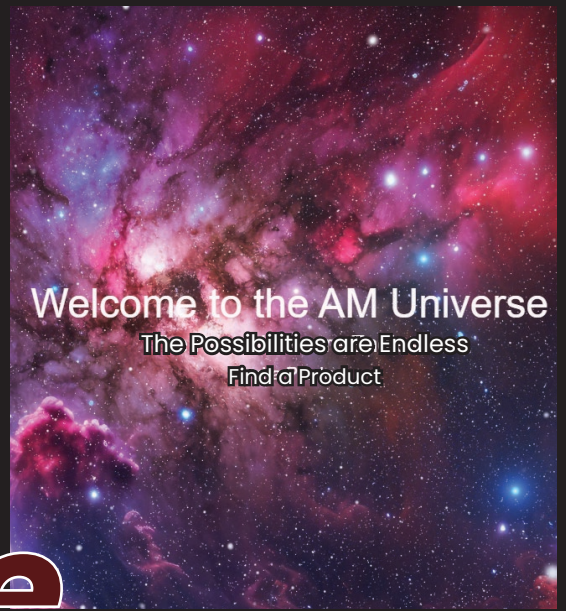


AI Data Box Team Unveils Cosmic Inquiry<sup>SM</sup>  
Tom Gram (Left), Tim Johnson (Middle), Tim Ma (Right)



# The Tribune

2<sup>nd</sup> Quarter 2024

Profit, Purpose, Family AND  
Community<sup>SM</sup>



## TyRex Unveils AM-Based AI Tool, Cosmic Inquiry<sup>SM</sup> AND Five (5) Voyager Programs Exploring the AM Universe For Unique Manufacturing and 3D Printed Product Ideas

There's no question about the popularity of Artificial Intelligence (AI). It seems like no matter where you turn, AI is the hot topic of discussion. Industries like Additive Manufacturing (AM) and 3D Printing (3DP) are no exceptions to this phenomenon. As a 30-year innovative manufacturer dedicated to continuing our technology, TyRex has begun constructing its own AI tool that harnesses the power of machine learning to add to the expansive potential that 3D printing offers. We're calling it TyRex's AI Data Box, the **Cosmic Inquiry<sup>SM</sup>**!

The journey to get to this announcement has come in three stages for the TyRex Business Family of Entities and Associates.

**STAGE 1:** Building a structured, secure and sanitized Data Box (patent pending) currently with over 110,000 and on our way to 175,000 potential manufacturable product ideas leveraging 3D printing. As these product concepts combine with each other, new ones are identified and new unique possibilities are introduced to the marketplace through this technology. An ever-growing set of product ideas could soon evolve an entire universe of product ideas. Currently, these unique product ideas cover over sixty (60) NAICS industry categories.

**STAGE 2:** The TyRex Family developed several connecting AM/3DP/Aided-by-AI programs, once described by TyRex Executive VP of Finance Kevin Alwell as "Voyagers traveling through the AM Universe." Currently, Voyager programs either completed or under development include:

**Voyager 0:** Cosmic Inquiry<sup>SM</sup> Training Only.

**Voyager 1:** Extraction - users seek out something specific i.e. by NAICS category, sub-category and sub-sub-category.

**Voyager 2:** Exploration - users utilize AI chat inside our AI Data Box to browse ideas in a certain industry or application.

**Voyager 3:** Problem Solving - users leverage Cosmic Inquiry<sup>SM</sup> to solve a specific current problem with a product idea.

**Voyager 4:** Creation - users leverage Cosmic Inquiry<sup>SM</sup> and special AI software to create unique, one-of-a-kind product ideas assisted by our AI Agent named Journey.

**Voyager 5:** Under Development.

**STAGE 3:** The future of the TyRex Business Family is not to simply 3D print manufacturable product ideas, but to become the continuous, long-term strategic product development partner to manufacturing industry interests in all sixty (60) plus industry categories or galaxies of product ideas.

Voyager 1 works as a 'smart filter,' while Voyager 2 operates as more of an interactive guide. Users begin the product idea extraction by specifying an industry category - for example, a user can select Automotive as a top-level category. Once a category is selected, a sub-category and a sub-sub category can be defined to better pinpoint 3DP projects that are most relevant to the user. Once the category fields have been entered, the Cosmic Inquiry<sup>SM</sup> platform will suggest the top 15 product ideas that are deemed by AI to be most relevant to...

Story Continued on Page 2!

# Coach's Corner

John Bosch, Jr.

Coach, Mentor and TyRex's Technology Visionary



## Welcome To The Future of Manufacturing!

As I read the 1<sup>st</sup> edition of the 2<sup>nd</sup> Quarter 2024 Tribune I began to wonder if there was something cosmic about TyRex unveiling its AM-based AI Tool the Cosmic Inquiry<sup>SM</sup> AND Five (5) Voyager Programs Exploring the AM Universe For Unique Manufacturable 3D Printing Product Ideas AND Featured under TyRex Family Culture our business family watching the solar eclipse. Interesting coincidence? Maybe this year's summer interns researching possible product ideas sourced from TyRex's AI Data Box, the Cosmic Inquiry<sup>SM</sup> might know.

Yes, TyRex's Tribune newsletter is the vehicle not of specific or strategic choice but more to show our appreciation to our internal TyRex business family as well as our long-term loyal business customers all across the spectrum of TyRex Entities and Associates. Whom we hope to share our business future.

In this Tribune newsletter, the TyRex Business Family of Entities and Associates announces our multiple initiatives to combine additive manufacturing (AM) and 3D Printing (3DP) with Artificial intelligence (AI).

We have been working on several additive manufacturing programs along with the ability to 3D print manufacturable items. But in truth, it was through the decision to connect AM and 3D printing with Artificial Intelligence that the game-changing possibilities became clear. In researching new manufacturing ideas you begin with a thought concept and then develop it into a statement of fact or claim. The final stage is the claim and concept's validation or proof. I personally believe we have validated the foundation programs to create special unique manufacturable 3D printable product ideas in time and cost reductions approaching 60% or greater. However, it is the continued emphasis on AI programming that will lead to the ability to source one-of-a-kind never before manufactured product ideas and then utilizing additional AI programming to reduce the time and cost of 3D printable parts, products and complex programs even further. And yes, it is amazing what the future possibilities can be! Maybe not just revolutionary but evolutionary in transforming manufacturing.

So in conclusion, consider this newsletter as an invitation to explore one or more of our Voyager programs to become a program partner with us to develop a continuous manufacturable 3D printing program of product ideas, and let's discover together what a true partnership of possibilities can achieve for your manufacturing business.

Thanks for Listening!

A handwritten signature in black ink that reads "John Bosch, Jr.".

Coach and Mentor of Innovation and creativity using  
iMind THINKING<sup>SM</sup>

## TyRex Unveils AM-Based AI Tool... Continued

the search, and that are most likely to succeed as a product idea. AI even suggests the technical success probability of the selected product idea. The program will also provide a short analysis highlighting the reasons why a product idea is likely or unlikely to succeed.

If Automotive was the top-level category, 'Electric Vehicles' and 'Cable Housing' could be used as the sub and sub-sub-categories. From the generated list of results, users can view one product idea to read more about the product, how it can be used and an AI-generated image or diagram of what the product might look like.

Voyager 2 includes usage of the AI Agent or assistant who can field questions and more directly get users to a product idea that best suits their interests. In addition to broadening product possibilities and producing more finely-tuned results, this program allows for product ideas with even faster iterations. At this third stage, users take their product idea development further by providing options to find new materials, the appropriate 3D printer and the best 3D design software for the job, called First Investigation.

Moving forward, TyRex foresees next stages to be enacted in the very near future.

**STAGE 4:** Connects product ideas with additive manufacturing experts who can individually or collectively turn an idea into a fully-researched reality.

**STAGE 5:** A new product's formal research is completed, and TyRex uses additional AI software to optimize the time between product idea selection through the selected product's post processing and finalization. 3D printing optimization to reduce manufacturing time and cost.

**STAGE 6:** At the final stage, TyRex is able to remotely monitor the 3D printing production of the new product idea at a strategic partner's facility!

At TyRex, we call this entire process "Evolutionary Manufacturing," which requires not just out-of-the-box thinking, but a comprehensive 'iMindSET<sup>SM</sup>' - which means the manufacturers best prepared for the future are iMind THINKING<sup>SM</sup> in an entirely new technology box altogether.





# Employee Milestones

## Birthdays

### April

- 1.....Karla Borjas (IRX)
- 3.....Lidia Lorenzo (ARC)
- 6.....Irene Gamez (ARC)
- 12.....Lee Tate (DLi)
- 23.....Jason Dunbar (DLi)
- 24.....Karol Sue Smith (ARL)
- 30.....Mercedes De Paz (SRX)
- 30.....Miguel Barrera (DLi)

### May

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

### June

- 2.....Alan Silva (TRX)
- 12.....Lisa Martin (TRX)
- 13.....Santiago Ramirez (IRX)
- 23.....Mabely Chavez (IRX)

## Anniversaries

### April

- 2 Years .....Avien Siegfried (TRX)
- 3 Years .....Gloria Walls (SD)
- 8 Years .....Martha Castillo Barron (IRX)
- 11 Years.....Joel Coffman (TRX)
- 11 Years.....Satwinder Kahlon (SD)

### May

- 1 Year.....Francisco Bascunan (TRX)
- 2 Years .....Hunter Barba (IRX)
- 2 Years .....Araceli Martinez (IRX)
- 2 Years .....Russell Turner (SD)
- 7 Years .....Larry Legler (ARL)
- 14 Years.....Hortencia Hernandez (MGD)
- 20 Years.....Elisa Delgado De Rodriguez (IRX)

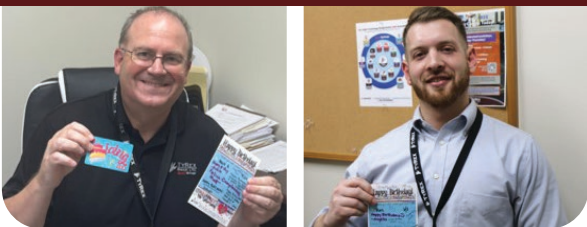
### June

- 2 Year.....Kelly McGill (IRX)
- 2 Year.....Zubair Mughal (SRX)
- 4 Year .....Alicia Zarate (MGD)
- 9 Years .....James Pelley (SRX)
- 9 Years .....Maricela Aguilar (MGD)
- 9 Years .....Le-Thu Ngo (MGD)
- 14 Years.....Lee Tate (DLi)
- 16 Years.....Jason Dunbar (DLi)
- 19 Years.....George Ayad (TRX)
- 28 Years.....Matt Ache (TRX)

Happy Birthday Karla and Miguel!



Happy Birthday Matt and Alan!



Elisa Delgado De Rodriguez

**20 YEARS!**



# TyRex Kudos & Acknowledgments

## TyRex's Diamond Discipline Employee of the Month Honorees



**Entrepreneurship At Every Position**

**Zubair Mughal**

**SabeRex**



**Community Citizenship**

**Santiago Ramirez**

**iRex**



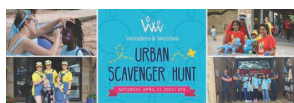
**Imagination & Innovation**

**Drew Donnelly**

**TyRex**



### TyRex Supplies 3D Printed Puzzles to Nonprofit Event Supporting Families in Need



This quarter we got to support our community partner Wonders & Worries and their Urban Scavenger Hunt event! We were thrilled to have been a Clue Spot sponsor and got to provide 3D printed puzzles. We appreciate the great work the Wonders & Worries team has done to help Austin community families facing difficult challenges.



Thank you for your generous support to help make the 2024 Urban Scavenger Hunt a success!



Share our Social Media post!





# TyRex Family Caring Culture Events

## Total Solar Eclipse

The total solar eclipse had the TyRex Family howling! With sun chips, moon pies and protective eyewear in hand, everyone at TyRex gathered outside to witness the spectacle.

Watch our video recap!

## Memorial Day



This Memorial Day, our TyRex Family wore flag pins to pay tribute to all that have served and paid the ultimate price for our freedom. To our veteran employees and all our nation's veterans, we say:

**THANK YOU FOR YOUR SERVICE!**



## Cinco De Mayo



For this year's Cinco De Mayo, the TyRex Family spiced up the salsa in our salsa contest and cranked up the competition in our first-ever TyRex Fútbol event! Congrats to all our contest champions and thank you to everyone who joined in on the festive treats, music and activities.



Watch our video recap!

# TyRex Introduces Its Voyagers Program

“Exploring the Universe” of Product Ideas the 2024 Summer Research Interns Have Mastered 3D Printing and AI Technology Becoming CREATIVE THOUGHT TECHNOLOGISTS



The summertime season is underway! For many teenagers and young adults, the summer months present great opportunities to gain professional work experience, make new friends and learn something new.

For a second consecutive year, TyRex has opened its facility to another large group of interns. Last year, we hosted 27 interns, providing each intern with a unique work experience. This year, we’re inviting 34 interns, some returning and some, completely new to TyRex!

These ‘TyRex Voyagers’ have been focused on critical research projects.



Check out last year's intern experience video!

## Austin Business Leaders Pass the Ethics Torch

### 2024 Ethics in Business Category Winners

<b>Individual</b> <b>Dyan Lofton</b> Austin Legal Access	<b>Nonprofit</b> <b>Communities in Schools of Central TX</b>	<b>Small Business</b> <b>Afia Foods</b>	<b>Large Business</b> <b>PNC Bank</b>	<b>Lifetime Achievement</b> <b>Bob Gregory</b> Texas Disposal Systems
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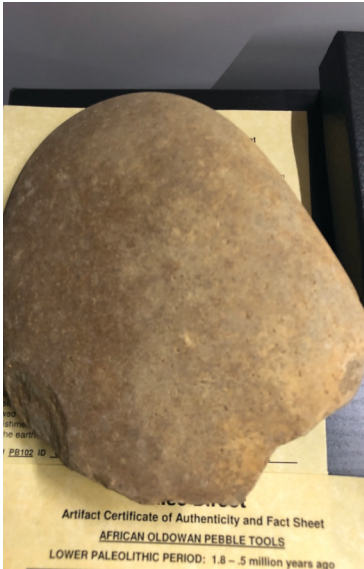


Check out this year's honorees and winners on RecognizeGood's website!



# TyRex Family Dinosaur Museum

## Authentic Artifact and Fossil of the Month



**Oldowan Pebble Chopper Axe**

Oldowan refers to the first type of tools used by hominin species. The name was coined by paleontologists Mary and Louis Leakey and stems from Olduvai Gorge in Tanzania – a long rift full of significant paleoanthropological findings.

Learn more about Oldowan Stone Tools.



**Sea Cow Cranium Fragment**

Sirenians or sea cows are an order of fully aquatic herbivorous mammals consisting of four main species types. The first known sirenian lived 50 million years ago, in the Eocene Period.

Learn more about the sea cow.





### EMPLOYEE HANDBOOK UPDATE

**In case you missed it!** The newest edition of the TyRex Employee Handbook is out now. Be sure to review all the changes, sign the attached acknowledgment and turn in to **John Stiles**. For questions and more info contact John Stiles ([jstiles@tyrexmfg.com](mailto:jstiles@tyrexmfg.com)).

**ATTENTION**

### 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!

**GET INVOLVED ON THE TFA**

Connect with fellow TyRex Family members, join in on the discussion and contribute to all the great content being posted on the TyRex Family Album now!




Visit the TFA now for more info on available DinoDo\$\$ar Reward Programs and to catch up on the latest TyRex happenings!

### TyRex 3D Printing Courses & Challenges with Ted Neil

**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](mailto:jstiles@tyrexmfg.com)), Ted Neil ([tneil@tyrexmfg.com](mailto: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.**



### Voyager Training with Tim Johnson

**Now Available to All TyRex Business Family Members**

Interested in exploring the power of AI? Want to learn more about AM and 3D printing? Looking for a product idea? Accomplish all three with TyRex's Cosmic Inquiry<sup>SM</sup> program! Guided 'Voyager' training is now available for all TyRex Business Family Members. Contact Tim Johnson ([tjohnson@tyrexmfg.com](mailto:tjohnson@tyrexmfg.com)) or John Stiles ([jstiles@tyrexmfg.com](mailto:jstiles@tyrexmfg.com)) to learn more and sign up!



# TYREX<sup>®</sup>

## GROUP, LTD.

### Family of Technology Companies



Arctos



Austin  
Reliability Labs



Digital Light  
Innovations



iRex



Megladon



Saber Data



SabeRex



TekRex



Woolly  
Mammoth 3D

## Nonprofit



RecognizeGood<sup>®</sup>  
Illuminating GOOD  
in Our Community

## Associated Entities



RF  
Scientific



Right Stuff  
Marketplace



STG  
4 Fronts



TyRex  
Learning  
Foundation



tri/REX

**Special By Design<sup>®</sup>**

This newsletter is edited by Trevor Hendricks, 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@tyrexfmfg.com](mailto:news@tyrexfmfg.com).

### BENEFITS CONTACT INFORMATION FOR TYREX FAMILY MEMBERS

#### Engage PEO – Payroll

[engagepeo.com](http://engagepeo.com) • 1-(888) 780-8807

#### United Healthcare – Medical

1-(877) 797-8812 • [myuhc.com](http://myuhc.com) • group #1459157

#### Ameriflex – HSA / FSA Accounts

(866) 868-3539 (FLEX) • [myameriflex.com](http://myameriflex.com)

#### Unum – Life / Disability Insurance

(866) 679-3054 • [unum.com](http://unum.com)

#### Assurity – Hospitalization / Accident

(800) 869-0355 • [assurity.com](http://assurity.com)

#### United Healthcare – Dental

1-(877) 797-8812 • [myuhc.com](http://myuhc.com) • group #1459157

*Vision insurance offered under Dental Select - 2 plans*

#### United Healthcare – Vision

1-(877) 797-8812 • [myuhc.com](http://myuhc.com) • group #1459157

#### Slavic 401K – Retirement Plan

(800) 356-3009 • [slavic401k.com](http://slavic401k.com)

#### Internal Support

John Stiles • (757) 508-2925 | Kevin Alwell • (512) 689-8695  
Human Resources Insurance Programs