President’s Message

Guided by the belief that education is an essential tool for improving communities and changing lives, the Florida Education Fund continuously seeks ways to enhance the educational opportunities we provide our constituents. As a result of endowment growth, consistent financial support from the State of Florida, grants, and unrestricted donations, we are able to fulfill our mission of producing scholars and well-trained professionals who will lead communities and forge pathways to self-reliance, innovation, creativity, and problem solving.

As described in this edition of the Focus, Dr. Traki Taylor, a keynote speaker at the October 2018 McKnight Annual Fellows Meeting, succinctly captured one of the primary objectives of our programs: “It is important to share your truth, to write truth into history and correct the omissions...You must be bold. At the end of the day, you must ask yourself, ‘why does your work matter?’”

Indeed, this edition of the Focus shows how, at both the doctoral and pre-college levels, FEF’s work matters, as it exposes students to and prepares them for careers in fields where they are traditionally underrepresented.

FEF helps to increase the number of underrepresented individuals with Ph.D.’s in fields of study that include computer science, engineering, health sciences, life sciences, statistics, business, psychology and physics. Furthermore, we support Fellows who are committed to conducting research that addresses major issues confronting communities.

You will read in this edition of the Focus, for example, how Dr. M. Rony François, a McKnight graduate, M.D. and Ph.D., has devoted his illustrious career to working with patients and directing other medical personnel to help them achieve wellness and overcome disease. He devotes a significant amount of his time to addressing disparities in the access and quality of care provided to all people. You also will read how McKnight Fellow Tommy Boykin, a doctoral student majoring in physics at the University of Central Florida, conducts research that aims to help improve the lives of patients afflicted by Alzheimer’s.

Our efforts to achieve our mission do not end with our Ph.D. program. At the pre-college level, for the Statewide Brain Bowl Competitions, our staff annually secures nearly $2.1 million in scholarships to help McKnight Achievers and other winners defray the cost of their college education.

You also will read in this edition of the Focus how we continue to broaden our efforts to bring cutting edge programming to our pre-college communities. Our Executive Vice President Lyra Logan not only continues to expand our coding programs but has developed new curriculum and forged new relationships with the University of South Florida’s Office of Undergraduate Research and Upward Bound Program, the Corporation to Develop Communities of Tampa, and the Tampa Police Department to work with underserved youth. These new programs will help encourage and prepare students to pursue higher education and careers in STEM fields.

In closing, as we increase our investment to help students achieve these milestones, we remain aware of the fragility of sustained growth and success, even in the best of years. We know that new challenges often threaten to thwart good results. In response, we follow the lessons illustrated by the successes of McKnight graduate twin brothers Sidney and Jeffery Anderson, discussed in this Focus edition. Like them, by remaining steadfast during difficult times, exercising caution during good times, and incorporating positive vision into a well established strategic plan, we will continue to surmount new challenges and persevere until we achieve our goals.

2018 Annual Fellows’ Meeting Keynote Speakers Inspire and Invigorate

For McKnight Fellows and alumni attending the 2018 Annual Fellows Meeting (AFM) in November, three extraordinary keynote speakers discussed the significance of their roles as minority professionals and provided inspiration and guidance to help Fellows succeed as doctoral students.

Dr. Walter Zakahi, currently the Provost and Senior Vice President for Academic Affairs at Bradley University, his alma mater, has served as an administrator and professor at Keene State College, Minnesota State University, and New Mexico State University. To be a scholar, he said, is to take on added responsibility and accept it as
MDF Alumni Drs. Jeffrey and Sidney Anderson

When Sidney and Jeffrey Anderson attend academic conferences, they receive a lot of attention. After all, it is rare to see twin brothers, both assistant professors of marketing, at such events. Their success is testimony to a strong family, a little luck, and a great deal of hard work and perseverance.

They grew up as latchkey children in 1970’s Compton, California, in a lower middle class family that included an older brother and working parents. Their father was a merchant marine who traveled a great deal, leaving parenting duties primarily to their mother. The family socialized with a diverse assortment of friends and kept the boys occupied with crafts, cycling, music, and museum visits. They credit their mother with keeping them curious.

Neither parent went beyond high school, but they emphasized the importance of education early. Their father, who worked with his hands, would come home dirty, and tell them to do well in school so they could get a job where they could come home clean. Years later, prior to earning Ph.D.’s in 2016 and 2017, Sidney and Jeffrey Anderson would become the first members of their immediate and extended family to complete undergraduate degrees and MBA’s.

In the middle of the first grade, Ms. Anderson transferred Sidney and Jeffrey to a small private school in Long Beach, California. The student population was wealthier, whiter, and more middle class, but the Anderson twins were accustomed to a mix of people, and the transition was smooth. Of 210 students, about 10 were African American, including four in the Andersons’ first grade class.

Jeffrey and Sidney earned bachelor’s degrees in Computer Information Systems from the University of Central Missouri in the early 2000’s, followed by Jeffrey’s MBA from Pepperdine University in 2004 and Sidney’s from his alma mater in 2011.

Each has many years of experience in corporate, private sector companies. Jeffrey’s resume includes seven years as a business analyst at Boeing and six as a product manager at Cheetah Logistics Technology. Sidney’s employers and clients have included American Express, the state of South Dakota, and Northwestern University. He also has served as an officer with the Ph.D. Project. Each of them took a significant pay cut to return to graduate school for the doctorate, Sidney in 2012 and Jeffrey in 2013.

Dr. Sidney Anderson is now Assistant Professor of marketing, McCoy College of Business Administration at Texas State University, where his research interest is in health care marketing and data analytics. Dr. Jeffrey Anderson is Assistant Professor of marketing at California State University in Los Angeles. Though they are 1,400 miles apart, they see each other five or six times a year. Sidney has a 26-year-old son, a 17-year-old daughter, and a nine-month old grandson; Jeffrey has three daughters, age 26, 17, and 5.

When they applied for McKnight, the brothers each spoke about wanting their presence in academia to encourage other minority students to complete graduate school. Asked for advice, Dr. Sidney Anderson said graduate students should “…work every day even if it’s 15 minutes, smooth out the work.” Dr. Jeffrey Anderson responded, “It’s not about being a genius. It’s more about perseverance, playing the game and doing what you must do. Your goal should be to get into the best program; you have options. McKnight and the Ph.D. Project exist to help you.” Both brothers expressed appreciation for the financial and emotional support received from the McKnight program, its staff, and other students.

“[Earning the Ph.D.] is not about being a genius. It’s more about perseverance, playing the game and doing what you must do.”

-- MDF Graduate Dr. Jeffrey Anderson

Since 1984, the McKnight Doctoral Fellowship Program (MDF) has awarded 1,280 Fellowships to African American and Hispanic students. Since the first Fellow graduated in 1988, an unprecedented 691 Fellows have earned Ph.D.’s. This achievement is all the more remarkable, given that the National Research Council reports the average time for doctoral degree completion as 7 years and 3 months, while MDF graduates boast an average completion time of just 5 years and 6 months.

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Annual Fellows’ Meeting Keynote Speakers Inspire and Invigorate

continued from page 1

part of one’s identity, and he offered advice on preparing to succeed:

First, and most importantly, he advised, find a mentor, and note that you also can continue to learn by being a mentor when time permits. Second, avoid as many additional duties as possible, except committee work, until you become a full professor. Do make time to serve on college-wide committees to learn the full breadth of the institution.

Third, develop a strong record of scholarship. At any one time, aim to have one paper under review, another in press, and another recently published. Fourth, pursue professional development, including leadership skills, if you plan one day to seek a higher level administrative position.

Finally, develop a set of professional values to guide you. For example, Dr. Zakahi follows these principles: address students’ needs first; make decisions based on data, not emotion; practice shared governance; and promote diversity in higher education.

Paraphrasing a song from the Broadway hit, “Hamilton,” Dr. Zakahi encouraged the audience to continue to pursue positions that will qualify them to “be in the room where it happens,” noting a historical lack of diversity in such spaces (8% African American, 4% Hispanic, 2% Asian). “It’s important that we are in the room,” he emphasized, because young people benefit from diverse leadership, including leadership by people of color.

Health disparities are only partly explained by lower access rates and socioeconomic conditions among minorities, Dr. François noted. According to the 2002 report, evidence shows that people of color often experience health care differently because of health providers’ stereotyping, biases, and uncertainty in the cognitively complex, high pressure environment of clinical visits. Dr. François cited a portion of the study that showed doctors were less likely to recommend intervention (cardiac catheterization) for minority and female patients with the same symptoms of heart disease as white males.

To illustrate the complex reasons for systemic health disparities, Dr. François employed Jones’s visual metaphor of a healthcare cliff. He explained that people in minority communities, already closer to ‘falling off the cliff’ due to greater exposure to illness and fewer economic opportunities, suffer further from the unequal distribution of resources—differences in quality of care and lack of preventative care and interventions.

Dr. François and the Committee recommend, among other solutions, integrating cross-cultural training for health professionals and increasing the proportion of underrepresented racial and ethnic minorities among them, while also specifying several broad areas for continued research.

Dr. Traki Taylor, Assistant Vice Chancellor for Academic and Student Affairs for the Florida State University System Board of Governors, is a former professor and dean for colleges of education at Florida A&M and Bowie State Universities. With upbeat music and spoken word, Dr. Taylor energized and inspired an early morning plenary audience to “…create a net that works…build your network to create net worth,” that mutually benefits the group.

“It is important to share your truth, to write truth into history and correct the omissions,” Dr. Taylor advised, adding, “you must be bold.” “You’re not getting a Ph.D. just for you. There are generations of scholars waiting to come after you. So what if you’re in one of the best programs? So what? At the end of the day, you must ask yourself, "why does your work matter?"

She urged her audience to get the full benefit of the Conference—ask, discuss, listen (remember why you have two ears and only one mouth), process, think, and keep coming back. Remember that “you are the only one who can defeat you.” Always, when attending conferences, bring at least three CV’s and your elevator speech, she advised.

Dr. Taylor reflected upon her early life in the inner city, “I turn daily to my spiritual center,” she said, and “walk with my beliefs, unapologetically, into the room. Honor sacrifices [your ancestors’ and your own] with success. Your degree is not free; be a responsible expert by earning the three letters behind your name.”
Growing up in Birmingham, Alabama, Tommy Boykin was always curious about how things worked, like the battery operated Batman car he received on his fifth birthday. Little did he suspect then, that his curiosity would take him half way around the world someday.

In high school, he became interested in physics and took his first course in the subject as a junior. However, he struggled in the course, and didn’t feel he was very good at it. His mother, who was pursuing a Ph.D., encouraged him. (She earned her doctorate in biochemistry and now teaches at a technical college.)

After high school, Boykin enrolled in Berea College, a small liberal arts school in Kentucky. There, in the summer following his freshman year, he conducted his first research on superconductivity, synthesizing a copper-based superconductor and identifying its crystal structure. A year later, he conducted further research. The experience sealed his decision to continue studying superconductors.

In his third summer at Berea, Boykin won an internship in the biochemistry department at Vanderbilt University. There, his research took a new direction toward the biological application of physics, studying the nature of amyloid precursor proteins. Though he lacked a strong background in biochemistry, Boykin worked extra hard to overcome the deficit; he succeeded, and in the process discovered a direction for his future studies.

Years later, in his second year as a McKnight Fellow studying physics at UCF, Boykin was watching the closing ceremonies of the 2016 Olympics and heard that the next Olympics would convene in Tokyo. He thought about “how cool it would be” to travel to Japan and, the next day, was surprised to hear his professors discussing opportunities to go there. For the next few months, Boykin scrambled to secure financial support and defend his dissertation proposal before going to Japan for an internship in the spring and summer of 2017.

As a researcher at Nippon Telegraph and Telephone Corporation (NTT), Boykin was the first American at the company in 10 years, had a German supervisor, and made friends with Scottish, English, and Vietnamese workers.

“I learned so much in Japan,” he said, citing working with several others to expand knowledge in the field of superconductivity and to having access to an old (30 year old) but very expensive tool not available to him before the trip.

Researchers predict superconductors will impact quantum computing and the production of magnetically levitated trains. Boykin, who will defend his dissertation this spring, hopes his research combining superconductivity and biochemistry will eventually unlock ways to mitigate Alzheimer’s disease. Also, as one of a very small number of African Americans in the field, he hopes to convince more underrepresented minorities to study physics.
History & Culture Brain Bowl Competitors Showcase Skills, Win College Scholarships

In March 2018, after 19 contests that led up to the final game, the Tallahassee Coalition Center of Excellence (COE) Lincoln High School team reclaimed their championship History & Culture Brain Bowl title, recovering from a devastating loss in 2017. The Competition tested 11 teams’ reading of college-level books with over 200 vocabulary, comprehension and extended reasoning queries patterned after questions on the critical reading section of the SAT.

To emerge as victors, the Lincoln High School team began reading and practicing for the Competition in the early fall, competed against several teams in their local competition, and then competed at State against ten other regional champions, edging out the second place finishers, the South Florida COE Hialeah TBreds.

The triumph earned them and members of the second and third place teams a three-night stay in the regional winners’ hotel, trophies, Dr. Mary Lindsey cash book awards, and four-year scholarships to Florida colleges and universities.

Seven of the 19 winners from the first, second and third place teams selected one of those scholarships, and two started college in Fall 2018 using the awards.

2019 Laws of Life Essay Winners

Each year, students in grades 3 through 12 compete in FEF’s Laws of Life Essay Contest, which requires them to exercise writing and critical thinking skills as they communicate the principles that guide their lives. Each contestant selects a quotation that expresses a key value and explains in the essay why she or he feels the chosen value is important. Excerpts from the 2019 winning essays follow:

**Khaliah Rentz, North Florida COE, 3rd Grade**

*Education is the most powerful weapon you can use to change the world.* – Nelson Mandela

I respect Nelson Mandela and everything he stood for before, during and after the years he served as the president of South Africa. I agree with his statement that education is a powerful weapon that can be used to change the world because, from the beginning of time, people have always discovered and taught, and that’s the reason the world has advanced to where it is today in the 21st Century. This means that education can be used to change the world by how we apply what we learn.

I will use my education to change the world once I graduate from college. I will become a police officer and will protect and serve my community. I also will educate people on crime and illegal activity and on activities that are not illegal, hoping to make an impact that will last a life time.

My mom always told me to be the change in the world that I want to see. And I believe that, if I use education as a weapon, this can and will be done.

**Ra’Sean Harris, St. Petersburg College COE, 8th Grade**

*Nothing ever comes to one that is worth having, except as a result of hard work.* – Booker T. Washington

This quotation by Booker T. Washington has made an impact on me because the principle behind it has been exhibited to me by many others in my life.

My mother has lived this principle by showing her children how hard work and dedication pay off. She has worked hard to earn her education, which has helped her become the professional she is today. I know how much she has been through to get where she is now.

My dad has also made an impact in my life by serving our country. He often says, “hard work and determination are always important factors in the endeavor to reach success.” He also says that opportunities are usually disguised as hard work, so most people don’t recognize them.

My sister also has shown me the benefits of hard work. When I was in elementary school, I slacked off a lot and scored below average, but my sister continued to help me. She was earning good grades, while I was getting F’s. That’s because, at first, I thought school was just a game. But, thanks to her, my parents, and teachers, I am taking it more seriously, working harder, making better grades, and learning something new every day.

These are the reasons I chose to write about the quotation by Booker T. Washington: it inspires me to try to work harder. I will continue to live by this principle as I progress in life.

continues on page 6
Skills Draw Top Scholarship Dollars at the FEF’s 2018 State Mathematics Brain Bowl

Students who fail to develop proficiency in mathematics forfeit many future career options, effectively turning their backs on more than half the job market’s opportunities. Competitors in the FEF’s annual Mathematics Brain Bowl Competitions promise to avoid such a fate, working tirelessly over several months each year to further master arithmetic, algebra, geometry and data analysis.

The Math Competitions reward superior skills, not only with prizes and trophies, but, for placing senior high teams, with Dr. Mary Lindsey cash book awards and four-year scholarships that fund ever-increasing tuition to Florida colleges and universities, including 12 scholarships contributed by Florida State University.

At the 2018 State Competition finals, Atlantic Coast COE Rad 5 triumphed over six other teams to win some of those scholarships for the second time in two years. Six of the 15 winners from the first, second and third place teams selected scholarships, and five will start college in Fall 2019 using the awards at Florida Atlantic University, Florida State University, Stetson University, University of Central Florida and University of South Florida.

In the Competition’s two other categories, the Atlantic Coast COE 6th-8th grade team the Math Attack and 9th-10th grade team the Palm Beach County COE Brain Master joined Rad 5 in the winners’ circle for the fifth and third times, respectively. For their exemplary performance, the teams won a three-night stay in the regional winners’ hotel and trophies.

2019 Laws of Life Essay Winners

continued from page 5

Eden Williams, South Florida COE, 10th Grade

The ultimate measure of a man is not where he stands in moments of comfort and convenience, but where he stands in times of challenge and controversy. -- Dr. Martin Luther King, Jr.

I live by this quotation because, for me, it is most challenging, yet when fulfilled reaps the most rewards. It reaps the most rewards because, like Dr. Martin Luther King said, it is the ultimate challenge to remain true to your values no matter what negative events occur in your life.

In my life, my mother is the best representation of this quotation. No matter how tired, or how many times my siblings and I may have gotten on her nerves, she remains courteous, polite, and friendly, even when that same respect isn’t returned. Following her example, no matter who violates my rights, I will remain positive.

I realize that, in times of comfort, I have taken great pride in proclaiming beliefs and morals that were easy to stand by when times were good. But now that I have seen adversity and disparity, I know for sure what I stand for—equality and love for every being on Earth.

I learned that I truly embrace these values from the moment I started attending my new private school. After learning about all the opportunities it offers, I realize the incredible advantage I and my new peers have over my old ones back in public school. From the system of grading, that makes it easy to get A’s, to the computers, printers, teachers, counselors, and facilities available to us any time we want, the benefits just don’t stop.

When I realized this, I was actually filled with rage that my friends might never have the experiences I am having, and rage at the spoiled kids who aren’t nearly as smart as my old friends and who sometimes waste the resources available to them. That was my most eye opening experience with inequality, because the minorities I studied with in public school deserve just as much attention, care and opportunity as the kids that attend my new school.

It has made me realize that we all should advocate for equality for all because of the love we should have for all. I have given and received love for as long as I can remember, and I will continue to do so, changing the world and every heart for the better, one person at a time.
**CodeMasters Expands in Hillsborough and Miami-Dade Counties in Summer 2019**

While Florida currently has over 18,000 open computing jobs, with an average salary of $80,276, only 19% of public high schools teach computer science and only 3,000 college students graduate with computer science degrees.

To help fill this gap, FEF will expand its summer partnerships with community-based non-profits in Hillsborough and Miami-Dade to teach the coding aspect of computer science to underserved students from the age of 7 to 17.

**Tampa Police Department – R.I.C.H. House Programs**

Since 2000, the Tampa Police Department Resources in Community Hope (R.I.C.H.) House program has worked to enhance neighborhood safety through collaboration between police and residents in high-crime areas. At sites in Tampa’s Sulphur Springs and Robles Park neighborhoods, the program offers impoverished children a safe atmosphere where they can grow, learn, and play as an alternative to idling on the streets after school and during the summer.

During 4-week summer programs at each site, FEF will teach game design/coding to children ages 7 to 17. In addition to creating several fully functional games, students will learn fundamental computer programming concepts to build upon in future classes and programs.

**CDC of Tampa**

The 27-year-old Corporation to Develop Communities (CDC) of Tampa conducts an annual 5-week summer middle school program in Hillsborough County’s Riverview area that focuses in part on exposing youth to workforce skills.

Working with FEF, the CDC’s summer students will become familiar with foundational computer programming principles while they learn to create fun animations and games.

By the program’s end, each student will create five projects, including a short cartoon and two fully functional 2-D video games to share with family and friends.

**Opa-locka CDC**

Since 2012, FEF has partnered with the 39-year-old Opa-locka Community Development Corporation, with FEF offering a single summer middle school robotics camp from 2012 to 2015. As of 2018-2019, the partnership has grown to include 8 after school and 15 summer coding programs at elementary and secondary schools in the CDC’s service area of Northwest Miami-Dade County.

FEF’s fifteen 6-week intensive programs in the area this summer will include five elementary and middle school robotics camps, seven middle school game design certification camps, and three high school industry certification camps in web design and development. In addition to building and showcasing important tech and entrepreneurial skills, students will learn how to prepare for higher education and potential careers, tour college campuses, and interact with tech professionals at local STEM-rich venues.

**FEF Partners with USF on Upward Bound STEM Grant**

During the spring 2019 academic term, FEF has partnered with the University of South Florida’s Office of Undergraduate Research (OUR) and Upward Bound Program to implement a grant that provides an immersive learning experience for students interested in STEM. The project introduces highly motivated high school students to information technology and literacy, game design and development, mobile application development, cybersecurity, data visualization, and web design within the context of research.

In the project’s first phase, students have begun learning computational and design thinking taught by FEF and OUR staff. FEF’s Executive Vice President Lyra Logan has provided curriculum and trained OUR staff to introduce programming skills to students through gaming, mobile app and website development. She also is helping OUR staff teach the curriculum to students in bi-weekly Saturday sessions.

In the project’s second phase, students will use learned research, problem solving and related skills to consider real-world questions and develop creative solutions or prototypes. To do so, they will have the opportunity to work on collaborative teams and access USF faculty, staff, equipment, facilities, and other campus resources.

The skills developed during this program are intended to prepare students for areas of study in STEM fields at the university level and for future careers: creativity, critical thinking, information literacy, computational thinking, research, team building, data visualization, literature synthesis, design thinking, written and verbal communication, problem design, problem solving, peer review, and rapid prototyping.

**Upcoming FEF Events**

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<tr>
<td>October 11-13, 2019</td>
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The FEF’s mission is to strengthen the larger community by creating and implementing programs and services that lead to greater educational advancement for historically underrepresented groups.

For information on how you may support FEF programs, please call 813-272-2772.