Working with a Raspberry Pi device (a credit card-sized minicomputer), Dylan



designed a number of programs with practical applications.

Dylan has appreciated the varied opportunities at Principia to participate in cocurricular activities such as sports, choir, and also Spring Production. “That was something I’d never pictured myself doing,” he says of Principia’s annual Broadway-style musicals. After working on stage crew his freshman year—and watching all the onstage action from the wings—he decided to audition and has ended up performing in the last three productions, including a major supporting role in *Bye Bye Birdie* his junior year.

Dylan has also gained considerable leadership experience at Principia. He was elected three times to the Boys’ Board (the dorm governing body), served as captain of the football team his junior year, and was Senior Class Co-President.

No doubt, the breadth and depth of Dylan’s experience contributed to his being named to the Missouri Scholars 100 program, based on GPA and test scores as well as cocurricular participation, leadership, and citizenship. Dylan, who graduated *cum laude* and won this year’s Upper School History Award, plans to pursue an engineering degree at North Carolina State University in Raleigh in the fall.



Hunter Benkoski

Working, Playing, and Learning with Other Christian Scientists

Back home in Stroudsburg, Pennsylvania, Hunter Benkoski was doing well, focused on her studies and her love of Irish dancing. Then, the summer after her sophomore year, she participated in a National Leadership Council service trip to Costa Rica and attended a Christian Science summer camp. That’s when she realized that she loved being in an environment where she could work, play, and learn with other Christian Scientists.

And that’s how, in the space of two short weeks, Hunter found herself at Principia Upper School at the start of junior year. “Everything just fell into place so harmoniously,” she says, leaving no doubt that this was the right decision. She dived right into the August sports camp for dance and hasn’t looked back since!

When it comes to academics, Hunter appreciates Upper School’s small classes

and flexible schedule. “I’ve always been a math/science kind of kid—and have really been able to increase my focus on that by having choice in my schedule,” she says. Through the elective class on Sustainability her first semester, Hunter discovered a deep interest in and commitment to environmental issues. This year, she took the college-level Field and Natural History course, participating in a weeklong study trip at the Teton Science Schools in Jackson Hole, Wyoming. Hunter plans to major in environmental studies at Principia College and pursue her interest in marine biology and conservation work.

Community activities and giving back are important to Hunter, who received this year’s Hugh Ferriss Semple Award for commitment to world affairs and public service. In the spring, she traveled to South Africa on the Simunye Project service program. “Being on the trip was one of the most humbling experiences of my life,” she says. “And being able to feel like I was ‘hands-on’ in making an impact on somebody’s life was incredible.”

For her senior project, Hunter did a “triple bottom line” assessment of the Simunye Project, reviewing and organizing 10 years’ worth of reports and data to assess the program’s social, economic, and environmental impact. “My ultimate goal is to help improve the trip in the future,” she says.

>>



COLLEGE

Chance Weith

A Transfer Student's Story

Chance Weith, a business administration major, transferred to Principia his junior year and immediately felt at home. Right away, he noticed how Principia faculty were highly engaged in his learning. "As much as I valued my previous educational experiences," he says, "I found that Principia faculty were hands down the best I'd had."

These relationships were particularly critical last fall when Chance was offered an interview with Amazon Corporation. "Two of my business professors helped me prepare through mock interviews and by offering advice about what to expect during the interview process," he notes. "It was a highly competitive, one-shot situation, and I had only about 10 days to prepare." Chance's careful preparation paid off. Less than a week later, he learned he'd been hired as an Operations Manager at Amazon's state-of-the-art fulfillment center in Ruskin, Florida, where he'll lead a team of 50 to 100 employees.

"For my senior capstone project, I conducted a strategic analysis of Amazon to learn more about the company's metrics and efficiencies," Chance explains. "That study will help me uphold the company's expectations, looking at how to best allocate people to tasks on the floor, for example."

Chance appreciated the breadth of study his liberal arts education offered. Among his favorite classes were Old Testament, Criminology, Strategic Management, and Life and the Universe. Last summer, he interned at a financial firm in his native Dallas, Texas, researching individual stocks to study the financial viability of companies. "The internship was a great opportunity," he says, "but honestly the experience helped me figure out what I didn't want to do."

It hasn't been all spreadsheets and research for Chance, though. He served as treasurer of the student-led Climbing Club and spent many weekends on rock climbing routes near campus or outdoor adventures in the area. He also helped the club expand to include kayaking and mountain biking and prepare to relaunch this fall as the Outdoor Club.

"I've felt so much support from the campus community and have made wonderful friends here," Chance reflects. "I know these friendships will last."



COLLEGE

Abby Strub

Mediation Team Leads to Law School

"I joined Principia's mediation team in order to build my résumé, quite honestly," says Abby Strub, a political science and English double major. "Little did I know how much I'd like it!"

Abby earned All-American status after the International Intercollegiate Mediation Championship Tournament at Drake University last November, where she helped her "firm"—"Douglas, Fiddler & Strub"—win the semifinal and final rounds. That success also helped her secure a spot this fall at Michigan State University College of Law. "I truly value Principia's approach to mediation," Abby says. "We consider each case from a spiritual standpoint in addition to looking at the legal issues."

Abby attended an international baccalaureate high school in her native Michigan. As she explains, "It was all about academics, which was excellent. But while considering colleges,

I realized I wanted to round out my experience. Prin was perfect for me because I was definitely challenged academically but was able to get involved in acting, music, house government, and campus life as well. Also, I felt like a valued student in every class I took. I don't think this would have been the case at a large university."

Abby sang in the choir, soloed in the Christian Science Organization's Sunday services, took voice, piano, and organ lessons, co-hosted an Internet radio show, and sang at Starbrooks open mic nights. She also represented Principia on the fine arts tour this past spring, singing for Principia Club audiences in Southern California. "I really enjoyed touring with students from the Upper School," she said. "This was my first trip to California, and I was the first one to run into the ocean when we had an afternoon at the beach!"

During her junior year, Abby traveled farther away with Principia, delving into the study of Shakespeare on the England Abroad. Interests developed on that trip led her to research father-daughter relationships in the Bard's works for her senior capstone.

"I'm very grateful for the scholarship and financial aid Principia offered me," Abby says. "This made it possible for me to continue to law school with no undergraduate debt."



David McClelland

From an Internship to Full-Time Work

Pitcher and Co-Captain of the baseball team, Co-President of Lowrey, Resident Assistant, and member of the Japan Abroad, David McClelland (who is also a 2012 Upper School grad) had a wide and varied experience at the College.

"I always wanted to play baseball in college," says David "and this year has been particularly special. Working to help develop the team led to so much growth. I've also made lifelong friends with teammates—we'll definitely stay in touch."

Learning the value of team took a different direction when David was elected Co-President of Lowrey his senior year. "My Co-President and I really balanced each other well, playing on each other's strengths," he comments. David also served as a Resident Assistant in Rackham his junior year. "Helping freshmen navigate the first year of college was a great experience," he notes. "It was

incredible to witness their individual growth as they faced challenges with friends, classes, and athletics."

Another highlight for David was traveling on the Japan Abroad. "Seeing how others live—from the fast-paced city life in Tokyo to the quiet, countryside villages—was truly eye-opening," he says. "Also, I was very grateful to travel with a group of Christian Scientists. Things come up during travel, and it was awesome to feel everyone's meta-physical support."

David arrived at the College with a strong interest in business, his major, and a passion for history, which he added as a minor. "It was a perfect complement to business and helped make me a better writer," he comments. "My academic endeavors taught me the value of hard work. Principia faculty had very high expectations, but I always felt their support." For his capstone, David researched Kyocera Corporation, a Japanese multinational manufacturer of electronics and industrial ceramics, which he visited while on the Japan Abroad.

Last summer David interned at Nestlé Purina in St. Louis, and toward the end of the internship, he was offered a full-time position as a financial analyst upon graduation from Principia. "I love the company's culture and truly look forward to working there," he says. ■



ACORN PROGRAM

PERFECT FOR YOUNG FAMILIES

By Armin Sethna



SINCE ITS FOUNDING MORE THAN 40 YEARS AGO, Principia's Acorn program has welcomed infants, toddlers, and their parents to participate in its unique blend of purposeful play and spiritual development. This academic year, that welcome has received a refresh and become even more inclusive—the program has moved into a bright, new location on campus and has expanded its outreach globally with the launch of Acorn Online.

Beginning this past fall, St. Louis-area children and their parents have been enjoying a specially redesigned room in the Lower School, equipped with perfect, pint-sized furnishings and facilities for little ones. “I can’t say enough about our new Acorn space—inside and out!” enthuses teacher Linda Warner (US’71). “I am incredibly grateful to teach in such a beautiful space, designed with the needs of young children in mind. It speaks volumes about Principia’s commitment to young families.”

Inside, different “activity stations” around the perimeter of the room—focused on dress-up, coloring, light, sound, and shapes, for example—engage the toddlers’ attention and natural inquisitiveness. In addition, there are tables and chairs for snack times and craft activities and a kitchen area for preparing food and washing up after messy art projects. Another section of the room has plenty of open floor space for parents, children, and teachers to sit in a circle during sing-alongs and story time. The outside area is equally impressive, with a sandbox, swings, teeter-totter, and climbing unit, as well as space for a small garden and a variety of riding toys. “It’s an understatement to say the children love to play out there!” Warner exclaims.

Acorn’s aim is to support parents with practical and prayer-inspired input that enriches those “first discovery” joys and lessons of

childhood, explains Acorn Director Dorothy Halverson (C’85). Every Tuesday, Halverson spends time with Acorn parents and children. Then, while the toddlers enjoy “play-in,” she hosts parents in a discussion that often features a visiting speaker. Topics range from practical care for children to introducing them to the Bible, and there’s always time for parents to share ideas and inspiration.

With this year’s launch of Acorn Online, Halverson has been reaching out to families beyond the greater St. Louis area through electronic communications and travel. She hosts a Facebook discussion group, where parents share ideas and links to useful resources, and an Acorn web portal houses a treasure trove of articles, activities, videos, and other resources that support spiritually based parenting and creative play and learning.

Halverson has also teamed up with Kathy Merrill (C’72), the School’s Bible Program Coordinator, to meet with parent groups across the U.S., building interest in Acorn’s online community and sharing a taste of the resources and lesson plans that are available. Thanks to our growing virtual community—with links to the on-campus Acorn program—Christian Science families everywhere are benefiting from Principia’s unique focus on nurturing the whole man. To get involved, visit www.principiaschool.org/acorn. ■

Acorn’s aim is to support parents with practical and prayer-inspired input . . .





Yield to Love

by Linda A. Bohaker

As a faculty member at Principia College, I take my job as a character educator seriously, no more so than when I'm leading a study abroad program. There's something about 18 people living, studying, and traveling together in a foreign country that provides natural opportunities to grow in grace.

I always promise students that one of the best discoveries awaiting them is learning more about their relationship with God. The fall 2015 Japan Abroad was no exception, yet little did I know how much spiritual and character growth this trip would require of *me*. This was my ninth abroad—what more could I possibly learn? Well, plenty!

I loved so many aspects of this group of students. They jumped into learning about and experiencing Japanese language and culture with such enthusiasm. They were fun, caring, good traveling companions, up for whatever adventure the day held. To be honest, though, I often found myself frustrated with them. They were connected to technology more than I wanted them to be, which meant they were less connected to each other in meaningful ways. And although desirous of a good group experience, they exhibited a fair amount of selfish thought and behavior. Efforts to address these issues metaphy-

sically and practically met with little response, so as the trip went on, the students knew I was frustrated with them.

That frustration came to a head at our final dinner together in Tokyo. Instead of celebrating the group and the whole abroad, everyone seemed to be focused

This was my ninth abroad—what more could I possibly learn? Well, plenty!

on themselves, their phone, or their specific friend group. And when I tried to talk about plans for the next day's trip to DisneySea theme park (which was a big treat), no one seemed to care. I'd had it. At first I was angry, then sad.

As I reached out to God for an answer, the thought came that I needed to cast the beam out of my own eye, rather than the mote out of my brother's eye. I realized I wasn't responsible for changing these students. The only thing I was responsible for was my own thought.

What was *I* seeing? A bunch of selfish, ungrateful mortals? Or God's perfect man? As I was begrudgingly getting

ready for our day at Disney, a phrase a Christian Science practitioner once shared with me came back to thought—"yield to Love." Here was a perfect opportunity to put this into practice. I have to admit that my first efforts to yield were mostly on a human level—being kind and patient, smiling, and so on. Yet, as the morning progressed, I grounded my thoughts in a higher expression of Love, knowing that man's true nature is spiritual, good, loving. This was true for them and for me.

Our day was terrific! Of course, we had fun, yet more importantly we were at our best as a group. Not one ounce of selfishness surfaced, just pure kindness, support, and love for each other. I hadn't asked them to be this way; I had simply acknowledged it as the true nature of God's man.

This experience was a humbling reminder that the responsibility to be a character educator is never about changing our students. It's about our own character growth. I'm grateful for the growth I experienced and was glad to be able to share with the students what I'd learned about yielding to Love. ■

Along with teaching, Linda Bohaker (C'83) co-chaired Asian Studies and directed the Abroad Office. She was named Professor Emerita of Business Administration this spring.

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