

SPRING 2013

PCC

COMMUNITIES

College News
Community Education Schedule
Portland Community College

John Patterson, owner
of Mr. Sun Solar and
PCC Community
Education instructor

STEM GROWS AT PCC

Big push for Science, Technology,
Engineering and Math programs

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OUT OF THE MUD

CLIMB Center client creates
ceramic art for Olympics

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SUNNY IN PORTLAND

Students flock
to solar energy
class taught by
industry pioneer

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Enroll now!

Classes starting
April – June

**Community Education
non-credit class schedule**

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**Portland
Community
College**

AN EVENING FOR OPPORTUNITY

★ *In the spirit of Motown* ★

Saturday, May 18, 2013 at 5:30 p.m.
Portland Marriott, Downtown Waterfront
1401 SW Naito Parkway, Portland, OR 97201



The PCC Foundation invites you to join us for the 2013 Evening for Opportunity Gala, benefitting student scholarships and success at Portland Community College. This year we honor the service of our remarkable college president, Dr. Preston Pulliams, on the occasion of his retirement in July. Please join us for a spectacularly fun and memorable evening as we groove to the hits of Motown and make opportunity happen for deserving students.

To sponsor a table or buy tickets, visit
www.pcc.edu/gala

PCC  Foundation



"When it comes to preparing Oregonians for rewarding careers and the jobs of the future, Portland Community College is leading the way."

— **Congresswoman
Suzanne Bonamici**
U.S. House of
Representatives,
1st District of Oregon

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Photographers: Vern Uyetake, James Hill and
Russell Banks

PCC's STEM Program

The college plays a critical part in the national movement to create high-paying careers as local industries look for workers in those high-demand fields.

Science

When it comes to STEM programs and careers, PCC is both digging deep roots and sprouting.

Across the country, educators, business leaders, economists, politicians and labor groups are focused squarely on filling Science, Technology, Engineering and Math-related jobs and careers. The demand for qualified workers in STEM (the commonly used acronym) fields is high with the current generation of workers about to retire and new, well-paid jobs developing at a quick pace.

Employers in the specific industries are turning to educators to fill the ever-growing gap.

"America is throwing everything we have at STEM," said Todd Sanders, a mechanical engineering faculty member who last year was appointed by Gov. John Kitzhaber to Oregon's Joint Interim Task Force on STEM Access and Success.

The depletion of STEM workers dates back to 9/11 when the United States stiffened requirements on foreign workers coming into the country with visas, Sanders said. The result was too few high-tech workers to fill in-demand jobs. Ever since, there has been a realization of this "drain of brain power" as well as a groundswell of momentum to train and educate future STEM students and excite them about the multitude of career possibilities.

Oregon's list of STEM careers is broad and encompasses a diversity of occupations — everything from doctors,

geologists and mathematicians to computer programmers, multimedia technologists and machinists — and just about anything in between.

In 2010, about 95,000 Oregonians worked in STEM occupations, representing 5.8 percent of all workers, according to the state's STEM Task Force. Employment in STEM occupations is expected to grow about 18 percent between 2010 and 2020.

"A lot of first-generation college students don't pick STEM even though the pay is better," said Dieterich Steinmetz, science and engineering division dean at the Sylvania Campus. "But for those who are driven, we can get them to a good paying job quickly."

PCC is proving to be a community college leader in the STEM arena, securing nearly \$2 million in grants from the National Science Foundation for STEM-related projects and another \$50,000 in grants from within Oregon. Sanders is the principal investigator on the grants that fund faculty development and award scholarships for engineering and technology students, among other things. So far about 200 students have received funding.

"We're hoping to make a huge impact with the scholarships. We want our graduates so technically skilled that they will get hired immediately," said Sanders, who for the past three years has run a Summer Sustainability Institute that brings together about 30 college faculty members from the western United States to update their knowledge about current industry trends and methodology.

Technology

Engineering

Programs and Job Training Flourish

By **Christina Holmes**

Efforts to encourage more students into Science, Technology, Engineering and Math high-demand fields

“Considering the number of students a faculty member teaches each term (about 120) we believe this is a good use of the dollar,” Sanders said.

Still, there are challenges. Only 40 percent of students who enter a STEM program complete a STEM degree, which suggests the need for strategies to keep students in the STEM pipeline, according to the state task force.

While PCC is reaching out farther and wider to students, it’s also up to students and their parents — who have the most influence over a student’s career choice — to recognize the potential benefits of pursuing a STEM career. If a student sticks with a STEM major and advances to a master’s program, many colleges and universities offer grants that pay for tuition.

“If you do the hard work in the sciences and get through calculus, then grad school could be paid for,” said faculty member Eriks Puris, who teaches geology and general science courses at the Southeast Center.

The statewide task force recommended lawmakers adopt an ambitious agenda for STEM education, including goals for K-12 and post-secondary education systems. The task force concluded that colleges and universities need to increase their capacity to enroll students, especially those in underrepresented populations, in STEM programs.

Getting more women into STEM careers is another challenge, said Charmagne Ehrenhaus, business and computer technology division dean at Sylvania. “Although I think it’s improving because of the web and Facebook. Girls see that the career fields are not just hard coding and high-level programming.”

“We want our graduates so technically skilled that they will get hired immediately.”

*-Todd Sanders
PCC engineering faculty*

PCC’s commitment to increase the number of STEM graduates who finish a degree or certificate program is unwavering. Many agree that STEM education will help Oregon’s capacity to create and build a healthy economy.

“It will take a lot to keep up with the rest of the world,” said Sanders. “But we will catch up. Because technology, innovation and invention drive the nation’s economy.” ■

PCC's STEM Industry Partners

Aerotek
Axiom Electronics
Biotronik
ClearEdge Power
Commissioning Agents, Inc.
FEI
Genentech
Heitzman Auto Body & Paint
HemCon
HP
HydraDx
Intel
Kaiser Permanente
Legacy Health System
Madden Industrial Craftsmen
OHSU
Oligos Etc.
PeaceHealth
Portland VA Medical Center
Precision Wire Components
Providence Health & Services
SolarWorld
Tektronix
Tuality Healthcare
Vanguard-EMS
ViaSystems
Vigor Industrial
Welch Allyn



Math

Rock Creek's New Research Bug By Janis J. Nichols

A student walks through the woods with a collection jar and carefully plucks bugs off tree moss. It's a scene repeated often by science majors at universities. At PCC's Rock Creek Campus, it will happen for the first time this spring.

Thanks to the steady global conversation about STEM and what educators interpret as a lack of investment on a national scale, policymakers understand that community colleges need to be fully engaged in teaching science and not just with overhead projectors.

The Community College Undergraduate Research Initiative replaces the lecture approach to teaching science with hands-on laboratory and field work. Twenty students will get their hands dirty and exit the experience with a new approach to critical thinking. These students are future technicians who will work in areas ranging from health care to climate change.

"At traditional four-year schools where faculty engage in funded research, for example, science majors are welcomed into the labs as research assistants and are encouraged to do independent research," said biology instructor Josephine Pino. "Until now, faculty at community colleges have engaged in research on a voluntary, ad-hoc basis. That will change. We know that one of the keys to attracting students to science is early engagement — engagement that challenges them in new ways."

The small class size guarantees interaction between faculty and students, and the location of the field work — 44 acres of woodland, 11 acres of wetlands and 44 acres of grassland — makes the research personal and relevant.

Now students will tramp the wooded acres to study how humans influence organisms in the forest. Through lab and field work, students will design research studies and present their findings.

"We know that one of the keys to attracting students to science is early engagement."

*-Josephine Pino
PCC biology faculty*

The Rock Creek undergraduate research project aims to collect, identify and use DNA bar coding to compare species of bark beetles from the campus forest. This work will help PCC build partnerships with local environmental agencies and university researchers.

"We know that we are not alone in our desire to study human impacts on our forests," said Pino. "The opportunities for student researchers to partner with public and private investigations are plentiful." ■

STEM Grows at Southeast Center By Christina Holmes

With all the national attention and talk aimed at STEM classes and programs, PCC is reserving one area of a new building at the Southeast Center for science, technology, engineering and math students.

The STEM Center at Southeast, part of the new learning commons building scheduled to open in late 2014, will house general classrooms, science labs and faculty offices. It will be anchored by a glass exhibit space where student and faculty research will be displayed to educate and inspire visitors and other students.

"We're dedicated to bringing more robust and well-rounded science classes to the Southeast Center," said Susanne Christopher, a PCC veteran faculty member who recently relocated to the Southeast Center to chair the science programs.

Longtime instructors from other PCC campuses are joining the effort to develop and launch the center.

"We're here at the beginning of fostering student involvement in STEM activity and we have a chance to develop something new," said Alexie McNerthney, a biology instructor at Sylvania for 14 years who moved to the Southeast Center last year. "This could be the district's flagship store."

McNerthney hopes to prove students wrong who think they're not cut out for math or science which offer lucrative careers.

"I'd like to foster an understanding that we all can be science minded," she said. "I would love to encourage confidence among students that they can pursue science if they want to." ■



*Health Information
Technology*

Robots Rock PCC's Sylvania Campus By Kate Chester

It wasn't a typical soccer match, nor were the teams or players well known, but the competition generated an unusually spirited audience of faculty, staff and students at the Sylvania Campus last fall.

"Today's game was a hoot," said Charmagne Ehrenhaus, dean of Sylvania's business and computer technologies division, referring to the campus' first remotely-controlled robotic soccer challenge.

"The team spirit was definitely here, because it celebrated the collective, interdisciplinary effort of faculty, staff and students — along with support from outside PCC," she said.

The "World Cup" of robot soccer showcased the efforts of three Sylvania-based departments: Computer Science, Engineering and Machine Manufacturing Technology. A month prior to the competition, students and faculty teamed up to participate in a non-credit, "build-a-bot" workshop that enabled students to build and program remotely-controlled robots that would compete in the culminating soccer championship.

Google Nexus 7 tablets served as the "heads" of the soccer competitors; since their bottom halves were fused, robots dribbled the soccer ball with their "arms," or in their case, paddles. Game day uniforms — variations of University of Oregon, Oregon State University, and a referee outfit — were custom-designed by a PCC engineering student who had a bachelor's degree in art.

"The month-long experience leading up to the soccer match emphasizes cross-technical learning in what we hope is a fun and engaging environment for students," said Gregg Meyer, civil and mechanical engineering instructor and lead organizer of the workshop. "We hope they'll want to learn more, that perhaps the experience will open their eyes to STEM disciplines, in terms of majors and possibly, careers."

The idea for Sylvania's workshop and soccer match sprang

from a national STEM-oriented conference for community colleges that Ehrenhaus and Dieterich Steinmetz, dean of Sylvania's science and engineering division, attended in October 2011. The two returned from the conference, mapped out the resources necessary to make the workshop a reality, integrated the math and industrial technology division into the equation, and gave Meyer the green light to coordinate logistics.

Over three consecutive Fridays, students were taught to build robots through themed lessons that offered engineering-focused learning, a fabrication day, and a computer programming-specific lesson.

The first class session highlighted engineering concepts and included a rocket club guest speaker from Portland State University, followed by a demonstration hosted by the Tactical Robot team of the Washington County Sheriff's Office. Students accessed Sylvania's machine shop during the second class and learned how to build robots using new rapid prototyping equipment — 3D printing, computer-controlled routers, laser cutters, 3D scanners, and a new vinyl cutter — in addition to conventional shop equipment. The how-to's of computer programming made up the third class prior to the soccer competition.

"We witnessed excitement from the students as they connected the dots between the three disciplines over the course of the workshop," said Dan Findley, division dean of math and industrial technology. "They began to understand how each field is connected to the other."

Ehrenhaus, Steinmetz and Findley hope to create additional STEM workshops down the road, ones that are for-credit — and

perhaps women-only, in an effort to encourage female students to consider STEM majors and careers (women are significantly underrepresented in STEM fields). In the meantime, they join Meyer in savoring the results of their first STEM soccer competition.

"We hope ... the experience will open their eyes to STEM disciplines, in terms of majors and possibly, careers."

*-Gregg Meyer
PCC engineering faculty*

"It was a big day for all of us, especially those on Team Duck, which pulled off a win of 4-2 over the orange-clad Beavers," said Meyer. "And while I'm not

suggesting robots are reliable point spread predictors, isn't it curious that our teams matched the 2012 Civil War 2:1 score ratio just a few days later?" ■

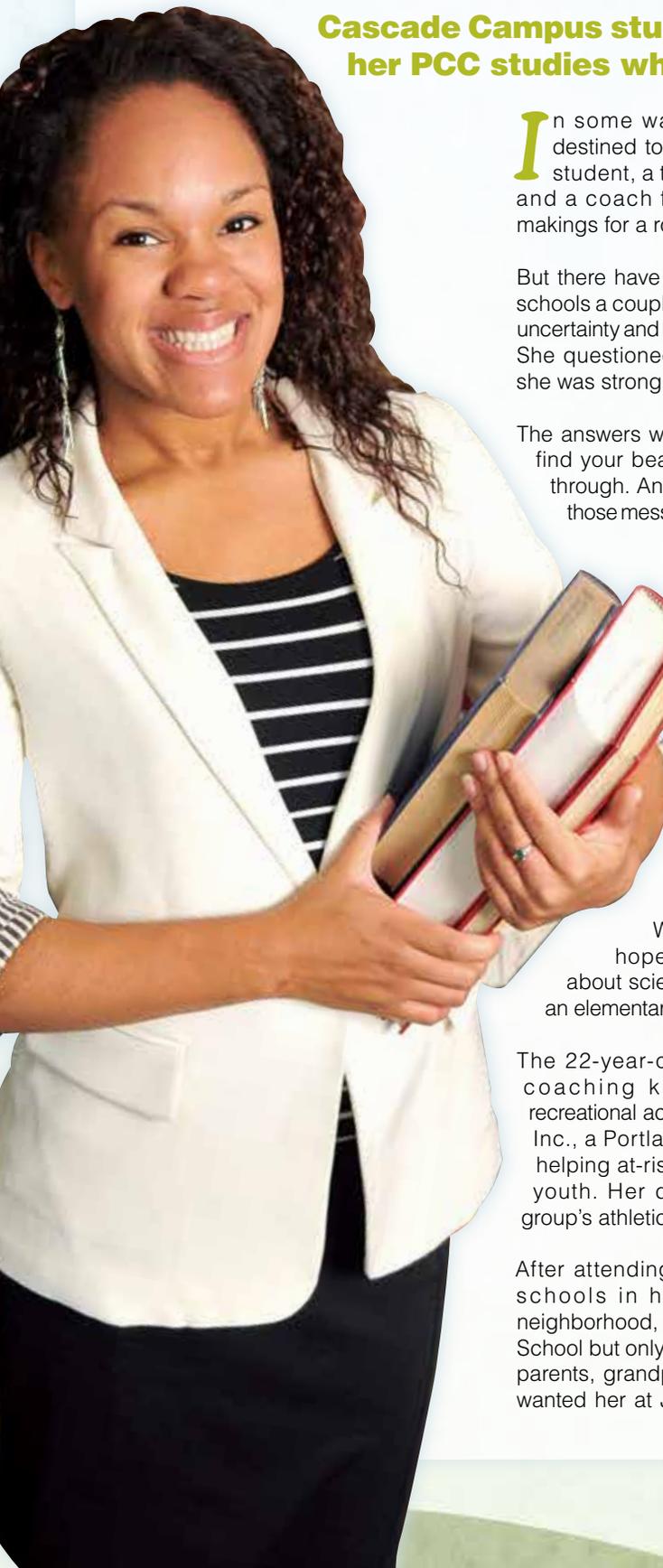
Bioscience

Machine Manufacturing
Technology



Where Science and Teaching Meet

Cascade Campus student and future science educator started her PCC studies while still in high school By Christina Holmes



In some ways Sydney Melson was destined to teach. She's a committed student, a three-sport varsity athlete and a coach for youngsters — all the makings for a role model teacher.

But there have been struggles. Changing schools a couple of times brought waves of uncertainty and lower-than-expected grades. She questioned herself and wondered if she was strong enough to make it.

The answers were always loud and clear: find your bearings, be patient and pull through. And now she's ready to share those messages with her future charges.

"This is life and it's not always going to be easy but you have to push through," said Melson, a student in the Portland Teachers Program, a nationally recognized program based at the Cascade Campus.

An environmental science lover who spent a summer interning with the U.S. Fish & Wildlife Service, Melson hopes to share her excitement about science with young children as an elementary school teacher someday.

The 22-year-old has also spent years coaching kids and coordinating recreational activities at Self Enhancement, Inc., a Portland nonprofit organization helping at-risk African American urban youth. Her dad, Tony Melson, is the group's athletic director.

After attending elementary and middle schools in her Northeast Portland neighborhood, she enrolled at Grant High School but only stayed a year because her parents, grandparents and other relatives wanted her at Jefferson, their alma mater.

Her sophomore year was one of transition but she said the Jefferson community welcomed her more than any other school.

"I felt I really blossomed at Jefferson," she said. "But when I first got there I wasn't sure who I was. It took a lot of talking to my parents and teachers who told me I could do this."

It didn't take long for her to get involved and she soon was elected to student government positions that allowed her to work with former Portland Mayor Tom Potter. He spoke at Jefferson during the school's Mayor's Week and she ended up speaking at his retirement dinner.

While at Jefferson she took advantage of Middle College classes offered at PCC and enrolled in math, writing and college survival courses.

"Those classes were so helpful because I knew what to expect when I got to college and how I would be held accountable for my grades," she said.

Now she's running full force with the teachers program at PCC, which partners with Portland Public Schools, Portland State University, the University of Portland and the Beaverton School District.

And once she becomes a teacher she'll have both a teacher's and a parent's perspective on connecting with children: Melson gave birth last summer to a little boy, Timaeus.

"My decision to go into teaching has brought clarity because now I have two people to think about," she said. ■



For more information about the Portland Teachers Program, email dcochran@pcc.edu or call 971-722-5020.

Chemistry

Microelectronics

PCC Programs

Degree programs and credit classes

PCC is also your one-stop resource for the following credit programs. Go to www.pcc.edu to learn more.

Transfer Degrees

Associate of Arts, Oregon Transfer
Associate of Science
Associate of Science,
Oregon Transfer, Business

Other Degrees and Areas of Study

Oregon Transfer Module
General Studies
High School Completion
English for Speakers of
Other Languages (ESOL)
Adult Education (ABE and
GED classes) (Non-credit)

Career and Technical Education Degrees and Certificates

Alcohol and Drug Counselor*
Apprenticeship
Architectural Design and Drafting
Auto Collision Repair Technology
Automotive Service Technology
Aviation Maintenance Technology
Aviation Science Technology
Biology and Management of Zoo Animals
Bioscience Technology*

Building Construction Technology
Business Administration
Accounting
Management
Marketing
Civil Engineering Technology*
Computer Aided Design and Drafting
Computer Applications and Office Systems
Computer Information Systems
Criminal Justice
Culinary Assistant
Dealer Service Technology*
Dental Assisting*
Dental Hygiene*
Dental Laboratory Technology*
Diesel Service Technology
Early Education and Family Studies
Electronic Engineering Technology*
Emergency Management
Emergency Medical Services*
Emergency Telecommunicator/911
Dispatcher*
Facilities Maintenance Technology
Fire Protection Technology*

Fitness Technology*
Geographic Information Systems
Gerontology
Graphic Design
Health Information Management*
Interior Design
Landscape Technology
Machine Manufacturing Technology
Management and Supervisory Development
Mechanical Engineering Technology*
Medical Assisting*
Medical Imaging*
Medical Laboratory Technology*
Microelectronic Technology*
Multimedia
Nursing*
Occupational Skills Training
Ophthalmic Medical Technology*
Paraeducator
Paralegal*
Professional Music
Radiography*
Sign Language Interpretation*
Veterinary Technology*
Welding Technology

**Program has special enrollment requirements.*

Cascade Job Fair Slated for April 30

By Abraham Proctor

The 16th Annual Cascade Campus Job Fair, one of the foremost resources for job seekers in the Portland metro area, makes its return on Tuesday, April 30 in the Cascade Campus Gym, 705 N. Killingsworth St.

An assortment of area employers will be on hand at the event set for 11 a.m. to 3 p.m. The job fair is sponsored by Brooks Staffing and OregonLive.com.

New to the job fair this year will be a free "head shot" service for attendees. A professional photographer will be on hand to take a close-up photo for use with online networking and more.

"We're so excited to be adding the free head shot service this year," said Cascade Career Services Director Becky Washington. "As more and more of the job-search process moves online, having a high-quality photo of yourself can really help your prospects."

Returning to the job fair this year – and continuing with its emphasis on online job searching – will be a free seminar from Josh Waldman, author of *Job Searching With Social Media for Dummies*.

"The job fair places job-seekers face-to-face with employers from a wide range of industries in both the public and private sectors," said Washington. "Among the employers represented at this year's fair will be OHSU, PGE, Clackamas County, ODOT and New Seasons Market, to name just a few."

Would-be employees are encouraged to "dress like you're going to an interview," Washington said.

She added: "It's no secret that it's a competitive job market at the moment. People should try to give themselves every advantage they can."

For more information, call 971-722-5613 or visit www.pcc.edu/cascadejobfair

College President Search Continues

A series of public forums will be held this spring for community members to meet the finalists who hope to become the next president of Portland Community College. For the full schedule and locations, visit www.pcc.edu/president

President Preston Pulliams will retire in July 2013 after nine years of service. The PCC Board of Directors is conducting a national search for the next president and remains committed to an open and inclusive process that will involve the board, faculty, staff, students and members of the broader community.

The next president is expected to be named in May and begin duties in July when Dr. Pulliams retires.

A Gift Now and In the Future

Former trial lawyer and PCC Foundation board member supports students today to ensure well-trained professionals in the future By Christina Holmes

Michael Gentry's love for fishing goes back to his childhood. His favorite pastime allows him to enjoy the sport while also caring for the many waterways in the Pacific Northwest.

He's the president of the Portland chapter of Trout Unlimited, which protects and restores North America's cold-water fisheries and ensures that native and wild fish thrive for future generations.

He's just as concerned about the future of Portland and Oregon and the people who will fill important jobs as his generation goes into retirement. Who are the future plumbers, health care aides, auto technicians and other professionals that Gentry relies on now and will need in coming decades? Will the technicians who may someday take X-rays of his heart or knees be properly trained? Who will be his long-term nurse if he needs one?

"I see that my donation is filling a need that doesn't get filled by other sources."

-Michael Gentry

"I started thinking that, down the road, if I need assistance there's a chance that the person who takes care of me will have gone to a community college. That's when the light bulb went off and I decided to donate. PCC and other community colleges do much of the training for our technical trades and we need to support that," he said.

Gentry said his donation could be viewed as a bit selfish as he wants the best and brightest workers filling those jobs that will impact his life. Even so, he decided to invest and make a financial commitment for student scholarships today and he believes the payoff will come later for him and other Oregonians.

"I didn't have any connection to the community college before I was asked to sit on the PCC Foundation Board," said Gentry. "I know the good work that PCC does in training our workers and that many employers are involved with the educational process."

He spent six years on the board and his term ended in 2011. Now he's a planned giving donor who began his financial support by including PCC in his estate plan. Recognizing the need for more immediate support, he recently made an additional donation via a charitable gift annuity with the PCC Foundation.

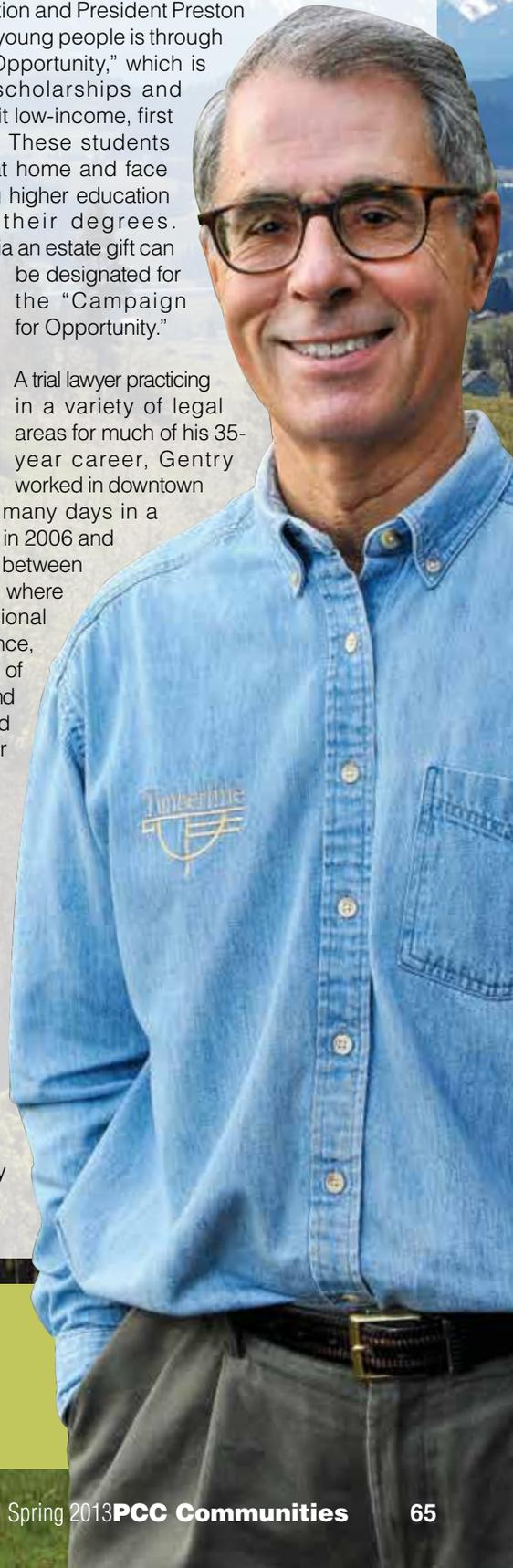
"I'm very pragmatic and I see that my donation is filling a need that doesn't get filled by other sources," he said. "I want to help a young person today."

One way the Foundation and President Preston Pulliams are helping young people is through the "Campaign for Opportunity," which is raising funds for scholarships and programs that benefit low-income, first generation students. These students often lack support at home and face barriers to accessing higher education and completing their degrees. Contributions made via an estate gift can be designated for the "Campaign for Opportunity."

A trial lawyer practicing in a variety of legal areas for much of his 35-year career, Gentry worked in downtown

Portland and spent many days in a courtroom. He retired in 2006 and now divides his time between the several nonprofits where he lends his professional and personal experience, including the Friends of Timberline and the Portland Opera. He's served both organizations for more than 20 years.

And of course he makes time for fishing. Gentry's fishing expeditions to nearby streams, lakes and reservoirs in Oregon and Washington (in his six-foot pontoon boat) as well as far-flung places in South America give him great pleasure as he's able to spend time outside and enjoy the scenery. ■



THE CAMPAIGN *for* OPPORTUNITY

To donate and learn more about the "Campaign for Opportunity," or to learn about including the PCC Foundation in your estate plans or making a charitable gift annuity, visit www.pcc.edu/foundation or call 971-722-4382.

IT'S ALWAYS SUNNY IN PORTLAND

A popular Community Education class teaches do-it-yourself solar panel installation for professionals and novices alike

By **Christina Holmes**

John Patterson's 30-plus years in the solar industry have allowed him to see the highs and lows when it comes to using the sun to heat swimming pools and water heaters and power appliances.

Now he shares his knowledge of all things solar with hundreds of PCC Community Education students in the popular Solar, Thermal and Electric Systems Installer Series, a hands-on eight-week course that provides up-to-date information and training on the principles of solar energy systems, solar hot water, solar electric controls and photovoltaic systems. It's the perfect set of classes for do-it-yourself homeowners as well as solar industry specialists looking for continuing education credits.

"Ever since I got into this business, part of my job has been educating people about solar energy," said Patterson, a former real estate agent who built a home in the 1970s using solar panels which set in motion his fascination with solar. "One of my mentors took the time to teach me everything about the business and I took on that attitude myself. I like teaching people about the benefits of solar. It's just great when they understand the concepts and principles."

Patterson's business, Mr. Sun Solar, was a pioneer back in the early '80s when the solar wave fanned across the country. Many homeowners took advantage of federal tax breaks for installing solar panels on their houses, and contractors warmed to the idea of using the sun as a source of energy.

"About 15 to 20 percent of the students in these courses are young people looking at solar as a career option," said Patterson, adding that the class draws everyone from professional home builders, architects and engineers to homeowners and apartment dwellers curious about solar.

The series of classes is approved for 20 hours by the State Renewable Energy Apprenticeship Committee.

The solar industry is tightly governed by the Oregon Electrical Specialty Code, and Patterson ensures that students know all about compliance with the set of rules and regulations. "It's more complicated than a lot of people think," he added.

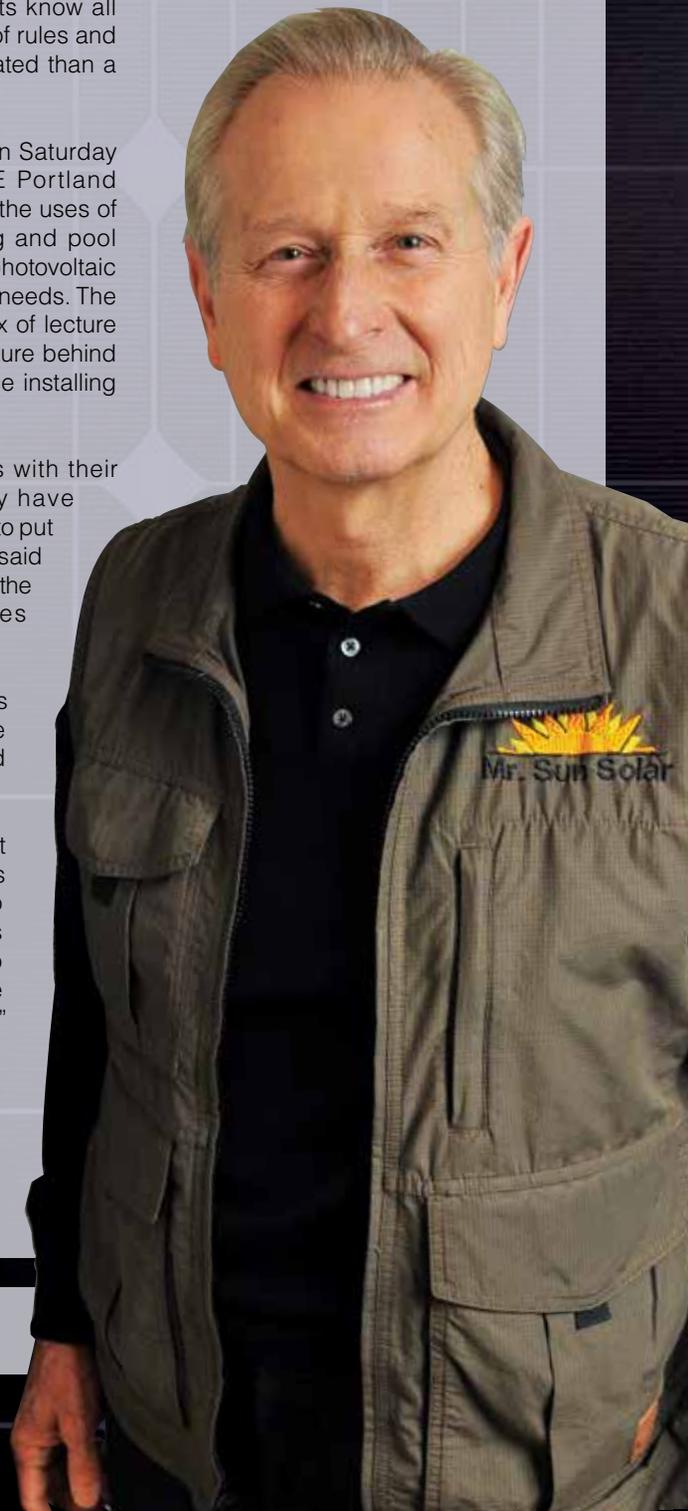
Patterson's classes are held on Saturday mornings at his shop on NE Portland Highway. Students learn about the uses of solar panels for water heating and pool heating, and also about solar photovoltaic systems for all or partial electric needs. The courses are practical with a mix of lecture and lab. Patterson built a structure behind his shop for students to practice installing panels on the roof.

"A lot of people come to class with their blueprints in hand, and they have specific questions about where to put a hot tub or a stove or a pool," said Patterson, who's been teaching the Community Education classes since 1995.

Waleed Almulla took the classes last fall as an introduction to the solar industry. He was impressed with the level of detail shared.

"We were exposed to different ways of installing the solar panels over roofs, what is required to do it, how the electrical connections need to be done all the way to the distribution box and how the system connects to the grid," said Almulla, a longtime Intel employee now serving as a senior manager for a design team. "Also, from a business point of view, we learned about what discussions to hold with a potential customer, how to

evaluate the eligibility of a specific home for a tax credit, how to estimate the tax credit and what licenses are needed to perform the work." ■



To learn more about the solar classes, turn to page 52 or visit www.pcc.edu/community and select "Work and Life Balance."



With help from the PCC CLIMB Small Business Development Center, Brett Binford (left) and Chris Lyon (far right) grew Mudshark Studios from a basement operation into a thriving business with 26 employees.

NO LONGER STUCK IN THE MUD

Business is swimming along for Mudshark Studios after counseling from the PCC CLIMB Small Business Development Center

By James Hill

A Northeast Portland small business, making a living feeding off the mud, might not be so small for long.

Mudshark Studios LLC is fresh off of its Olympics debut where the ceramic production company created foot mold plaques of 13 Team USA athletes for a New York advertising company. Their work appeared in Citibank ads in a build up to the 2012 London Games.

Last fall Martha Stewart flew the company founders to New York City and honored them as Craftmakers of the Year through her American Made Awards.

"It validates the business for our mothers that Martha Stewart has accepted us," chuckled Chris Lyon, who co-founded Mudshark along with Brett Binford.

It's taken awhile to get to this place of acceptance. In 2006 Mudshark Studios started in a basement not too far from their current studios on NE Oregon Avenue. By 2010 the company had filled up its old location and exceeded monthly sales projections by 50 percent. The founders needed a bigger space and more equipment to meet the demand, but they had nowhere to expand.

"We knew we needed money," said Lyon. "So I slapped together a business plan, went to a bank with it and they laughed. We had a lot of work that wanted to come at us and we didn't have the capital to get it up and running. That's when we went to (PCC's) CLIMB Small Business Development Center to see what they could do."

They were in good hands. In 2011, the SBDC provided long-term business advising to 440 local small business owners and small business education courses to 1,300 people. In total, 153 jobs were retained and 234 created during that time while helping these companies cultivate more than \$3 million in sales. These businesses were able to access \$4.2 million in capital with the SBDC's help.

Rick Stone and Noah Brockman, who co-lead the Oregon Small Business Development Center Network's Capital Access Team, worked with Mudshark to hone their business plan and loan package into a something lenders could relate to and fund.

"They developed an outstanding loan package and, honestly, one of the best we've seen," Brockman said. "Working with hundreds of clients on accessing capital, of those clients that stay engaged throughout the entire process and integrate our feedback, a high percentage of them eventually get financed."

Lyon and Binford developed a 50-page business plan and collected 350 pages of documentation to support it. Mudshark ended up reeling in an equipment loan from the Portland Development Commission and a line of credit through Albina Bank.

They continue to attend small business management courses at the SBDC, which are funded by the Portland Development Commission. The classes have helped them figure out how to manage growth, employees and processes, Binford said.

They now have 26 full- and part-time staff and Binford estimates he's hiring somebody almost every week. They need the staff considering they ship goods to the East Coast as well as Peru, Japan, Australia, England and beyond.

And the name Mudshark? "We always thought it would be a cool name; being covered in mud all the time and trying to emulate the mudshark where we are out there in the brackish waters," Lyon said. "It fits well." ■



For more information about the CLIMB Center for Advancement, visit www.pcc.edu/climb or call 971-722-2798.

THE CONSTRUCTION CRAZE

SYLVANIA CAMPUS

Students study in the renovated computer area in the Library.



There is a bustle of activity in the recently-renovated Library, now home to the tutoring and computer technology support centers, which were relocated from the College Center to the Library's second floor. In addition, the north entrance to the Library is now open, allowing easier access and resulting in an increase of students stopping by between classes. Other completed bond-funded work includes large scale facelifts for chemistry labs and administrative space in the Science and Technology Building. These projects are part of the \$45 million in bond improvements where crews will renovate more than 170,000 square feet of classroom, laboratory and office space and create a new child development center and a storage facility for the automotive building. The largest project will be modernizing nearly 75 percent of the College Center building — which equals about 120,000 square feet — to make the student center more accessible and easier to navigate.



Chemistry labs and administrative space were updated over the summer.

CASCADE CAMPUS

To prepare for a new underground parking structure, construction crews removed plants and shrubs that lined the existing parking lot between North Albina Street and North Mississippi Avenue, and offered them to neighbors and friends of the college. The plant giveaway in December brought about 100 people to the campus, some with wheelbarrows to carry their cache. Hoffman Construction used an excavator to dig up the bigger trees. The \$42 million project at Cascade includes a new three-story academic building and an adjacent three-story Student Center, both to be built on top of a single-level underground parking structure. Additional work includes remodeling the first floor of the Student Services Building, demolition of the existing timeworn Student Center and upgrades to the existing Library.



Plants and shrubs removed for construction were given away to residents from the surrounding neighborhoods.

Crews are hard at work at Sylvania, Cascade, Rock Creek and the Southeast Center as new structures are erected and buildings remodeled — all part of the \$374 million bond measure approved by voters in 2008

By Christina Holmes

ROCK CREEK CAMPUS

With the partial demolition of Building 7 and installation of temporary walls, art students saw the perfect opportunity to create vivid 3' x 3' pictures to display on the backdrop. About 130 art panels are now exhibited on both floors of the building and will remain in place until the temporary walls are removed next year. At that time, the artwork will be moved to other locations. PCC is investing \$44 million at Rock Creek to add more than 89,000 square feet of space to the campus with new building additions, classroom renovations and seismic, electrical and telecommunications upgrades for seven of the eight buildings within the campus core.



Art students created panels for the temporary construction walls.



The expansion of Building 7 will provide much-needed additional space for classrooms and student services.

SOUTHEAST CENTER



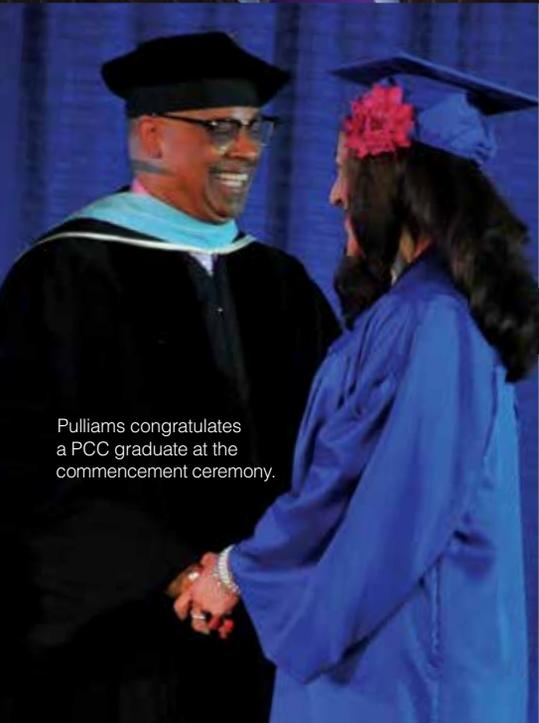
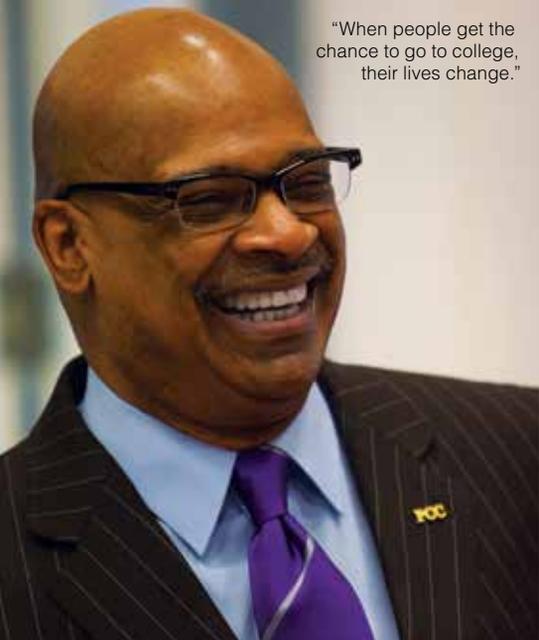
Left to right: PCC Board Member Jim Harper, Rep. Alissa Keny-Guyer, Rep. Michael Dembrow, Sen. Diane Rosenbaum, student Jeremy Selinger, U.S. Sen. Jeff Merkley and Southeast Center President Jessica Howard.

A festive groundbreaking event in October drew about 300 students, staff, community members and legislators to the Southeast Center to celebrate construction on new buildings. In addition, administrative offices have temporarily relocated to the wings of the German American Society's 1911 building, freeing up space in Mt. Tabor Hall. The \$34 million in bond dollars will start to transform the Center into a comprehensive campus. The two new buildings — a learning and student commons — will house the bookstore, student services, new classrooms, science and computer labs and a library that will be open to the public. The new three-story buildings will front SE 82nd Avenue and SE Division Street and include neighborhood ground floor retail space. Upon completion of this expansion, the Center will grow to six buildings and more than double its size to 200,000 square feet.

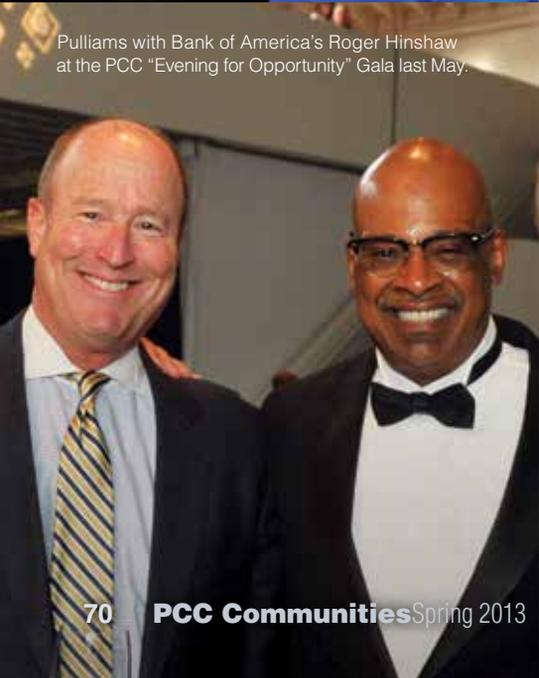


Dancers from the Portland Art and Cultural Center performed at the groundbreaking festivities.

"When people get the chance to go to college, their lives change."



Pulliams congratulates a PCC graduate at the commencement ceremony.



Pulliams with Bank of America's Roger Hinshaw at the PCC "Evening for Opportunity" Gala last May.

LOOKING BACK AND AHEAD

With four months remaining before he retires, Pulliams talks about his tenure and passion to raise money for first-generation, low-income students By James Hill

Come July, PCC President Preston Pulliams wraps up nine years of steering the college, and in his final months he's ramping up his efforts to support student success. His "Campaign for Opportunity" is in full swing as he helps raise money for low-income, first-generation college students who need financial assistance and support to attend PCC and complete their degrees. Too often these students face difficult challenges in accessing and succeeding in higher education.

The president can relate. As a young man, he was expected to join his father as a foundry worker, but became the first in his family to attend college thanks to a \$600 scholarship award from his local Rotary Club. That first gift of opportunity to go to his local community college inspired Pulliams to make access to higher education the cornerstone of his vision at PCC.

"When people get the chance to go to college, their lives change. PCC is working to give people that chance," he said. "Together, I believe we can give every Oregonian the opportunity to succeed."

Q: What are some of your favorite moments leading PCC?

A: My biggest moments occur every year at commencement. When I participate in that ceremony I get to see the results of a lot of hard, quality work over a number of years by the students. Commencement also represents the hard work and graciousness of our faculty and staff. That's always a high point every year — but in a way it's a reaffirmation of what this is all about. Every year, I get to experience that. I have people who stop me on the street later on and say, "You shook my hand at commencement!" or "You said this to me at commencement!"

Q: What was your biggest hurdle or challenge during your tenure?

A: We still struggle with adequate funding from the state. It's one of those hurdles that will be with us for a long time and it's a result of several things: the lack of revenue and resources the state suffered during the recession, and

being in this period where there is such a need for workforce development and a need to strengthen the pipeline of skilled labor. I'm hopeful that the governor's reform might redirect some funding to strengthen our resources.

Q: How do you want to be remembered after you retire?

A: I like the whole notion of access to higher education being a key tenant of what I was all about. The legacy that I would love to have is that somehow I contributed to allowing more individuals access to higher education. Whether they are transferring to a university or are in a career-technical program, they had an opportunity to gain a college experience.

Q: Does the "Campaign for Opportunity" fit into this idea?

A: Yes. I want to devote myself to a campaign for which I'm taking every spare moment to talk about the importance of access to higher education. Especially for groups that are challenged economically, or are struggling with social issues, or don't see college as a place for them. In the story of my life, somebody saw something in me that I really didn't see myself, and they were willing to invest in that with two years of a free college education at my local community college. Now I feel a personal and professional obligation to do that for others.

Q: What does the future hold for you in retirement?

A: I want to stay engaged in education as a consultant. One of our biggest challenges is grooming leadership. I think we're going to face a record number of retirements from college CEOs and presidents. I want to create interest in these positions and encourage those who are interested in pursuing a presidency. ■



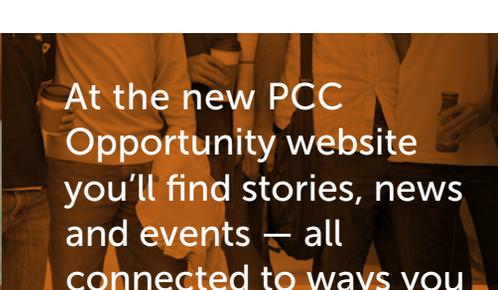
To donate and learn more about the "Campaign for Opportunity," visit www.pcc.edu/foundation or call 971-722-4382.



PCC
means
powerful.



At the new PCC Opportunity website you'll find stories, news and events — all connected to ways you can stand with PCC. Join us and turn your PCC pride into action.



▶ opportunity.pcc.edu





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Project: YOU

with PCC Community Education

Our Project:

Names: Ginny and Trevin Miller

Occupation: Owners of Mr. Green Beans, a sustainable coffee and do-it-yourself retail store

Our Project: Expand our horizons while having a fun "date night"

Class We Took: Home Coffee Roasting

And Now: We discovered a passion for coffee! We opened our own store that specializes in coffee and home roasting supplies, and we're teaching the PCC coffee roasting class that inspired us.

CommunityEducation

Make YOU the project!

If you can dream it, Community Education's hundreds of classes can help you achieve it. Go online to pcc.edu/community and get started on your own Project:YOU this spring.