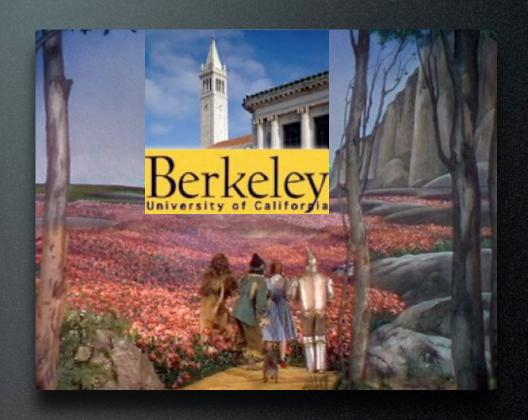
Success,
failure, and
leadership –
what you need
to know

Juan Meza
Senior Scientist, Department Head
Lawrence Berkeley National Laboratory



## Starting off ...

- Universities can be impressive, but daunting
- Exciting places, but sometimes the trip can seem scary
- Always worth the challenge



#### Elements for Success

- Knowledge (Brain)
- Passion (Heart)
- Confidence (Courage)
- Community (Home)



## If I only had a brain ...

- Need to have technical knowledge
- A diploma is nice, but it's more than that
- Always keep learning



# Intelligence not always best predictor of success

- Hard work will often win over raw talent
- Common sense plays a big part
- Creativity and curiosity key components of success

## Look for research internships



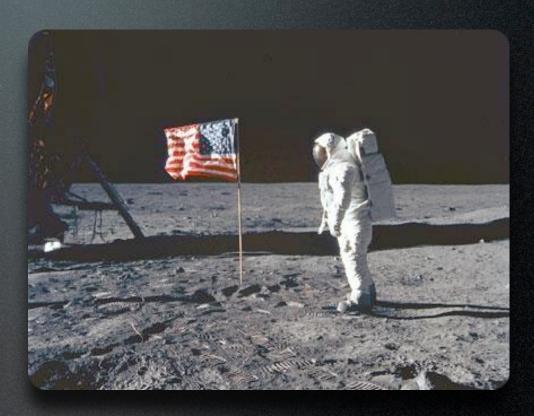
## If I only had a heart ...

- Knowledge without passion isn't enough
- Care deeply about something
- Follow your heart; enjoy yourself



#### Dreams

- "Dream no small dreams, for they have no power to move the hearts of men." Johann Wolfgang von Goethe
- "The future belongs to those who believe in the beauty of their dreams", Eleanor Roosevelt



#### Communication

- Writing and speaking is critical to success
- Scientists do not work in a vacuum
- Ask questions in class, meetings, etc.

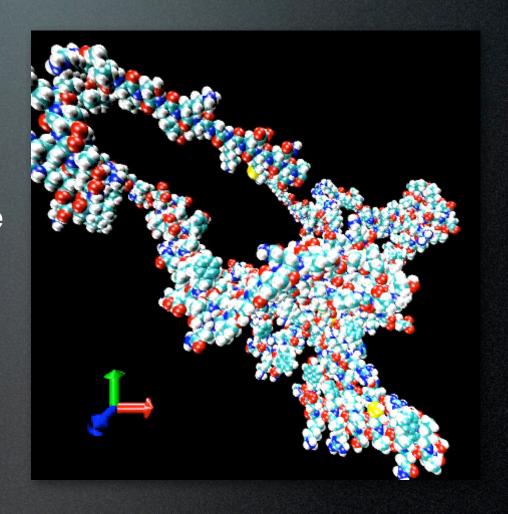
#### Confidence

- It's a scary world out there – you will need a LOT of courage
- The real enemy isn't always outside, sometimes it's inside
- Take risks failure IS an option



#### Fail to succeed

- Many of my successes have followed on the heels of failure
- If you always succeed you're probably not trying hard enough
- Particularly hard for firstgeneration and underrepresented groups



## Obstacles

- Lot of bad people out there
- Not always easy to recognize
- Overcoming obstacles is a sign of true maturity



## Overcoming obstacles

- Learn from the obstacles
- What worked what didn't work
- It's not about how many times you fail, it's about how many times you try



## Getting help

- A lot of good people out there also
- Many willing to help you if you listen to them
- Don't have to do everything by yourself



## Meeting the Professor

- First time visiting your professor
- Lots of fire and smoke
- Look behind the curtain



#### Behind the curtain

- Professors can point you in the right direction
- Can be scary to approach, but most are very helpful
- All want you to succeed



## No place like home

- Give back to your community
- Mentor your brothers, sisters, friends, ...
- Remember your roots –
  it's what gives you your
  strength



#### Elements for Success

- Knowledge (Brain)
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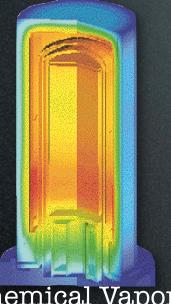
# Thank you!

## Speaker Bio

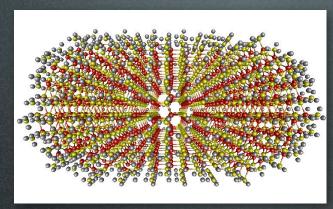
#### A little bit about me

- Born in Houston, Texas
- Moved to Mexico in first grade
- Moved back to Houston in fifth grade
- BS and MS in EE at Rice University
- Worked in Silicon Valley
- PhD in Computational Mathematics at Rice
- Worked at national labs (Sandia, LBNL) for past 21 years

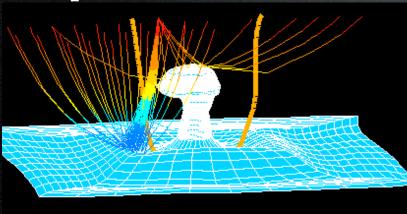
## Some areas I've worked in



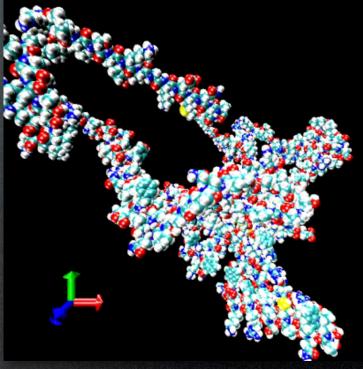
Nanoscience







Seismic Inverse Problem



Molecular Conformation