



The Brightest Star in the Lone Star State:

Collin College professor named 2013 Texas Professor of the Year

We cannot forget them—the people who transform education into personal, enlightening experiences. Though there is no fail-safe recipe to fashion an extraordinary professor, when you encounter one, you know it immediately. It may be the way this individual has the ability to simplify a complex concept with ease or the fact that this person will push you to hurdle seemingly insurmountable challenges.

Among these intrepid individuals there are a select few who shine above the rest—who are called to serve as national models of excellence. Successful in her own right as a *New York Times* best-selling author, pilot and first responder, Ceilidh Charleson-Jennings is an educational pioneer who is leading a new generation into the dynamic world of mass media.

CNN and *Good Morning America* have heralded this professors' prowess, and this fall the zenith of academic excellence, the Carnegie Foundation for the Advancement of Teaching and the Council for Advancement and Support of Education (CASE), named Collin College communication studies Professor Ceilidh Charleson-Jennings the 2013 Texas Professor of the Year. Her achievement marks the sixth Carnegie Professor of the Year for Collin College, a feat unmatched by any college or university in the state of Texas.

"We are so proud of Professor Charleson-Jennings for receiving the pinnacle award in teaching," said Mac Hendricks, chair of the college's Board of Trustees. "This outstanding professor exemplifies the college's core values inside and outside of the classroom."

The Professor of the Year program, now in its 33rd year, is the only national initiative that focuses solely on excellent undergraduate teaching and mentoring. Professor Charleson-Jennings accepted the award at a Washington, D.C. ceremony in the Ronald Reagan Building and International Trade Center. CASE and Carnegie also honored Professor Charleson-Jennings at a Congressional reception at the Folger Shakespeare Library on Capitol Hill.



Professor Ceilidh Charleson-Jennings

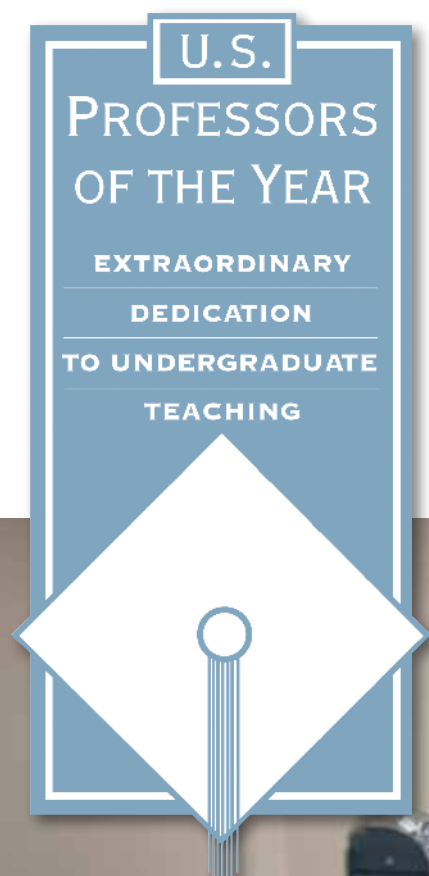
According to Collin College District President Cary A. Israel, "Professor Charleson-Jennings is an extraordinary professor as well as a *New York Times* best-selling author, flight instructor and search and rescue expert. For more than 20 years, she has propelled Collin College students toward their dreams. Charleson-Jennings has forged close-working relationships with industry professionals and has provided students the unique experience of working with nationally renowned producers and editors," Israel said.

Israel added that this award marks back-to-back Texas Professors of the Year for the college. The college is now home to three Texas and three U.S. Professors of the Year. Israel stated that Professor Charleson-Jennings and her Collin College colleagues have won more Carnegie Professor of the Year accolades than Cornell, Northwestern, Vanderbilt, Johns Hopkins, Georgetown, Rice, Texas Christian University and the University of Texas at Austin.

"Collin College's Professors of the Year teach diverse disciplines including communication, physics, sociology, mathematics, psychology and theatre," said Israel. "These coveted awards reflect the broad spectrum of academic excellence that students can expect at Collin College."

Professor Charleson-Jennings said that she is very honored to have been recognized nationally for a job she loves. She added that it is a privilege to be one of the six Collin College professors who have been named Carnegie Professors of the Year.

continued on page 4



Where are they NOW?

FAILURE is not an option

Stephen Fasolino has failures, blow-ups or meltdowns at work nearly every week. Fortunately, these calamities are part of his job description.

As an electrical engineer working in the Raytheon failure analysis laboratory, Fasolino day in and day out determines the root cause of failures and tests equipment to the point of failure to create stronger and better products.

“I get to do a lot of destructive analysis, and I get to blow things up,” Fasolino said. “I test things to the point of failure, learn how things are made and see how things hold together.”

Testing everything from night vision goggles to military tank sensors to capacitors, Fasolino determines what goes wrong in some of the most complex and delicate equipment.

“Occasionally, our investigation will require us to duplicate a failure by overstressing the electronics to the point of failure,” Fasolino said. “It would be like plugging your phone that should take five volts into 100 volts and seeing what it looks like after the pop. It’s quite amazing when you understand how many ways things can fail. A lot has to go right in order for things to actually function as they’re supposed to.”

By studying and creating a detailed analysis of failures, failure analysis prevents future costly reliability problems. But there is more to his job than making things blow up.

“As a failure analyst, you must have a multidisciplinary mindset,” Fasolino explained. “For me, having a degree in electrical engineering is not good enough. I have to learn about physics, mechanical and chemical engineering also. Failures in electronics are not always caused by an ‘electrical’ failure. The types of products I work with are complex and need to operate in harsh environments.”

For Fasolino, Collin College provided a wealth of information across disciplines that helped propel him into his current position. During his time at Collin College, Fasolino was a part of the College Aerospace Scholars Program that took a trip to NASA for a competition.

“We had to create a comprehensive life cycle,” Fasolino said. “The competition required building a robot to simulate a trip to Mars. But it wasn’t just about the engineering. We constructed a budget and a marketing plan and tapped into each teammate’s area of expertise.”

In addition to robotics, Fasolino benefited from the knowledge and experience of his professors at Collin College.

“I really enjoyed the quality of the professors,” Fasolino said. “Dr. Greg Sherman (2012 Texas Professor of the Year) helped me learn and enjoy physics and engineering. All of my professors at Collin were interested in my learning and were not teaching simply to get a paycheck. Their passion exuded into the classroom and showed in the way that they taught.”

After attending Collin College for two years, Fasolino transferred to The University of Texas at Dallas and earned a degree in electrical engineering. He has worked at Raytheon for five years.

When he is not blowing up capacitors or cranking up volts of electricity, Fasolino is filling out reports and attending meetings with failure review boards as a part of the unglamorous side of his work.

“We provide detailed technical reports for our customers about why a product failed. It’s not just destroying something and moving on to the next test,” Fasolino said.

He also completes non-destructive testing using methods such as x-rays and communicates with suppliers and customers about how their equipment is working.

“It’s quite amazing when you understand how things can fail, and it’s cool to see how things actually work,” Fasolino said. “Every day there’s something new that you can learn about how things work.”



Photo by Esther Anderson

Stephen Fasolino

Electrical Engineer

Raytheon Failure Analysis Laboratory

“All of my professors at Collin were interested in my learning and were not teaching simply to get a paycheck. Their passion exuded into the classroom and showed in the way that they taught.”





Exploring Areas of Study:

Cybersecurity

Protecting business and personal data

Lift the glitz and glamour of the red carpet a bit and the coveted careers portrayed on popular TV programs like “Criminal Minds,” “Law and Order” and “It Takes a Thief” are real-life roles filled by specialists who share one unique quality – the ability to think like the enemy.

Dave Galley, director of engineering at Collin College, said “thinking like a bad guy” is also one of the most important skills students in the cybersecurity program at Collin College must learn to master.

In fact, cybersecurity Professor Steve Willis said that combined with computer networking skills and an analytical mind, this type of unconventional thinking serves as the foundation for an industry that currently has more open jobs than qualified applicants.

The cybersecurity program is one of several information technology programs that benefited from a major federal grant recently. The U.S. Department of Labor awarded nearly \$20 million in grant funds to a consortium led by Collin College aimed at training and workforce development to help unemployed workers change careers. The consortium of six colleges stretches from coast to coast, and the grant is the largest in Collin College history.

Following a couple of years working in a field lacking the challenge and stability she desired, Merys Raymer decided to return to the metaphorical drawing board of her career goals.

CYBERSECURITY DEMAND

30,000 corporate jobs

10,000 government, public safety and intelligence jobs

“I looked for courses I could take at Collin because they were affordable, and cybersecurity seemed like it could be really rewarding,” Raymer said. “There’s a lot of hands-on configuration and technical work. This is not a field you go into if you want to learn everything and then stop learning. It’s something where every two years, everything you know has changed.”

Moving forward in courses focused on what faculty casually refer to as firewall forensics and incident response, Raymer discovered a more narrow interest she is eager to spend the next 40 years undertaking – penetration testing.

As a penetration tester, Raymer said she will spend much of her time thinking like a behavioral profiler or high-end thief.

“Your job is to find vulnerabilities in people’s existing systems,” Raymer said. “Obviously, they know when you’re doing it, but it’s your job to analyze a system the company thinks is secure and find where other people could get into it. That way, the company can fix those trouble areas before an actual attack happens.”

She believes it is best described in terms of a neighborhood.

“You can lock your doors, but someone can still break in through the windows,” Raymer said. “The trick is to make your house more difficult to break into than your neighbor’s house.”

In the same way, Galley emphasizes any corporation with an online presence will never be 100 percent secure.

“It’s really about how many penetration attempts you are going to have in a 24-hour period,” Galley said.

At first glance, weaknesses in large corporate security systems may not seem relevant to the everyday individual, but Galley and Willis warn that Americans should not dismiss the serious impact these vulnerabilities can have on them.

“The average person has one password they use for everything,” Galley said. “In general, a penetrator knows that breaking into the Bank of America or the Fidelity system is a federal offense with a minimum 10 years in prison. They also know they can break into Sears or campingpillows.com and get the same passwords.”

Whether it is stolen passwords or credit card information, legislators continue to become more aware of the repercussions insecurities in big business information systems have on the individual citizen, resulting in the creation of new disclosure requirements. Although many companies find these laws frustrating, steps toward compliance have created an immediate need for more than 40,000 jobs in cybersecurity, an industry expected to continue growing as threats to information technology inevitably increase.

Although advancements like mobile technology and cloud computing have made life easier in many aspects, they have also allowed for many holes in security, requiring even deeper advancement in security systems. Dynamic firewalls, such as the 12 recently donated to Collin College by industry leader Palo Alto Networks, are cybersecurity’s most recent answer to these needs. (See photo above right).

Pete Brierley, computer networking professor, indicated this new technology has also created a forum for discussion about how safe it is for corporations to allow employees to bring their phones to work or provide their own computers.

“You go do your transaction from your smartphone via the wireless network at Starbucks fully believing everything is fine,” Raymer said. “And then, all of a sudden, someone has your credit card information.”

With personal privacy at risk, big business on the defensive and associate degree graduates earning six-figure salaries, students like Raymer are preparing for jobs that will provide security in more ways than one.

While demand for corporate cybersecurity is on the rise, with 30,000 currently open positions, Willis said the government is also seeking 10,000 qualified cybersecurity professionals for both public safety and intelligence seeking.

In a profession with such demand, many Collin College cybersecurity students who’ve earned certifications begin working well before graduation. Opportunities like co-op and student organizations, such as

the newly formed Information Systems Security Association (ISSA) student chapter, which runs out of the regional North Texas ISSA chapter, help students fine-tune skills, gain experience and network.

Raymer, co-founder of the first student chapter in the world, said interactions in ISSA have solidified her confidence.



Matthew Stauble of Palo Alto Networks presented a gift of firewall units to Dave Galley, director of the engineering/tech program, and Amy Evans, executive director of the Collin College Foundation.

“We’ve only been doing this a few months, and I know two people who were unemployed one month and after investing time in ISSA were employed the next,” Raymer said. “And I get to interact with great people like our student advisor John Jordan, director of IT at Texas Instruments.”

Although the prospect of a healthy job market at their fingertips is great for current cybersecurity students, Collin College’s youngest students in Wylie ISD’s dual credit cybersecurity track also have reason for excitement. Regardless of their long-term goals, students who complete the career track will have a sufficient number of certifications by the end of their senior year to immediately land a job.

“Most importantly,” Galley said, “We find the program provides all of our graduates with an applicable skill set that places their resume at the top of the shortlist.”

For more information about Collin College’s cybersecurity program, visit <http://www.collin.edu/academics/programs/cybersecurity.html>.

Collin College professor named 2013 Texas Professor of the Year continued from page 1

“Teaching is something you continuously aspire to. It is the best job in the world,” said Professor Charleson-Jennings.

For this professor, it all started when she fell in love—with mass communication. Charleson-Jennings will never forget the six months she served as a teaching assistant.

“I thought so much of the teachers in my own life. I saw how knowledge could be infectious with a professor who had a genuine love for the subject area and how student success was possible when combined with students who were hungry for knowledge.”

The day is brightest for Charleson-Jennings when, at her urging, the audio producer of her best-selling books agrees to listen to a class perform a live reading and is so entranced by one student’s performance that he asks her to read again.

“I love it when students surprise us all and themselves. There is something in the magic of watching students write something honest and brave and hear it delivered. That is the epitome of what education is all about—the challenge and courage and willingness to risk and to reveal and share what you have,” Charleson-Jennings said.

Student and president of the Collin College Students in Communication Association Moriah Walton expected mass communication to be filled with dry theories and endless algorithms. She was shocked on the first day of class to hear Charleson-Jennings tell students that they would be writing film scripts.

“This flair for the practical, our class later discovered, comes from Professor Charleson-Jennings’ very real involvement in many of the industries that communication studies represents. Professor Charleson-Jennings never let her class get dull for even an iota of a

“Teaching
is something
you continuously
aspire to. It
is the best job
in the world.”

moment. She is possibly the most energetic professor I have ever met, and her experience and wisdom shone through clearly as she taught. She almost seemed to physically transform the beige-walled classroom into a thriving, energy-filled production studio.”

It is not uncommon for Charleson-Jennings to give her students the opportunity to “get primary.” A firm believer in field experience, she was on the scene searching for astronauts

during the Columbia space shuttle tragedy and assisting in the aftermath of Hurricane Katrina and devastating tornadoes in Joplin, Mo. and Birmingham, Ala. Charleson-Jennings has taken students on search and rescue simulations, and during the recession her students wrote public service announcements for area nonprofits of their choice. In addition to her other ventures, Charleson-Jennings is also the founder and executive director of Possibility Dogs, a nonprofit that transforms homeless dogs into service dogs for the disabled.

Walton has embraced Charleson-Jennings’ philosophy to “get muddy; get primary; create change.” She and her former professor cannot wait for the next adventure to unfold.

“I am firmly convinced that no matter how far I go in life, no matter where I end up, there will always be a little piece of Professor Ceilidh Charleson-Jennings in the back of my mind urging me on to greatness. The inspiration she gives lasts more than a term, or a school career. Her lessons are for a life of learning and doing, and they never fade. I would not be the person I am without her,” said Walton.

To learn more about
Collin College’s six
Carnegie Professors of the Year,
view the video at
<http://youtu.be/usnL6c09tTQ>.

MOST IN TEXAS

Collin College salutes its six Carnegie Professors of the Year



Student & Alumni HIGHLIGHTS



Collin College Model United Nations at competition in the nation's capital

The Collin College **Model United Nations** team placed third at the National Model United Nations conference in Washington, D.C. and earned an Honorable Mention. More than 650 student delegates from all over the world participated in this competitive series on international relations.

Three students from the Collin College Respiratory Care program, **Tracy Bedar**, **Stewart Morrison** and **Kanokon Raksriaksorn**, received National Education Recognition Awards for Undergraduate Students from the American Respiratory Care Foundation.



Tracy Bedar



Stewart Morrison



Kanokon Raksriaksorn



M'Banna Kantako II

Student **M'Banna Kantako II** was recently featured on KTXD television's "The Broadcast" where he talked about his journey of changing his life through education.

Collin College's chapter of **Kappa Delta Pi**, the international honor society in education, won a 2013 Chapter Program Award in the community service category for its college-wide book drive.

Collin College's chapter of **Psi Beta**, the national honor society in psychology for community colleges, won the 2012-2013 Chapter Excellence Award. This award is given for meeting or exceeding chapter excellence standards that reflect Psi Beta's mission. In addition, the chapter was named winner of the Ann G. Robinson College Life Award.

Two teams representing **Respiratory Care** competed at the Trivia Bowl (also known as the Sputum Bowl) in Dallas. One team took first place while the other team made it to the final four. The winning team travels to California for the national convention.

Congratulations to all the students who competed in the fourth annual Collin College Math Competition. In the College Algebra Competition **Xiaohui Shi** of Frisco won first prize and **Michael Standeven** of Plano and **Phoebe Nigussie** of Sachse tied for second prize. In the Precalculus Competition, **Vu Phan** of Wylie won first prize, **Jeeseon Park** of Allen won second and **Jason Julizar** of Frisco won third.



Respiratory Care contest winners



Collin College graduate **Laurel Jackson-Cook**, (pictured at left in center) was hand-picked by the University of Texas at San Antonio for the Ronald E. McNair Scholars Program, which prepares selected students for doctoral studies. According to Jackson-Cook, "I know that I am capable of the challenges because of both the academic and leadership

experiences that I had while attending Collin College. As I move up the academic achievement ladder towards obtaining my Ph.D., I will remember my wonderful experiences at Collin College."



Faculty & Staff HIGHLIGHTS



Dr. Rebecca Orr

Dr. Rebecca Orr, professor of biology, made two presentations and served as a panelist at The Ohio State University in November. She was joined by Dr. Matt Stolfus of The Ohio State University and Dr. Brian Lukoff of Harvard University.

Jennifer Brooks, professor of psychology, was recently named southwestern vice president of the Psi Beta National organization.

Dr. Amina El-Ashmawy, professor of chemistry, was named a 2013 American Chemical Society Fellow. She is one of 96 fellows named from across the nation and one of only two from community colleges. *Business Insider* also profiled her during National Chemistry Week.



Dr. Amina El-Ashmawy



Gail Cronauer

Gail Cronauer, professor of theatre, was honored as one of the great ladies of the Dallas performing arts community during the USA Film Festival and Texas Association of Film and Tap Professionals' TexFest.

Sonia Iwanek, professor of political science, was honored by the American Political Science Association as an Outstanding Professor of the Year Finalist at the 2013 reception in Chicago.

Professor of Developmental Reading **Dr. Pam Sawyer** received the Gladys R. Shaw Professional Development Award from the College Academic Support Programs, a part of the Texas College Reading and Learning Association.



Collin College was named a **top military-friendly school** by *Military Advanced Education*. This marks the fourth consecutive designation since 2010.

Collin College Living Legend **Dr. Myrtle Hightower** was recognized as this year's Citizen of the Year at the Plano Chamber of Commerce's Annual Awards Banquet. Dr.

Hightower is a longtime educator and civic, community and social activist. She has served as an associate faculty instructor and was very involved with the Writing Center at the Spring Creek Campus.



Dr. Myrtle Hightower

Donna Hatch, director of nursing, has been elected to serve on the advisory board for the North Texas Organization of Nursing Executives, which is for high-level nursing executives from area hospitals.



Donna Hatch



Kim Davison

Kim Davison, vice president of organizational effectiveness and human resources, was appointed for a two-year term to the city of McKinney's Board of Adjustment.

Central Park Campus reference librarian **Lisa Huang** was appointed to a two-year term as a member of the McKinney Public Library Board.



Lisa Huang



Linda Kyprios

Linda Kyprios, executive director of the Spring Creek Campus Library, was elected to serve as the at-large representative to the Executive Council for the Texas Council of Community and Junior College Libraries by the Texas Council of Academic Libraries.

The Texas Higher Education Coordinating Board has ranked Collin College's **nursing program** at the top of the list of the state's nursing programs. Collin College is the only community college in Texas to receive the Nursing Shortage Reduction Program grant for eight consecutive years since the grant was first created in 2006.



Texas Comptroller Leadership Circle

Collin College received the **Gold Leadership Circle Award for Transparency** from the Texas Comptroller's Office. The award spotlights local government agencies that are opening their books to the public and providing clear, consistent pictures of spending in a user-friendly format. Only two colleges/universities in Texas received the award.

District President Cary A. Israel has been selected by Congressman Sam Johnson to serve on the Congressional Veteran Commendation Board, which recognizes the wartime sacrifices and peacetime community involvement of veterans across the Third Congressional District of Texas. The commendation, in conjunction with the Veterans History Project sponsored by the Library of Congress, is a nomination-based program designed to formally honor distinguished veterans of Texas' Third District and to preserve their stories for future generations of Americans.



Cary Israel

Did you KNOW?

New Health Sciences Center and Conference Center Coming Soon



In April of 2014, Collin College will break ground on a 125,000-square-foot Health Sciences Center at its Central Park Campus in north McKinney. The college also will be constructing a 23,000-square-foot conference center. Both facilities are scheduled to open in fall 2015.



SAVE THE DATE!

Saturday,
February 22, 2014, 6:30 p.m.

STETSON & STILETTO STANDOFF

A Texas trivia night benefiting student scholarships
Join us inside the magnificent new library
at Spring Creek Campus in Plano!

With the backdrop of Jeffersonian architecture
and a magnificent dome,
guests will square off in trivia competition
inspired by the Lone Star State and Collin County,
while raising funds for a great cause.

Attire: Cowboy-Chic Call 972.599.3145 for details!

 FOUNDATION

inside this issue

Collin College professor named
2013 Texas Professor of the Year ... 1

Where are they now? 2

Exploring areas of study:
Cybersecurity..... 3

Student & alumni highlights..... 5

Faculty & staff highlights..... 5

Stetson & Stiletto Standoff 6



NON-PROFIT
ORGANIZATION
US Postage
PAID
Plano, TX 75074
Permit #275

POSTAL CUSTOMER