Cochise in Costa Rica

Page 4
The Cochise College Foundation board of directors is always pleased to be able to help students. That’s why we serve.

Now I’m excited that the foundation is embarking on a new project that aims to solve a community problem - the percentage of individuals age 16-24 who are neither in school, nor working. In Cochise County, according to opportunity-index.org, that percentage is a little higher than the state and nation. We’d like to see that change, and we know that education plays a major role in quality of life for both the individual and the community. For many people, education helps secure a comfortable lifestyle and makes dreams come true.

To address this issue, the foundation seeks to guarantee a scholarship to all Cochise County high school graduating seniors. To start, scholarships will be offered at three levels dependent upon GPA, and we hope to see award amounts grow over time.

As we take on this challenge, the foundation seeks to connect both with established and new donors. The April 29 scholarship fundraiser An Evening at the Races marks the first in what we hope will become an annual event that connects us with you.

Details of the Scholarship Guarantee Program will be available in the fall semester. On behalf of the board and the students who will benefit, I sincerely thank the donors who have already stepped forward to support this noble cause and look forward to hearing that you will be a supporter too.

Sincerely,

Mark Battaglia JD
Board President
Cochise College Foundation
Board Officers
Mark Battaglia, J.D., President
Gail Zamar, Vice President
Gene Manring, Secretary
Karen L. Justice, Treasurer

Board Members
Yolanda Anderson
Chuck Chambers
Sheila DeVoe Heidman
Jean Giuffrida
Jan Guy
Dan Rehurek, Ph.D.
David Smith
Bob Strain
Dr. Mark von Destinon

Board Member Emeritus
Shirley Gregory
Linda Staneart

Ex-Officio Member
J.D. Rottweiler, Ph.D. (ex-officio)

Honorary Members
Marsha Arzberger
George Bugen

Cochise College Foundation Staff
Denise Hoyos, Executive Director
Sheila Selby, Foundation Coordinator
Rose Berumen, Administrative Assistant

"Accolade" is published by the Cochise College Foundation, 4190 W. Highway 80, Douglas, AZ 85607. (520) 417-4100

Contributors
Rose Berumen
Amanda Helt
Denise Hoyos
Keith Ringey
Sheila Selby
Rick Whipple

"Accolade" inspires charitable contributions in support of Cochise College by raising awareness about competitive advantages of the college and the activities of the Cochise College Foundation, which promotes student success through scholarships, facilities development, and program support. By supporting Cochise College, the Foundation endeavors to increase the college’s accessibility to our diverse and changing communities.

FROM THE COCHISE COLLEGE PRESIDENT

Every year at commencement, the same thought crosses my mind.

“Where did the year go?”

The 2016-2017 academic year has been so full of great things that it’s been hard to fill you in on all of them.

In addition to the stories in this issue of Accolade, there’s plenty of other news of note that may not make it into this publication but can be found on the college website.

For example, Cochise College welders took the top three spots in the Skills USA State Championships; the winner was a female Cochise College student. Women’s basketball played in the second round of the national tournament. Men’s rodeo finished first in the Grand Canyon Region, and the women finished third. The baseball team and the men’s basketball teams made it to the regional semi-finals.

In the coming year, the college will pilot the use of open educational resources as a way to save students money on textbooks. Open educational resources are teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use and repurposing by others. The transition may take some time, but the intent is to help provide better access to students.

In addition, the college is undergoing a major review and upgrade of its information technology system and internal processes. The result is some months away, but the impact on students and the institution is expected to be significant and positive.

Meanwhile, I’d like to thank all of those businesses, individuals and volunteers who supported the college’s recent fundraising event An Evening at the Races. The event is a meaningful step toward helping the college increase the capacity of local residents to positively contribute to the quality of life in Cochise County.

J.D. Rottweiler, Ph.D.
President
Cochise College
jdr@cochise.edu
Research takes community college scientists to new level

Each year, the findings of research in various branches of science change the way we see the world.

Dr. Beth Ann Krueger, dean of mathematics and sciences, and Edmund Priddis, chair of the sciences, can easily name recent examples: the discovery of one of the last dinosaurs, a T-Rex in South Africa; the deadly impact of sunscreen on coral reefs; the harmful impacts of trash on sea turtles; the bleaching of the Great Barrier Reef in Australia; the production of medicines using recombinant DNA technology; and global climate change leading to the northward shift in bird wintering ranges.

Instructors try to integrate new information into class materials, but it’s not necessarily the same as conducting your own research.

So Cochise College faculty leaders partnered with the Community College Undergraduate Research Initiative (CCURI), which provides educational and faculty development resources to 44 institutions. One of four CCURI partners in Arizona, Cochise College established an Undergraduate Research Initiative club that engages students in developing their own research proj-

Cochise College scientists, above, explored Manuel Antonio Park, right, on the Pacific Coast of Costa Rica.
ects, with real outdoor experiments and unpredictable results and variables. Since 2013, the program has allowed students and instructors to trek through major deserts, an assortment of mountain ranges, and rainforests. To date, participants have studied the bean beetle, used high output covert infrared detecting camera traps to record wildlife traffic, and participated in the zika-related study of mosquitoes in conjunction with the Cochise County Health Department, among other things. They’ve also hosted Earth Day events and presented at the Arizona-Nevada Academy of Science poster session at Glendale Community College and at the CCURI conference in Gallatin, Tennessee.

Cochise County, which is rich in biodiversity, helps make the college’s undergraduate research a unique and special educational opportunity. Currently, students are taking advantage of their enriched landscapes by analyzing more than 20 mammal species with infrared cameras in various locations around the county.

“They get to begin thinking like a scientist, not a student,” said Priddis. “The research shows that the sooner students get involved in research the better. They are more likely to stay in their major, and they also absorb the material better.”

Though the club’s activities are not fully integrated into the science curriculum, Priddis says that may occur in the future. Meanwhile, as students work on their degrees, their participation in undergraduate research projects complements their classroom learning experiences, helping them gain an understanding of laboratory techniques and anaerobic respiration; the steps of molecular genetics, including the concept of the gene and its expression; ecological principles; and more.

In recent months, students have begun exploring the world beyond Cochise County. In April, they began research in Mexico to understand how the international boundary impacts the movement of species. In the summer of 2016, students traveled even further south to Costa Rica. For 10 days students learned about two volcanoes and a diverse assortment of wildlife, as well as the culture of the Central American country.

“We left the Monday after graduation,” Priddis said. “There were six students, another instructor and me. We went all over Costa Rica. It’s pretty diverse. It has two sides. It has a big mountain range in the middle. We went into what they called the Cloud Forest and another classic rainforest. We visited a school in Costa Rica and kids showed us their cultural dance.”

Johnny Salas, a sophomore who made the trip, appreciated learning about the plants and animals, including the large population of birds, some of which he’d never heard of before.

“Everything was so green, looking out the window from our tour bus you would see so many trees. It reminded me of Jurassic Park, to be honest,” he explained. “It was nice learning how much we all have in common, despite our differences.”

As field research grows in popularity among Cochise College students, Krueger and Priddis are considering additional opportunities. And, you can follow along and learn more about what student scientists are up to by joining Cochise College Undergraduate Research on Facebook.
The list of organizations that have dealt with significant information breaches, including identity theft, organizational breaches and other cyber-related intrusions, is lengthy and covers a variety of industries. The topic is in headlines almost daily, drawing attention to the growing need for workers who know how to protect information systems.

"Just look at the news," said Dan Guilmette, Cochise College CIS faculty. "Cybersecurity will only become more important in the future, not less."

Pervasive and ever-changing technology now requires citizens from all walks of life to gain some level of knowledge about how to protect information, as well as others who are willing to play a bigger part in helping protect the nation's assets.

Nora Luna, an alumna of Cochise College, earned her degree in cybersecurity last year. As a grant specialist with the Tombstone Unified School District, she helps make decisions about the confidentiality of student information. She also works on Fort Huachuca for OSI Vision, a contractor that provides services in the areas of IT operations.

She sees a growing need for more cybersecurity professionals.

“I believe that there needs to be more [people in this industry], because technology changes so often that we have a hard time keeping up. The more people that are in the field, the better we are able to function," she said.

Guilmette attributes a growing interest in the college's cybersecurity training to community outreach and the college's relationship with industry professionals at Fort Huachuca. The program hosted the first-ever Cybersecurity Night for students last fall, offering alumni and industry panels and exposing students to advice from professionals. It also is served by a STEM (science, technology, engineering and math) industry outreach coordinator, who helps place students in internship programs with relevant employers.

“We have been starting to see increased numbers for the last couple of semesters," Guilmette explained.
Students enrolled in the program start in a typical classroom with 20 or so PCs lined up on rows of desks, along with stacks of servers and dozens of ethernet cords. Students are "plugged in" to their computers to examine lines of code in order to put a database of private information on the defense against an ever looming threat of hackers.

But protecting computers isn’t the only thing students learn.

“Cybersecurity is not only learning how to fix or secure a system,” explains Chase Petit, a student from Sierra Vista. “You must know how to compromise a system as well.”

Petit says studying cybersecurity is about both defense and ingenuity, both of which have been a challenge to her.

“Sometimes I didn’t really understand what I was learning until later on. Now that a couple semesters have gone by, everything has now been making sense,” she says.

Students who complete an associate’s degree spend lecture and lab time gaining an understanding of computer languages. They are introduced to multiple operating systems like Windows and Linux, which is a freely distributable, cross-platform operating system. They also study network defense and computer forensics. And they are taught by experts in each respective field.

“Faculty expertise comes from two main areas - a formal education or certifications, as well as experience in the field,” Guilmette says. “For example, we have associate faculty teaching computer forensics who also performs the same tasks for local law enforcement, and one of our full-time faculty has various certifications to include the CISSP (Certified Information Systems Security Professional). We try to maintain a balance that allows us to better present the full breadth of cybersecurity to our students.”

In addition to Cybersecurity Night, the college supports programs that expose students at all levels to cybersecurity and information technology. It serves as host of the AFCEA (Armed Forces Communications and Electronics Association) Computer Challenge that draws hundreds of K-12 students to campus for competitions in word processing, programming, keyboarding and web page design. It also supports the Air Force Association’s CyberPatriot Program and the AFCEA President’s Cup, both of which challenge students to resolve real-life cybersecurity situations in a virtual environment.

“We simulate something that looks like a real world threat,” says one CyberPatriot volunteer. In the real world it would be like an organized crime group or something like that, but during the competition, it’s a bunch of professionals who do this for a living and who are trying to show kids how dangerous it is and how easy it is to let the bad guys in.”

Guilmette says he hopes to continue to grow community interest in order to help build a stronger cyber industry in the future, noting that the number of Cochise County Cyberpatriot teams has grown from five to 26.
Event raises $10k for scholarships

More than 100 sponsors, donors, community members and employees helped the Cochise College Foundation launch its inaugural An Evening at the Races event in April, raising both the visibility of the organization’s work to promote student success and approximately $10,000 for scholarships.

Guests had the opportunity to purchase and name horses and jockeys in six 12-horse races. Participants used Cochise Bucks to identify their favorites and bid and paid for approximately 60 silent auction packages using their winnings, also Cochise Bucks. Dr. JD Rottweiler, Cochise College president, worked up the crowd by calling the races. Some 20 attendees also participated in the hat parade.

Sponsors included the Sierra Vista Herald, Legacy Foundation of Southeast Arizona, Southwest Gas, Big O Tires, Battaglia and Roberts PC, Sulphur Springs Valley Electric Cooperative and Wi-Power, Canyon Vista Medical Center, Hudbay, Arizona G&T Cooperatives, DiPeso Realty and Martin Cleaners. In addition to purchasing tickets or sponsoring horses, numerous donors also supported the cause with additional contributions. They included Celia and Arthur Jenkins, Gene and Helen Manring, Daniel and Anne Ortega, Tim and Ruth Quinn, and Robert and Jane Strain.

The Cochise College Foundation has committed to a project to guarantee a scholarship to all Cochise County graduating high school seniors, starting with the Class of 2018 that will enroll for the 2018-2019 school year. An Evening at the Races will play an important role in raising awareness both of student need and of progress made toward decreasing the number of Cochise County youth age 16-24 who are neither in school or working.

An Evening at the Races 2018 is scheduled for April 28 at the Sierra Vista Campus.
Cochise College faculty Rebecca Orozco and student Stephen Uzzle prepare to excavate a location at Warren Ballpark. Orozco participated in digs around the county when she was a student at Cochise, and Uzzle will participate in Archaeology Southwest’s 2017 summer field school.

Cochise College students joined with University of Arizona and Bisbee High School students this semester to participate in an archaeological excavation of Bisbee’s Warren Ballpark. The oldest continuously operating ball field in the U.S. drew big-name athletes, but little is known about the fans. The dig focused on areas under the stands where spectators would have congregated, according to UA faculty Dr. Robert Schon, who planned the experience. The purpose was to learn about past behaviors by examining items discovered there.

According to Schon’s proposal narrative, the first phase of the project identified numerous beverage containers, including some manufactured in Bisbee in the early 20th century and others shipped by rail. Researchers also identified that soft drinks were more commonly found in the infield and that alcoholic beverage containers were more readily found in the outfield. After the unexpected discovery of a partial bottle of Shu-milk, a 1940s shoe cream, research confirmed the presence of a cobbler during the Great Depression. A Bisbee Bus Line token from the 1930s was among the oldest items found, according to a February 2017 report by Tucson News 4.

Cochise College student Stephen Uzzle, who participated in the dig, is one of 16 students from across the U.S. who have been awarded a fellowship from UA and Archaeology Southwest to attend summer field school in archaeology. One Cochise College student has participated in the field school in each of the last two years.

Items from the dig will be catalogued and displayed at the Bisbee Mining and Historical Museum.
Angelica Calanog, a member of the 2017 All-Arizona Academic Teams, and multi-scholarship recipient Brigido Sicairos, shared their stories with employees and Cochise College Foundation board members attending informal 50th birthday parties on the Douglas and Sierra Vista campuses. The workday festivities included both edible cakes and this styrofoam prop, created by culinary arts faculty Lora Miller, that appeared on the cover of the fall 2016 Accolade. Calanog, who was a high school senior and a Cochise College sophomore at the same time, talked with attendees about how she manages her time, her love for her job in the science lab, and her desire to obtain scholarships in order to prevent her parents from going into debt. Sicairos also covered his family’s financial situation, explained how scholarships help him, and got the chance to meet the donors of one of his scholarships, the Helen Mulholland Memorial Scholarship for excelling science students.

The Cochise College Foundation became an Arizona non-profit organization on March 20, 1967. The foundation’s mission is to promote student success, and it is expanding its visibility among employees, community members and other stakeholders. The birthday parties served to follow up on an effort last year to publicize the foundation’s work and enhance employee giving.
Several dozen former Cochise College Apache players came together for an all-class baseball reunion on April 1. Guests represented classes from the 1960s to the 1990s and included former coaches Dick Atkinson, Bobby Roan, Chuck Hoyack, and Dr. Bo Hall (’72). Players gathered at Turquoise Valley Golf Club for a round of golf, then visited the Douglas Campus to watch the Apaches play Pima. The day ended with dinner at The Gadsden Hotel.

Visitors were introduced between games, with participants taking photos on the field. More information and photos can be seen in the online version of the April 4 Douglas Dispatch.

Richard Acevedo (’86), the primary organizer of the day’s activities, shows off socks that clearly have style and significance.
College launching new programs

Two new programs set to begin this fall aim to meet existing and anticipated workforce needs in Cochise County.

Curriculum for an associate of applied science degree in agronomy was approved in December. New courses to support the program include Introduction to Crop Science, Introduction to Entomology, Sustainable Use of Natural Resources, and Crop Consulting. The vibrant local agriculture industry, which turns out everything from nuts to grapes and includes backyard farmers and large producers, is driving the evolution. Courses will be offered primarily in Douglas, Willcox and Benson.

Also starting in August is a residential construction technology program that will allow students to build a home and earn a certificate in one year. The program will be carried out in conjunction with Habitat for Humanity, which will provide a location and materials. New courses to support the program are planned sequentially to allow for home construction and include Concrete, Wall Coverings, Exterior Finishing, Roofing, Floor Covering, and Doors, Cabinets and Millwork. Students will be committed to the project full time, and the courses will be offered in eight-week sessions. An associate of applied science in residential construction technology also is an option. The college developed the program in anticipation of a major Benson-area master-planned community that plans 28,000 new homes to be built over a 20-year period.
Employees go extra mile to promote student success

Cochise College employees pledging to donate through payroll deduction were set to contribute in excess of $20,000 during the 2016-2017 fiscal year. Their contributions support an array of needs, including scholarships, programs, and capital.

The number of full-time employees giving through payroll deduction grew from 34 to 65 last fall, an increase from 10 to 20 percent of full-time employees. A handful of associate faculty also donate through payroll deduction. Prior to August 2016, employee gifts totaled about $10,000 annually.

In addition to increased visibility on campus, it recently took steps to enhance giving by college and foundation leaders. All of the college’s five elected Governing Board members supported a recent fundraising event, and the foundation board recently voted to require a minimum gift of its members.

“Promoting student success in this way is happy work,” Hoyos says. “On behalf of students, we are thankful to all of the employees and college leaders who not only donate, but who also serve on scholarship review and fundraising committees. Our efforts would not be the same without them.”

Help us celebrate 50 years of promoting student success through charitable giving.

Your gift of

- $50
- $500
- $5,000

goes to the general scholarship fund and can be mailed with the envelope in this publication.

They value excellence. So they give.

Dr. Beth Krueger, Dean of Math and Science

Long-time Sierra Vista residents Hal and Virginia Thomas recognized excellence in the Cochise College Nursing Program and included plans to support it in their trust.

Working with their attorney and the Cochise College Foundation, they established a perpetual endowment to provide scholarships for students like those who helped Virginia in her time of need.

What do you value?

We can help you leave a legacy that supports student success.

Contact: Denise Hoyos
520-417-4148 / 520-515-3690
hoyosd@cochise.edu
www.cochise.edu/give
SCHOLARSHIP SEeks TO DEVELOp BISBEE CAREGIVERS

Bisbee-area residents interested in training for a career they can practice in their community may be eligible to receive the $1,000 Justice Financial CNA Scholarship in coming semesters.

Cochise College Foundation board member and local business owner Karen Justice established the scholarship by transferring stock to the foundation. Her goal is to help train individuals to become certificated nursing assistants so they can provide care to residents of Bisbee who wish to stay in their community and homes.

The CNA program will be offered in summer, fall and spring, and two scholarship awards are anticipated. Applications are now available online at www.cochise.edu/fa, as well as with Terri Vernon, CNA coordinator, who can be reached at (520) 515-5471 or vernont@cochise.edu.

1970s
Joe Pintor, who played baseball at Cochise, has retired from Union Pacific Railroad.

1980s
Charles Escarcega ('89) earned an associate of applied science in mechanical drafting at Cochise and a bachelor’s degree in industrial technology at Arizona State University. He has held a variety of engineering positions within the semiconductor, mechanical engineering, telecom and electrical engineering fields, including work as engineering technician IV for Erica Lane Enterprises. A former Cochise baseball player, he credits drafting faculty Max Shoehnals and coach Bo Hall with helping inspire his success.

1990s
William Wright ('92) is athletic director for Estrella Foothills High School/Buckeye Union High School District.

Brian Wright ('93) is finance director for the City of Eloy.

2000s
Mary Giaconeletti Franco attended Cochise right after high school, earned a bachelor’s degree at the University of Arizona and a master’s degree at the University of Phoenix. The principal at Open Doors Community School, she expects to earn her doctorate this year.

2010s
JC Shine ('11) earned a UAV flight operator degree and is an aviation safety inspector with the Federal Aviation Administration.

Stefanie Mills ('13) is a Title I paraprofessional teaching math and reading to third graders in the Sierra Vista Unified School District.

Micah Gaudet ('14) is a public safety intelligence analyst with the State of Ohio. Gaudet’s degree in intelligence operations transferred to Middle Tennessee State University, where he earned a bachelor’s degree in economics. “Cochise gave me, a backwoods, homeschooled kid from Wisconsin, the confidence I needed to be successful.” He is finishing a master’s in public administration at The Johns Hopkins University. “I doubt this would be happening without Cochise College.”

Matthew Lamb ('16), a graduate of the intelligence operations program, is a veterans service representative for the Department of Veterans Affairs, Veterans Benefits Administration.

Brandon Uselton ('16) is an IT technician with Texarkana Water Utilities. He earned an electronics technology degree while serving in the military.
Cochise College extended special invitations to two athletics alumni to lead students to their seats during its 52nd commencement at the Douglas Campus on May 12.

Margie Torres (‘11) and Peter Van Bogaert (’92) both reside in Tucson and consider their Cochise experience as a time when something important happened in their lives. Both referred to it as a beginning.

Margie, originally of Tucson, was approached by coaches Karen and George Nicodemus at a high school basketball game. At the time, she thought they wanted one of her teammates, specifically the tall one. But Karen and George saw something in her - a smart player whose skills they could use at Cochise College. Margie was elated.

What’s remarkable about her time at Cochise is that she “grew up.” Recalling the scary moment when her mom left her at the Douglas Campus, she also confirms the truth of Coach Karen’s advice - that the friendships formed in college would last longer than those in high school. Margie’s thirst for opportunity also made her an easy recruit to play at Sterling College in Kansas, where she got the chance to see some of the world beyond southern Arizona.

Margie started out studying administration of justice and behavioral science. An internship as a probation officer changed her mind, and she was an assistant coach at Cochise until a car accident forced her to pursue work closer to home. She joined Pima Community College as a dispatcher in 1996, worked more closely with students as a cashier beginning in 2007, and moved into payroll until 2010. Today, she is the scholarship coordinator for Pima Community College Foundation.

Her proudest professional accomplishment has been leading the implementation of a scholarship application and review program that makes it possible for students to obtain financial assistance, and for donors to help. She’s still a fan of Cochise basketball.

“When Cochise comes to play Pima, I have to admit I sit on the Cochise side and wear my red and black,” Margie says. “Cochise has a special place in my heart, because that’s where my life started. Watching the players succeed reminds me that athletic opportunities are what kept me going.”

Van Bogaert was an all-state catcher and leading hitter at Douglas High School. He was recruited to play at the college and university level. Cochise College suited him academically, and he graduated in 1992 with an associate of general studies. He continued to play at Western New Mexico University, where he earned a bachelor’s degree in education with a minor in ESL.

After playing two years of independent baseball in Canada and Mexico, and while waiting for teaching job fairs, Peter discovered he had a hidden talent for construction. Today, he’s the owner and leader of PVB Fabrications, an industrial contracting business based in Tucson that employs 120 people. PVB Fabrications was recently named the 2017 Small Business Administration Minority-Owned Small Business of the Year for the State of Arizona.

Peter describes Cochise College as a place of re-birth. When his father died after his freshman year, Coaches Bo Hall and Chuck Hoyack stepped up their mentorship, and Peter credits them with helping form principles of life that he still practices.

“My life as a business owner in the construction field is similar to what it looked like for me as a player: I learned to evaluate skills; developed the ability to work with integrity, respect and honor; and was given the freedom to evolve under the guidance of coaches and interactions with teammates” he says. “That constant desire for personal growth helped me be able to learn how to prepare for the future, and it all started here at Cochise.”

Margie and Peter joined with Chuck Hoyack, dean of liberal arts, faculty member in history and baseball coach, in leading students to their seats.
The 1973 Cochise College baseball team included, left to right, Richard Saenz, George Montaño, Eddie DeAnda and Rick Hooker. If you can identify the unnamed individuals in this photo, email alumni@cochise.edu.