



INSTITUTE REPORT

VIRGINIA MILITARY INSTITUTE

Volume 48, Number 4, December 2019

Ring Design Incorporates Institute Traditions, Cadet Creativity

By Mary Price



Second class cadets pose in front of the cannonball following the Ring Figure ceremony Nov. 22.—VMI Photo by H. Lockwood McLaughlin.

An on-and-off tradition in the Institute's earliest years, and a celebrated milestone of the VMI cadetship since the early 20th century, the receiving of class rings is almost always the highlight of a 2nd Class cadet's academic year.

What's more, the VMI class ring is easily identifiable simply by its design and size. But there's another way that the VMI ring stands out from those at other colleges and universities: it's cadet designed. Each year, a 2nd Class cadet or group of cadets designs the rings that they and other members of their class will wear for the rest of their lives.

Having the honor of designing the ring for the Class of 2021, which celebrated its Ring Figure

See Class Ring, page 8

1958 Brother Rat Cleans Barracks, Befriends Cadets

By Mary Price

It's not often that one finds an 83-year-old still working, much less working at a physical job like cleaning up in barracks. But Barney Odend'hal '58 has already played a lot of golf, and he doesn't want to waste time with what he calls the "boob tube."

"I come to work," said Odend'hal, who's been a custodian in barracks for the past

nine years. "People cannot understand how I do it being an old man, and I work circles around them."

Odend'hal has both an unusual last name and an unusual life story. The family name is Germanic in origin, he shared, and it was originally spelled Odendendhall. "So somebody along the line had the good sense," he explained,

to condense it and add an apostrophe in place of the missing letters.

Odend'hal grew up in Norfolk and attended Hargrave Military Academy in Chatham, Virginia, for high school. He then matriculated at VMI, but wound up leaving after two years to enlist in the

See Odend'hal, page 4

Five Cadets Present on Shakespeare at Fall Conference

By Mary Price

"I'm always impressed with how the cadets conduct themselves, particularly in the questions, because they don't know what's coming."

So says Col. Emily Miller, chair of the English, rhetoric, and humanistic studies department, about a conference she's been taking cadets to for the past 12 years. This year, five cadets joined Miller in attending the American/Popular Culture Conference, held Sept. 26-28 in Wilmington, North Carolina, where they presented papers focused on Shakespeare.

Cadets attending the conference each year begin by taking Miller's Shakespeare course, which she teaches each spring.

"The students come from all majors, which makes it a lot of fun, because they're bringing all of those different perspectives to the study of Shakespeare," observed Miller.

At the beginning of the course, Miller tells the cadets that the best major research papers they write will be submitted for presentation at the American/Popular Culture Conference, which is held each fall.

"That gives them a head start," she explained. "They're not having to start from scratch."

To help the cadets understand what they're reading, Miller emphasizes the culture in which Shakespeare produced his plays—one in which shifting societal attitudes towards women, hierarchy, and monarchy, to name just a few, were paramount features.

"[Cadets] seem to really dig into the culture, and see how the play reflects some of those attitudes," Miller stated.

At this fall's conference, Reid Wilkinson '20 presented his paper, "Melancholy: the True Killer in *Hamlet*," in which he concluded that Hamlet, protagonist of Shakespeare's play of the same name, suffered from what physicians of the time called melancholy, and what would be known today as depression.

"I was the only biology major, the only STEM major, in the class," explained Wilkinson. "I was trying to put a biology spin on an English class in a way. I'm trying to pursue medicine, and it was a good connection, a way to pursue something I'm passionate about. It makes the writing process a little bit easier."

Wilkinson said that while he'd presented biology

research at conferences before, he had never presented research in the humanities. The questions that came his way after he'd presented challenged him in ways he hadn't expected.

"[Scientists] might ask more mechanistic questions, but the English professors and the people there, they made me think more outside of the box, which relates more to the liberal arts perspective there," he commented.

Joseph Gummo '20, an international studies major, presented his research on strong women in three plays—*The Merchant of Venice*, *Julius Caesar*, and *Othello*.

"I was a big fan of multiple plays," explained Gummo. "I wanted to connect them all together."

Looking at the three plays, it wasn't hard to see that women figured prominently in all of them, and so Gummo began to ponder their positions relative to the male-dominated power structure of the time, which was challenged when Queen Elizabeth I ascended to the throne in 1558.

"While that gave women empowerment, the church, specifically the Roman Catholic church ... looked at women as if they were almost lesser beings compared to men," Gummo commented.

"That controversial topic of [the queen's] ascension and that view of the Catholic church clashed, and I think that's why Shakespeare included [women] in his plays, and you can see throughout his plays, too, he portrays them in different lights," he added.

Gummo described his experience of presenting at the conference as "awesome" and the questions from attendees as "very thought-provoking." It was his first time at a scholarly conference.

"I would recommend it to anyone who gets the chance," he said.

In addition to Wilkinson and Gummo, other cadets presenting their research at the Shakespeare conference this fall were Joseph Hughes '19, Bryant Smilie '20, and Nicholas Wainwright '20. 🍷



Col. Emily Miller and cadets attended the American/Popular Culture Conference Sept. 26-28.—Photo courtesy of Col. Emily Miller.

INSTITUTE REPORT

Volume 48, Number 4, December 2019

The Institute Report, VMI's monthly newsletter, publishes eight issues during each academic year. Inquiries, suggestions, news items, and address changes should be directed to Editor, Institute Report, VMI Communications and Marketing, Lexington, VA 24450-0304; (540) 464-7207; or VMIReport@vmi.edu. © 2019 Virginia Military Institute.

Director Col. Stewart MacInnis

Editor Maj. Michelle Ellwood

Assistant Editor Kelly Nye

Designer Robbin Youngblood

Institute Report Staff

Stephen Hanes

H. Lockwood McLaughlin

Mary Price

Header photo on page 1 by
Kelly Nye

The Virginia Military Institute is committed to providing an environment that emphasizes the dignity and worth of every member of its community and that is free from harassment and discrimination based on race, sex, color, national origin, religion, age, veteran status, sexual orientation, pregnancy, genetic information, against otherwise qualified persons with disabilities, or based on any other status protected by law. In pursuit of this goal, any question of impermissible discrimination on these bases will be addressed with efficiency and energy and in accordance with VMI General Order 16. General Order 16 also addresses complaints or reports of retaliation against those who have opposed prohibited practices, those who have filed complaints or reports of prohibited practices, and those who have testified or otherwise participated in enforcement of General Order 16. Questions regarding discrimination prohibited by Title IX of the Education Amendments of 1972, or other federal law, may be referred to the VMI Inspector General and Title IX Coordinator, 212 Carroll Hall, VMI, Lexington, VA 24450, (540) 464-7072. Any cadet or prospective cadet having questions about disability services for students should contact the Director of the Center for Cadet Counseling and Disability Services, 448 Institute Hill, 2nd floor, Post Infirmary, Lexington, Va. 24450, (540) 464-7667. For employment-related disability services, contact the Americans with Disabilities Act Coordinator in the VMI Human Resources Office, Lexington, VA 24450, (540) 464-7322.

TAPS

The superintendent regrets to inform the VMI community of the passing of Bruce C. Gottwald Jr. '81 and Donald K. Jamison '57, as well as Cadet Jamison L. Clark '23.

Bruce C. Gottwald Jr. '81, who was active in the VMI community in key leadership positions for decades, died in a traffic accident in Kansas on October 20, 2019.

Mr. Gottwald was 61 when he died. He served on the VMI Board of Visitors from 2010 to 2018. He was the eldest son of Bruce C. Gottwald Sr. '54, past president of the Board of Visitors, and brother to Teddy Gottwald '83, who is currently a member of the Board of Visitors. He also served on the VMI Foundation Board of Trustees and as president of the VMI Keydet Club Board of Governors.

Col. Donald K. Jamison '57, who returned to VMI after graduation and served the Institute for years with distinction, passed away on Nov. 19, 2019, at the age of 85.

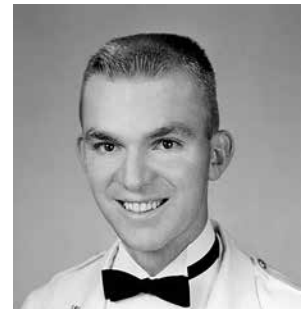
After graduating from VMI, Jamison went on to earn his master's degree in civil engineering from the University of California at Berkeley. He taught briefly at VMI before going on to earn his doctorate in civil engineering technology from the University of Wisconsin. Jamison served as professor of civil engineering for nearly 40 years, including serving as head of the civil engineering department from 1971 to 1978 and again in 1984 to 1991. He was a 2013 inductee into the VMI Sports Hall of Fame, and served as the NCAA tennis coach from 1968 to 1984. He was the superintendent's representative to the VMI Honor Court, an academic adviser to hundreds of cadets, and civil engineering professor emeritus.

Jamison L. Clark '23, an international studies major and member of the Marine Corps ROTC, passed away on November 30, 2019. He was 18 and the son of Jamie Clark '84.

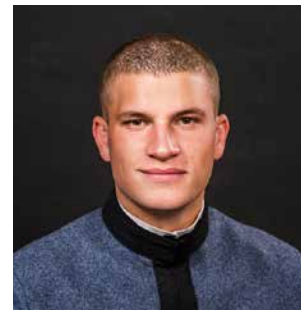
Prior to coming to VMI, Clark attended high school at the Berlin Brandenburg International School in Germany. 🇩🇪



Bruce C. Gottwald Jr. '81



Donald K. Jamison '57



Jamison L. Clark '23

Play for Peace

Joining others from the community to raise both funds and awareness for the work of Project Horizon are cadets taking part in the 5th Annual Play for Peace Golf Tournament on Oct. 18 at the Lexington Golf & Country Club. These cadets who participated include Michael Spence '21, Brandon Rash '21, Robert Branham '21, Phillip Everett '21, John Walker Richard '21, Carson Elizabeth Durham '22, Andrew Winder '22, and Charles Cathcart '22. Both VMI and Parkhurst Dining were among the sponsors of the 2019 tournament, which grossed more than \$12,000, the largest amount raised at one of Project Horizon's golf tournaments. —Photo courtesy of Col. Jeffrey Boobar '86.



Marine Corps. In the late 1950s, he served two years on the USS *Roanoke*, a *Worcester*-class light cruiser.

In the years that followed, Odend'hal married and became a father. He also worked installing telephone lines, but his life was marred by alcoholism—an obstacle he said he overcame when he quit drinking after a religious conversion experience in 1972.

Later in life, after retirement and having been widowed, Odend'hal found himself at loose ends. That's when he came to VMI, this time as an employee. Over the years, with his kind manner and quick smile, he's befriended hundreds of cadets.

"It's the most awesome relationship [with cadets] that I have ever seen," Odend'hal related "I can't tell you why or how it came about. It's just because I was where they



Honored as the oldest Marine present, Barney Odend'hal '58 participates in the cake cutting ceremony during the Marine Corps birthday ball Nov. 9 in Washington and Lee's Evans Dining Hall.—VMI Photo by Kelly Nye.



Barracks custodian Barney Odend'hal '58 chats with Cody Luper '20 while cleaning the barracks study room.—VMI Photo by Kelly Nye.

were. Because of that, I began to get a 'Hi, mister!, Hi, Barney!' Now I expect that there's not a cadet who doesn't know something about Barney."

Butch Staton, custodial supervisor over barracks, also knows something about Barney. "He's absolutely reliable," said Staton, who has been Odend'hal's supervisor ever since Odend'hal was hired nine years ago. "He's a fixture. He tells me that if he's not here, he's bored."

Sometimes, Staton finds himself having to rein in the older man's enthusiasm—such as when it snows and Odend'hal wants to shovel as much as possible. "The man is up for anything," Staton remarked. "He's one of a kind."

If he's not careful, Odend'hal might find himself recruited to join the admissions staff, as he wears his love for the Institute on his sleeve day in and day out.

"VMI is the best of what most schools want to be," he commented. "I enjoy life more now than I did when I came here to VMI. I have fallen in love with VMI and the people around it. They're such awesome people." ❄️



Homecoming 2019

Homecoming weekend activities included a dance in Cocke Hall, reunions for the Classes of 1974, 1984, and 1994, and a football game against Western Carolina University. While visiting post, Albert Linwood Loth Jr. '48B, former regimental commander, stopped for a picture with current regimental commander Austin Stansberry '20.—VMI Photos by Stephen Hanes, Kelly Nye, and courtesy of Micalyn Miller, VMI Alumni Agencies.



VMI Search Engine Returns Positive Results

By Mary Price

It's a common problem in today's world: a computer user seeks information online, yet the search engine he or she is using doesn't easily return the desired results.

As they neared the end of their cadetships last fall, Charles Remig '19 and Kirk Kallian '19 had encountered this problem far too often—and so they set out to fix it. The two, both computer science majors, decided to develop a more accurate searching algorithm, or set of rules to be followed, for VMI's website.

"We wanted to make [the capstone project] something toward VMI," explained Kallian, who commissioned into the Air Force this spring and is now working for a mortgage company while he waits to go to drone pilot training.

The search engine undertaking became Remig and Kallian's senior capstone project within the major—and their work was accepted for presentation at the 21st International Conference on Information Integration and Web-based Applications & Services (iiWAS2019), held Dec. 2-4 in Munich, Germany.

The current search engine on VMI's website, which is powered by Google, "works fine for some things, and not for other things," explained Remig, who, like Kallian, commissioned into the Air Force this spring. He's now working in VMI's information technology department while he waits to go to pilot training.

A search engine such as Google's, Remig noted, is meant to scan hundreds of webpages simultaneously, so it doesn't work very well on one domain, such as vmi.edu. "When you're dealing with the specificities of a small domain such as ours, [Google] doesn't hit the marks as well," said Remig.

Adding to the problem is the uniqueness of many of VMI-specific terms, such as rat, brother rat, and dyke line. Those terms, plus a multitude of others, have different meanings at VMI than they do in the world at large.

"Those are the kinds of things that a general-purpose search engine cannot quickly catch," explained Dr. Youna Jung, assistant professor of computer science, who advised the cadets' capstone project.

To begin their work, Remig and Kallian took BM25, which is a commonly used keyword-based algorithm for powering search engines, and modified it to weight VMI-specific terms more heavily. Kallian



The search engine created by Charles Remig '19 and Kirk Kallian '19 is designed to help users find the information they need quickly and easily.—Image courtesy of Charles Remig '19.

explained that they'd learned about the algorithm in an information retrieval class taught by Dr. Minsoo Kim, adjunct professor of computer science.

Remig and Kallian also tried to create a way to find catalog information, such as that about a specific course, more easily, by adding a "catalog search" button to their prototype search engine. That effort was meant to help cadets find course information without having to hunt through numerous links.

"We applied filters to the algorithms that boosted the weights of catalog links super high," Remig explained. What's more, he and Kallian added a feature that brings up a faculty member's office location, phone number, and email address when his or her name is typed into the search box.

"If you're looking for someone, you don't want to crawl through an entire website looking for where their information is," said Remig.

The prototype search engine works incredibly well—yet Remig stressed it's not ready for implementation because it has security vulnerabilities that need to be addressed. He's hopeful, though, that another computer and information science major will pick up this project down the road and refine it.

"That's the beauty of code—you can pass it on," he said.

Kallian noted that the project had taught him a new appreciation for software development. "There are so many roadblocks and stumbling blocks," when writing code from scratch, he commented.

Jung, meanwhile, traveled to Germany in early December to present the results not only of Remig and Kallian's research, but also that of Alex Feldner '21, who conducted research this past summer on security in mobile healthcare applications. Also presenting was Aaron Causey '20, whose presentation was entitled, "Hybrid Disaster Response System using Web of Things." 🌟

10th Annual Leadership Conference Tackles Disruption

By Mary Price

In a whirlwind two days near the end of October, approximately 95 outside guests arrived on post for the 10th Annual Leadership and Ethics Conference, ready to tackle the topic of this year's gathering—"Disruption: Challenging Leadership at Every Turn." Including VMI cadets, the number of participants at this year's conference was nearly 200.

Speakers included author and political commentator Jonah Goldberg, author of *Suicide in the West: Rebirth of Tribalism*; Michele Gelfand, author, professor, and psychologist; and Gen. (Ret.) Joseph Votel, who capped off a 39-year Army career by serving as commander of the U.S. Central Command, responsible for the Middle East and Near East, as well as Central and South Asia, from 2016 to 2019.

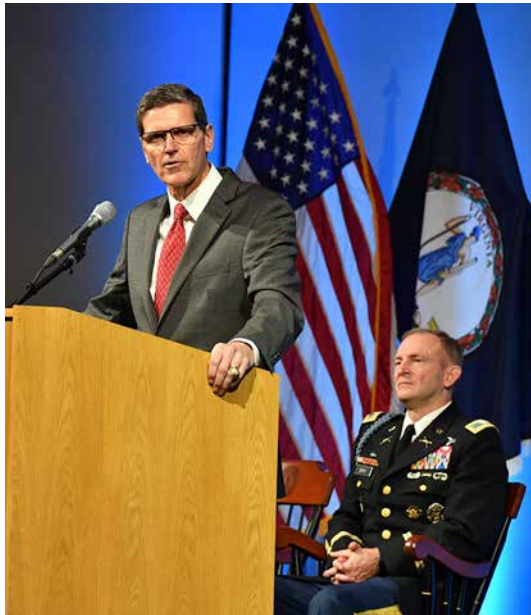
Votel used the occasion of his remarks to talk about the conflict in Syria, which has now dragged on since 2011, and how the United States was able to defeat ISIS there.

Votel explained that success over ISIS came through reliance on six key principles: a unifying organizational culture; pervasive trust; flat communication; strong relationships; decision making and risk assessment at the right level; and feedback loops for awareness and alignment.

The four-star general put special emphasis on trust. "This sustained us throughout setbacks [in Syria]," he noted. "The idea of trust is extraordinarily important ... It existed up and down the chain of command, and throughout our partners' chains of command."

In addition to the main speakers, four alumni—Bob Fricke '78, Carrie Papke '07, Karl Renne '96, and Court Whitman '99—offered their own stories of innovation-driven leadership. Papke, a veteran of the U.S. Marine Corps, now owns a women's clothing store in Grand Rapids, Michigan. "Being an entrepreneur is a mindset," she told conference attendees.

Papke also talked about the need to prepare oneself for change, with her own life as



Retired U.S. Army Gen. Joseph Votel speaks as part of the H.B. Johnson Jr. '26 Distinguished Lecture Series Oct. 29 in Cameron Hall.—VMI Photo by Kelly Nye.

an example. She noted that since her graduation from VMI, she's transitioned both into and out of the military, married and given birth to a daughter, and gone to work for a public relations firm, in addition to opening her business.

"You're going to have a lot of disruption in your life," Papke noted. "Opportunities lie where you see problems."

Whitman, an Army veteran, served as a Green Beret in Iraq and Afghanistan. He spoke with conference attendees about high-performance leadership, which he defined as "success in desired results, above established norms, over the long run."

Serving as one of approximately 25 facilitators at this year's conference was Isaak Halkidis '21. Like most of the other facilitators, Halkidis is a member of the Cadet-Superintendent's Advisory Board, a leadership program for upper-class cadets in which members examine Corps life and

make recommendations for change to the superintendent.

"We were volunteered to be facilitators, and in exchange we'll have first priority to attend leadership conferences at different schools," said Halkidis, a history major who plans to commission into the Army.

Halkidis is hoping that, thanks to his experience with VMI's leadership conference, he will be able to attend a similar conference at Texas A&M this spring.

To prepare for VMI's conference, Halkidis and the other facilitators attended three training sessions with Col. Dave Gray, director of the Center for Leadership and Ethics, and Col. Pat Looney, deputy director.

"The training sessions consisted of learning how to actively engage the people at your table," Halkidis explained. "We were basically taught how to consistently engage in conversation and keep the conversation flowing so we weren't sitting in dull silence."

A week after the conference concluded, Halkidis reflected upon his very positive experience of involvement there.

"I ended up connecting with a ton of really cool people," he commented. "The cool aspect about the conference was that it wasn't just cadets—it was also alums and teachers. ... It was all different walks of life."

Fellow facilitator Jack Buck '20 also got a lot out of his leadership role at the conference. "We had a lot of interesting people," said Buck, noting that he'd had everyone from an assistant commandant at Virginia



Brandon Valeriano and retired U.S. Army Gen. Joseph Votel speak as part of a panel discussion.—VMI Photo by Kelly Nye.

Tech to a teenager from a military school at his table.

Buck shared that his biggest challenge was “getting everybody to stop agreeing with each other.” To do so, he found himself having to stir the pot a bit by playing devil’s advocate. “You want to foster the conversation,” he stated. “You want at least a little conflict.”

Away from moderating a discussion group, Buck said he enjoyed the various speakers.

“I really liked Bob Fricke,” Buck commented. “He had some really good stories. Everybody who commissions out of here thinks they’re going to be in the Army for a long time, but his path was a lot different, and he ended up being in the FBI for a long time.”

The conference, said Capt. Catherine Roy, communications and marketing specialist at

the Center for Leadership and Ethics, is designed to give attendees lots to think about. “The theme develops in an arc over the two days, going from a global perspective down to the ‘what’s in it for me’ lessons,” she stated. This year, she added, attendees were given the chance to conduct live polling for the first time.

“It’s interesting to see everyone’s perspectives, their different takes on things,” said Emma Pratt ’21, who was attending the leadership conference for the first time. “I’m looking forward to seeing more.” ❁



Author Michele Gelfand gives a moderated interview with Col. Dave Gray Oct. 28.—VMI Photo by Kelly Nye.



Fall FTX

ROTC cadets participate in field training exercises (FTX) over the weekend of Oct. 26-27. The ROTC units used facilities on and off post, including the Corps Physical Training Facility, McKethan Park, and Lackey Park to train cadets on leadership and safety, and to teach military tactics.—VMI Photos by H. Lockwood McLaughlin.



with a formal ceremony in Cameron Hall and the Ring Figure ball on Nov. 22, is Smith Blake '21, a history major from Manakin-Sabot, Virginia.

Blake didn't get the job of ring designer by accident. He applied for it last fall, in October 2018, just after an email about Ring Figure came out.

"I like history," said Blake. "I've always been an artist. I got the job the next day, I believe."

Once the job was his, Blake went to work immediately, recruiting Paige Miller '21 as his assistant and spending much time in the VMI archives in Preston Library researching dyke lines and class ring designs.

The cadets came to the task armed with the knowledge that they had two surfaces, or sides of the ring, upon which to express their creativity: an Institute side, which represents VMI, and the class side, which is more unique to the class receiving the ring.

On the Institute side, Blake had hoped to include "The Institute will be heard from today," a phrase uttered by Gen. Thomas J. "Stonewall" Jackson at the Civil War battle of Chancellorsville, but it didn't work out.

"We couldn't get that much [text], and we couldn't get that intricate," explained Blake. Instead, he wound up going with "Honor Above Self." Above that phrase on the ring is a rendering of the cadet battery—cannons Matthew, Mark, Luke, and John—as well as the head of the statue *Virginia Mourning Her Dead*.

Below the phrase are representations of the two men most associated with VMI: Gen. George C. Marshall, VMI Class of 1901, and Jackson. Also on the Institute side are the initials of the 10 cadets who died as a result of the Civil War battle of New Market on May 15, 1864.

As they contemplated their ring design options, Blake and Miller knew that they wanted to tie into generations of Institute history by including their class's dyke line, the relationship that runs on a three-year cycle between 1st Class cadets and 4th Class cadets.

"[Miller] and I have brainstormed together," said Blake. "We've really tried to develop a ring that symbolizes not only our class but our dykes' class as well."

Happily, Marshall turned out to be in their dyke line, so that made his inclusion on the Institute side of the ring an even more natural fit.

On the class side of the ring is an eagle—symbolic of American liberty—as it is on almost every VMI class ring. But the eagle representations often vary, so the cadet ring designers incorporated the eagle features of the Classes of 1985 and 1991, both of which were in their class's dyke line.

"[Miller] and I worked together and we figured out a cool little way to slip in both years," said Blake. "The design of the head as well as the wing spread—that comes from both of those years."

Also on the class side is the Latin motto from the VMI coat of arms, "Consilio et Animis," or "By wisdom and courage," along with the dates of the class's matriculation and Breakout.

Just as unique to the Class of 2021 are symbols of events during their rat year that class members will long remember. One, an iceberg, represents the coldest 20-mile rat-dyke march in recent memory, and the others—a sun, moon, and star—commemorates the solar and lunar eclipses that took place then.

But there's one feature on the class side that's been used by nearly every class at VMI from 1848, when the first rings were presented, onward. Displayed vertically is the Hebrew word "Mizpah," which is generally translated as "The Lord watch between me and thee when we are absent one from another."

As he worked through draft after draft, keeping some ideas and rejecting others, Blake drew on what he'd learned as a high schooler taking

International Baccalaureate art classes at Trinity Episcopal School in Richmond.

"In art, you can't be perfect at everything," said Blake. "Every time I made a ring draft, I would mess up and have to start over."

Having learned to take failure in stride, Blake was able to handle the frustrations that accompany the production of any creative work.

"When I messed up, it wasn't like, 'Oh, I can't do that anymore,'" he commented. "It was, 'How can I do better, and how can I make it look even better?'"

The entire process, from getting the job of ring designer to final approval by senior members of the Institute administration, took two and a half months. In early November, with approximately two weeks to go until the presentation of the rings, Blake could look back with satisfaction on a job well done.

"It was a really fun process," he stated. "It was a lot of work, getting everything approved and making sure we had everything we wanted on the ring, but in the end ... I'm very proud of the ring." 🦅



Daminica Moore '21 paints the ring design for the Class of 2021 onto the cannonball at the edge of the Parade Ground in preparation for Ring Figure.—VMI Photo by Mary Price.

VMI Class Rings as Unique as VMI Itself

Just like the Institute itself, the tradition of class rings at VMI is quite unique.

The first graduates did not receive class rings at all. In fact, there is no record of any cadet or alumnus receiving a ring prior to 1848. Members of that class designed their own ring, a tradition that continues to this day.

"There is no VMI school ring," explained Col. Keith Gibson '77, director of the VMI Museum System and the Institute's unofficial historian. "They're class rings."

Throughout the 19th century, some classes chose to have rings made, while others did not. Rings of that era were much smaller and simpler than the large, elaborate ones of today, and many were signet rings with designs carved into the stone, so the ring could be used to produce a wax seal.

Those cadets who did choose to have a ring did not receive them in their 2nd Class year, as is now the custom. Instead, rings were presented just before or at graduation, as brother rats were about to depart from one another.

"It was an alumni thing, not a cadet thing," Gibson noted. "You wanted to wear your ring as an alumnus, not as a cadet."

With the dawn of the 20th century came a new generation and new customs. In 1907, the Class of 1908 became the first class to receive rings during the 2nd Class year, and from that point on, each VMI class has had a class ring. Rings, though, would continue to be received during finals week for another 20 years.

The Roaring Twenties called for a party, and the Class of 1928 added one, moving the ring ceremony to November of the 2nd Class year, and adding a formal dance known as Ring Figure.

Originally, Gibson noted, the term "ring figure" was descriptive of an action at the dance itself.

"In the 19th century, it was quite common to start big dances very formally with a promenade," he noted. "That was specialized for the occasion in which cadets received their rings by creating the thing called the Ring Figure. The figure was actually your class numerals."

With larger classes, and a move into Marshall Hall for the Ring Figure dance, the "figure" part of Ring Figure was moved to the presentation ceremony—but Ring Figure remains a milestone of the VMI cadetship, with memories made there often staying with alumni decades after graduation.

— Mary Price



The cannonball at the edge of the Parade Ground displays the finished ring design of the Class of 2021.—VMI Photo by H. Lockwood McLaughlin.



Halloween

Cadets hand out candy to local youngsters during trick-or-treating in downtown Lexington Nov. 1. The event was rescheduled from its traditional Oct. 31 date due to strong storms moving through the area Halloween night.—VMI Photos by Kelly Nye.





Ring Figure Weekend

Members of the Class of 2021 receive their rings during a ceremony in Cameron Hall on Nov. 22. The 2nd class cadets heard remarks from superintendent Gen. J.H. Binford Peay III '62, Ring Figure chairman Jonathan West '21, and class president Dylan Stoltzfus '21. Later that night during the Ring Figure Ball in Marshall Hall, the cadets walked through the ring-shaped archway on the Gillis Theater stage and put on their rings for the first time. Friday's celebrations were followed by the last football game of the season, and senior day, on Nov. 23 in Foster Stadium. The Keydets beat the Chattanooga Mocs 31-24 to finish the season with a 5-7 record, their best record since 2003.—VMI Photos by H. Lockwood McLaughlin and Kelly Nye.





Father Fish and Rodent Drivers?

New Biology Faculty Member Has Seen It All

By Mary Price

Move over, zebrafish—there's somebody new swimming in the tank.

Many VMI alumni and current cadets will remember the research that Col. Jim Turner '65 conducted on zebrafish—but now that Turner has retired, the newest member of the biology department faculty, Maj. Molly Kent, has arrived, with plans to bring to post a different species of fish.

Kent, a behavioral neuroscientist, is interested in the three-spine stickleback—a fish species in which the father assumes almost total responsibility for raising the young.

According to Kent, only about 6 percent of fish species are paternal-only. That's attracted many scientists—but there's a research gap Kent is eager to fill.

"[The stickleback's] behavior has been really well studied." But Kent noted, "very few people have studied the brain."

Kent added that a procedure known as Golgi staining, which enables study of neurons under a microscope, hasn't yet been done in the stickleback. "That's something that's really great for students to handle," she commented.

Kent got her start in neuroscience at the University of Wisconsin, where she earned an undergraduate degree in biology. She'd entered the university thinking she'd major in psychology, but meeting a professor who was a neuroscientist changed her mind.

"I took my first [psychology] class, and I decided 'no,'" she explained. "I liked biology, and when I realized I could combine both psychology and biology, it was the best of both worlds."

Before she came to VMI, Kent was a post-doctoral fellow at the University of Richmond, where she was involved with research that gained national

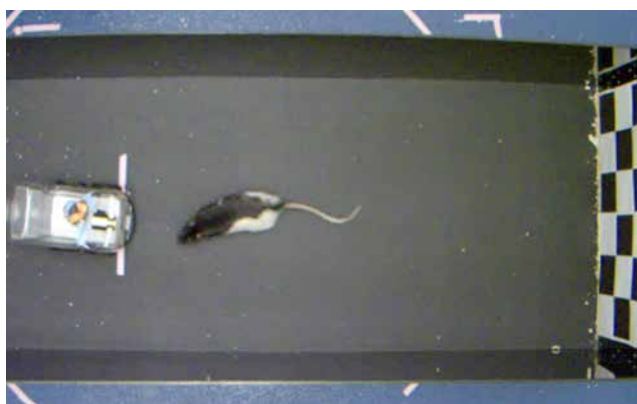


Maj. Molly Kent helps Brenden Shrader '23 with data analysis in an introduction to biology class.—VMI Photo by Mary Price.

and even international attention when it was published in the journal *Behavioural Brain Research* in mid-October.

There, Kent worked under Dr. Kelly Lambert, professor of behavioral neuroscience, to see if laboratory rats could be trained to drive a tiny, rat-sized car.

Like most neuroscientists, Lambert keeps rodents to study their behavior, with the goal of extrapolating what's learned to humans. One day, Kent recalled, a psychology professor asked, "Can we get rats to drive a car?" Kent explained that the professor was really just thinking out loud, but since Lambert had a pair of rats available—ones she'd dubbed Mario and Luigi—and another professor was willing to design a tiny vehicle for them, they decided to give it a try.



A laboratory rat and a rat-sized car are seen here in this image from the University of Richmond's neuroscience lab.—Photo courtesy of Maj. Molly Kent.

All of the women came to the experiment with a solid knowledge of rodents—and what really matters to them. "Rodents are extremely food motivated," said Kent. "You can train them to do just about anything for food."

Lambert and Kent started slowly, giving the animals a tiny bite of sweet cereal when they entered the vehicle. Gradually, more behaviors were introduced and rewarded, so the rats learned to stand on the metal plate on the bottom of the vehicle and hold onto a copper wire. When they did so, that moved the vehicle forward and toward a food reward.

But that wasn't all. Later, the rats learned to turn the tiny cars to the left or right by touching the sides of the vehicle. "How quickly they were able to catch on was extremely surprising to me," said Kent. "The steering I didn't exactly expect to happen. It was interesting that they could figure out, in space, how to move an object to move themselves."

Another surprise came when the researchers tested fecal samples from the animals—and found that the rats who'd learned to drive had lower levels of stress hormones than those who had not.

"It seems that driving itself is an enrichment to help with resilience," she stated.

VMI has no laboratory animals—and isn't likely to get any because of space limitations. Kent explained that standards of care require separate rooms for male and female animals, as well as another room for doing experiments. Caretaking, too, is an issue, as someone must come to the lab and check on the animals every day, year-round.

However, there are blood and fecal samples from the driving rats kept at the University of Richmond, and Kent said it's very possible that those could be brought to VMI for cadets to study.

This fall, Kent is teaching a course in animal behavior. In the spring, she'll teach an introductory course in neuroscience—and that course is already full, with a waiting list. 🐁

POST BRIEFS

Applied Mathematics Faculty Member Named Climate and Security Fellow

Lt. Col. Jessica Libertini, associate professor of applied mathematics, has been named a climate and security fellow through the Climate and Security Advisory Group (CSAG) in Washington, D.C. The organization is a non-partisan group of U.S.-based stakeholders from a broad range of institutions focused on developing policies for addressing the security implications of climate change. One of approximately 22 fellows, Libertini will travel to Washington, D.C., once each month for the rest of

the academic year to participate in lectures, field trips, and networking opportunities. She hopes to bring some of this experience into the STEM and Policy course she will teach in the spring. This is Libertini's second selection for an outside fellowship in the past three years: in 2017, the American Association for the Advancement of Science named her a science and technology policy fellow, with a placement in the office of the secretary of defense.

Plastic Whale Nets Media Attention

A wire sculpture of a whale created by Col. Gerald "Jay" Sullivan, professor of mechanical engineering, and filled with plastics by elementary schoolers as a way of drawing attention to the problem of plastic pollution in the world's oceans, was recently featured in a television news story by Harrisonburg, Virginia-based WHSV. The story, broadcast Nov. 8, featured

interviews with students at Bessie Weller Elementary School in Staunton, where the whale sculpture is now located. Sullivan created the whale in partnership with Shenandoah Green, which conducted an "Earthtober" campaign to limit the use of single-use plastics. The whale will be featured in the Staunton and Waynesboro Christmas parades.

Honor Roll of Donors Now Available

The thousands of alumni and friends, including many of its faculty and staff, who made more than \$39.9 million in gifts and commitments in support of the Institute during the 2019 fiscal year, are recognized in the new VMI Alumni Agencies Honor Roll of Donors. Now available exclusively

online at vmialumni.org/honorroll, the document lists all of the individuals and organizations who made gifts to the Institute between July 1, 2018 and June 30, 2019, and includes information about fundraising in support of VMI during the fiscal year. 🌿



Thanksgiving Supper

Cadets attend an early Thanksgiving supper Nov. 19 in Crozet Hall. Parkhurst Dining provided traditional Thanksgiving dishes including turkey, sweet potatoes, gravy, and sparkling apple cider. Faculty members, administrative staff, and their families were invited by the Corps to attend. —VMI Photos by H. Lockwood McLaughlin



180th Founders Day Observed

By Mary Price

On a sunny and mild day, standing in stark contrast to the snowy Nov. 11, 1839, when 23 new cadets arrived to relieve soldiers guarding what was then the state arsenal, Virginia Military Institute observed the 180th anniversary of its founding on Nov. 11.

The occasion was marked, as always, by a day off from classes for cadets and the traditional Founders Day parade, accompanied by a 17-gun salute from four 105mm howitzers. Taking review of the parade alongside Gen. J.H. Binford Peay III '62, Institute superintendent, was Deborah Lee James, former secretary of the Air Force and this year's Founders Day speaker. (See additional photos on page 20.)

In her remarks to cadets that morning, James discussed her blueprint for career success—one that she developed after life thrust her into a career very different from the one she'd long envisioned for herself, and one that she described in her newly published book, *Aim High: Chart Your Course and Find Success*.

James told her listeners that from the age of 15, she'd dreamed of a career with the State Department. All of her decisions were made with that goal in mind, and after graduating from Columbia University with a master's degree in international affairs, she moved to Washington, D.C., and went through the State Department's oral and written interviews, all the while almost sure she'd be hired.

And yet she was not. At the age of 24, James related, "I remember crashing." That crash led her to stay in bed for four days, but on the fifth day, she got up and began to apply for other jobs. Soon, she was offered a job at the Pentagon as a program analyst with the U.S. Army.

That job led her to a position as a professional staff member of the House Armed Services Committee, and then to another as assistant secretary of defense for reserve affairs under President Bill Clinton from 1993 to 1998.

After a lengthy stint in private industry, including several

years working for well-known defense contractor SAIC, James reentered public life in 2013 when she was nominated by President Barack Obama to serve as secretary of the Air Force, a position she held until 2017.

Today, James serves on corporate boards and is thinking of launching her own nonprofit, one aimed toward the betterment of women and girls. She's also had some time to think about strategies for success, which she outlined in her book and went over during her speech in Marshall Hall.

The first strategy, she noted, is to chart and navigate your own course, as no one else can do that for you. "Everybody ... ought to have a Plan A, but prepare to pivot to Plan B," she commented. "You don't know what you're going to like until you expose yourself to different kinds of jobs and opportunities."

The second strategy is to seek mentors and mentor others—and not only during youth and young adulthood. "Keep that up for your entire life," James counseled.

Other strategies James mentioned include hanging on with positivity during times of transition, trying to understand what



Former Air Force Secretary Deborah Lee James discusses her principles for career success in a Founders Day convocation speech.—VMI Photo by H. Lockwood McLaughlin.

drives difficult people, and having a mindset of always needing to learn, evolve, and reinvent oneself.

James also stressed teambuilding as essential in today's business world. "No one is an island these days," she said. "Today it's all about teams." To thrive in this environment, "speak up and listen deeply," she advised. "At least half of communication is effective and deep listening."✪



Former Air Force Secretary Deborah Lee James meets with cadet regimental leaders after the Founders Day parade.—VMI Photo by H. Lockwood McLaughlin.

Loyal Donors Honored at Institute Society Dinner

By Scott Belliveau

On Nov. 11, VMI celebrated the generosity of more than 550 loyal donors at the annual Institute Society Dinner, at which the VMI Foundation recognizes the members of the Institute Society for their leadership. In fiscal year 2019, its nearly 800 members gave millions of dollars to VMI, including almost \$2 million to the Foundation Fund, which generates unrestricted money for VMI.

Stephen E. Hupp '84, VMI Foundation president, cited the many people who had a role in strengthening the Institute over



Derrick Ziglar '15 introduces a short video showcasing several highly accomplished cadets during the Institute Society Dinner.—Photo courtesy of Micalyn Miller, VMI Alumni Agencies.

the past two decades, including the “alumni and friends who have consistently provided what can only be described as amazingly generous financial support.”

Gen. J.H. Binford Peay III '62 thanked the guests for “the incredible impact of your gifts and donations to VMI that I see daily,” adding, “Your support has provided many of these special opportunities that have placed our graduates on a strong, forward trajectory.”

Guests also heard from three young alumni—Bess Dobbins Moskowitz '10, Sean Noll '13, and Derrick Ziglar '15—who related the continuing impact of VMI on their lives. ❧



Members of the VMI Herald Trumpets play the national anthem during the Institute Society Dinner Nov. 11.—Photo courtesy of Micalyn Miller, VMI Alumni Agencies.



Capt. Sean Noll '13 mingles with special guests including faculty and other alumni during the Institute Society Dinner.—Photo courtesy of Micalyn Miller, VMI Alumni Agencies.

Class of 1994 Presents Initial Proceeds of 25th Reunion Campaign

The Class of 1994 presented the proceeds of its 25th reunion campaign, more than \$1 million, to the Institute Nov. 2 during the third fall reunion. The presentation was made by Phillip A. Starling, Marshall C. Campbell, and George M. Brooke IV. Gen. J.H. Binford Peay III '62, superintendent, and Steve Maconi, VMI Alumni Agencies chief executive officer, accepted the initial proceeds of the campaign. With 170 brother rats participating in the campaign, the class had a 55 percent participation rate.—Photo courtesy of Micalyn Miller, VMI Alumni Agencies.



Tournées Film Festival Brings French Cinema to Post

By Mary Price

Founded in 1995, the Tournées Film Festival has a goal of bringing French cinema to American audiences—and this November, for the first time ever, the festival came to VMI, with six films being shown Nov. 7-16.

The Tournées festival is funded by the French Ministry of Culture through the Franco-American Cultural Exchange (FACE), explained Lt. Col. Jeff Kendrick, associate professor of modern languages and cultures.

It was Kendrick who first thought to bring the Tournées festival to VMI, after reading about the *semaine internationale de la francophonie* (international week of Francophonie, or IWF), an international celebration of the language and cultures of the French-speaking world.

“In an effort to raise awareness of our growing French program at VMI, and as a way to broaden our outreach on post, I thought the Tournées festival would be a great way to celebrate IWF,” Kendrick commented.

In the spring, he applied for a grant to cover the cost of screening the films. As part of the process, applicants review a list of several dozen films and are asked to choose five recently released films and one “classic” film that they would show if their application to host the Tournées festival is approved.

The application process is quite competitive. “They look at things like how the films fit with your college or university,” explained Kendrick. “They look at what access people in your region have to French cinema. They want to bring in something that people don’t normally get to see.”

This year, only two Virginia schools were selected to host the Tournées festival—VMI and Christopher Newport University.

Shown at VMI were *Le Retour du Héros* (Return of the Hero), *La Douleur* (Memor of War), *Le Corbeau* (The Raven), *Une Jeunesse Allemande* (A German Youth), *Tazzeke*, and *Madame Hyde* (Mrs. Hyde). All were in French with English subtitles.

“There’s a lot of different kinds of films, but it’s all built around the idea of conflict,” said Kendrick. “Some of it is romantic conflict; some of it is actual political, national-level conflict; civil conflict within a society.”

Tazzeke, he noted, is about the adjustment immigrants must make when moving to a new land—in this case, moving from Morocco

to France. *Madame Hyde*, said Kendrick, “is a funny, kind of quirky movie loosely based on *Dr. Jekyll and Mr. Hyde*.”

But the Tournées festival wasn’t just a nonstop movie marathon. It was also an opportunity to learn more about French cinema from experts in the field. On Nov. 9 and Nov. 16, guest speakers came to post to talk about the films and help the audience explore them more deeply.

Speaking on Marguerite Duras, whose book *La Douleur* formed the basis for the movie of the same name, was Dr. Elizabeth Groff, assistant professor at Roanoke College. Dr. Florence Martin, professor of French at Goucher College, spoke on *Tazzeke*.

In the weeks leading up to the festival, Kendrick made a big effort to get the word out, putting up

posters around Lexington and spreading the word to other colleges and universities within an easy driving distance.

“This is the first time we’ve ever done something like this since I’ve been here,” he commented. “If it’s successful, there’s no reason why we wouldn’t try it again.”

In addition to the funding from FACE, the Tournées festival’s appearance at VMI was made possible by the Dean’s Academic Speakers Fund, the Department of Modern Languages and Cultures, and the Office of International Programs. ❁



Dr. Florence Martin of Goucher College speaks during the Tournées Film Festival in Nichols Engineering Building Nov. 16.—VMI Photo by H. Lockwood McLaughlin.



The Tournées Film Festival brought six French films, all with English subtitles, to VMI Nov. 7-16.—VMI Photo by H. Lockwood McLaughlin.

Middle School Students Craft, Build, Problem Solve

By H. Lockwood McLaughlin

On Nov. 8, a group of about 20 middle school students visited post as part of a STEM outreach program to participate in engaging engineering and math-related activities. The visiting middle schoolers were divided into a few rooms of Nichols Engineering Building, where they were able to craft, build, and problem solve. The event was sponsored by the American Society of Civil Engineers, a group which includes a very active VMI chapter.

"It's going really well. They seem excited and interested in what they're doing," remarked Richard Fetter '21, who had just stepped aside from a lab table where a hands-on activity with sand and water was taking place. "It feels great to give back. I got interested in engineering, and I think it's good to expose them to it and provide them that opportunity."

A few weeks prior, a group of engineering cadets visited Maury River Middle School to do similar outreach and to get kids interested in the STEM fields.

"That was a very good experience," recalled Dr. Tanjina Afrin, assistant professor of civil engineering. "And our cadets are very excited about this [event] as well. They can help a local school, and at the same time, they will have the pleasure of helping others"

This visit to post is just one of a string of visits and positive outreach-related interactions between Maury River Middle School and VMI. In years past, the middle school has sent students to the National Engineers Week at VMI. Eighteen months ago, Annika Tice '19 organized a girls' leadership camp at VMI which included students from a MRMS after-school program. Middle schoolers also



Dr. Tanjina Afrin watches as Christopher Milliken '20 and Andrew Polson '20 help Maury River Middle School students build a marshmallow sculpture.—VMI Photo by H. Lockwood McLaughlin.

attend the national math exam competition, the AMC-8, each November in the Center for Leadership and Ethics.

Back in Nichols Engineering Building, amidst smiles and genuine excitement, the cadets spread out to help teach and interact

with middle schoolers involved in the different activities offered. One classroom was mathematics, while two were more engineering focused. There was even some competition between students as they worked to create their best structures in one of the challenges.

"Our cadets were very excited about this," said Lt. Col. Matt Swenty, associate professor of civil engineering, who was in a room where cadets were helping kids build wire frame structures out of marshmallows and dry noodles. "We didn't have to pull teeth at all. They are readily volunteering, and they're excited about it. We told them it was local community middle schoolers. They thought that was a really worthwhile activity, so I was really happy to see that." 🍌



Cadets help students from Maury River Middle School discover STEM through hands-on activities in Nichols Engineering Building.—VMI Photo by H. Lockwood McLaughlin.

Women's Club Rugby Undefeated

By Molly Rolon

What is possibly the most successful fall club sports team, women's rugby, is also the team that, from the outside looking in, had the least chance of being successful.

The team recruits from an extremely small pool. The entire roster seldom practices together, and most players come to the team—and sometimes the game—with little to no experience playing the sport. Adding to the strikes against the team is history. Four years ago, the team had been disbanded due to lack of interest. Despite perceived obstacles, the VMI's women's rugby club did not lose a conference match all season—and beat non-conference opponent the Citadel as well.

"This year, the women are the pride of the club, going undefeated in a series of round-robin sevens tournaments around the state," said Capt. Blair Turner, who coaches the women's side. Rugby can be played in several configurations, with teams of seven or 15 being the most common.

The women's success comes from many angles: Support received from inside and outside the club, physical fitness, and a true team environment. The support for the current women's success began within the club nearly four years ago.

"When I came here, we didn't have a women's team," said Maddy Moger '20, team captain.

"I walked onto the guys' team, and they let me play with them and practice with them until we built up the women's team."

An atmosphere of 'one team, one goal' boosts both rugby teams at VMI.

"Support amongst the two teams has always been positive," noted Turner. "They practice on the same days and on the same [field] and root for each other on game day." The two teams also scrimmage each other in practices, Moger said. This helps new recruits to see and feel what a game will be like, and practicing with the men's side increases training intensity.

Current players explain to potential recruits that rugby is a sport for everyone. It's a sport for every body type and ability, as the sport needs a mix of larger, stronger players, and smaller, more agile players. No matter what a woman's physique, there's a position for her on the rugby "pitch," or field. Many potential recruits shy away from rugby because they don't have experience, but Moger explains,

"You don't need experience. We accept everybody. We'll teach you the sport."

Explanations aside, recruiting women to play rugby at VMI is a challenge that boils down to numbers. Women make up less than 15 percent of the Corps, meaning there's not that many of them to actually recruit. This already small group of cadets is heavily involved in Corps activities. The team added a third practice on Wednesday evenings to give players who are cadre or involved in conducting rat training a chance to get on the pitch.

"Time is a precious commodity at VMI—club sports must fight for it like everyone else," said Turner. "Often, if cadets have other commitments, they have to miss practice time."

Building a winning team has helped recruiting. By the time Moger returned as a 3rd Class cadet, there was enough interest

for a women's team.

The newly rebuilt team went to the Todd Miller Tournament at Longwood University that spring and won every game.

"The majority of the girls had never played in a rugby game before, and we won the whole thing," Moger said. "Doing something like that definitely boosts the popularity of the sport."

Rugby is a rough-and-tumble sport by any account. There's the full tackles of American football, combined with the constant running of soccer, plus some hockey-style roughness and

no substitutions unless for an injury. To cap it off, mouth guards are the only protection allowed.

At VMI, however, this attracts recruits. "I think it appeals to VMI girls a little bit more—the aggressiveness and brutality," Moger said. "That's not something that VMI girls easily shy away from."

Another element of the team's current success is cohesion. Perhaps built through the shared cadet experience, and definitely helped by the above-average physical fitness gained from Corps life, this team atmosphere serves the "ruggers" well on the pitch.

"One thing that gives us an edge up is that our girls are fit," said Moger. "Compared to other teams, we have so much more endurance, and we outlast them on the field. VMI girls are very quick learners. When we're in our practices we may not realize that, but it all comes together on the pitch."

The team also shares in racking up game scores. A wide variety of players score tries, or goals, during most games. Almost every



Members of the women's rugby team pose for a photo on North Post.—Photo courtesy of Molly Rolon.

tournament this season has seen a player scoring her first try, Moger said. Most other teams have a couple of “glory hounds” who score most of the tries, but on the VMI women’s side, tries are scored by all positions and all class years.

This fall, the team roster boasts a strong contingent of 1st Class and 3rd Class cadets. The younger players are critically important to the continuity of women’s rugby at VMI, while the 1st Class cadets bring experience and leadership. Going forward, the team hopes to add current rats to the team for the spring season, eventually expanding the roster to make playing 15-player games a regular possibility. 🍀

Model Arab League

Jonah Eger '21, Zane Bouregy '21, Jacob Woodruff '21, and Holly Hein '23 attend a debate sponsored by the Appalachia Regional Model Arab League at Hollins University in Roanoke Nov. 1-3. At the event, which aims to develop the diplomatic acumen of future leaders in Arabic-speaking nations, the cadets represented the nation of Oman. Bouregy earned an award for superior performance in the Social Affairs Council, while Hein took home an award for distinguished performance in the Political Affairs Council. Accompanying the cadets was Maj. Jason Schroeffer, assistant professor of modern languages and cultures.—Photo courtesy of Maj. Jason Schroeffer.



Rat Olympics

Rat Olympics take place in the Corps Physical Training Facility Nov. 11. The competition is the culmination of the 10-week physical education program, Rat Challenge. The company that works the hardest and displays the best attitude wins the Stockwell Cup, named for the late Col. Bill Stockwell. This year’s winner was Company E.—VMI Photos by H. Lockwood McLaughlin and Mary Price.





Virginia Military Institute
Communications & Marketing Office
Lexington, VA 24450-0304

Nonprofit Org.
U.S. Postage
PAID
Richmond, VA
Permit No. 320



Founders Day

This year's Founders Day marked the 180th anniversary of the Institute's founding, Nov. 11, 1839. Former Air Force Secretary Deborah Lee James took review of the Founders Day parade alongside Gen. J.H. Binford Peay III '62, superintendent, and current Board of Visitors president Bill Boland '73, and the Cadet Battery fired four howitzers for a 17-gun salute.—VMI Photos by H. Lockwood McLaughlin and Kelly Nye.

