

Champion of Engineering

Darryl McCall's COE Roots Run Deep

Darryl McCall graduated from UCSB with a BS in Chemical Engineering in 1978 and spent the next thirty years at Procter and Gamble, eventually leading a global business and several global supply chains. He was hired by Coty in 2008, where he served as Executive Vice President until retiring in 2014. McCall currently resides and owns his own consulting company in Santa Fe, New Mexico. He co-chaired the committee for the endowment to renovate and maintain the **Robert J. Rinker** Teaching Lab, where undergraduate ChemE students receive critical hands-on training. He served on the department's External Advisory Board from 2005-'15 and has donated generously to the COE, with a focus on increasing access to STEM education and careers for first-generation, minority, and otherwise underrepresented or disadvantaged students. He spoke with *Convergence* in March.

CONVERGENCE: *You have taken on considerable responsibility in your career. What advice do you have for young engineers aspiring to achieve similar levels of leadership and responsibility?*

DARRYL MCCALL: Master your craft first, and early in your career; you likely won't have time later. Solve for x when necessary, and for the fun of it. Honing and challenging a curious mind, in your chosen discipline or not, will pay untold dividends.

You must also establish a reputation; it is what gives you the standing to be considered for new opportunities. You build a reputation through integrity, experience, and the results you achieve. Your ability to make a distinctive contribution, beyond the norm or expectations, will contribute to your reputation, and give you greater satisfaction in whatever you do. Toward that end, mobility can also be important, as learning from new relationships and in different cultures accelerates development.

C: *As a UCSB ChemE alumnus, what motivated you to support the renovation of the Rinker Undergraduate Teaching Lab?*

Photograph by Daniel Quat

DM: While I was chairing the Chemical Engineering Department External Advisory Committee (EAC), students frequently complained to me about not having a relevant and reliable ChemE 180 Laboratory, which is essential for learning and for the enjoyment of problem-solving. The Rinker Lab provides an opportunity to combine theory and computation with practical experience, thus accelerating the preparedness of graduates for the realities of a job, an important concern for employers.

C: *Did you feel well prepared for your career as a UCSB graduate? What were some of the most impactful elements you recall during your time here as an undergraduate?*

DM: I felt prepared to begin work as a process engineer at either Dow Chemical or Procter & Gamble, and I joined the latter. Dr. Rinker's 8 a.m. classes and frequent homework, my independent study of biomass conversion, and camaraderie among classmates who also joined P&G in several locations, all contributed to my confidence.

C: *Can you talk about the Darryl McCall Technology Awards, which gave cash awards to minority students trying to adapt during COVID?*

DM: Research shows that people of color leave STEM studies in greater proportions than whites and Asians. COVID-19 had the potential to worsen these regrettable losses for students of color at UCSB, owing to a lack of access to reliable internet service or a quiet place to study, or a need to contribute toward family income.

I was introduced to the MESA program by Dr. Rinker in the nineties, and at the onset of COVID-19 I saw an opportunity to support STEM students of color who were moving to remote learning. During the past year of virtual classes in 2020 and 2021, more than sixty first-generation college, low-income and underrepresented STEM students received assistance of their choice. This ranged from purchasing a modem, to creating a personal study space at home, to upgrading a computer, to subscribing to an internet service.

C: *What is your view on the value of diversity generally, and to the importance of broadening access to STEM fields in higher education and beyond?*

DM: Regarding the value of diversity, one only needs to look at UCSB's excellent reputation for research as evidence of the benefits of a diverse approach to most projects. It is the deliberate inclusion of multiple perspectives, experiences, and disciplines that has led to its world-class standing in interdisciplinary research.

Supply of talent is a significant challenge when attempting to promote race and gender diversity in STEM fields. My focus in education is primarily toward improving the supply of STEM students of color. This applies to pre-K through university — and beyond. Attrition in STEM fields for underrepresented minorities doesn't end upon graduation.

C: *Despite being recognized officially as a Hispanic-Serving Institution, Latinx students in the COE often struggle to adjust, and have higher dropout rates. How can UCSB expand the pipeline to the COE for Latinx students and those from other underrepresented groups, and support them to succeed once they are here?*

DM: A pipeline is an apt analogy to describe the end-to-end nature of this problem: supply through a leaky system must exceed the demand. Two important clarifications: first, this system encompasses 20 to 25 years of education and, second, demand is best defined by the attainable respective demographics in the catchment area for the COE.

A recent example can point a way forward. When I graduated in

chemical engineering, there were no female faculty. Now, twenty percent of ChemE faculty are female, and they are serving as role models for aspiring female STEM students and academics. Many efforts over many years have contributed to this success.

To achieve graduation rates commensurate with the COE catchment, particularly for Latinx students given UCSB's designation as a Hispanic-Serving Institution, leadership must find ways to match the success we have had in hiring female faculty.

I have long advocated for African American faculty at the university to serve as role models for students of color in chemical engineering. I will continue to direct my energies toward reducing attrition among underrepresented students and inspiring them to believe that they can succeed in STEM.

C: *Can you talk a little bit about your work as a UCSB Foundation Trustee? What have you found rewarding about that service?*

DM: I was humbled and honored to join Richard Breaux's (Dick) Foundation Trustee executive team during 2017 and 2019. This gave me an opportunity to understand how the university worked, beyond the purview of a department, and to influence its direction. A couple of exciting experiences were witnessing firsthand the exceptional leadership of **Chancellor Henry Yang**, the devoted loyalty of our alumni, and the sincere, energetic interest of the trustees to improve the university and its standing within the UC system. Importantly, Dick understood the benefits of assembling a diverse executive team during his tenure despite the challenges in doing so.

C: *At the dedication of the Rinker Lab, you said, "My class of '78 have all been successful, but you don't succeed individually." You then asked successful UCSB alumni to consider giving back, as you have. Why is that so important?*

DM: As a first-generation college attendee from a mobile enlisted military family of eight, I found it very challenging to satisfy the curriculum and graduate in four years. Four years was the norm, but in my case, it was an imperative, as I was married with a son throughout my studies at UCSB. I needed a job. Similarly, working in corporate America as an engineer of color in Cincinnati during the '70s and '80s was a formidable adjustment for me. P&G was also transforming to embrace diversity of race and gender. Despite my determination to succeed, it would not have happened without the support, advice, and encouragement of others while at UCSB and during my career.

My first tutor at UCSB was one of four African American pre-med students at the time. Fortunately, **Dr. Gerald Cysewski** agreed to sponsor my undergraduate thesis in biomass conversion, and Dr. Rinker accepted my application to attend his polymer systems course, ChemE160, out of sequence. In my senior year, my classmates accepted me into their study groups when I finally moved sixty miles closer to campus to reside in married student housing. I could not have graduated without this support and encouragement, for which I have always been thankful.

Isaac Newton's observation to the effect that, standing on the shoulders of giants, one can see further and more clearly than otherwise, has been inspirational for me. Upon graduating, it became my turn to give back, and through my example, I have hoped to encourage my classmates, colleagues, and others to do the same. Now that there are roughly twelve COE graduating classes from UCSB in retirement from careers, since the first grads, in 1965, I want to encourage these successful alumni to contribute more of their energy and ideas to UC Santa Barbara.