



TEXAS INSTRUMENTS

Alumni Association



2022 Annual Meeting

TIAA Annual Meeting May 19, 2022 -- Agenda

- ❖ **Opening Comments & Introduction of Speaker** **Debi Heaton**
- ❖ **BEST Robotics** **Steve Marum**
- ❖ **TIAA Update** **Debi Heaton**
- ❖ **Nominating Committee Report** **Larry James**
- ❖ **Election of Officers** **Members**
- ❖ **Concluding Remarks** **Debi Heaton**



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What is BEST?

What is BEST?

Is it a sporting event?



What is BEST?

Is it an engineering challenge?

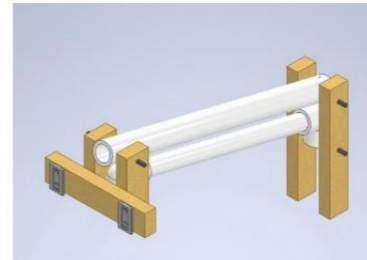
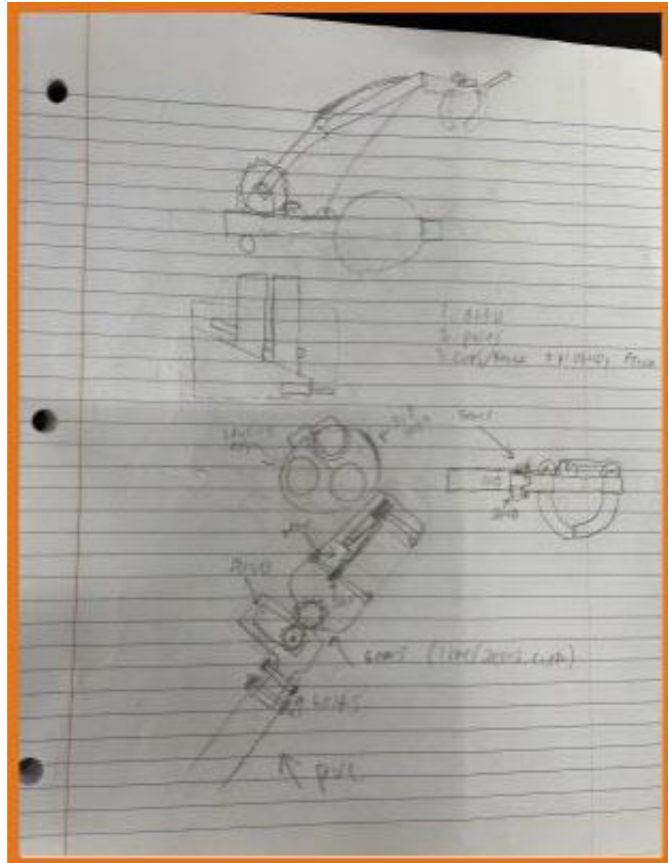


Figure 12 – 4-Bar Arm

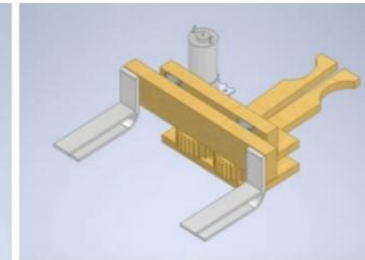


Figure 13 – Forklift & Gripper

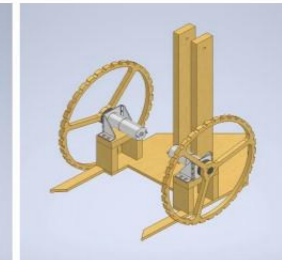


Figure 14 – Base Design

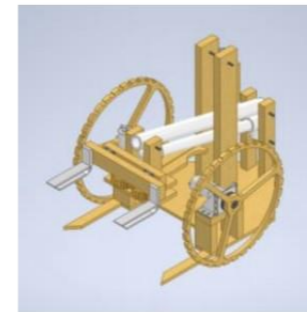


Figure 15 – Robot Assembly



Figure 16 – Gripper Design

What is BEST?

Or maybe a programming challenge?

```
if(vexRT[Btn6U] == 1) {
    motorSet(clawMotor, 127);
} else {
    motorSet(clawMotor, 0);
}

goingToOpen = !goingToOpen;
if(goingToOpen) {
    motorSet(spinMotor, 127);
} else {
    motorSet(spinMotor, 0);
}

if(vexRT[Btn6D] == 1) {
    motorSet(spinMotor, 127);
} else if(vexRT[Btn6U] == 1) {
    motorSet(spinMotor, -127);
} else {
    motorSet(spinMotor, 0);
}

if(vexRT[Btn5U] == 1) {
    motorSet(gripperMotor, 127);
} else if(vexRT[Btn5D] == 1) {
    motorSet(gripperMotor, -127);
} else {
    motorSet(gripperMotor, 0);
}

if(vexRT[Btn4U] == 1) {
    motorSet(pickMotor, 127);
} else if(vexRT[Btn4D] == 1) {
    motorSet(pickMotor, -127);
} else {
    motorSet(pickMotor, 0);
}

if(vexRT[Btn3U] == 1) {
    motorSet(pickMotor, 127);
} else if(vexRT[Btn3D] == 1) {
    motorSet(pickMotor, -127);
} else {
    motorSet(pickMotor, 0);
}

if(vexRT[Btn2U] == 1) {
    motorSet(pickMotor, 127);
} else if(vexRT[Btn2D] == 1) {
    motorSet(pickMotor, -127);
} else {
    motorSet(pickMotor, 0);
}

if(vexRT[Btn1U] == 1) {
    motorSet(pickMotor, 127);
} else if(vexRT[Btn1D] == 1) {
    motorSet(pickMotor, -127);
} else {
    motorSet(pickMotor, 0);
}

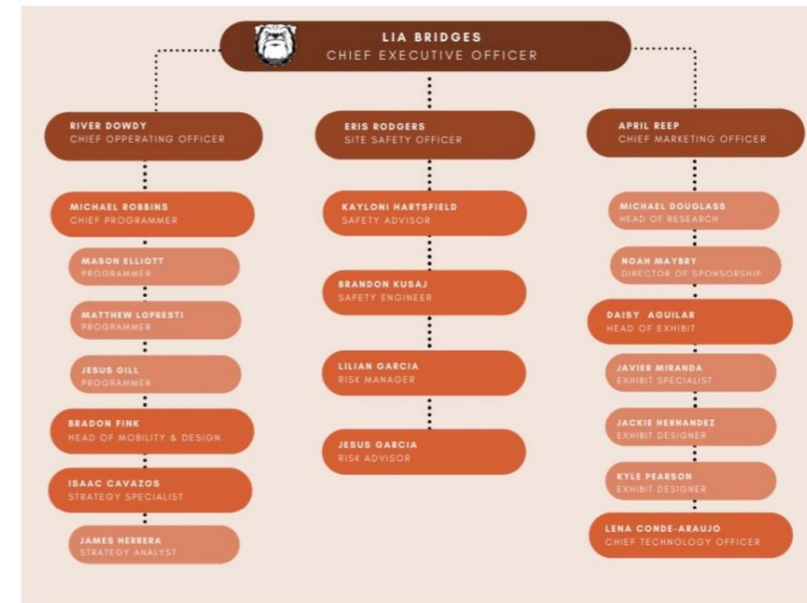
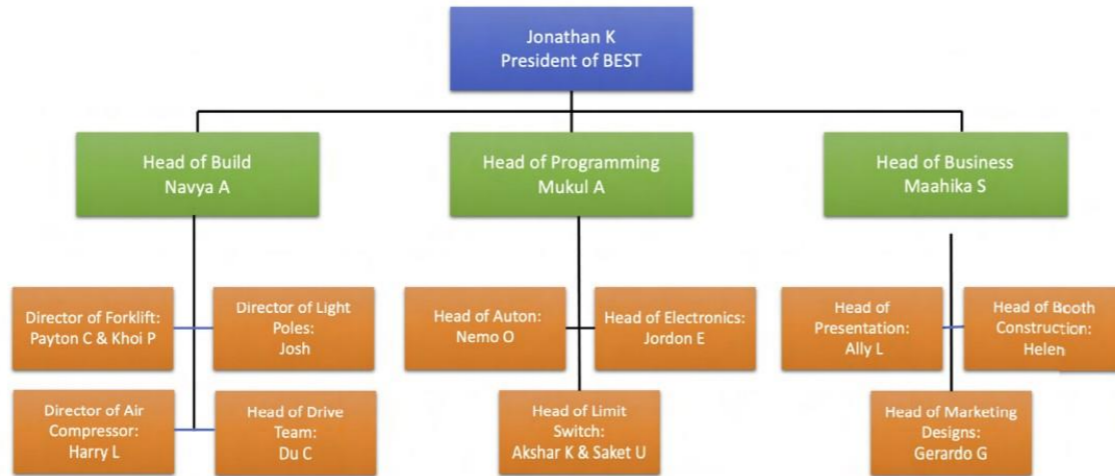
delay(100);
}
```

```
while(1 == 1){
    //Driving Motor Control
    motor[leftMotor] = vexRT[Ch3];
    motor[rightMotor] = vexRT[Ch2];
    //Arm Control
    if(vexRT[Btn6U] == 1){
        motor[armMotor] = 100;
    }
    else if(vexRT[Btn6D] == 1){
        motor[armMotor] = -80;
    }
    else{
        motor[armMotor] = 15;
    }
    //Gripper Control
    if(vexRT[Btn5U] == 1){
        motor[clawMotor] = 127;
    }
    else if(vexRT[Btn5D] == 1){
        motor[clawMotor] = -127;
    }
    else{
        motor[clawMotor] = 15;
    }
}
```

Figure 24 - Driver Control Program

What is BEST?

Perhaps it's a business simulation?



What is BEST?

BEST is all of the above!

BEST Beginnings



Founders – Retired Tiers
Ted Mahler and Steve Marum

BEST Beginnings

- Engineers Week, February 1993...

BEST Beginnings

- Engineers Week, February 1993...
- The Sherman Site Management team...

BEST Beginnings

- Engineers Week, February 1993...
- The Sherman Site Management team...
- Now what!?!



Our First Game: PVC Insanity

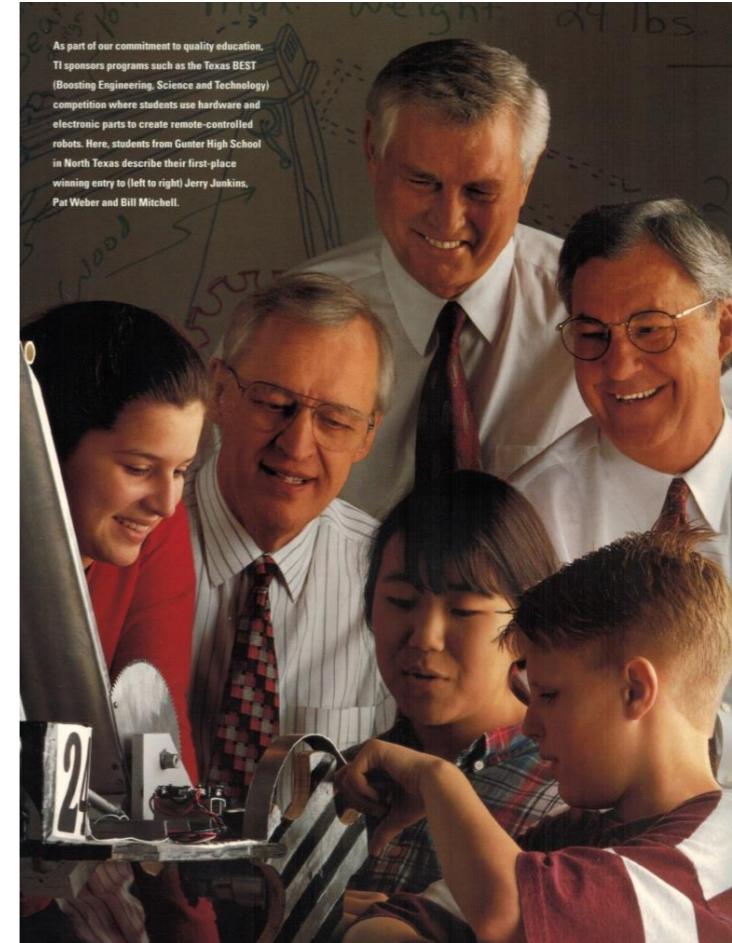


BEST Games through the Years

1993 PVC Insanity	2008 Just Plane Crazy
1994 Bumble Rumble	2009 High Octane
1995 TOTALly AweSUM	2010 Total Recall
1996 Block'n Load	2011 Bugs!
1997 Dynamite Duel	2012 Warp XX
1998 Toxic Troubles	2013 Gatekeeper
1999 Rocket Race	2014 Blade Runner
2000 Pandemonium in the Smithsonian	2015 Pay Dirt
2001 RAD to the Core	2016 Bet the Farm
2002 Warp X	2017 Crossfire
2003 Transfusion Confusion	2018 Current Events
2004 BEST Fever	2019 Off the Grid
2005 Mission to Hubble	2020 Outbreak
2006 Laundry Quandary	2021 Demo Daze
2007 2021 – A Robot Odyssey	2022 Made2Order

TI Involvement

- TI has been involved from the very beginning
- TI supports many local competitions – Hubs
- TI supports the Texas BEST regional competition
- Hundreds of Tiers and retired Tiers have helped over the years



From TI 1995 Annual Report

The Recent Past & the Future

The Recent Past & the Future

□ Covid ☹️

The Recent Past & the Future

- Covid 😞
 - BEST changed to a single-team classroom format

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 - Some hubs may have disbanded

The Recent Past & the Future

- Covid 😞
 - BEST changed to a single-team classroom format
 - Still, we lost ground
 - Some teams dropped
 - Some hubs went into “hibernation”
 - Some hubs may have disbanded
- We have some catching up to do!

Benefits to Volunteering

- Fun!
- TI will donate to BEST based on your hours
- If you are a team coach, TI will give your team a \$750 grant
- That “feel good” feeling at the end of the year

Links

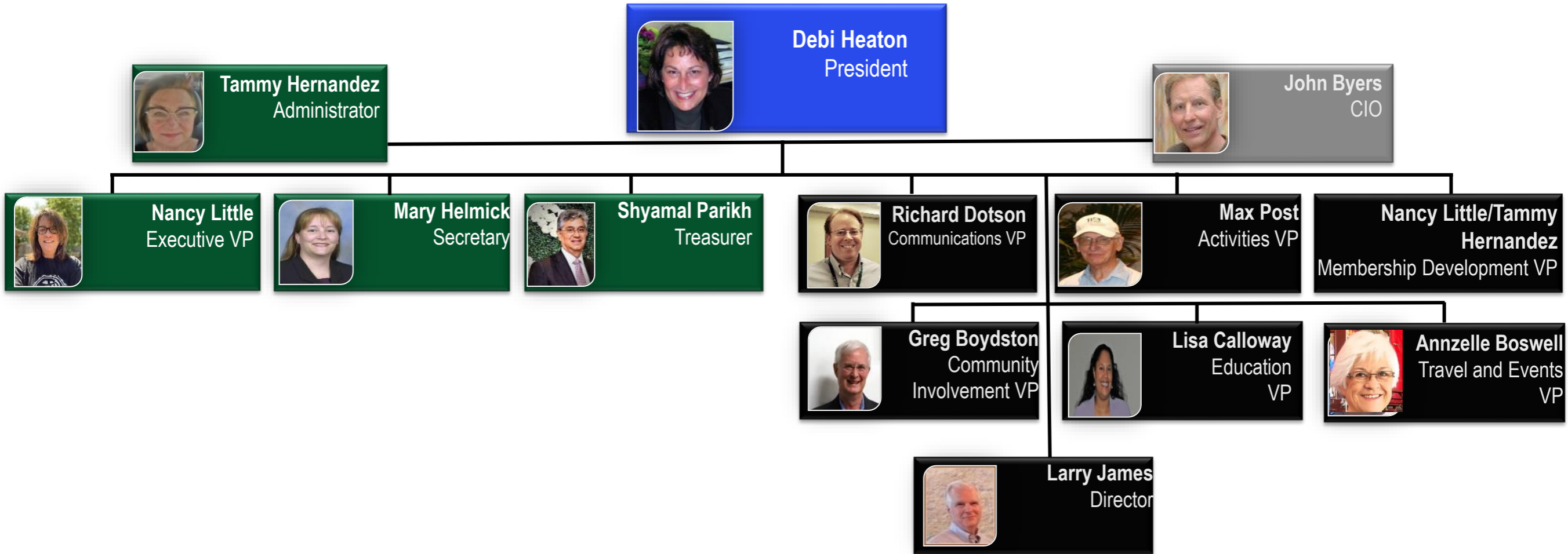
- www.bestrobotics.org
 - “Hub Contacts” has links to all the hubs
- www.ti.com/giving
 - Has information on the grants

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Texas Instruments Alumni Association



May 5, 2022



COVID Challenges

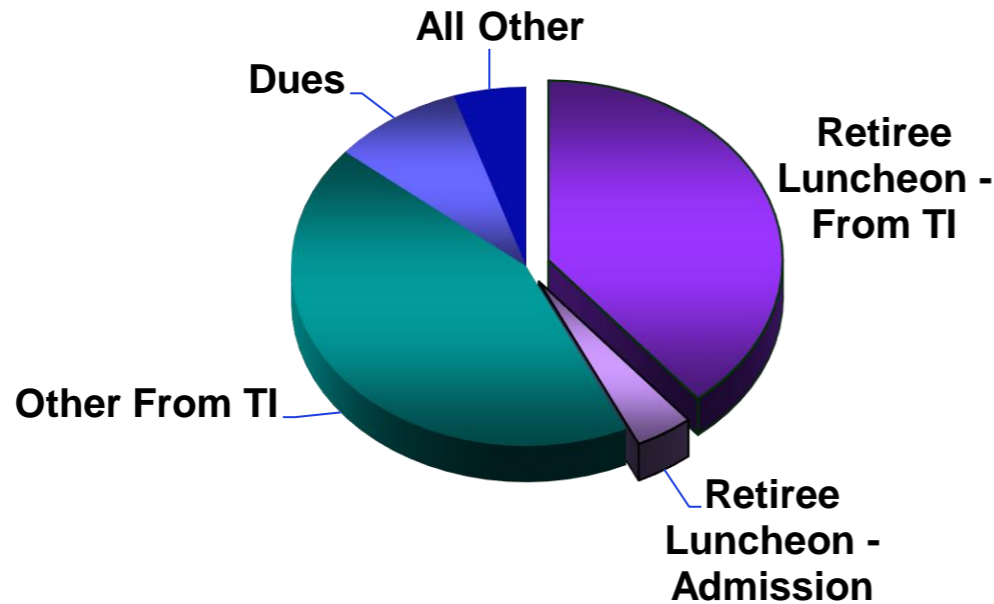
- ❖ The last three years have been challenging for everyone, including TIAA – we take guidance from TI and The Senior Source regarding what types of activities should be conducted. TIAA is ramping back up to normalcy.

Activity	2019	2020	2021	2022 YTD & Planned
Travel Trips & Events	16	2	5	10
Community Involvement	15	7	7	15
Educational Seminars	5	1	1	2
Luncheons	2	0	0	1

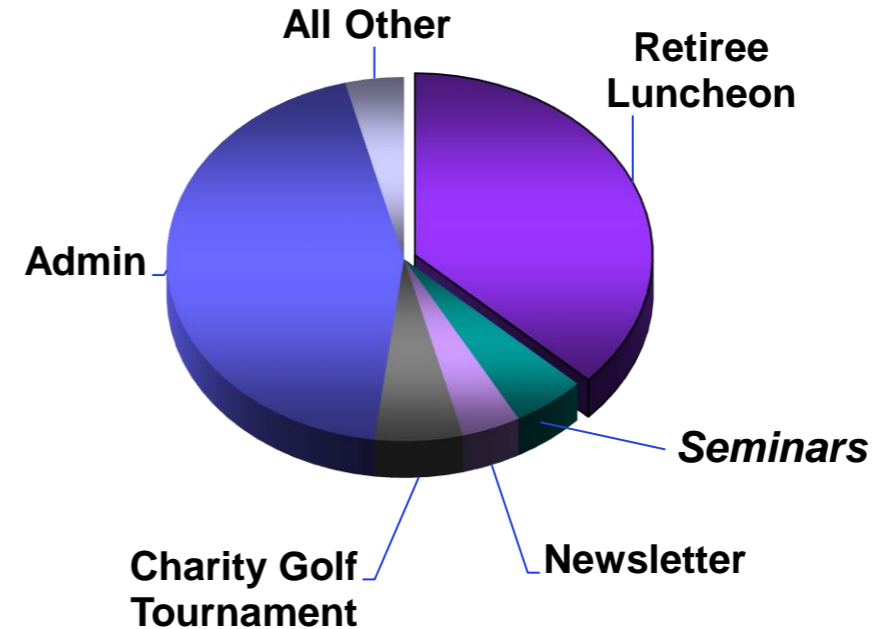
- ❖ TIAA’s Leadership Team voted to again extend members expiration dates by one year in 2022 since we are offering limited activities. That also means that any new members joining this year receive two-years free membership instead of just one.

TIAA 2019 Financials – last normal year

Income - \$101.1K



Expense - \$103.6K



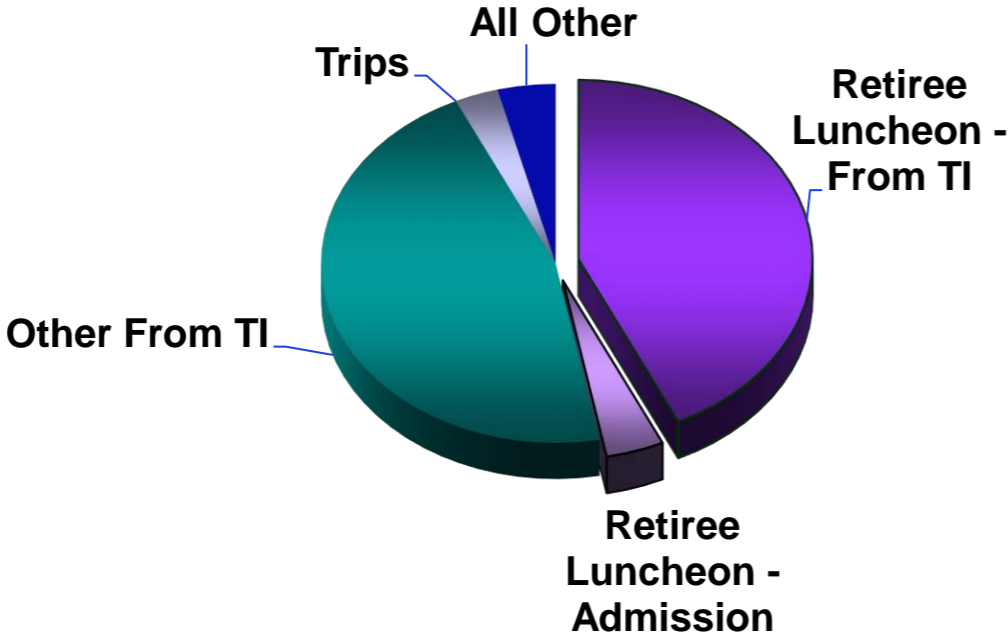
TI provided 82% of TIAA funding in 2019

12/31/19 Fund Balance = \$91.1K

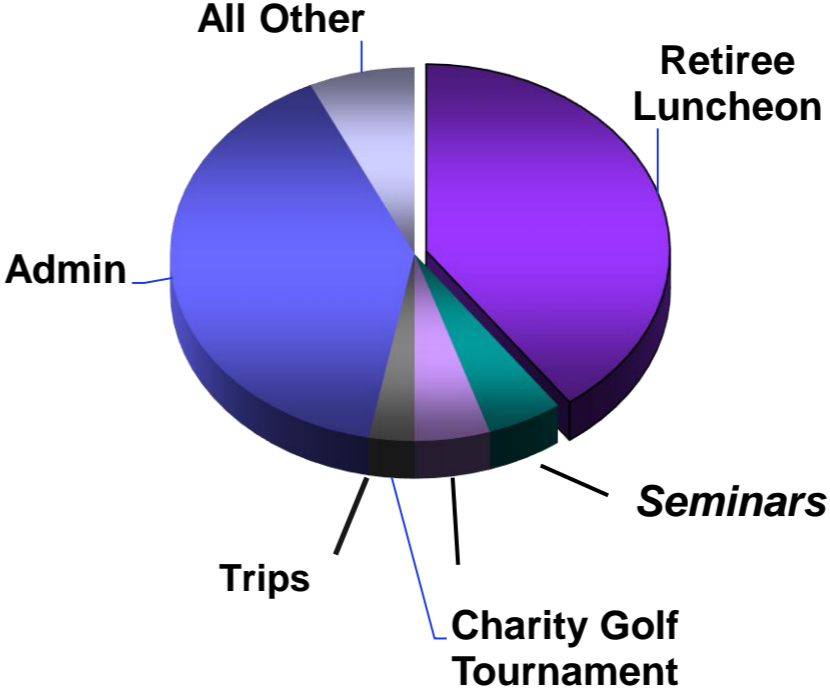


TIAA 2022 Budget

Income - \$92.5K



Expense - \$97.7K



90% of TIAA funding is from TI

1/1/22 Fund Balance = \$196.3K



TIAA Membership

Type	Apr 2021	Apr 2022	% Total
Annual	779	831	48%
Lifetime	<u>910</u>	<u>903</u>	<u>52%</u>
Total	1,689	1,734	100%

2021 Virtual Activities

- ❖ **May 20, 2021 – TIAA Annual Meeting**
- ❖ **October 19, 2021 – Virtual Health Benefit Seminar provided by Via Benefits**



Crossroads Community Services

Serving the Hungry

July 20, 2021



Dallas Ramps

October, 2021



TIAA Volunteers Build and Donate Equipment to Help Special Olympics Athletes Compete



Future Planned Volunteer Activities

- ❖ UNT NITA Mock Trial June 10
- ❖ Senior Source Fan Distribution June 22 & July 23
- ❖ Computers for the Blind August
- ❖ Crossroads Community Services September
- ❖ Dallas Ramps October 11
- ❖ Readers2Leaders November
- ❖ Faith and Grief Memorial Arch November 29
- ❖ Annual Joint TI/TIAA Virtual Volunteer Event November
- ❖ Meals-on-Wheels Gift Wrap December
- ❖ Volunteer Luncheon December 15



Hamm Orchard 07/15/2021



Globe Life Field Tour, 08/31/2021



Dallas Arboretum Fall of 2021



Rodeo 1/29/2022




e



Michelangelo's Sistine Chapel, 02/17/2022



In-Sync Exotics, Wylie, 03/10/2022

A MAN OF THE PEOPLE

"When we all tear down the walls of bigotry and prejudice and live in real harmony with ourselves and others, then we'll all say, 'I am an American.' Pure and simple."
—John Wayne

Although he was a card-carrying member of the Republican Party, Duke viewed himself first as an American, who was most interested in the country's welfare. He balanced his vocal beliefs in traditional conservative values with an appreciation of spirited debate that kept him open to new ideas. A regular correspondent with Presidents Eisenhower, Reagan, Nixon, and Ford, he also worked with Jimmy Carter to ratify the Panama Canal Treaty.

President Carter fondly remembers that, "During my time in office, his correspondence, notes, suggestions, and criticisms sent my way were always respectful and heartfelt – offered up because he believed what he was saying was in the nation's best interests."

John Wayne believed in America and the American people, even when some of those people disagreed with him.



John Wayne Museum, 04/14/2022



Attendees from the April 6, 2022 TIDA (Design Automation) Luncheon at Spring Creek BBQ in Richardson.

Left to Right: Don Smith, Bob Lemon, Drew Holland, Susan Argyle, Charles Livingston, and Chuck Lace. Kate Rose took the photo.

"Iron is the soul of civilization and enlightenment."
 Fukuzawa Yukichi (1835-1901), cultural and founder of Meiji Shintō

IRON MEN

THE ARTISTRY OF IRON IN SAMURAI ARMOR

explores the vital role that iron played in Japanese warrior culture from the fourth to the nineteenth centuries. The plates were painstakingly transformed into elegant armor by skilled artisans. Before this, a lengthy process that included subjecting unrefined iron to temperatures over 2500° Fahrenheit was required to bring the element into a usable form.

Iron is the sixth most abundant element in the universe. It is found in and gives the planet Mars its red color. The ability to smelt iron was first achieved over 3000 years ago by people of the Iron Age. The knowledge of iron processing first made its way to Japan from mainland Asia around the third century B.C. It revolutionized agriculture and impacted the socioeconomic structure—advancing their culture by contributing to human wellbeing and warfare.

The warrior elite of Japan, the samurai, came to depend on iron for the foundation of their armor, *yoroi*, which enabled their survival. It created this important product for all ranks of samurai, from foot soldiers to daimyo lords, to the shogun himself. Through the course of the exhibit, visitors will learn about the ancient Japanese iron industry and the sophisticated and beautiful iron armor. These pieces exemplify the artistry which this seemingly unyielding metal gave way to works of protective art.



Samurai Museum 5/12/2022

Future Planned Travel & Entertainment Events

- ❖ Jun World Aquarium, downtown Dallas
- ❖ Jul Ham's Orchard (a TIAA tradition)
- ❖ Aug Texas Rangers game, Aug 31
- ❖ Sep Perot Museum
- ❖ Oct Wine tasting in Grapevine

UTD/TIAA “Aging Minds” Seminar


**BRAIN AGING &
ALZHEIMER’S DISEASE**

PRESENTED IN PARTNERSHIP WITH
TEXAS INSTRUMENTS ALUMNI ASSOCIATION

**Thursday
March 3, 2022**
4:30 p.m. Reception
5 p.m. Lecture

UT Dallas
800 West Campbell Rd,
Davidson-Gundy
Alumni Center
Richardson, TX 75080

**Please respond
by February 18**
to cvl@utdallas.edu
or (972) 883-3758



**PRESENTED BY
Dr. William Jagust, MD**
*Professor
Public Health & Neuroscience
University of California, Berkeley*

Dr. William Jagust, MD, joined the faculty of the University of California, Davis in 1986, where he established the UC Davis Alzheimer’s Disease Center and served as Chair of the Department of Neurology from 1998-2004. He moved to the University of California, Berkeley in 2004 where he is a Professor of Public Health and Neuroscience, and a Faculty Senior Scientist at Lawrence Berkeley National Laboratory. Dr. Jagust’s career has been focused on understanding the

VOLUNTEERS ARE NEEDED FOR STUDIES THAT INVESTIGATE BRAIN ACTIVITY AND MEMORY

Studies involve monitoring of brain activity through an imaging method called functional magnetic resonance imaging (fMRI) while you perform simple tasks.

In order to take part, you must:

- Be between 18-30 or over 65 years of age.
- Have learned English in childhood.
- Be in good general health.

Dates and times for participating are flexible.
You will be compensated for your time and reimbursed for travel.



**For more information:
Email: fnim@utdallas.edu
Call: 972-883-3753/3720**

fNIM laboratory
functional Neuroimaging of Memory

This research is conducted under the direction of Michael Rugg, PhD. at the Center for Vital Longevity, UT Dallas.

Other Plans

❖ **New Website Coming Soon**

❖ **Health Benefits Seminar**

October

❖ **Annual Retiree Luncheon**

November 10

❖ **Mesquite Convention Center**



TIAA Status

As you can see from the current and planned activities, TIAA and its involvement in the community and fun is almost back to normal.

Get Involved

Join In

Serve the Community

Have Fun

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Report of the Nominating Committee

Pursuant to the TIAA Bylaws,

The TIAA Board of Directors and TIAA Nominating Committee are pleased to recommend the following slate of officer candidates to the TIAA membership, for the term of office: July 1, 2022 through June 30, 2023.



Proposed TIAA Officers

July 1, 2022 – June 30, 2023



Shyamal Parikh
President



Nancy Little
Executive VP



Bob Rifkin
Treasurer



Mary Helmick
Secretary

Brief Bios of Candidates

Shyamal Parikh [President candidate] Shyamal joined TI in 1980 after receiving an MBA from the University of California, Los Angeles. He started his career as a financial analyst in the MOS Memory business, with progressive assignments in Accounting, Finance and Operations. He left TI in 2004 as the VP of Financial Planning and started a consulting business with a former TI colleague. He has also worked for startup companies as CFO, as well as serving as TIAA Treasurer for the past 3 years.

Nancy Little [Executive Vice President candidate] Nancy joined TI in 1984 after graduating from Colorado School of Mines with a Metallurgical Engineering degree. She retired from TI in December 2020 having worked her entire 36-year career in the Semiconductor Division. At the time of her retirement, Nancy was the Implant/Epi Engineering Section Manager in RFAB. Nancy has served as TIAA EVP for this past year and also helps with the Membership Team.

... cont'd



Brief Bios of Candidates – *cont'd*

Bob Rifkin [Treasurer candidate] Bob is a native of Omaha, Nebraska. He obtained a BS degree in industrial engineering from Northwestern University, and an MBA from Carnegie-Mellon University. He joined Texas Instruments as part of the Control Management Program in 1976. During his 44 year TI career Bob held positions including controller of the Standard Linear and Logic entity, and manager of TI Financial Reporting. His last TI assignment was in Treasury. Bob retired from TI in 2020, a few months after the offices closed due to COVID.

Mary Helmick [Secretary candidate] Mary is also a recent retiree, having worked in several positions in her 30 years at TI, including manager of the Standard Linear & Logic Packaging Group; management positions in the Sherman Wafer Fab facility; Quality Director for DLP; and Director of Strategy and Program Management for TI's Analog Business. Outside of work, since 1993 Mary has volunteered with BEST (Boosting Engineering, Science and Technology). She is currently serving as a Board member and Treasurer of BEST of Texas Robotics, Inc. She served as TIAA Secretary for the past year and also helps with our Membership Team.



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Election of Officers



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