January 31, 2017

ENGR110/210
Perspectives in Assistive Technology

David L. Jaffe, MS

Instructor

11

Years

Questions?

Attendance Sheet, Evaluation Form, and Meet with Dave Signup

For all students:

- Attendance Sheet
- Meet with Dave signup – Teams or individual students

For everyone:

- Class Session Evaluation Form

First Field Trip – Thursday, Feb 9th

- ▶ VA Palo Alto Health Care System
  - ▶ Spinal Cord and Brain Injury Services
  - ▶ Assistive Technology Center

- ▶ Due to space limitations, it is only open to enrolled students and community carpool drivers.

- ▶ Who has to leave early?

Driver's Signup Sheet

Car Pool Drivers' Signup Sheet - 2017

Field trips: Thursday, February 9th - VA Medical Center - Palo Alto
Tuesday, February 21st - Motion & Gait Analysis Lab - Menlo Park
Tuesday, February 28th - Magical Bridge Playground - Palo Alto

Students and community members: Please indicate your availability to drive students to these field trips. Unless otherwise arranged, the departure point from Stanford is the Thornton Center

Driver's name:	Dave Jaffe		
Cell phone:	650/892-4464		
Tours available:	☒ - VA	☒ - Gait Lab	☒ - Playground
Car model & color & number of passengers:	Black Acura Integra - 2		

Driver's name:	_____		
Cell phone:			
Tours available:	☐ - VA	☐ - Gait Lab	☐ - Playground
Car model & color & number of passengers:			
Available for early return @ 5:40:	☐ - VA	☐ - Gait Lab	☐ - Playground

- Field trips:
  - Thursday, February 9th - VA Medical Center - Palo Alto
  - Tuesday, February 21st - Motion & Gait Analysis Lab - Menlo Park
  - Tuesday, February 28th - Magical Bridge Playground - Palo Alto

Let me know if you are a solo driver so I can send you a map.

- Students and community members: Please indicate your availability to drive students to these field trips. Unless otherwise arranged, the departure point from Stanford is the Thornton Center.

A couple of take-aways

1. One concept that Peter emphasized was his need to objectively and systematically measure the performance of his project prototypes.

2. Another interesting item was his decision to put some of his design concepts in the public domain to allow others to bring them to market.

What Will Alphabet Be When It Grows Up?

John Pierce, one of Bell Labs' research managers, once said the organization's structure reflected the fact that "pursuing an idea takes, I presume, 14 times as much effort as having it." It was a keen insight born of Pierce's decades of experience. Creating a functional product from breakthrough science - the transistor, for instance - required not only extraordinary effort but also an extraordinary amount of time.

Bell Labs' biggest ideas, which at best took decades to commercialize, didn't ensure the company's long-term success in the competitive environment brought on by the breakup of its monopoly. That's a bitter truth about making big bets on world-changing technologies: often, commercializing the innovative idea is far more important, and more difficult, than coming up with it in the first place. John Pierce knew what he was talking about.

Read the entire article here.

What Makes it Difficult to Commercialize a Prototype?
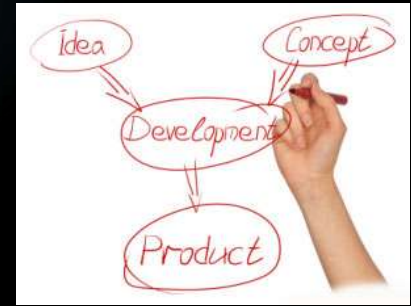
Short answer: It takes lots of $, time, and commitment to get a product to market

it doesn't happen automatically - you can't do it part time as a hobby

you may need years and millions of $

you need a BIG market and a BIG demand

you need to have insurance pay for it

you need patent protection

you need to start a company

you need a space and to hire good people

you may need FDA approval and product liability insurance

you need to have it manufactured, advertised, marketed, distributed, sold, supported

you need a lot of help

you need a lot of luck (probably most important)
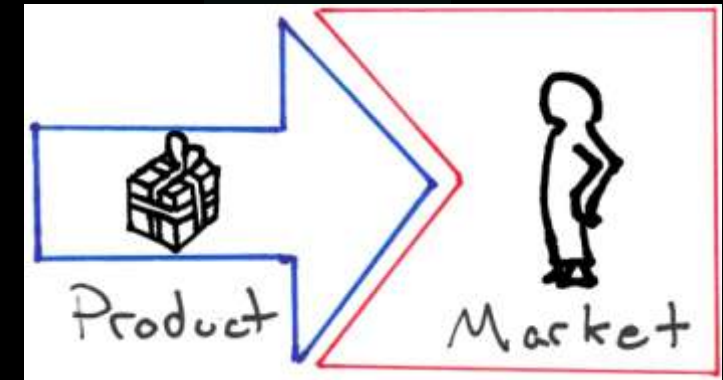
RESNA Student Design Competition

The RESNA Student Design Competition (SDC) is an annual competition that has showcased creative and innovative assistive technology designs that help people with disabilities function more independently for over 30 years. Student teams represent a wide variety of disciplines including mechanical, electrical, and biomedical engineering; computer information science; special education; architecture; physical and occupational therapy; and other fields of study.

Registration is now open for the 2017 Competition. By registering, student teams are indicating their intent to submit their final project by Tuesday, April 11th.

Prizes - Semi-finalist teams win a trip for two team members to the RESNA annual conference (June 28-30 in New Orleans) and a free membership to RESNA. One design, judged to be the most commercially viable, will receive a cash prize and product development consultation.

More information can be found on the Student Design Competition website.

RESNA
Rehabilitation Engineering and Assistive Technology Society of North America

Thursday, February 2nd

Collaboration: From User-based Design to Co-design

June M. Fisher, MD

Today

Humanistic Intelligence and HARCAD for Assistive Technologies

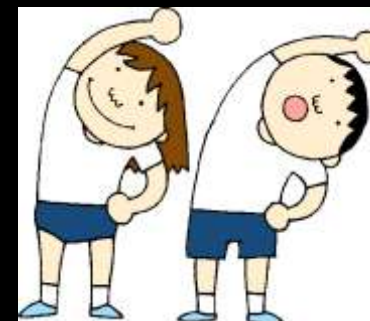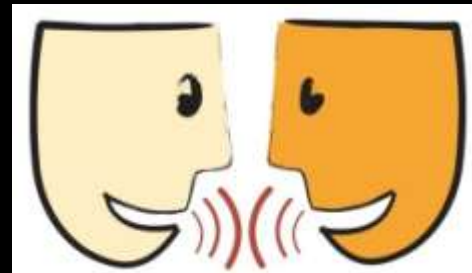Steve Mann, PhD
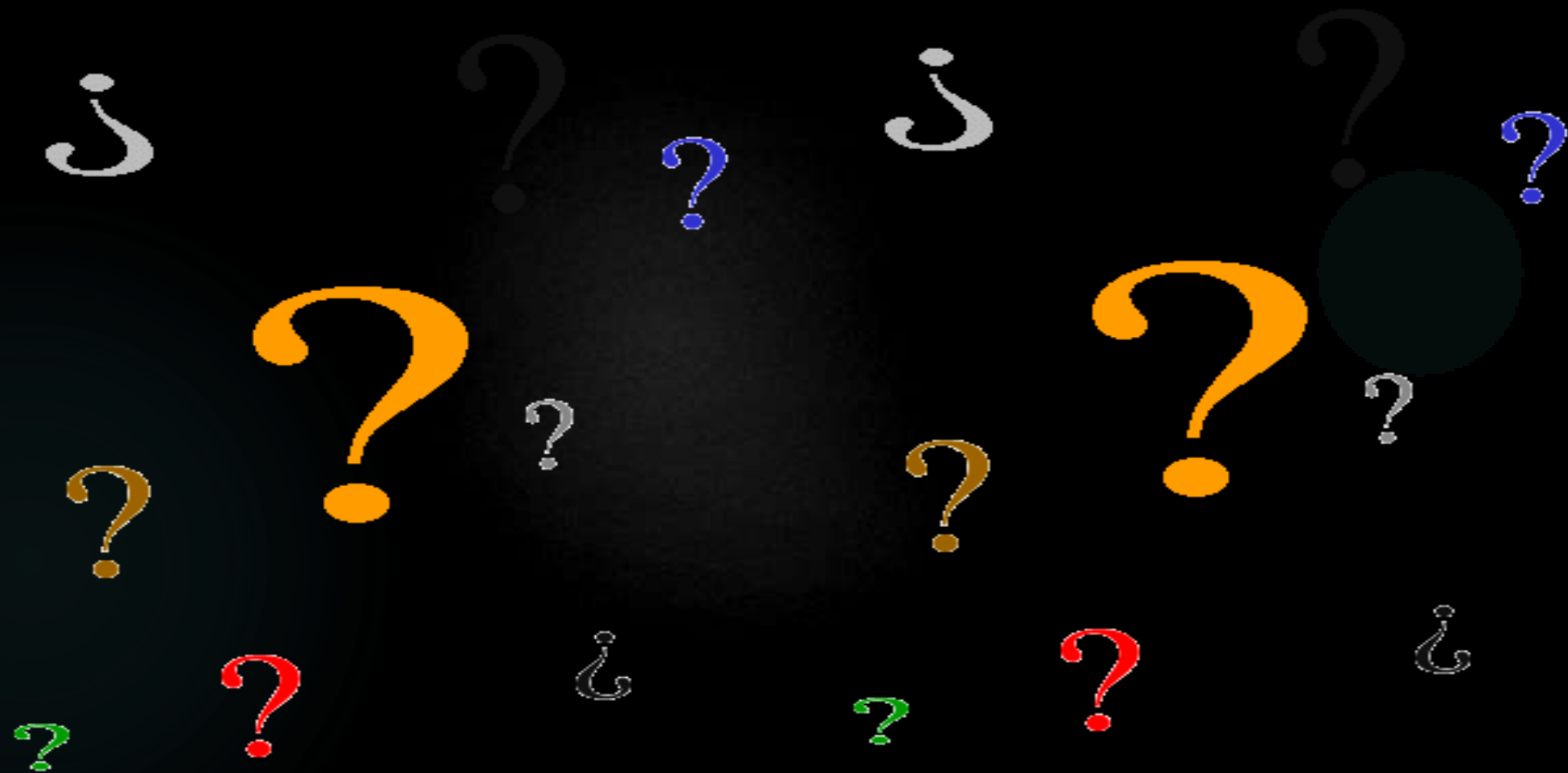
University of Toronto

Short Break

Break Activities

- Sign attendance sheet
- Grab a cookie
- Stand up and stretch
- Take a bio-break
- Text message, web-surf, email
- Talk with classmates
- Reflect on what was presented in class

Questions?

Adjourn

class dismissed

Laptops Galore