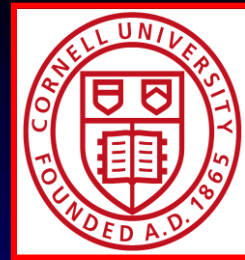
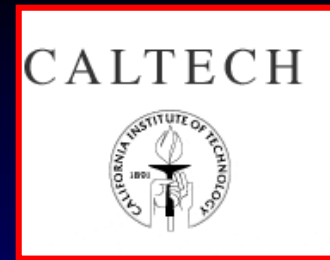


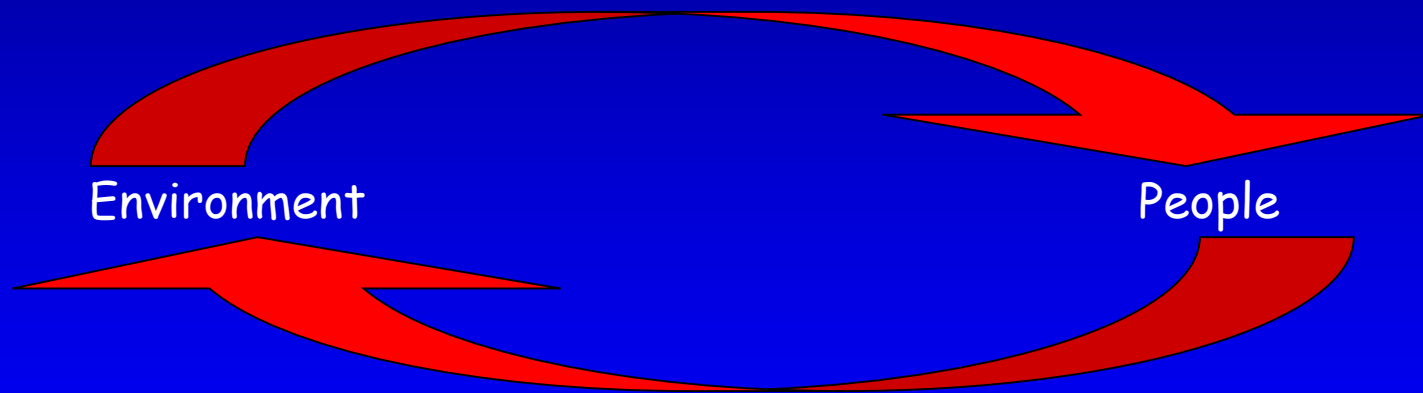
Excellence is not a Goal.
It's a Journey.



Prof. Daniel Zajfman
Weizmann Institute of Science



Excellent researchers require an environment that is just as good as they are.



Ideal Environment Nurtures Excellence

Singapore airlines (SIA)

"best business class",
"best cabin crew service",
"best in-flight food",
"best for punctuality and safety",
"best for business travelers",
"best air cargo carrier" and
"Asia's most admired company".



Excellence, is a dynamic phenomenon and not a point of arrival.

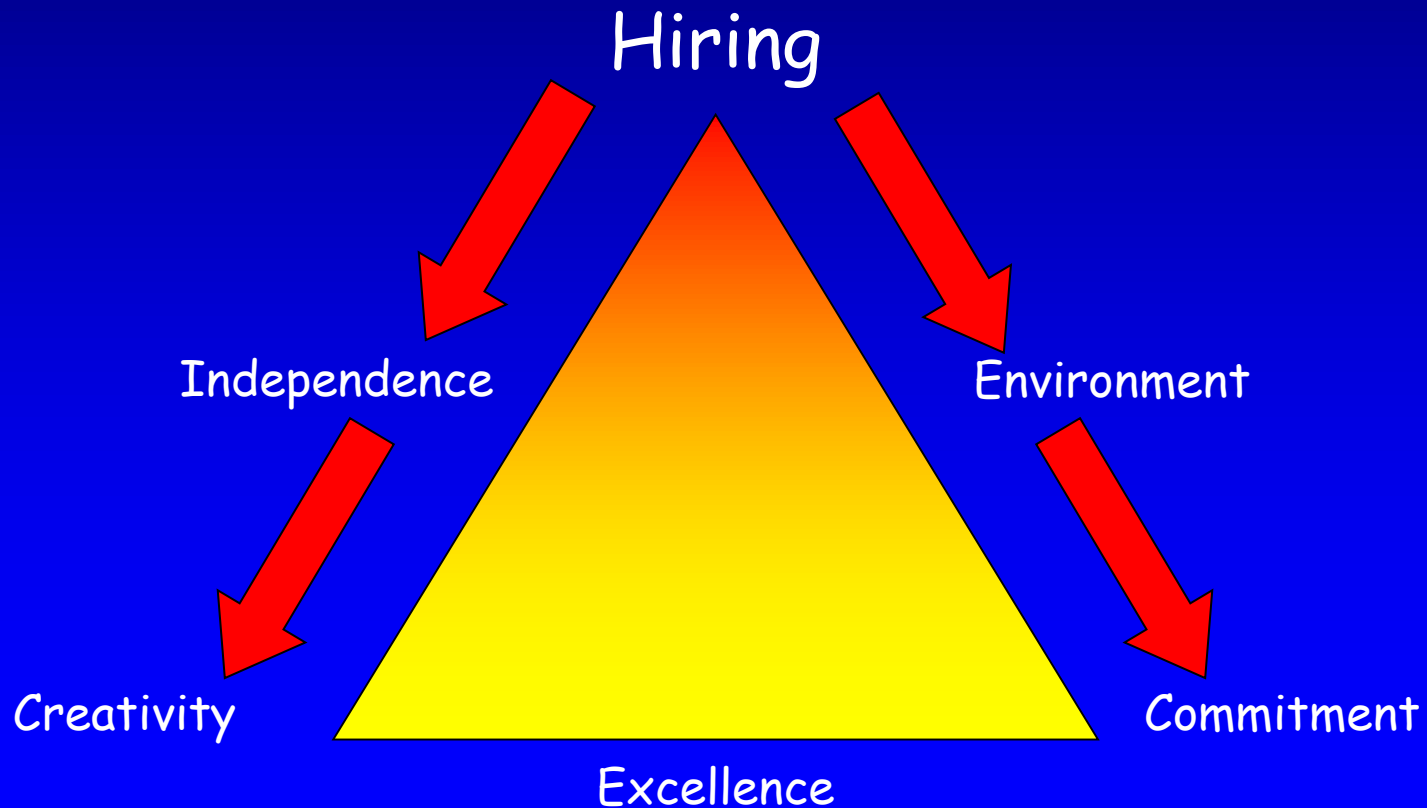
Because even the highest standards for the service provider soon become the minimal standards for the customer.

This is why excellence is not a goal, but a journey.

➔ SIA is one of the most profitable airlines: Excellence can be profitable

What is the secret behind excellence?

The **secret** to building a culture of **excellence** starts with a focus on people



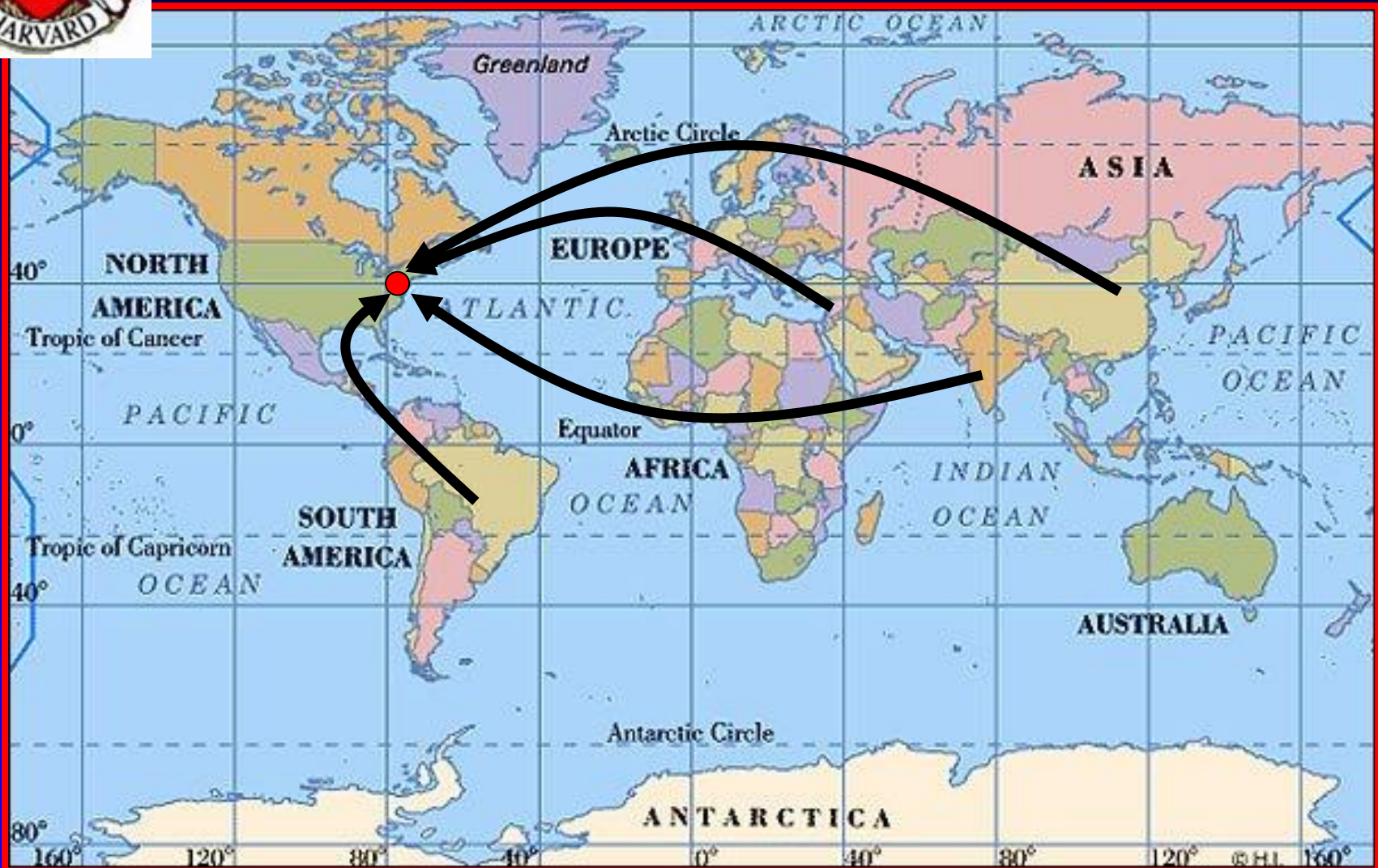
Excellence is people driven

Where are the excellent people?

The Israeli Problem
7 millions vs 7 billions.



The pool of talent: 7 millions vs 7 billions.

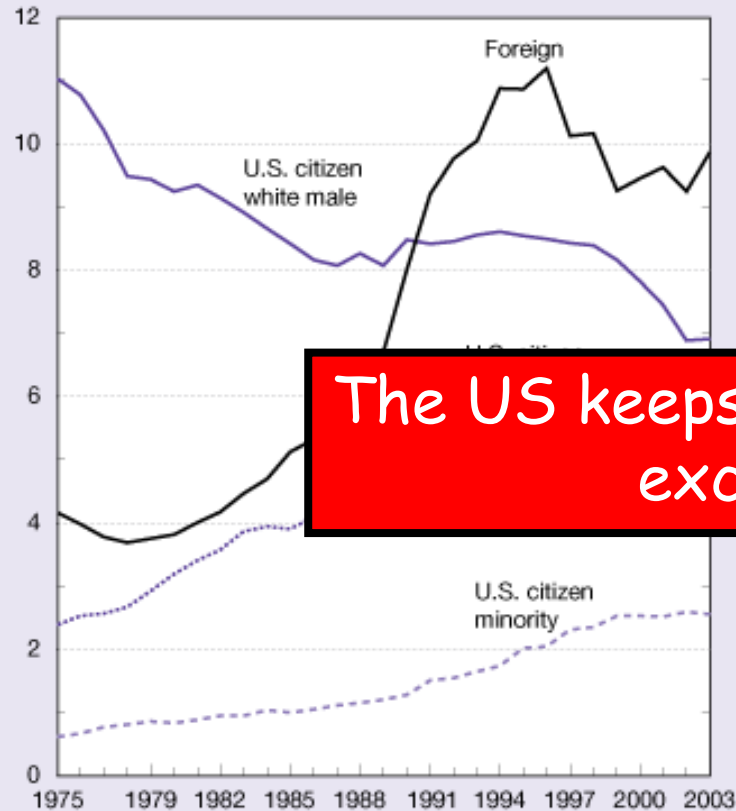


Science and Engineering degrees in the US

Figure 2-18

U.S. S&E doctoral degrees, by sex, race/ethnicity, and citizenship: 1975–2003

Degrees (thousands)



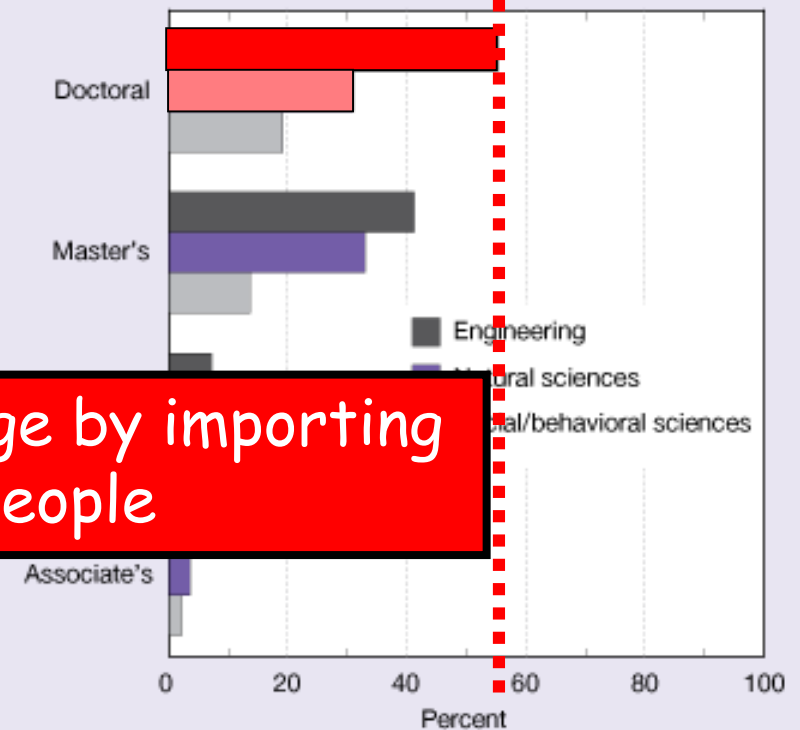
NOTES: Foreign includes permanent and temporary residents. Minority includes Asian/Pacific Islander, black, Hispanic, and American Indian/Alaska Native. Degree recipients with unknown citizenship omitted.

SOURCE: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, WebCASPAR database, <http://webcaspar.nsf.gov>. See appendix table 2-31.

Science and Engineering Indicators 2006

Figure 2-20

Foreign share of U.S. S&E degrees, by degree and field: 2002 or 2003



NOTES: Doctoral degree data are for 2003; other data are for 2002. Foreign includes temporary residents only. Natural sciences include physical, biological, agricultural, computer, earth, atmospheric, and ocean sciences and mathematics.

SOURCES: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey; and National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates, WebCASPAR database, <http://webcaspar.nsf.gov>. See appendix tables 2-25, 2-27, 2-29, and 2-31.

Science and Engineering Indicators 2006

The pool of talent:
7 millions vs 7 billions.



The Israeli Problem
7 millions vs 7 billions.

Be people driven, not subject driven

Academic Research as an Example

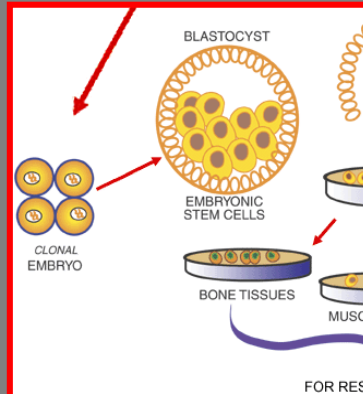
Educate

The People Driven Method

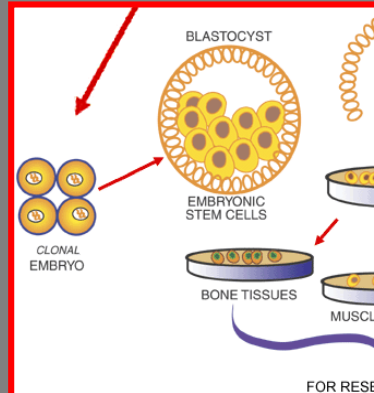
Scientist



Proposal



Proposal



Financial support

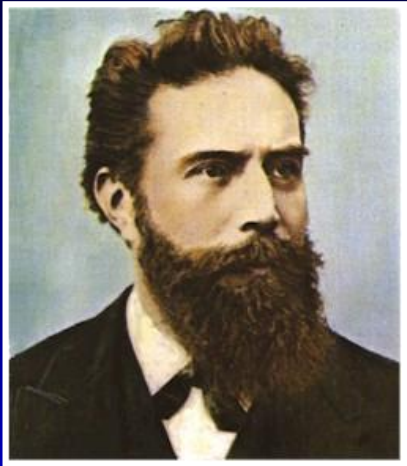


Laboratory



Independence:
The Kimmel Award at the
Weizmann Institute of Science

People (Curiosity) Driven Research

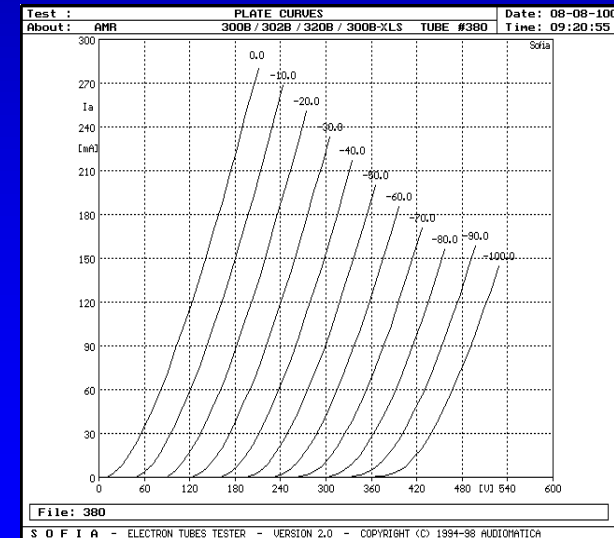


Röntgen



Crookes tube

Excellent people work in excellent field,
and they can often provide answers
to questions that cannot be asked



The Israeli Problem
7 millions vs 7 billions.

Be people driven, not subject driven

Academic Research as an Example

Educate

How to educate so that people can provide
answers to questions that they cannot ask?

How to Educate Excellence?

Curiosity leads to motivation, which leads to excellence

Is curiosity innate, or is it learned?
No clear answer to this question.

But there must be a Biological Basis:
Self-Preservation and Survival



So what should we do so that we don't kill our kids curiosity?

It is not what you learn,
but very often how you learn it,
and who is the teacher

Since excellence is not a goal,
but a way of life, it should be
taught by role model



Weizmann Approach: Excellence Landscape

Basic Science only

Physics

Imbedded multidisciplinary
approach

Mathematics

Graduate school and
Public Education

Biology

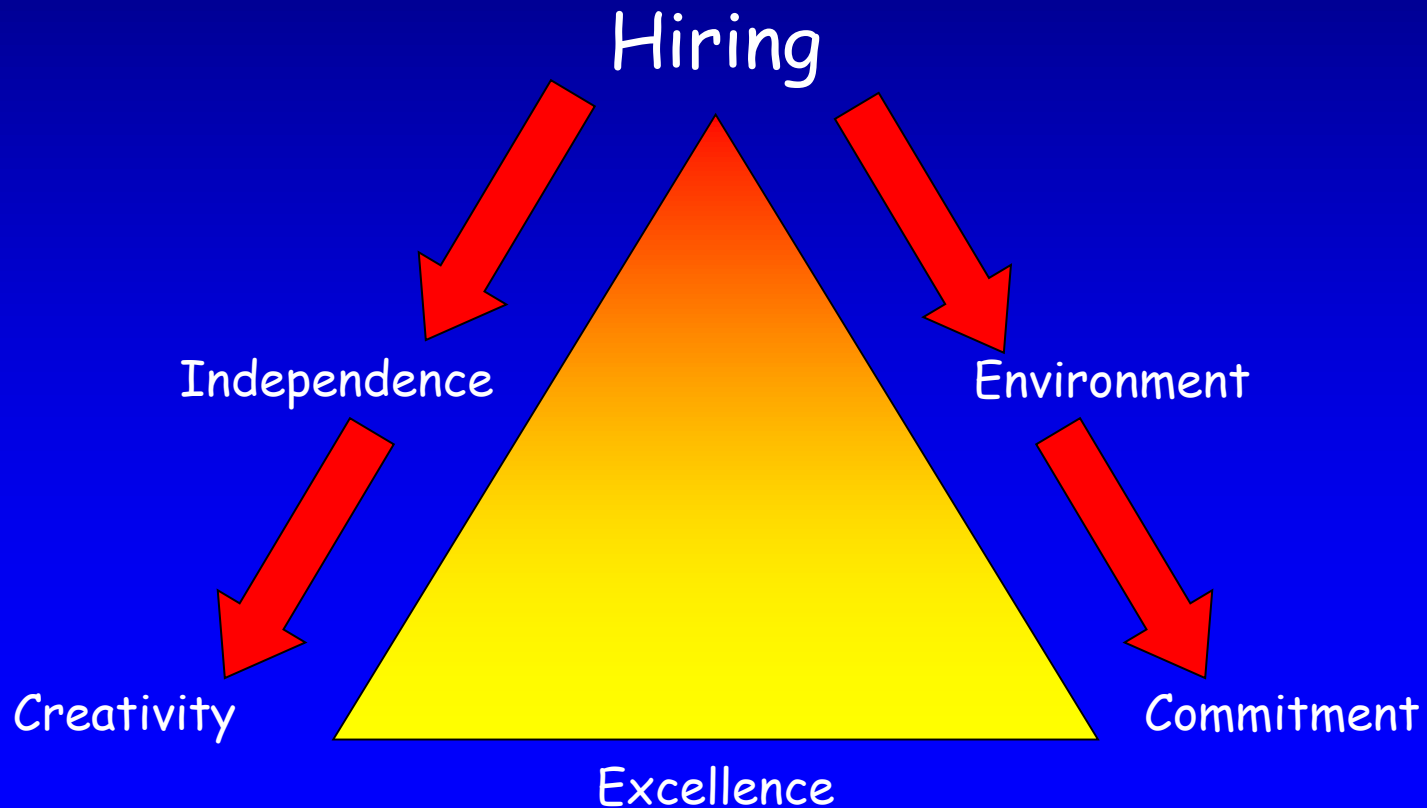
Chemistry

High level education program

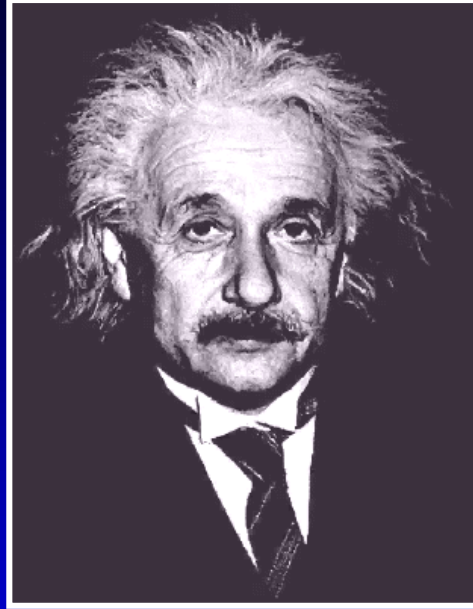
Intellectual Property rules
and technology transfer



The **secret** to building a culture of **excellence** starts with a focus on people



Is basic research changing our world?



"The world we have created
is a product of our thinking.
It cannot be changed without
changing our thinking".

