Life After Dissertation: 
*deriving maximum value from career investments*

UC Davis 
Current Progress in Biotechnology 
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Introductions
Genentech Overview

• After you complete your PhD, how sure are you that you will be satisfied with the results of your efforts?
• What is “success”, and how will you measure it?
• Regardless of the job offer that you accept, how can you be assured that you derive maximum value from your career investments?
Treasure Hunt (a)

You each have an envelope with some cards inside.

On each card is printed the name of a “value” that you might consider important in your life… or not!

Remove the cards and look through them.

If your job “landscape” included these values, and no others, how happy would you be, on a scale of 1 (not happy) to 5 (extremely happy and fulfilled)?
### Values – an individual matter

- Humor
- Gratitude
- Respect
- Hard work
- Influence
- Flexible schedule
- Fame
- Family happiness
- Creativity
- Innovation
- Cooperation
- Economic security
- Fun
- Great healthcare benefits
- Competitiveness
- Spirituality
- Groundbreaking science
- Mentoring others
- Learning
- Calm

- Balance
- Achievement
- Special rewards
- Close friendships
- Lots of travel
- Independence
- New challenges
- Helping others
- Serving customers
- Authenticity
- Teamwork
- Collaboration
- Equality
- Fairness
- Responsibility
- Wealth
- Communication
- Continuous improvement
- Steady pace
- Lots of time off

- Integrity
- Orderliness
- Freedom
- Fast paced
- Constant changes
- Courage
- Loyalty
- Power over others
- Personal development
- Wealth
- Self Respect
- Membership
- Individuality
- Recognition
- Power
- Honesty
- Thrifty
- Parties
- Serving the community
- Big bonuses
You each have two minutes to swap your cards with others folks in order to get the best set of “values” based on your own priorities.

You can trade “two for one” but you cannot give a card away or discard a card.

>>>>>>>>>>>>>> GO! >>>>>>>>>>
Values Game – Lessons

\[ y = f(\text{PhD}) = \frac{d(\text{skills, knowledge, Z})}{d(X)} \]

Where \( y = \text{“Success”} = \text{Being able to enjoy what YOU value} \)

• You can’t solve this equation if you don’t know what “X” is.
  From what do YOU derive value and satisfaction?

• The path of least resistance may be a dead end.
  – When you don’t know where you want to go, then any road will get you there… but you may not be happy with the results.
  – Determine your values and your “metrics of success” BEFORE you accept your first job. Use them as a beacon to guide your career. Write them down.
  – Don’t settle for a job that conflicts with your values.
  – Examine your values periodically… they may change!
Caryle Vann

- MS in Chem.Engr., MBA
- Vacaville CHO facility
  - Largest in world
- Technology Group
  - Process & equipment
- Sr. Engineering Project Manager
  - Technical, schedule, financial responsibility for changes to facilities, utilities or process equipment

Ethics  Serving others
Integrity  Teamwork
Responsibility  Learning
Growth  Cool science
Problem Solving  Financial stability
Genentech’s Mission

• Our mission is to be the leading biotechnology company, using human genetic information to discover, develop, manufacture and commercialize biotherapeutics that address significant unmet medical needs.

• We commit ourselves to high standards of integrity in contributing to the best interests of patients, the medical profession, our employees and our communities, and to seeking significant returns to our stockholders, based on the continual pursuit of scientific and operational excellence.

Genentech was founded in 1976 by venture capitalist Bob Swanson and biochemist Herb Boyer.
Product Approval Timeline

DNA Founded

'76 '85 '87 '90 '93 '96 '97 '98 '99 '00 '01 '02 '03 '04 '06

Protropin® [somatrem for injection]

Nutropin® [somatropin (rDNA origin) for injection]

Nutropin AQ® [somatropin (rDNA origin) injection]

ACTIVASE® ALTEPLASE

Rituxan®

Pulmozyme®

dornase alfa

INHALATION SOLUTION

Nutropin DEPOT™ [somatropin (rDNA origin) for injectable suspension]

cathflo® ACTIVASE® (ALTEPLASE)

AVASTIN® (bevacizumab)

Xolair®

Omalizumab

Xerecort® (rescue inhaler)

Tarceva® erlotinib tablets

Lucentis® RANIBIZUMAB INJECTION

Herceptin® trastuzumab

TNKase® Inchekin

Raptiva® efalizumab

Nutropin AQ® Pen" Cartridge [Somatropin (rDNA origin) injection]

"Nutropin AQ® Pen" Cartridge [Somatropin (rDNA origin) injection]

Nutropin AQ® Pen" Cartridge [Somatropin (rDNA origin) injection]
Passion For Our Patients

• We are committed to developing products that address significant unmet medical needs.

• We are committed to ensuring our marketed products are available to eligible patients treated for approved indications in the US who do not have insurance, cannot afford their out-of-pocket co-pay costs or need assistance with insurance reimbursement.

**Commitment to patient access**

• Since 1985, we have donated approx. $1 billion in free medicine to uninsured patients through the Genentech® Access to Care Foundation (GATCF) and other charitable programs.

• Since 2005, we have donated > $140 million dollars toward co-pay assistance to eligible patients.
Commitment to our Community

Commitment to playing a positive role in our communities

In 2007, we provided more than $33 million in cash contributions to support a wide range of educational and community initiatives.

- Employee Volunteer Program
- Contribution Matching Program
- Genentech Goes to Town

Every year we also collaborate with patients, patient advocates and healthcare providers to develop disease education and awareness campaigns.

In July 2007, Genentech was included on the San Francisco Business Times list of the top 100 corporate philanthropists in the Bay Area.
Commitment to Science

• The passion that drives our business is the belief that the science of life - biology - holds the keys to solving life’s toughest health challenges. Innovative science is the basis of our existence and the foundation for our future.

• Genentech reinvested more than $1.8 billion into research and development in 2006, approximately 19% of its operating revenues — significantly more than the pharmaceutical industry average.

Founders Research Center
Single largest biotechnology research facility in the world
Commitment to Employees

FORTUNE
- In 2007, named #2 on the magazine’s annual list of the “100 Best Companies to Work For” - ninth consecutive year on the list

Working Mother
- In 2007, named one of the "100 Best Companies for Working Mothers" for 15th time

Science Magazine
- In 2007, named a “top employer in the biotech, biopharma, pharma and related industries” for the sixth year in a row

San Francisco Business Times
- In 2007, ranked Genentech #1 on its list of the “Best Places to Work in the Bay Area” - third consecutive year on the list
The Casino Game

Your are on a trip home and must change planes in Las Vegas. Your connecting flight is delayed for 12 hours due to mechanical problems. You complain! Loudly!

In order to appease you, the airlines hands you $1000 to spend on gambling activities while you wait for the plane. You must return the $1000 when you leave the casino, but you can keep any money that you win.

You must pick only one casino in which to gamble:

Which would you choose?
You ask the airline customer service representative for more information about the two casinos. The airline representative gives you the information below.

You must pick only one casino in which to gamble:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>Costs $200 per round to play</td>
<td>Costs $100 per round to play</td>
</tr>
</tbody>
</table>

Which would you choose?
You ask the airline customer service representative for still more information about the two casinos. The airline representative gives you the information below.

**You must pick one casino in which to gamble:**

<table>
<thead>
<tr>
<th>Casino</th>
<th>Cost per Round</th>
<th>Prize if Won</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$100</td>
<td>$200</td>
</tr>
<tr>
<td>B</td>
<td>$250</td>
<td>$500</td>
</tr>
</tbody>
</table>

Which would you choose?
You still can’t make up your mind. You plead for even more information, and the airline representative gives you the information below.

**You must pick only one casino in which to gamble:**

- **50% odds to win**
  - **A**
    - Costs $100 per round to play
    - Pays $200 per round if won

- **80% odds to win**
  - **B**
    - Costs $250 per round to play
    - Pays $500 per round if won

Which do you choose? Why?
The Casino Game (e)

.... But if the odds were different...

80% odds to win

A
Costs $100 per round to play
Pays $200 per round if won

50% odds to win

B
Costs $250 per round to play
Pays $500 per round if won

Which do you choose? Why?
The Casino Game -- Lessons

It does not necessarily matter which game pays the most…
… you must also account for what you pay to play
…. but your odds to win matter even more!

No matter which casino you choose, you can maximize your gains by maximizing your odds of winning!

A

Costs $100 per round to play
Pays $200 per round if won

B

Costs $250 per round to play
Pays $500 per round if won
Maximizing your odds to win

Every employer has “other competencies” that are highly valued in addition to your technical skills and knowledge.

Your degree and your brainpower is only a “ticket” into the company.

Your “success”, once you have a job, is mostly determined by how well you use these “other competencies”

where

“Success” = Being able to enjoy what YOU value
They all have the “same ticket”…

“Success” = Being able to enjoy what YOU value

…but which one(s) will gain the most success from their career investments?
Other competencies …

**Emotional Competence**

- Self awareness
  - Emotional awareness
  - Accurate self-assessment
  - Self-confidence

- Self regulation
  - Self control
  - Trustworthiness
  - Conscientiousness
  - Adaptability
  - Innovation

- Motivation
  - Achievement drive
  - Commitment
  - Initiative
  - Optimism

**Social Competence**

- Social Awareness / Empathy
  - Understanding others
  - Attunement
  - Empathetic accuracy
  - Social cognition
  - Developing others
  - Service orientation
  - Political awareness

- Social Facility / Skills
  - Influence and Leadership
  - Communication
  - Conflict management
  - Change catalyst
  - Building bonds
  - Collaboration, cooperation, teamwork
  - Self presentation
  - Concern

*Taken from Daniel Goleman, *Working with Emotional Intelligence* (1998) and *Social Intelligence* (2006)*
You may be thinking…

Does this really matter to me? Aren’t my research skills and my technical knowledge enough?
Research shows…

In an study at UC Berkeley in the 1950s, 80 PhD students in science went through a battery of IQ and personality tests, as well as interviews to evaluate them on such qualities as interpersonal effectiveness, integrity, emotional balance, and maturity.

Forty years later, these scientists were tracked down and the “success” of each person’s career was measured (expertise, recognition in their field, career strength, etc.)..

“Emotional intelligence abilities were about four times more important than IQ in determining professional success and prestige – even for these scientists.”

“Neuroscience has discovered that our brain’s very design makes it sociable, inexorably drawn into an intimate brain-to-brain linkup whenever we engage with another person. That neural bridge lets us affect the brain – and so the body – of everyone we interact with, just as they do us.

... Our relationships have subtle, yet powerful, lifelong impacts on us.
... how we connect with others has unimagined significance.”

I am measured (and I measure my employees) against these “valued competencies” …

- Leadership
- Set and meet goals
- Hard work
- Creativity & innovation
- Learning
- Solid problem solving
- Self starting and directing
- Crisp decision making
- Continuous improvement
- “Lean thinking”
- Add value to the “bottom line”
- Manage projects (technical, budget, schedule)
- Strong Relationships
- Influence others
- Networking
- Humor
- Respect for others
- Cooperation
- Serve customers
- Teamwork
- Build consensus
- Collaboration
- Encourage
- Mentor and coach others
- Manage conflict
- Integrity
- Honesty
- Orderliness
- Thrive in fast pace
- Courage
- Gratitude
- Recognition
- Positive attitude
- Embrace new challenges and change
- Responsible and accountable
- Personal development
- Leveraging technical expertise
The Impact of Emotional and Social Intelligence

\[ y = f(\text{PhD}) = \frac{d(\text{skills, knowledge, Z=other competencies})}{d(X)} \]

You can’t solve this equation if you don’t know what the “Z’s” are.

From what does your employer derive value?

• Scientific skills and knowledge are only a part of your employer’s equation (20 – 70%?)
• Emotional and social intelligence empower your success with every employer
• Without high emotional and social intelligence, you limit your career options and your ability to succeed

…regardless of how you define success!

“Success” = Being able to enjoy what YOU value
Takeaways.....

\[ y = f(\text{PhD}) = \frac{d(\text{skills, knowledge, Z})}{d(X)} \]

\[ y = \text{“Success”} = \text{Being able to enjoy what YOU value} \]

\[ X = \text{YOUR Values, how you define success, happiness} \]
\[ (\text{Do you REALLY know what these are?}) \]

\[ Z = \text{“other competencies”} \]

Emotional and social intelligence abilities will empower your success in any career (and a lack of them will hinder you!)
The good news.....

\[ y = f(\text{PhD}) = \frac{d(\text{skills, knowledge, } Z)}{d(X)} \]

You can increase your emotional and social intelligence....

Get more information...
  Daniel Goleman
  *Social Intelligence* (2006)

*Exercise your emotional and social intelligence muscles*...
*Get coaching*
*Practice, practice, practice*...
Questions?