



**ZINK CENTER FOR
COMPETITIVE INNOVATION**
College of Engineering, Architecture and Technology



IMPACT '25 REPORT

About the Zink Center

Established in 2022 by a generous gift from the Zink Family Foundation, the goal of the Zink Center for Competitive Innovation is to enrich the engineering curriculum by providing the tools, resources and experiences necessary for students to succeed at the highest levels of technology, innovation and entrepreneurial endeavor.



ENHANCE
INSPIRE
EMPOWER

A Message from our Director

The Zink Center for Competitive Innovation in the College of Engineering, Architecture and Technology (CEAT) was established in 2022 by a generous gift from the Zink Family Foundation of Tulsa. The mission of the Zink Center is to create, develop and promote interdisciplinary design teams, competition teams, and innovation teams through for the benefit of current and future generations of OSU students, the OSU system, and the people of Oklahoma and beyond.

The Zink Center is designed to enrich the undergraduate engineering experience by providing the tools and resources necessary for our students to succeed at the highest levels of technology, innovation and entrepreneurial endeavor. The senior design or capstone experience incorporates the latest engineering concepts, tools and techniques such as 3-D printing, rapid prototyping, robotics, simulation and precision systems—all focused on solving industry and societal problems. Our sponsored interdisciplinary design-build-operate competition teams include formula racing, off-road racing, rocketry and creative innovation. In addition to our design, competition and innovation teams, the Zink Center Leadership Seminar Series consist of four leadership and professional development seminars per semester—the seminars feature presentations by recognized business leaders and experts in the areas of emerging technologies, innovation and business entrepreneurship.

The Zink Center partners with industry, alumni, OSU's Spears School of Business, the Spears Riata Center for Innovation and Entrepreneurship and the OSU Foundation team to create hands-on learning experiences for CEAT students. We invite you to share in some of our Zink Center accomplishments and student successes highlighted in this Annual Impact Report to stakeholders.

With our founding gift from the Zink Center Family Foundation our student-centric mission, our foundational pillars and support from our donors, we are well positioned for future growth and success.

GO POKES!

C. Michael Caroline



**C. MICHAEL
CAROLINA**

DIRECTOR

The Zink Center for Competitive
Innovation

GRIT. INNOVATION. COMPETITION.

The Zink Center for Competitive
Innovation Strategic Plan



Transformational Excellence

INTERDISCIPLINARY DESIGN

COMPETITION TEAMS

INNOVATION TEAMS

LEADERSHIP & OUTREACH

Teamwork & Integrity

THE FOUR
ZINK CENTER PILLARS

Programs and Opportunities

A Framework for Engagement and Sustainable Excellence

ACADEMY OF MENTORS

Fosters academic support, peer connections, and positive role modeling. Mentors connect with students both virtually and in person. Mentees gain technical, leadership, career advice and a sense of community all of which contribute to academic, professional and personal growth and success.

COMPETITION HUB

Encourages teamwork, grit, and intellectual curiosity. Competition teams coalesce around an interdisciplinary design challenge requiring ingenuity, perseverance, and technical expertise in multiple disciplines to solve complex engineering problems. Students develop a shared sense of responsibility resulting in a culture of collaboration, growth, and mutual success.



READ MORE about the strategic plan [here](#).



INNOVATION HUB

Cultivates creative prototyping and essential business skills. Teams bring together CEAT and Spears students who desire to launch a technology-based business. By partnering with the Spears School of Entrepreneurship, the Riata Center for Innovation and Entrepreneurship, Cowboy Technologies, and the CEAT ENDEAVOR laboratory. The Zink Center positions these teams for a successful business launch.

DIRECT TEAM SPONSORSHIP

Foster academic support, peer connections, and positive role modeling. Mentees gain technical, leadership, career advice and a sense of community all of which contribute to increased retention and success. The program focuses on academic and practical life experiences, long-term networking, and a culture of collaboration that benefits both mentors and mentees in their growth and development.

Academy of Mentors

BRINGS STUDENTS, ALUMNI & INDUSTRY MENTORS TOGETHER TO FACILITATE THE GROWTH & SUCCESS OF THE ZINK CENTER COMPETITION & INNOVATION TEAMS

The Academy of Mentors is an informal network of experienced and interested alumni and friends who are eager to engage with CEAT students.

The Academy assists in developing technical and team leadership skills as well as facilitating peer-to-peer mentoring within the student teams.

Zink Center leadership provides a variety of avenues for students and mentors to connect through in-person and online opportunities.



READ MORE about the academy of mentors [here](#).



Funding Strategy Goal:

\$1M - \$6M in new endowed funds to:

Support Peer-to-Peer Mentor Scholars Program

This program is designed to award scholarships to excellent CEAT student mentors at the junior and senior levels. The program includes enrichment activities, workshops, specialized training and conferences.

Support Peer-to-Peer Scholars Prize Fund

This fund provides excellent peer-to-peer scholars with state-of-the-art computer hardware and software to support their mentoring activities.

Support Named Mentor Spaces Within the Zink Center

The mentor spaces provide Zink Center competition and innovation team members with a place to meet in person or virtually with mentors. Virtual meetings will be supported by state-of-the-art hardware and software.



Competition Hub

CULTIVATES CREATIVE PROBLEM SOLVING, TEAMWORK AND GRIT IN **COMPETITIVE ENVIRONMENTS**

Benefits for students include incubator resources, business startup skills training, business competition opportunities, networking, and startup funding.

Teams bring together CEAT and Spears students who desire to launch a technology-based business.

Team guidance focuses on successful business launch provided by a partnership between the Zink Center, the Riata Center, the Spears School of Entrepreneurship, and the CEAT ENDEAVOR Laboratory.

Teams include freshman students for a unique multi-semester mentoring opportunity with upper-class CEAT and Spears students.

Funding Strategy Goal:

\$1M - \$6M in new endowed funds to:

Support Innovation Scholars Program

This program is designed to recruit top students to an immersive, multidisciplinary experience focused on product ideation, design, development and market launch. It includes enrichment activities, programs, startup workshops, and recruitment scholarships.

Support Innovation Prize Fund

This fund provides for three named annual awards in perpetuity. The awards are designed to complement existing Riata Center competitions and focuses on technical excellence, innovation and collaboration.

Support Innovation Makerspaces within Endeavor laboratory

The makerspaces provide Zink Center Innovation teams with resources and collaborative spaces in a stimulating and mentoring environment. Spaces are outfitted with hardware and software to support rapid prototyping and product design.



READ MORE about the competition hub **here.**



Innovation Hub

A CATALYST FOR CREATIVE PROTOTYPING AND ESSENTIAL BUSINESS SKILLS THROUGH INTERDISCIPLINARY TEAMWORK

Located in the CEAT ENDEAVOR Laboratory, the Zink Center Innovation Hub is a vital component of the Center and is designed to establish, develop and sustain an innovation and collaborative culture across CEAT academic programs as well as academic programs across the university. The Hub focuses on the complementary nature of technology-driven innovation and the application of tools and techniques to take a product or process through market discovery, design, rapid prototyping, test and evaluation, manufacturing and supply chain management.

This total immersive experience takes student startup teams through a progression of innovation activities including product launch, scale-up, addressable markets, business growth and profitability factors, pitch and poster competitions, leadership attributes and skills, budget and financial principles and practices, and project management. These activities will make our students more competitive and successful in the dynamic innovation ecosystem.



READ MORE about the innovation hub [here.](#)



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Direct Team Sponsorship

PROVIDES INDUSTRY SPONSORS WITH OPPORTUNITIES TO ENGAGE AND CONNECT WITH OSU STUDENTS

Sponsored projects require a commitment to attend weekly design meetings online, and to participate in person in project evaluations at the end-of-semester Senior Design Expo. Projects are selected from a list of available projects by the student teams. Upon selection, a sponsored project requires \$5,000 in sponsor support plus materials and supplies.

Sponsored seminars require \$10,000 in sponsor support and coordination with Zink Center leadership. All logistics and expenses, including the catered reception and speaker engagement, will be handled by Zink Center staff.

Sponsored competition teams may be supported at three levels: \$1,000, \$5,000 and \$10,000. Sponsors are encouraged, but not required, to engage with their team. In-kind donations of materials, supplies, and travel are of great benefit to enhance team success.

Funding Strategy Goal:

\$250,000 in annual funding for:

The Zink Center Excellence Fund

Sponsored projects require a commitment to attend weekly design meetings online, and to participate in person in project evaluations at the end-of-semester Senior Design Expo. Projects are selected from a list of available projects by the student teams. Upon selection, a sponsored project requires \$5,000 in sponsor support plus materials and supplies.

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Inquiries about 'Ways to Give' can be directed to:

JILL JOHNSON, OSU FOUNDATION

jjohnson@osugiving.com | 405.612.5731



READ MORE

about direct team sponsorship [here](#).



Steven Azzaro



**BECAUSE OF OSU AND
CEAT'S ZINK CENTER,
I'VE BUILT A COMPANY
FROM THE GROUND
UP IN OKLAHOMA.**

What began as a student's idea during a hitting slump is now a patent-pending product developed through Oklahoma State University's innovation ecosystem and the College of Engineering, Architecture and Technology.

Steven Azzaro, a kinesiology student in the College of Education and Human Sciences, created the Az-Tec SwingRight, a device designed to improve swing mechanics and muscle memory for athletes in sports such as baseball, golf, tennis and cricket. With help from CEAT's New Product Development Center, the ENDEAVOR Lab and the Zink Center Innovation Hub, Azzaro transformed his personal project into a startup company.

Through OSU's resources, he received prototyping support, intellectual property guidance, and patent assistance from Baker Botts, a top law firm based in Dallas. Manufacturing is now based in Ponca City with support from K&C Manufacturing and the Pioneer Technology Center Incubator.



READ MORE about
Steven Azzaro
here.



SCIVINCE team continues success with 3D-printing prototype

SCIVINCE, a groundbreaking 3D-printing prototype, is the brainchild of a collaboration between the College of Engineering, Architecture and Technology and the Spears School of Business.

SCIVINCE finished first in the Big City/High Tech category of the Riata Center for Entrepreneurship's Business Plan competition and later won first place in the i2E Love's Entrepreneur's Cup.

The revolutionary design utilizes multi-axis technology and counter-gravity printing that results in less material used and a shorter print time.

What began as a Senior Design project developed into a blueprint for taking an idea from conception to the marketplace. This successful collaboration shows what kind of innovation can be fostered by experts in multiple fields combining their efforts in an interdisciplinary manner.

The team consisted of CEAT student Soroosh Farsiani, Spears students Will Petty and Mahla Hosseini, and company CEO Maryam Nasrabad and CTO Dr. Hadi Noori, a professor in the School of Mechanical and Aerospace Engineering—a vital component of the Zink Center's interdisciplinary design teams.



OSU students transforming diabetic healthcare with robotics

Two Oklahoma State University graduates are addressing a costly but often overlooked challenge in diabetic healthcare: routine foot care. Their startup, Jotero, is developing a robotic nail care system designed to protect patients and give podiatrists more time for advanced treatments.

OSU MBA graduate Trevor Fogleman and Joel Quarnstrom, a mechanical and aerospace engineering Ph.D. candidate, were both inspired by family experiences with diabetes. With support from OSU's Riata and Zink centers, they created a robotic system that performs nail care with medical-grade safety and precision in half the time.

For diabetics, trimming toenails can be dangerous — small cuts may lead to infection and amputation, which account for nearly 80% of lower-limb amputations in the U.S. Podiatrists currently spend hours on routine care that brings in little revenue compared to surgeries.

Currently patent-pending, Jotero has raised \$35,000 and is rapidly prototyping and positioning the team at the forefront of robotic healthcare innovation.





Zink Center Outreach

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**THE THINKTANKS
ARE UNIQUE,
IMMERSIVE
EXPERIENCES**

Future Point of View

The Zink Center was honored to host the Future Point of View (FPOV) Spring 2025 ThinkTank at OSU's ConocoPhillips Alumni Center, May 12 – 13. FPOV is a technology strategy firm with corporate offices in Oklahoma City and resources across the United States. FPOV's Spring 2025 ThinkTank marked the first time that the firm has held its conference on a college campus—a good reflection of the strong partnership between FPOV and the Zink Center. The ThinkTanks are unique, immersive experiences with an audience of 40 – 50 executive and innovation leaders from medium to large industries and organizations. The two-day agenda was largely focused on the emergence--and promise--of synthetic intelligence (AI), data analytics, predictive analytics, workforce dynamics and (AI-driven) economic development and strategies. In addition to the audience of business leaders, innovators and entrepreneurs, several OSU faculty made presentations on technology/autonomous developments in OSU research and business systems. Several Zink scholars and staff also attended.

ZINK CENTER LEADERSHIP SEMINAR SERIES



FEBRUARY 11, 2025

Hart Brown

CEO, Future Point of View

Emerging and Disruptive Innovation



MARCH 25, 2025

Ning So

Managing Partner, Wentworth Capital

Leadership: Technology, Innovation and Entrepreneurship



SEPTEMBER 9, 2025

Aaron Stutzman

Captain U.S. Navy

Designing and Building the USS Oklahoma Nuclear Submarine



OCTOBER 28, 2025

Hart Brown

CEO, Future Point of View

Technology Disruptions That Will Change the World



MARCH 11, 2025

Mike Moradi

Co-Founder & General Partner, Cortado Ventures

Venture Capital as Fuel for Innovation



APRIL 14, 2025

Dr. Jamey Jacob

Professor MAE & Executive Director of OAIRE

Living in Space: Interdisciplinary Convergence & Collaboration



OCTOBER 14, 2025

Dr. Renee Hale

PepsiCo R&D

Leadership Lessons from Science Fiction and Fantasy



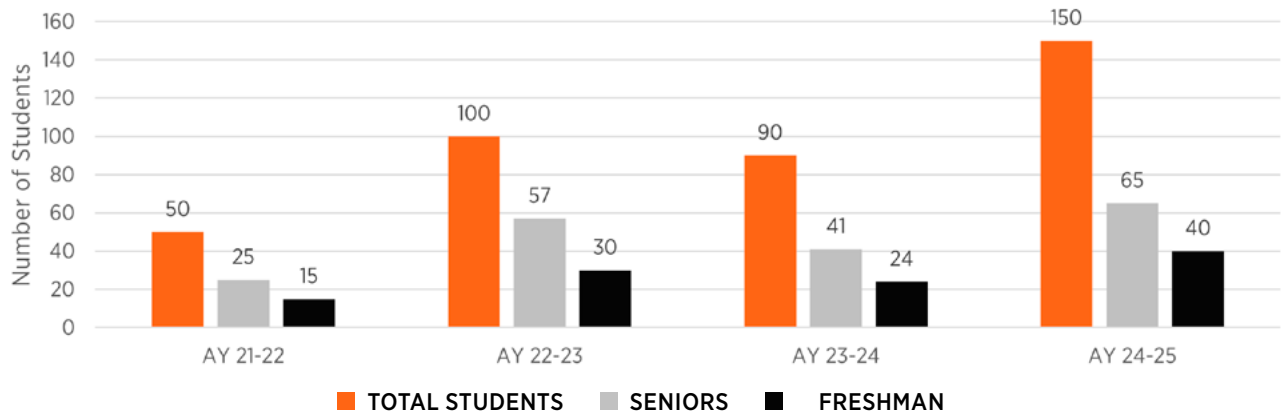
NOVEMBER 11, 2025

Dave Boyer (CEO) & Kyle Ingram (VP)

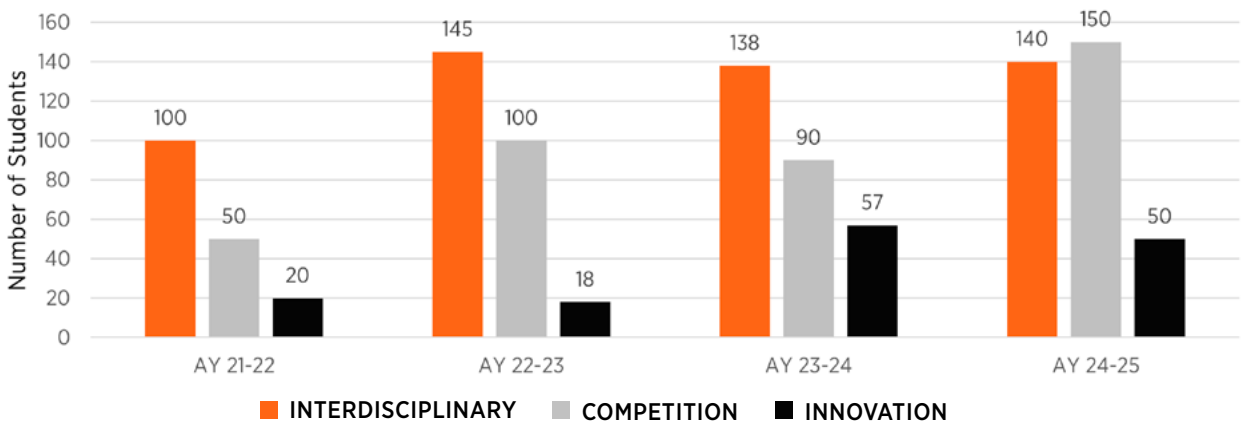
Webco Industries

Apollo 13's Triumph — Creating Engineering's Finest Hours

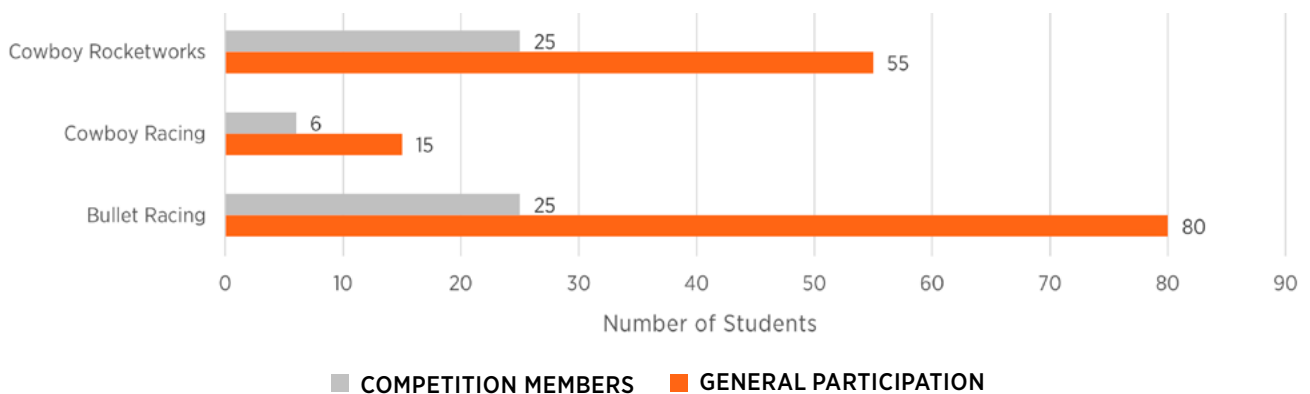
TEAM COMPOSITION BY STUDENT ACADEMIC YEAR



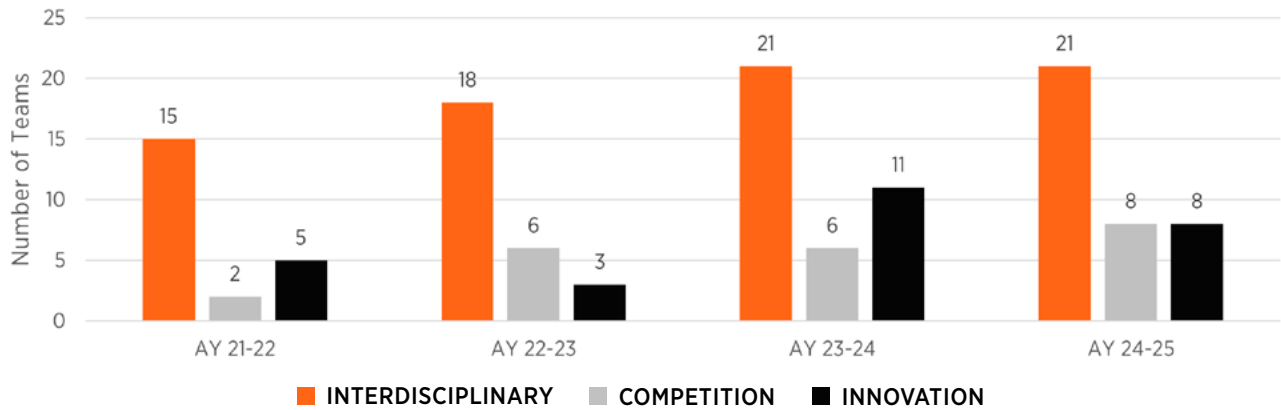
TEAM COMPOSITION BY FOCUS AREA



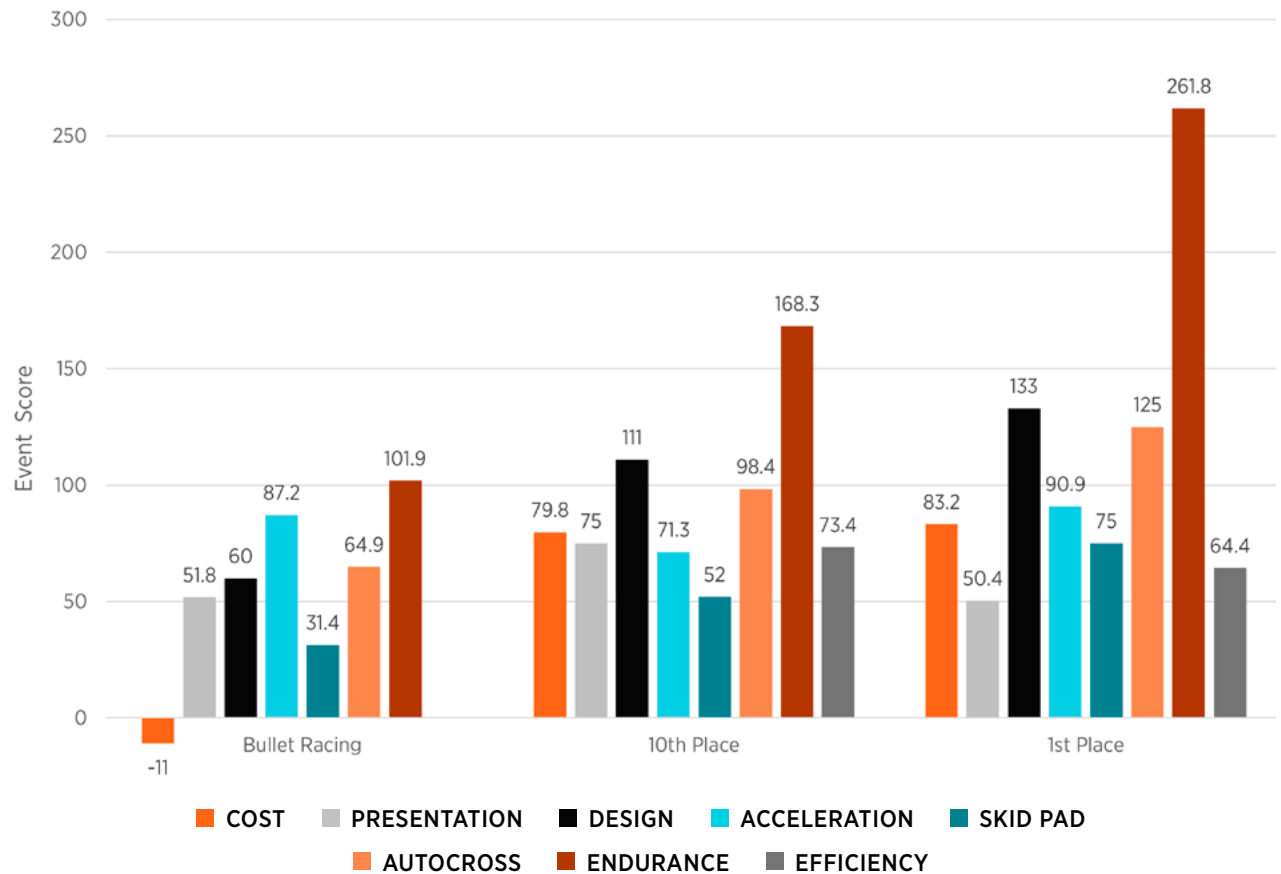
COMPOSITION TEAM PARTICIPATION AY 24-25



ZINK CENTER STUDENT TEAMS



BENCHMARKING BULLET RACING AGAINST TOP TEAMS: AREAS FOR IMPROVEMENT



ZINK CENTER FOUNDING DONOR

**Darton Zink and The Zink
Family Foundation**

*Founding Benefactor and the
impetus behind the Zink Center's
vision, creation and programming*

**THANK YOU
TO ALL OF OUR
GENEROUS
DONORS!**

“

**AT THE TIME OF MY GIFT, THE ZINK CENTER
WAS THE MOST MEANINGFUL PLACE TO
MAKE AN IMPACT.”**

-Van Weathers

ZINK CENTER CORNERSTONE DONORS

**Ad Astra Foundation and the
Phil & Alice Pippin family**
Rocketry team travel support

Mary Davey
*Robert “Bob” Lembcke FSAE
Competition Team Endowment*

Gordon Eubanks
Zink Center programming

Glen & Mary Lou Penisten
Penisten Endowed Mentorship Fund

Van Weathers
*Weathers Endowed Chair in
Competitive Leadership*

Janet & Troy Weiss
*Zink Center for Competitive
Innovation*

Darton Zink
*The impetus behind the Zink
Center's vision and creation; bricks &
mortar, programming*

COMPETITION TEAM DONORS

Bend Tech
Bob Lembcke Motorsports
CK Worldwide
Cone Engineering
DeatschWerks
De-Comp Composites
DeWalt Power Tools
Great Plains Technology Center
Grim Reaper Industries
Holley Automotive
Hoosier Racing
KISSsoft Engineering and
Consulting
Mishimoto
Pioneer Tire
Regal Research
Risse Racing
Rogue Manufacturing
The Boeing Company
Tilton
VR3 Engineering
Wiens Real Estate, LLC
Wilwood Engineering
Zeeco, Inc.



2026

Key Goals



ACCELERATING THE PATH FROM ENGINEERING PRINCIPLES TO ENGINEERING PRACTICE

INCREASE

the Zink Center resource infrastructure – faculty, staff, mentors and laboratory facilities and capabilities

BUILD

greater collaboration with the Spears' Riata Center and School of Entrepreneurship

DESIGN

a multimodal marketing and communication platform to tell the "Zink Center story"

CONTINUE

to work with the OSU Foundation to engage more alumni and friends of the university to increase funding for the Zink Center

CONTINUE

to build a "culture of invention, innovation and entrepreneurship"

INCREASE

the number of design, innovation and competition teams and the number of students participating on these teams

ENGAGE

more first and second year students in engineering and innovation activities

INTEGRATE

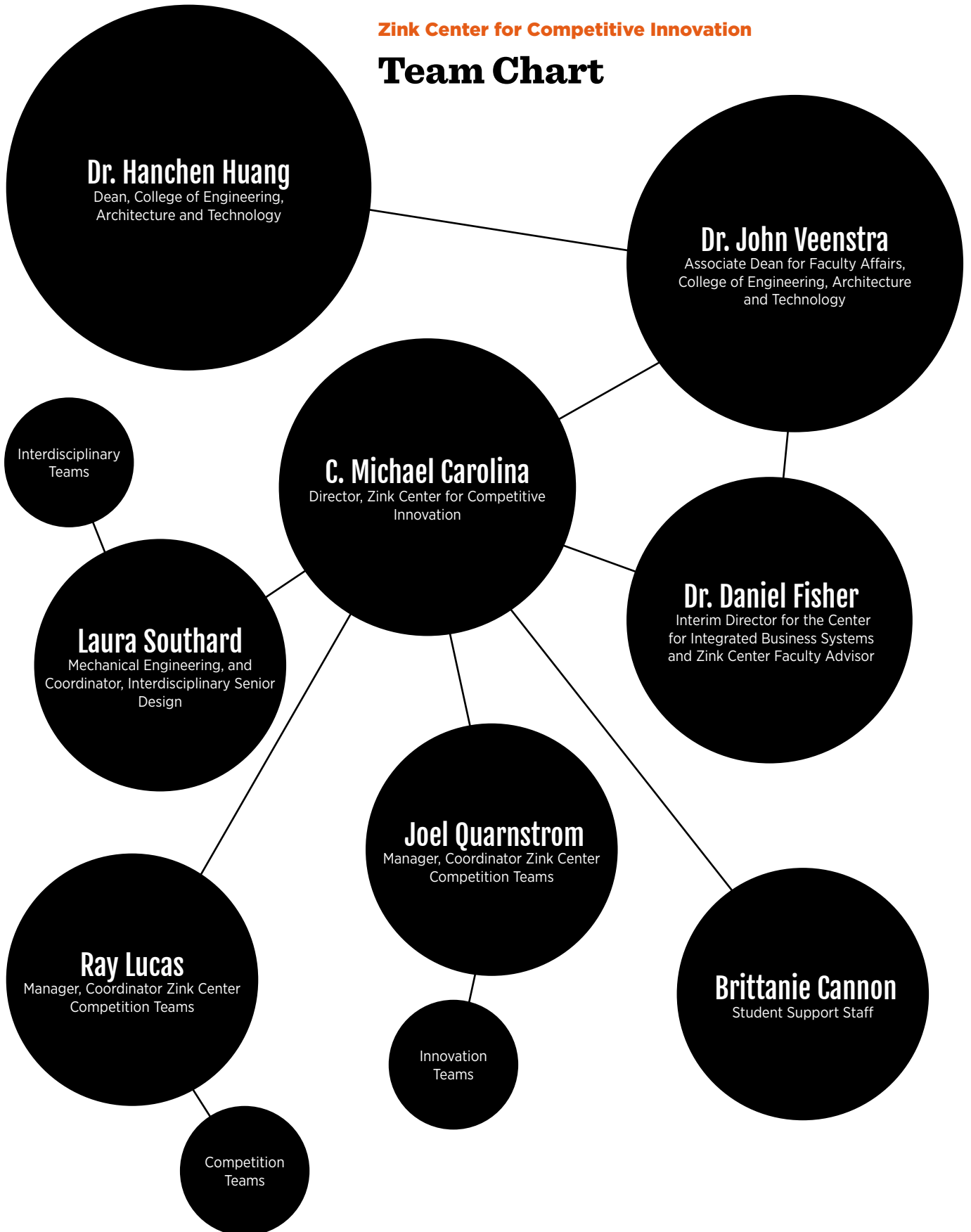
more focus on professionalism and ethical behavior into the content of programs and seminars

CONTINUE

to work with the OSU Foundation to engage more alumni and friends of the university to increase funding for the Zink Center

Zink Center for Competitive Innovation

Team Chart





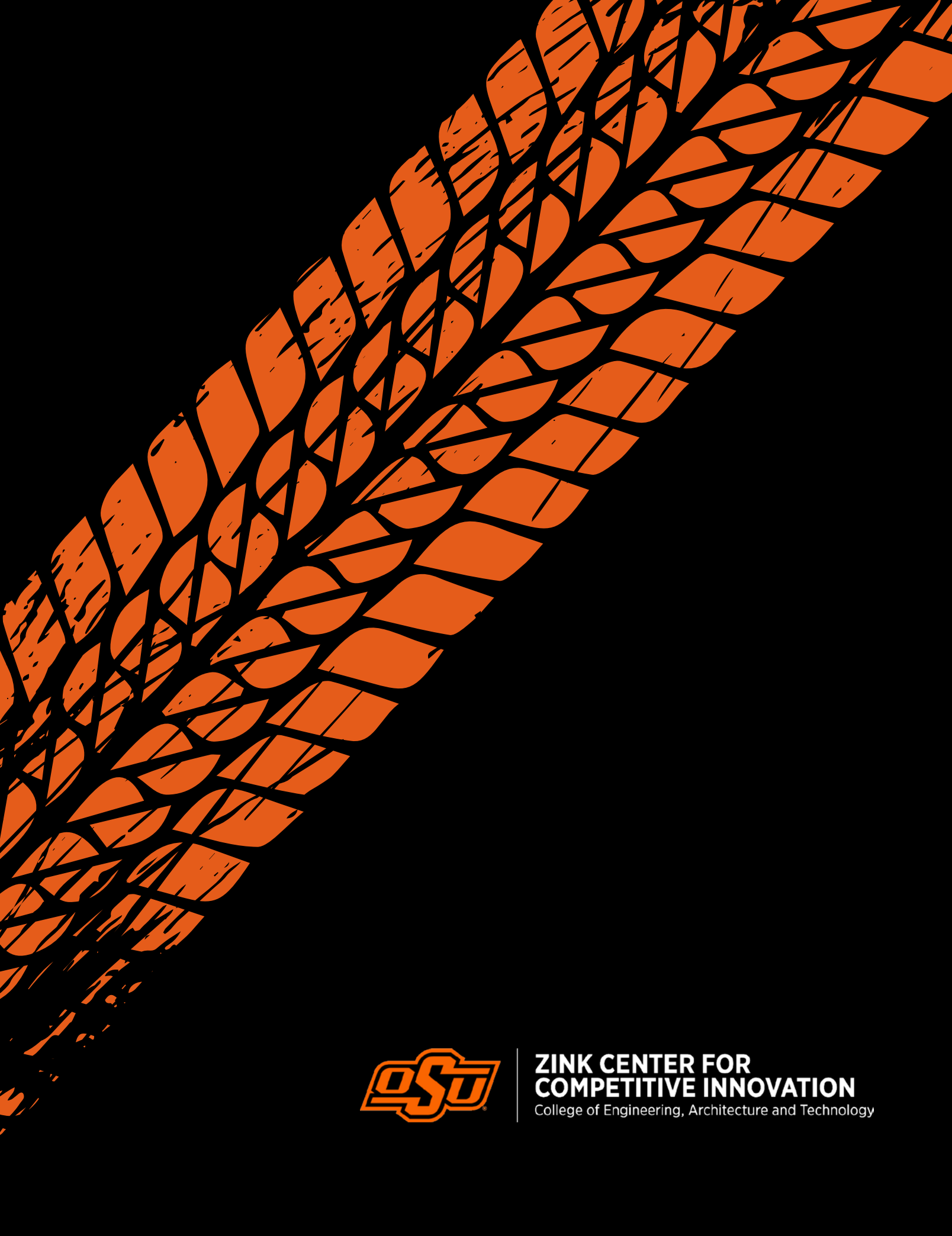
Council Members

- 1. JOHN AWEZEC**
Senior Vice President, Carollo Engineers (Retired)
- 2. BUDDY BAYER**
Chief Operating Officer, Colt Technology Services
- 3. MATTHEW CLIFTON**
Director, Zink Family Office
- 4. TERRY DARK**
Senior Director, Combustion Systems and Package Equipment Groups, Zeeco, Inc.
- 5. DENAY HUDDLESTON**
Manager of Digital Products, Phillips 66
- 6. CHRIS HUMES**
Vice President, Carollo Engineers
- 7. CHERIE HUMPHRIES**
Board of Advisors, Streamlynk Partners | Board of Directors, First National Bank and Trust of Broken Arrow | Retired, Williams
- 8. JODY VIVION**
Director of Business Development, Flintco, LLC
- 9. JILL JOHNSON**
(ex officio member, OSU Foundation)



The Zink Center for Competitive Innovation Advisory Council

Established in 2023, the Zink Center Advisory Council is a community of interest consisting of eight members from the private sector (and one ex officio member from the OSU Foundation) who represent a broad set of engineering and leadership backgrounds and experiences. The Council's collective insights are vital in setting strategy, strategic priorities, and goals toward building and sustaining a unique and transformative student-centric model. The Zink Center model focuses on a balance of excellent theoretical knowledge, superb knowledge-application practices, interdisciplinary collaboration, exceptional interpersonal skills, and grit and determination.



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COMPETITIVE INNOVATION**

College of Engineering, Architecture and Technology