

## Rice's Office of Innovation Partners with Carbon and TyRex Group

Rice University's Office of Innovation is partnering with Redwood City, California-based Carbon and Austin, Texas-based manufacturer TyRex Group to make additive manufacturing 3D printed equipment.

"Collaboration is the fastest way to get technology out of the lab and into the real world," said Paul Cherukuri, a physicist, chemist and tech entrepreneur Rice tapped last fall to serve as its first vice president of innovation.

"3D printing is increasingly critical for university innovation because it allows you to create things you couldn't otherwise make, and it lets you go very quickly from an idea to a prototype and downstream to a product."

- Paul Cherukuri

To make 3D printing and other prototyping capabilities broadly available at Rice, Cherukuri's office is constructing the Rice Nexus, a dedicated innovation space.

In part, Cherukuri is building on his own experience as a research investigator. When he pitched his idea for developing 3D-printable smart helmets to the Office of Naval Research in 2021, he championed the idea of working hand in hand with industry experts who specialize in manufacturing products with 3D printing.

"The Navy was good with this because they understood the importance of thinking about manufacturing at the beginning," Cherukuri said. "That is key for accelerating innovation. And it's really where additive manufacturing takes off."

The Rice Smart Helmet project reimagines the military helmet as both protective equipment and a wearable technology platform. When the Navy funded the project it allowed Cherukuri to purchase two of Carbon's industrial-grade 3D printers, an M2 model that was installed at Rice for smaller prints and a top-of-the-line, large-format L1 that was installed at TyRex's Austin facility almost 170 miles from the Rice campus.

Cherukuri said the combination of Carbon printers and TyRex expertise has allowed the smart helmet team to "go seamlessly from idea to production." He went on to say he wants to replicate that experience for other labs at Rice. "If I design on the L1, I can hit print and print 1,000 of them, and that is a capability we did not have before," Cherukuri said.

Of TyRex, he said, "The fastest way to make a design production-ready is to work with someone experienced who understands the real-world challenges of product development, and that is what they bring."

The Rice Nexus is slated to open this summer. Cherukuri said the facility's "capabilities, funding and resources will be defined" by what the Office of Innovation learns from faculty surveys.

# Coach's Corner

John Bosch, Jr.
Coach, Mentor and TyRex's Technology Visionary

### A Special by Design® Company!

Many years ago my partners Andrew Cooper and Matt Ache focused on creating a "Built to Last" and "Built to Work" by becoming a "Special by Design® company. Now at the mid-point of TyRex's 29th year in business and supported by this TyRex Tribune Newsletter, I am proud and quite honestly humbled to suggest that the TyRex Family has elevated itself to becoming a very SPECIALLY Designed™ business entity.

TyRex's business calling begins with two TyRex business foundation beliefs. The first is **Profit**, **Purpose and Family<sup>SM</sup>**, and the second is **Trust**, **Respect and Mutual Appreciation**, which covers all TyRex's relationships with family members, customers, vendors, professional support entities and community partners.

Why Very <u>SPECIALLY</u> Designed<sup>sM</sup>? This Tribune publication covers all of TyRex's programs ascending to its new designation.

It begins with the celebration of our TyRex Family members' anniversaries with half being over seven (7) years in this quarter. This underscores and celebrates our business foundation of people strength and continuous company culture and business knowledge education.

Each month, our TyRex Family celebrates its employees' Birthdays, Anniversaries and Accomplishments! Also, TyRex has monthly culture "fun" events that invite all nine (9) business entities to come together to enjoy and connect the entire TyRex Business Family into ONE successful and sustainable business family.

TyRex has established multiple long and "Built to Last" community partnerships through RecognizeGood: THE Foundation, a non-profit which TyRex has been a major sponsor of for over thirteen (13) years. Through RecognizeGood, TyRex's community partnership support reaches over thirty (30) non-profit community entities. TyRex's community support commitment is a 365-day-a-year relationship.

TyRex's Technology Advancements continue



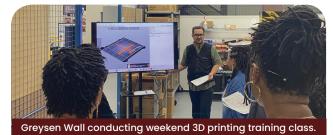
to expand in new technology fields such as the combining of Additive Manufacturing (AM), 3D Printing (3DP) and Aided by Artificial Intelligence (AI). Second, TyRex is expanding its technology networks such as the front page illustration of the collaborative military smart helmet with Rice University and the Office of Naval Research.

Check out our three (3) employees of the month. Not only do they represent three (3) of TyRex's six (6) Diamond Disciplines of Professionalism, Entrepreneurship and Imagination and Innovation, but they also represent our TyRex technology of the future leadership. Trust me when I say TyRex's Technology Leadership is in good hands. I invite you to come meet these individuals and discuss the amazing technologies of the future they are working on. It will amaze you, I promise.

And finally, as TyRex expands its technologies of the future programs by training education and now CHALLENGES for each and every TyRex Business Family member (both permanent and temporary employees.) The TyRex Family includes those that are long-term employees and those who are just beginning their career at TyRex. Everyone is invited to source their creative and innovative abilities by their TyRex iMind THINKINGSM. TyRex employs a "SHARED SUCCESS" with all its Technology Business Family company and together, partners with our Community Non-profits.

Thanks for Listening!







# **Employee Milestones**

# Birthdays

## April

1	Karla Borjas (IRX)
3	Lidia Lorenzo (MGD)
	Irene Gamez (ARC)
12	Lee Tate (DLi)
16	Stefanie Lebens (TRX)
23	Jason Dunbar (DLi)
23	Hoang Lu (MGD)
24	Karol Sue Smith (ARL)
27	Clarissa Rivera (MGD)
30	Miguel Barrera (DLi)
30	Mercedes De Paz (SRX)

### May

2	Maria Moreno (IRX)
	Zubair Mughal (SRX)
13	Maricela Aguilar (MGD)
	Hortencia Hernandez (MGD)
	Michael Bobrowski (MGD)
16	Maria Jaimez (IRX)
19	Denny Hean (IRX)
	Matt Ache (TRX)
24	Ted Neil (TRX)
	Mike Hammock (TRX)

### June

1	Maritza Beltran (IRX)
	Rick Jennings (SRX)
	Patrick Newman (TRX)
	Lisa Martin (SD)
13	Santiago Ramirez (İRX)
19	Jorge Alejo (SRX)
23	Mabely Chavez (IRX)



Matt celebrating hisbirthday virtually with dinos at the TyRex Movie Production Set!

## **Anniversaries**

# April

1 Year	Maria Barrientos (IRX)
1 Year	Avien Siegfried (TRX)
2 Years	Stefanie Lebens (TRX)
2 Years	Daisy Valadez (MGD)
	Gloria Walls (SD)
7 Years	Mike Bobrowski (MGD)
7 Years	Martha Castillo Barron (IRX)
10 Years	Joel Coffman (TRX)
10 Years	Satwinder Kahlon (SD)

### May

1 Year	Hunter Barba (IRX)
1 Year	Araceli Martinez (IRX)
	Russell Turner (SD)
	Jace Waechter (MGD)
	Dan Chambers (SRX)
	Larry Legler (ARL)
	rtencia Hernandez (MGD)
17 Years	Daniel Hogberg (MGD)
19 Years El	isa Delaado De Rodriauez (IRX)

### **June**

1 Year	Kelly McGill (IRX)
1 Year	Zubair Mughal (SRX)
2 Years	Raymond Satalal (SRX)
3 Years	Alicia Zarate (MGD)
8 Years	Maricela Aguilar (MGD)
	Le-Thu Ngo (MGD)
	James Pelley (SRX)
	Lee Tate (DLi)
15 Years	Jason Dunbar (DLi)
18 Years	George Ayad (TRX)
27 Voors	Matt Acho (TDV)



Jason Dunbar 15 Years!



# TyRex Kudos & Acknowledgments

# **Employee of the Month Honorees**



## Russell Turner (SD)

"Russell exemplifies the diamond disciplines **Professionalism** and Innovation and Imagination in his everyday work. He strives to reach the highest level of performance in technical standards while showcasing his ability to solve problems and increase efficiency for his fellow coworkers and clients. Russell also develops new ideas and technologies to further the momentum of VR/AR in 3D printing at TyRex."



## Mike Bobrowski (MGD)

"Mike exemplifies the diamond discipline **Entrepreneurship**. He uses his diverse career background and technical abilities to move strategic sales forward for Megladon. Mike uses his passion for learning, his creative intelligence, and his web development skills in creating content and sales opportunities for Megladon. He is helpful to his fellow coworkers and is a pleasure to be around. Mike is involved in TyRex's A.I. initiatives."



## Tom Gram (TRX)

"Tom exemplifies the diamond discipline **innovation** and imagination. Tom's professional knowledge of the sciences from his chemical engineering background along with his ability to interact with anybody makes him a great company asset. He has a knack to inform and educate anyone with a positive attitude and wholesome demeanor. He is willing to help anyone and has no problem getting his hands dirty for the cause."

### **Woolly Mammoth 3D Takes Shape**



Additive Manufacturing company Woolly Mammoth 3D is entering its final 3D printing launch stages after having been in development for nearly half a year. The company has joined the TyRex Family of Technology Companies as the Family's ninth sister company that proudly serves and operates under the TyRex Group umbrella. Woolly Mammoth 3D specializes in Additive Manufacturing and 3D printing production.



# **TyRex Family Culture Events**

## **TyRex Egg Toss and Basket Decoration**



Congrats to our Egg Toss winners!



Check out the best moments from this year's event on our Facebook Album!

The weather may have been cold and rainy, but that didn't stop the TyRex Family from celebrating the Spring season with an altered version of our annual egg hunt - rather than filling baskets with found eggs, TyRex Family Members tossed their eggs into baskets in a unique contest of skill and vigor. In addition to that, we kept our annual tradition of decorating and assembling egg baskets - this year, we teamed up and donated a total of 200 baskets to our community partners the SAFE Alliance and Florence's Comfort House.





TyRex Cinco de Mayo Celebration







A 3D printed donkey piñata, Mariachi music, virtual loteria, Mexican candies and churros, grand salsa contest with 3D printed chips and more made TyRex an especially fun place to be during our Cinco de Mayo Celebration!



Martin Johnson and the Cinco de Mayo Event Team host virtual Lotería.





Salsa Competition Entries. (All salsas were judged using 3D

printed tortilla chips!)

## TyRex Pays Tribute to Employee Veterans on Flag Day



Sav Thanks to our veterans on Facebook!





This Flag Day at TyRex, our TyRex Family Members wore Buddy Poppies and celebrated our employee veterans. We also paid tribute to all that have served. To our veteran employees and all our nation's veterans, we say thank you for your service!



# TyRex Group in the Austin Community

## RecognizeGood Shows How Doing The Right Thing Is Good Business At 2023 Ethics in Business Awards Ceremony









Austin's business community continues to grow and thrive, due in large part to a rich talent pool and a probusiness environment overall. For those of us who are part of this business community, we know that Austin also has a certain culture that rings distinct from other business-friendly communities. Collaboration, putting people first, and subscribing to the idea that "doing the right thing is good business" are all part of Austin's unique success. As we continue to grow, keeping values like respect, integrity and honesty front of mind is more important than ever – and for the shining examples of businesses who do just that, it's equally important to celebrate.

The Ethics in Business Awards are an Austin-area mainstay, shining a spotlight on companies and business leaders from all sectors who lead with values. Since 2002, the awards program has honored more than 250 individuals, nonprofits and businesses of all sizes. More than that, keeping these examples at the forefront gives all of us the opportunity to share with each other, learn from each other, and inspire each other.



Check out RecognizeGood's Facebook Album!



Learn more about Ethics in Business on RG's website!

## TyRex Expands Skillpoint Alliance 3D Printing Knowledge

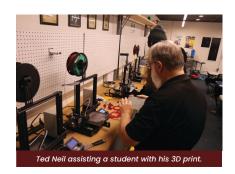
As TyRex continues to expand its impact and help local community nonprofits and businesses grow, TyRex Family members Trevor Hendricks and Ted Neil ventured over to Skillpoint Alliance to share some of their 3D printing knowledge with two cohorts of Certified Production Technician (CPT) students.

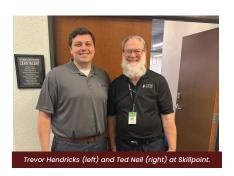
The team covered 3D printing basics, shared a couple of free-to-use online tools and software, introduced tips and tricks to help the students with common troubleshooting, explained how TyRex has leveraged additive manufacturing to develop innovative solutions for its customers and demonstrated that it doesn't require an experienced engineer or scientist to create unique objects with 3D printing.



Skillpoint Alliance is a 501(c)3 workforce development organization that provides in-demand workforce training to vulnerable members of the Central Texas community.

LinkedIn post.









# TyRex Family Dinosaur Museum

## **Authentic Artifact and Fossil of the Month**



### **Texas A&M Cadet Hat Device**

These distinctive hat insignia devices were given to high-performing cadets at Texas A&M in the 1930's to wear on their hats as a part of their uniform. This vintage artifact can be seen in the Military Exhibit on the main production floor.



about Army
Headgear at the
Smithsonian.



#### **Woolly Mammoth Leg Bone**

The Woolly mammoth stood around 12 feet tall and greatly resembled the elephants of today, primary differences include long shaggy hair and large curved tusks. Although currently extinct, Austin-based Colossal Biosciences is actively working towards reintroducing the mammoth.

Learn more about Woolly Mammoth restoration at Colossal Biosciences.





#### **Fossilized Baby Dinosaurs**

Considering their delicate nature, finding complete sets of dinosaur bones is a rare phenomenon. The fossilization process itself is a rare occurrence, requiring specific conditions of rapid burial, sediment deposition, and mineralization to preserve the bones over millions of years. Discovering young or juvenile dinosaur bones helps researchers learn about dinosaur species growth and development.



Learn more about Fossils at Britannica.

# **TyRex Family Album**

## DinoDo\$\$ar Reward Programs For TyRex Family Members

**TyRex Family Members Only** 

Looking to earn DinoDo\$\$ars? TyRex has released several DinoDo\$\$ar Reward Programs for our TyRex Family Members to participate in! Log into the TyRex Family Album (TFA) to learn more and check for the latest programs!



Visit the TFA now for more info on available DinoDo\$\$ar Reward Programs!

### Get Involved and Become a Contributing Member of the TyRex Family Album

**TyRex Family Members Only** 

On the TyRex Family Album, connect with fellow TyRex Family members and discuss TyRex news, employee accomplishments, internal contests, company trivia, Dino Museum facts and finds, company and community culture, important updates and so much more! Join the rest of the TyRex Family and log on to the TFA and get involved!

### Ted Neil's TyRex 3D Printing Courses & Challenges

Now Available to our Austin Area Community Members

TyRex 3D Printing Training Courses are here and are available to all TyRex employees and their personal family members, and now our Austin area Community! Whether you're interested in advancing your 3D printing knowledge, want to 3D print novelty items, or want to make 3D printed cookies and tortilla chips, get in touch with John Stiles (jstiles@tyrexmfg.com), Ted Neil (tneil@tyrexmfg.com) or scan the QR code to learn more and sign up! TyRex 3D Printing Training and Challenges come with TyRex's Dino Do\$\$ars Incentive Bonuses.







# Family of Technology Companies



















Arctos

Austin Reliability Labs Innovations

Digital Light

iRex

Megladon

Saber Data

SabeRex

TekRex

Woolly Mammoth 3D

# Nonprofit



RecognizeGood® Illuminating GOOD

## **Associated Entities**







Right Stuff Marketplace



4 Fronts



**TyRex** Learning Foundation



tri/REX

Special By Design®

This newsletter is edited by Trevor Hendricks, Stefanie Lebens, Patrick Newman, Henry Shepard and Joel Coffman. If you have news or something you would like to include in this newsletter, please send an email to news@tyrexmfg.com.

### BENEFITS CONTACT INFORMATION FOR TYREX FAMILY MEMBERS

### **Engage PEO - Payroll**

engagepeo.com • 1-(888) 780-8807

#### **United Healthcare - Medical**

1-(877) 797-8812 • myuhc.com • group #1459157

### Ameriflex - HSA / FSA Accounts

(866) 868-3539 (FLEX) • myameriflex.com

### Unum - Life / Disability Insurance

(866) 679-3054 • unum.com

Assurity - Hospitalization / Accident (800) 869-0355 • assurity.com

### **Dental Select - Dental**

(800) 999-9789 • dentalselect.com • group #14047536

Vision Insurance offered under Dental Select - 2 plans

### **VSP - Vision**

**Eye Med - Vision** 

(800) 877-7195 • VSp.com (866) 939-3633 • eyemedvisioncare.com

#### Slavic 401K - Retirement Plan

(800) 356-3009 • slavic401k.com

### **Internal Support**

Lisa Gilmer • (317) 607-3760 | Kevin Alwell • (512) 689-8695