

# A Journey to Leadership



**City County  
2022 Conference  
April 7, 2022**

**Dr. José M. Hernández**  
Astronaut

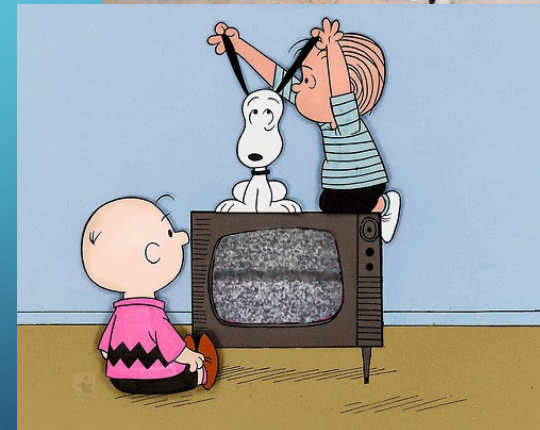
President and CEO

**Tierra Luna Engineering, LLC**



# MY STORY

- My childhood
- Start of a dream
- The effect of empowerment
- The long journey
- The importance of perseverance
- 



# Ms. Young's First and Second Grade Class



## MY FATHER'S RECIPE TO SUCCESS

1. Define your goal
2. Recognize how far you are from it
3. Create a roadmap to get there
4. Education is key
5. Develop a strong work ethic
6. Persevere, never give up!



Liftoff of Discovery STS-128 Mission

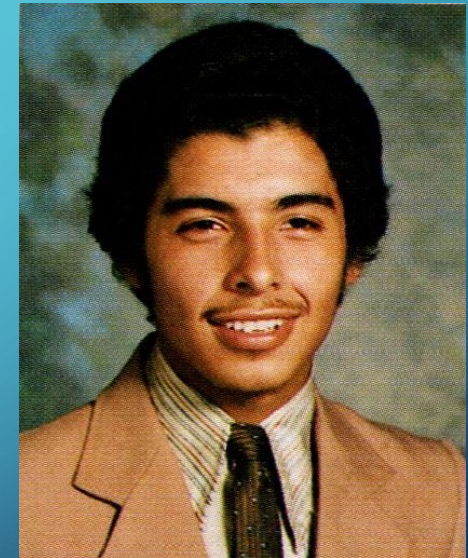
# GETTING INVOLVED IN SCHOOL AND THE COMMUNITY



Jose Hernandez—President  
Randy Deal—Vice-President  
Marla Wright—Secretary  
Leona Williams—Treasurer



Meeting with SUSD Superintendent  
Dr. Leon Lessinger



Official Yearbook Picture

# ROLE MODELS AND BEING ONE IS IMPORTANT



Selected by NASA in 1980



Dr. Franklin Chang-Diaz veteran of Seven spaceflights

# MEETING FAMILY OBLIGATIONS



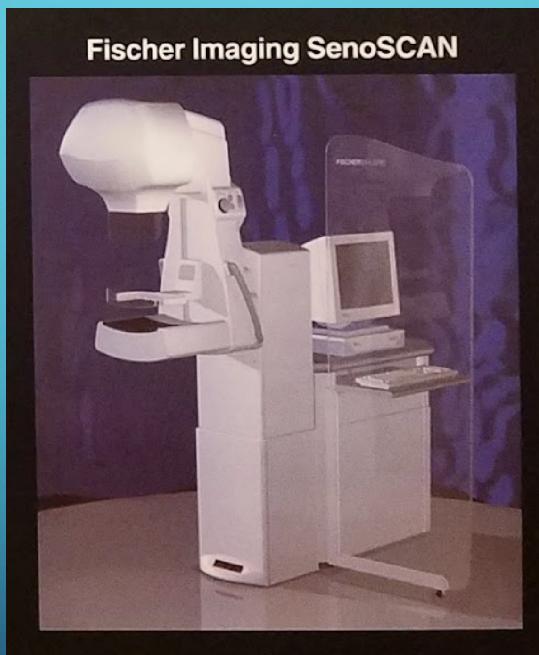
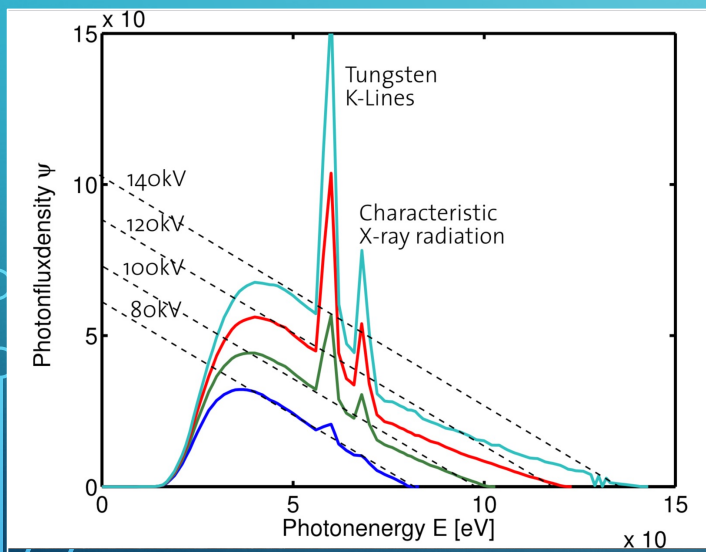
# THE X-RAY LASER PROGRAM AT LAWRENCE LIVERMORE NATIONAL LABORATORY



Artist rendition of and X-ray laser



# Innovation Creates Opportunities



## Digital Mammography System Aided By Collaboration With Livermore Researchers Receives Fda Approval

Sept. 26, 2001

LIVERMORE, Calif. - A Denver, Colo. company that worked with Lawrence Livermore National Laboratory researchers announced Tuesday that it has received Food & Drug Administration approval for its digital mammography system.

Fischer Imaging Corporation partnered with LLNL from 1993 to 1996 on digital mammography work under a Cooperative Research & Development Agreement with the Lab's Engineering Directorate. While traditional mammography technology uses film to record the X-ray image, Fischer's new SenoScan digital mammography system records the image electronically.

Digital breast imaging opens the door for many changes in the practice of mammography, in the view of Livermore mechanical engineer Clint Logan, who headed the Laboratory's collaboration with Fischer.

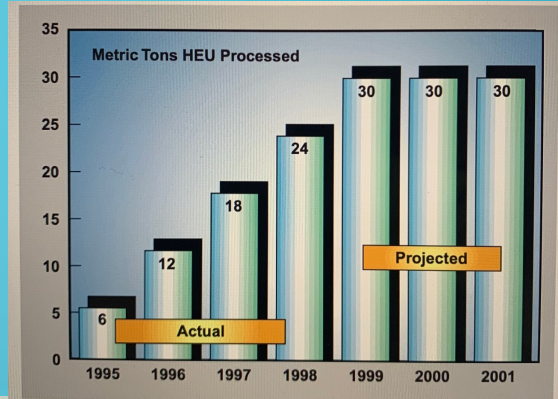
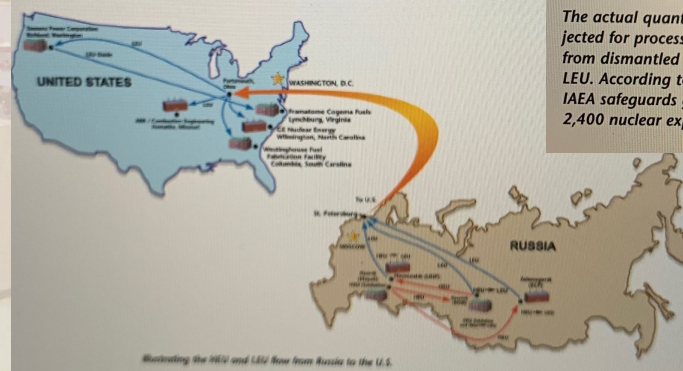
With this technology, images can be acquired at one location and then be rapidly transmitted by computer to another site for interpretation.



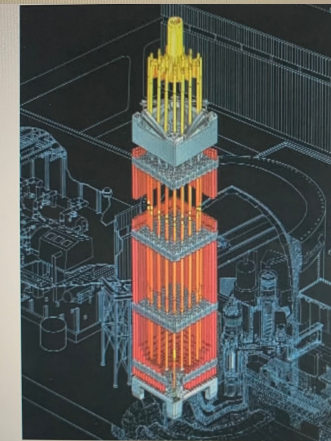
**Co-developed the first full-field digital mammography system**

# BEING STRATEGIC WITH YOUR CAREER

## Megatons to Megawatts Implementing HEU Transparency Measures



The actual quantity of HEU already processed and the amounts projected for processing by 2001. To date, sixty (60) metric tons of HEU from dismantled Russian nuclear weapons have been downblended to LEU. According to the IAEA's definition of a significant quantity (1987 IAEA safeguards glossary), this would be enough to make approximately 2,400 nuclear explosive devices.

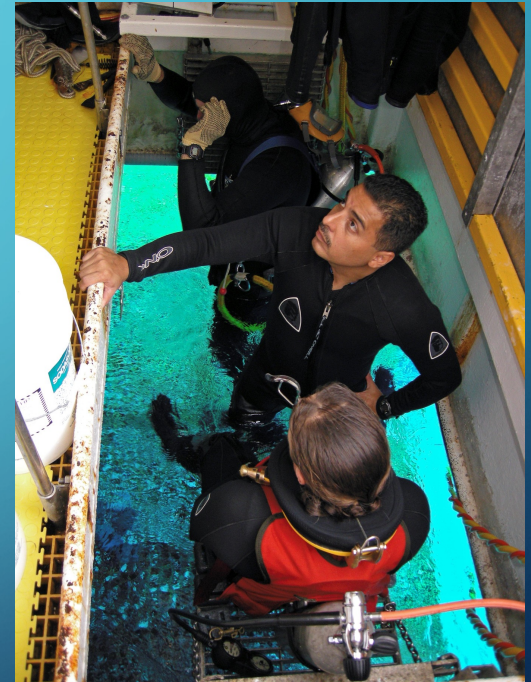
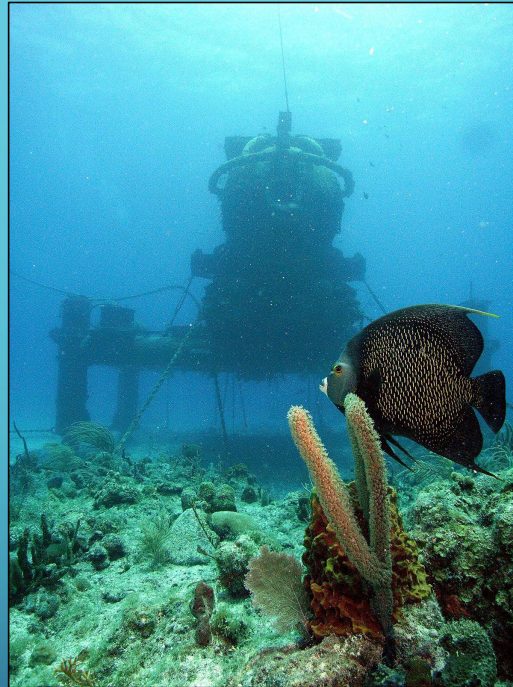


Artists concept of a fuel rod assembly being installed in a nuclear power reactor.

# TRAINING AS AN ASTRONAUT



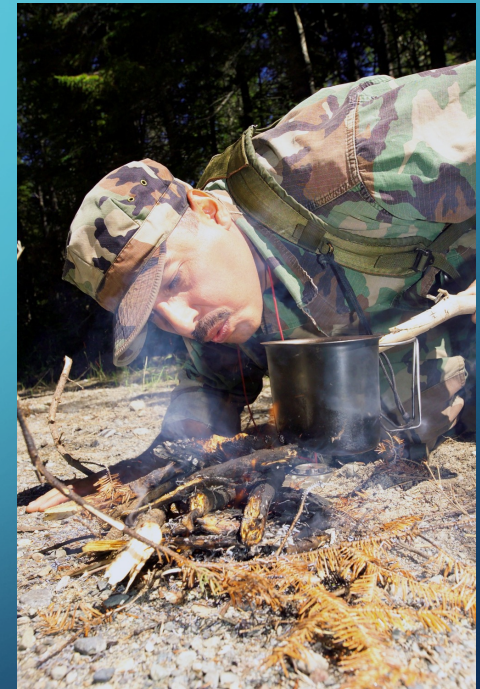
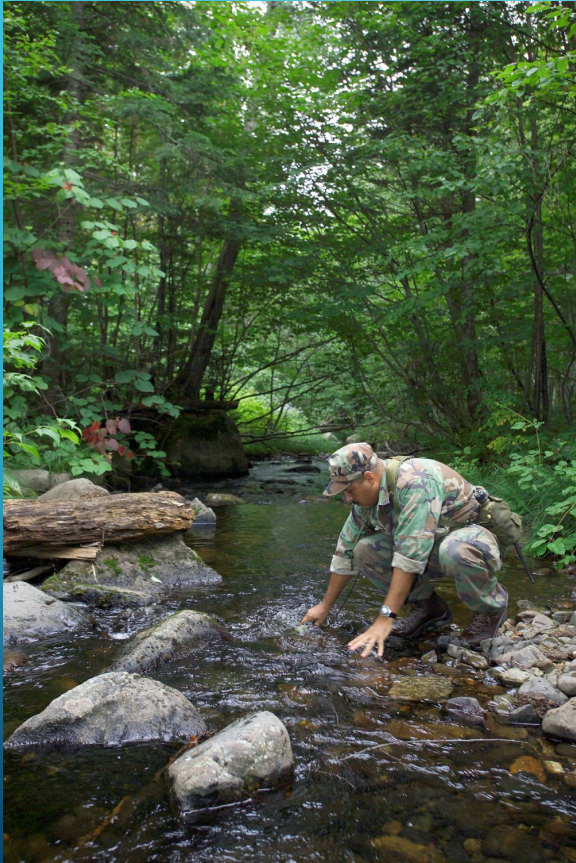
**NASA Extreme Environment Mission Operations (NEEMO)**



# Water and Cold Weather Survival Training



# WILDERNESS SURVIVAL TRAINING



# PILOT TRAINING



# Getting ready to go to space

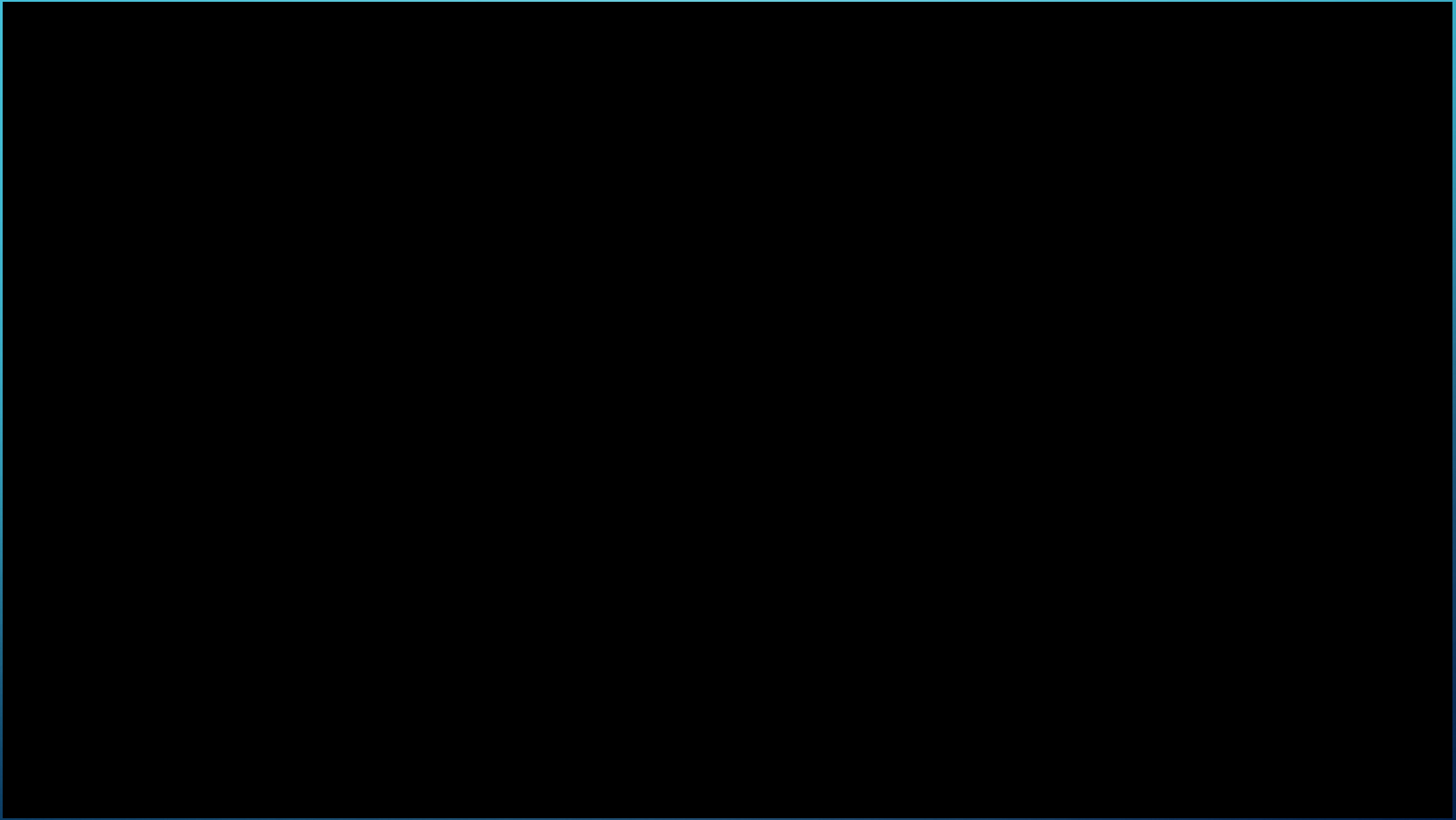


LIFT OFF !





# STS-128 MISSION VIDEO



## 3-Element Strategy to Reaching Your Goal

- Know the minimum requirements
- Compare yourself to people you want to be like
- Differentiate yourself from the competition

Just remember that whatever it is you are doing, don't be afraid to enjoy the journey!



Zero G Training on the KC-135 Vomit Comet



With my son on a Zero G Flight

# STAYING INVOLVED WITH YOUR COMMUNITY



UC welcomes new Regent



Candidate for Congress



# Coming Full Circle



# Order Books at: TierraLunaEngineering.com



## Hot Off the Press - Movie

Amazon is producing a film portraying the life story of astronaut Jose Hernandez, a former migrant farmworker, who flew in space on Space Shuttle Discovery STS-128 mission in 2009



Alejandra Márquez Abella to Direct  
Biopic of Mexican American Astronaut

# Reaching for the Stars Foundation

Website: Visit our store for books



[www.tierralunaengineering.com](http://www.tierralunaengineering.com)



Twitter  
[@astro\\_jose](https://twitter.com/astro_jose)



[www.astrojh.org](http://www.astrojh.org)

Find us at:



LinkedIn:  
Jose M. Hernandez

Our Wines



TIERRA LUNA  
CELLARS

[www.tierralunacellars.com](http://www.tierralunacellars.com)



Facebook  
[JoseMHernandez128](https://www.facebook.com/JoseMHernandez128)