

The Beauty of Indirect Trajectories

There is a predominant myth that the path to success is the shortest line between two points. Although mathematically this is true, it doesn't mean it is true for our lives. Unfortunately, myths and fiction have longer lifelines than facts. Every successful woman we have ever profiled in *IEEE Women in Engineering Magazine* has never followed any direct trajectory. Everyone's career path is as diverse as our interests, life experiences, and personal goals.

I used to envy my friends who knew exactly what career they would pursue, the specific goals they wanted to accomplish, and the plans of action they would put into play to achieve those aspirations. For many of us, our experiences and challenges shape our goals and send us off zigzagging to try new things. These actions force us to take new risks that ultimately make us stronger and more confident and provide us with the ability to leave a more impactful footprint on the world. The undulations introduced throughout our careers are critical factors that distinguish us from everyone else; they help us present new perspectives and solve problems once considered unsolvable.

There is no better example of this than what we have been experiencing

during the COVID-19 pandemic, which has caused an unanticipated deviation, forcing everyone to pivot and re-evaluate everything from education, health, career choices, and social interactions. Despite all the challenges the pandemic has brought upon us, IEEE Women in Engineering (WIE) members have not stood on the sidelines, waiting idly. Instead, they are at the forefront of making the profound changes and adaptations needed to help us move forward, not just through the pandemic but beyond to build stronger, more socially resilient communities.

One such role model is Dr. Gilda Barabino. As a woman of color, her career path has come with many challenges, which have resulted in her resolve to lead others not just to succeed but to empower society to value the differences and perspectives of every person's contributions and voice.

Also taking these challenges head on are scientists and designers Catherine D'Ignazio and Lauren Klein. In their new book, *Data Feminism*, they inspire all students to integrate these concepts into their own research and show us how to do it. Considering and integrating these nontraditional, unspoken issues into our research is a fundamental shift that will inevitably lead to pro-

found changes in diversity and inclusion in the science and engineering fields.

Dr. Katie Wilson, whom I call a diversity and inclusion ninja, has gone above and beyond individual mentoring and taken her best practices to the masses. She is one of the founding members of Uniting Professional Women Advancing Relationships and Development (UPWARD) Universities Networking with Intel for Tomorrow's Engineering and Sciences (U.N.I.T.E.S.) Women, a mentorship program for female science, technology, engineering, and mathematics students

created by Intel, UPWARD, and Santa Clara University. One of this program's celebrated participants is Julia Lieberman, a student at Santa Clara University. No one exemplifies that one's life is not a straight line connected by two points more than

Lieberman, who shares the twists and turns of her life's adventures, which have helped shape this exemplary "woman to watch."

In this issue of *IEEE Women in Engineering Magazine*, we celebrate trail blazers like Dr. Giovanna Oriti. Oriti is bringing attention to the contributions of women like herself who are becoming the giants of power electronics, a field that has traditionally been devoid of women. She credits her success to strong mentorship from a male advisor, a common theme for many women. Accordingly, in this issue, we also celebrate the male mentors who have demonstrated a lifelong commitment to building diversity and inclusion through their mentoring. Prof. José David Cely from Bogotá, Colombia, has made supporting female engineers such a regular part of his daily work that he barely



Karen Panetta

even recognizes when he does it. We thank him and all the other mentors who have served as the conduit to ensure that women receive opportunities to thrive.

Finally, we are proud to partner with Eta Kappa Nu (IEEE-HKN), the international honor society of IEEE, where the pillars of character, scholarship, and attitude are exhibited through an individual's actions. We encourage all of our IEEE WIE members to seek induction into this prestigious group as many of our IEEE WIE members have already embodied the characteristics cherished by IEEE-HKN. Thank you to all of our IEEE WIE and IEEE-HKN members and students for their inspiration, resilience, and commitment to using their skills to benefit humanity.

—Karen Panetta, Editor-in-Chief
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