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Persistence, Opportunity, Inspiration and Dedication—That is what Postsecondary Education is all About for Students, Staff and Educators at our Community Colleges: The Steve Smith Story

In every educator's career, there are students that somehow touch his or her heart and ultimately results in a synergy that pushes both to do their very best—even if their very best doesn't mean an A in the class. And you never know just what that student will ultimately do with your best effort to assist him to better understand the subject material in your class.

For San José City College math instructor Bill Langolis, Steve Smith is one of those students.

Oakland-born Steve Smith was a member of SJCC's football team in the early 2000s, playing the position of wide receiver. Something a bit more important to him than his football career was his academic career.

While growing up, college was not an option, it was a given. His father, Tyrone Wilson Smith, Sr., graduated from Valparaiso University with a degree in electrical engineering; his mom, Joan Petersen Smith, has a masters



Former San José City College student and aspiring quantum chemist Steve Smith.

degree from the University of Boston. "Growing up with educated parents I'm sure had an affect on me in many ways, and going to college was something I figured I would do from a young age," says Smith.

The only question was where the 2000 graduate of Oakland's Bishop O'Dowd High School would attend college. He chose SJCC because he had a job at Valley Medical Center's clinical laboratory—a position he held for almost three years while attending SJCC. It also allowed him to live closer to his mom, who was also employed at VMC and living in the South Bay.

Even with a full-time job on Smith's plate, he found a way to also participate in something he'd wanted to do all of his life—play collegiate football. His mom wouldn't allow him to take part in football until he was in high school, and he enjoyed much success on the gridiron in high school as a wide receiver starter for most of his junior year and all of his senior year. Bishop O'Dowd's football team was ranked #2 just behind powerhouse De La Salle.

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Smith also was proud to be following in his dad's cleated footsteps—Tyrone Smith was one of the very few African Americans on Valparaiso's football team in the 1960s.

But football wasn't Steve Smith's number one concern in college—chemistry was.

"I became interested in chemistry in high school," Smith says. "Although I was one of those kids who always had a lot of questions about how things worked, I was rarely satisfied with simple, incomplete answers.

"I had a really great teacher in high school; the guy rode a Harley to school, he blew up things in class—sometimes as part of an experiment, but really just for fun and to keep everybody involved and interested. He also let us write reports on whatever subject we wanted, and as you can imagine, many students, including myself, wrote reports on some pretty questionable material!"

Smith enjoyed writing his reports—one on psilocybin, the active chemical in "magic mushrooms" that gives the feeling of intoxication, and the second on THC. "We really had fun in that class, and I learned a lot at the same time.

"It was interesting to me to learn about how things worked on such an elementary level—the reason the sky is blue, why ice floats, why things are different colors. I wasn't sure what I was going to do for a career at that point, but I knew college would help tremendously, and if I was going to major in something, it was going to be something I was interested in."

So at SJCC, Smith decided to major in chemistry—and chemistry requires a great deal of knowledge of very advanced math. Complicating the picture, Smith did not find math easy.

"The class taught by Mr. Langolis was a SJCC class that met off campus, and I was the only college student in the class. My classmates were high school juniors and seniors—even one sophomore! The name of the course was 'differential equations'—a course you take after completing three semesters of calculus.

"This was the most competitive class I'd ever been in. In many advanced math or science classes, your grade is dependent on a curve. In a typical organic chemistry class, the high score will usually be a high 80-something, and the average could be around 50. So if you score over 50, you are good to go.

"Anyway, these kids were all very bright and worked

extremely hard, causing there to not really be much of a curve. On campus, a test that I scored a 72 on would easily have been a B, possibly an A, based on a curve. But with these kids, I was struggling to conserve a C in the course."

As Langolis recalls, "Steve was doing dismally, but working very hard. I kept office hours after class and Steve was almost always there. He really wanted to be a chemist and was quite concerned about his math difficulties. I told him, 'Well, there are many kinds of chemists. Maybe you've got good hands.' He replied 'Yeah I've got good hands. I'm a wide receiver.' To my relief, he scraped through with a C. I lost track of him, but three years later met him at the gym. He told me he was at SJSU—studying quantum chemistry. Quite a turnaround."

Earning a C in Langolis' course helped keep Smith's desire to transfer to SJSU on course as a chemistry major, but he was not yet done with math. While at SJSU, he took a class called "partial differential equations."

"In this class, we solved a problem known as a Fourier Transform—it's a function, something like an integration. It is a pretty in-depth calculation. In practice, you use this function to interpret data. But in order for it to be useful, you need to do thousands of these calculations per second. Doing one by hand took me two weeks.

"We use computers for most of the math we do in the lab with regards to experiments. However, understanding certain physical situations requires an in-depth knowledge of higher level math, so you really have to have had the experience of going thru the nitty gritty details."

Following graduation from SJSU majoring in chemistry, Smith applied directly to the Ph.D. program at the University of Arizona.

So what exactly is quantum chemistry?

"You got four years? I'll tell you everything I know," Smith says with a laugh. "Basically, the ideas of quantum chemistry and quantum physics account for the fact that on very small scales (like the sizes of atoms) or at very fast speeds (like the speed of light), the classical laws of physics that seem to dictate the macroscopic world do not hold. When you investigate atomic behavior, quantum principles often can provide a more complete way to understand any observations.

"All this stuff is based on some pretty heavy math,

and having a solid background in mathematics is really key. This actually sounds really nerdy, but taking calculus changed my view on the world. And once I got to the point where I was using the math to better understand the physical world, it became clear to me there are a lot of possibilities out there that I hadn't previously considered."

Thus far, Smith's educational focus is in inorganic chemistry, in the field of nanoscience, focusing on the development of nanoscale materials with interesting physical properties. He has yet to come up with a title for his doctoral thesis, and he plans to be doing research for another year and a half before he has enough material to put a dissertation together.

He explains some of his recent work in the lab. "I have created some small magnetic particles known as 'nanoparticles.' Theoretically, these particles could be used for a variety of applications, from making better hard drives to curing cancer...for real. And who knows what somebody five or ten years from now after reading a paper I published will want to do with some of these systems.

"I've got a lot of ideas, but at this point, I'm just doing some very elementary research on some systems that no one has ever studied. Working with engineers or whomever with the goal of creating actual products or technologies is not in my immediate plans in grad school. Developing basic scientific knowledge into usable technologies is really a whole 'nother ball game that requires massive efforts and is something that I hope to be able to do after I graduate.

"My ultimate goal would be able to create materials that benefit society in a positive way. It's a pretty general goal, I know, but there's just so much out there, especially in this new area of nanotechnology, I'd like to be part of a variety of projects that all do something positive."

And never for a moment don't think that Smith isn't grateful for Bill Langolis' (and other professors) efforts on his behalf.



The actions and caring of one SJCC professor made it possible for Steve Smith, now a doctoral candidate in chemistry at the University of Arizona, to make his education and career dreams come true.

"Looking back, it's become very clear to me over the past few years that a lot of things had to go just right, the stars had to be aligned in just the right way for me to get to where I'm at right now. I definitely worked hard along the way—first with my job at VMC, then in a research laboratory at SJSU for two years where I was able to publish a study. I worked at Verisign, Inc. in Mountain View for about a year also just trying to make ends meet. I usually had two jobs the whole time I was in school, in addition to playing football for the first couple years.

"But beyond all that, people like Bill Langolis, and others (including Dr. Herbert Silber, whom I worked for at SJSU) have been instrumental in me becoming the man that I am today. Giving me opportunities, listening to concerns, giving me advice... teaching me. That support was crucial, and I am grateful it was available."

In this coming school year, be on the lookout for your own Steve Smith. You never know which of your students may go on to make a difference in the lives of so many, just as the future Dr. Smith's work in nanotechnology will certainly become.

Bernard Osher Foundation Creates California Community Colleges Scholarship Endowment

There is no doubt that the establishment of the California Community Colleges Scholarship Endowment will make a difference for deserving but underfunded students at Evergreen Valley and San José City colleges and at all of our sister community colleges as well.

The brand-new statewide program is based upon a \$25 million start-up gift from the Bernard Osher Foundation to the Foundation for California Community Colleges (FCCC). There is also an additional \$25 million set aside that the Osher Foundation will use to provide a 50 percent match for locally-raised funds. Carole Cassidy, executive director of the San Jose/Evergreen Foundation, says, “The funds we raise will go into a statewide investment pool, but will be earmarked for local students. Once the endowment is fully funded, it is expected to award at least 5000 scholarships statewide per academic year, and continue to grow in number in perpetuity. We have an incredible opportunity, but it is time-limited and reaching our target fund raising goal to maximize the match from the Osher Foundation will be quite a challenge!”

A minimum of five scholarships will be awarded at each college in the system for the 2009 fall semester. Funded by the initial \$25 million gift, these scholarships will be for \$500 per semester, \$1000 per year per student. To be eligible, students must have completed 24 credit hours and qualify for a Board of Governor’s fee waiver. Students may use the funds for books and other educational supplies and the application process will be handled at each college individually.

Bernard Osher is a Bay Area patron of the arts and education who is nicknamed “the quiet philanthropist.” Osher and his wife Barbro conduct their charitable works through the Bernard Osher Foundation, which was established in 1977 to improve the quality of life through support for higher education and the arts. A native of Maine, Osher also is the patron of the Osher Lifelong Learning Institutes, a national network of learning



Bernard Osher and his wife Barbro (not shown) received an honorary Doctor of Humanities degree from the University of North Carolina-Wilmington this past spring (photo by UNC).

opportunities for older adults operating on 115 college and university campuses, including San José State University.

“This is the best scholarship program I’ve ever seen—very well thought through,” says San José/Evergreen Community College Chancellor Rosa Pérez. “I view it as a once-in-a-lifetime opportunity to build an endowment that will keep on helping our students forever.”

Please contact Carole Cassidy, the executive director of the SJECCD Foundation at 408-223-6766 or by e-mail Carole.Cassidy@sjeccd.org to learn how you can help grow this program for our campuses.

Say Hello to Carole Cassidy, the New Executive Director of the San José/ Evergreen Community College Foundation

Although she's been on the job since May 1, it's about time you meet Carole Cassidy, executive director of the San José/ Evergreen Community College Foundation.

Carole comes to the SJECCD with more than 20 years of experience in nonprofit fundraising and management in higher education, the arts and medical research. A Certified Fund Raising Executive (CFRE), Carole's credentials and experience in community college fundraising are exemplary. In three short years as the Executive Director of Foothill-DeAnza's Foundation, she created a centralized fund raising operation where none had previously existed, and increased that foundation's assets from \$3 million to \$15 million. She retired from that position and left California for a brief period, but returned to take on the challenge of building the SJECCD Foundation into a foundation that will no doubt make a difference for our students and our community.

"Carole's areas of expertise include board development, board fund raising, creating annual development plans, building planned giving programs, strategic planning and designing new development operations from the ground up," says SJECCD Chancellor Rosa Pérez. "Her skills will no doubt build our young foundation into something special that will serve our colleges well into the 21st century."

Carole is a former Silicon Valley Professional Fund



San José/ Evergreen Community College Foundation's Executive Director Carole Cassidy

Raiser of the Year. She earned her BS degree in Speech Communication and Public Relations from Southern Illinois University.

Welcome Carole!

Youth Empowerment Strategies for Success (YESS) Program for Foster Youth

Evergreen Valley College has been chosen by the Foundation of California Community Colleges to house the Youth Empowerment Strategies for Success (YESS) Program—one of eight community colleges statewide to house this new foster youth program. The Foundation chose EVC because of the commitments to foster youth and the extensive partnerships throughout the community at both Evergreen Valley College and San José City College.

The foster youth population is underrepresented in the postsecondary education setting, and even fewer former foster youth graduate from college. The YESS Program, under the Student Support Services Program, is working with on-campus programs and off-campus partners to ensure that comprehensive services to assist foster youth at each campus.

Two Colleges, One Community

The YESS Program will have a coordinator who works directly with the youth to ensure that we are addressing their particular needs and potential barriers. Academic counselors and Foster Youth Success Initiative liaisons at each college will work closely with the youth and coordinator to ensure that a continuum of educational and financial aid services.

EVC President David Wain Coon says, "As part of the grant, we will be providing around 80 hours of training on four areas—employment, education, financial literacy, and daily living skills each semester. The YESS Program will serve 50 foster youth in total on both campuses.

"I would like to offer sincere thanks to Liz Tyrrell and Mark Sanchez for their leadership and hard work in collaborating with our many partners to make this program a reality."

An Opportunity for Fun, Camaraderie, Exercise and Networking: Join the SJECCD Latina Leadership Network for Monthly Ladies' Golf—Or as a Chapter Member!

With the new school year beginning, how about taking this opportunity to join the Latina Leadership Network (LLN) and help make a difference in the lives of Latina students on both Evergreen Valley and San José City Colleges' campuses? While the San José/Evergreen Community College District Chapter doesn't have anything as big as setting up and hosting a statewide conference this year, there's still plenty to do!

The SJECCD LLN provides two scholarship to Latina students on each college campus, and fundraising efforts take place all year in the guise of special events, including monthly ladies-only golf outings and a planned LLN ladies' golf tournament in the spring of 2009.

Your first opportunity to join the LLN ladies' golf group will be on Sunday, September 7 at the Rancho del Pueblo Golf Course in San José. A clinic will be held starting at 2 p.m. for a nominal fee of \$25. Space



Anyone who has been on the golf course with Josie Gutiérrez knows how serious—and good—she is at the game!



Irene Gutierrez is a ladies' golf regular who drives the ball harder and farther than most.

is limited to the first 15 golfers, and the clinic will be taught by John Jasso and Felix Jasso. Check-in at the pro shop is at 1:45 p.m. Golf clubs and balls are provided for those who need them, but if you have your own, please bring them. Don't forget a light windbreaker as the golf course can be breezy in the afternoon.

Please send a check to the SJECCD LLN, in care of Irene Gutierrez, SJECCD, 4750 San Felipe Road, San José, CA 95135. R.S.V.P. deadline date is September 4. A portion of your fees are donated back to the LLN and go toward scholarships. Also feel free to invite your female friends—LLN golf is open to interested members of the public too!

You'll want to join the golf group to be ready to participate in next spring's second annual LLN golf tournament!

Golfing isn't the only thing that chapter members have been up to this summer. On July 28 on EVC's campus, the chapter hosted a "thank you" BBQ for members and friends who took part in planning this past

spring's 21st annual LLN conference. Attendees enjoyed healthy grilled vegetables and meats for lunch, an everyone-wins-something raffle and a pair of piñatas—one for the kids in attendance and one for adults!



(Above) Six-year old Alexia Ledesma makes contact with the piñata as candy starts to fly.

(Below) A pair of LLN members plot against the piñata.

(Above) California's LLN President Maria Ramirez, and Josie Gutiérrez (below) take their turns at wacking the piñata.



The first general meeting of the new academic year will be on Saturday, September 13 at the District Office Board of Trustees room from 10 a.m. to 12 p.m. For more information, contact Irene Gutierrez at the District Office, Josie Gutierrez or Liz Vasquez at EVC, and Odila Peper or Isabel Macias at SJCC. To R.S.V.P. and receive an agenda, contact Josie Gutiérrez by e-mail gabygolf@mindspring.com.

SAN JOSÉ CITY COLLEGE HOSTS 'ROAD TO REDRESS AND REPARATIONS: COMMEMORATING THE 20TH ANNIVERSARY OF THE CIVIL LIBERTIES ACT OF 1988'

The Civil Liberties Act of 1988 was signed by President Ronald Reagan on August 10 of that year, and was most notable for providing an official apology and financial reparations from the United States government for actions taken against Japanese Americans or legal permanent residents of Japanese heritage at the commencement of World War II.

The Japanese American internment was the forced removal and relocation of 120,000 Japanese and Japanese Americans, 65 percent of whom were United States citizens, from the West Coast. This was authorized by President Franklin Roosevelt via Executive Order 9006, which gave licence to local military commanders to designate military areas as exclusion zones and declare that "any of all persons may be excluded." In turn, all people of Japanese ancestry were excluded from California and most of Washington and Oregon—except for those in internment camps.

The Civil Liberties Act of 1988 was the result of two decades of a dedicated public information program and the careful political actions of a group of passionate



Former San José Mayor, Congressman and Secretary of Transportation Norman Mineta and SJCC President Dr. Michael Burke at the 'Road to Redress and Reparations' event at SJCC.



The Honorable Norman Y. Mineta and SJECCD Board of Trustees President Randy Okamura.

Japanese Americans, with one of the leaders being San José native son Norman Y. Mineta. Mineta, the co-founder of the Congressional Asian Pacific American Caucus, was a gentle yet persistent reminder for government redress for Japanese Americans who lived through the involuntary relocation and internment through the presidencies of Jimmy Carter and Ronald Reagan.

The "Road to Redress and Reparations: Commemorating the 20th Anniversary of the Civil Liberties Act of 1988" was held at SJCC's theatre and was sponsored by the San José chapter of the Japanese American Citizens League, the Nihonmachi Outreach Committee, AT&T, Southwest Airlines and San José City College. Attendees were treated to a screening of the moving film *Redress: The JACL Campaign for Justice*, and speeches from local Japanese American dignitaries.