

# Fred-Talks

Volume I, Issue 3

## Inside this issue:

- Portraits of eminent scientists 2
- Books I have Read Recently 2
- Comments on Programmed Research 3
- Student Loans and Sallie Mae 3
- Food for Thought 4
- Crass Commercials 4

## Introduction to this Newsletter Issue

Hello again!

Welcome to my newsletter.

I hope you enjoy it or, at least, find it amusing. Or, perhaps, even irritating?

If you do not wish to receive any more issues, please email a message to me and just say, "Discontinue".

I intend to occasionally bring up issues that are someone else's point of view. These may or may not be my points of view, but are current points that I think should be dis-



cussed.

As such, I welcome discussion and/or expressions of your ideas on the subject.

Should you have dissenting views, please bring them up. I would be happy to include your comments with or without your by-line in the next

Fred G. Duerr, Ph.D.

[fgduerr@gmail.com](mailto:fgduerr@gmail.com)

### Blog Site

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

### Website



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

### Newsletter Archive

[www.chemeco.com/Newsletter.htm](http://www.chemeco.com/Newsletter.htm)

## Is It Ever Right To Kill Another Human Being?

The consensus of the general population and the government of the United States of America prohibits the killing of any human being unless certain exceptions exist. Those exceptions generally fall into one or more of the following categories.

1. unpreventable accidents
2. Government controlled executions
3. Military actions during warfare
4. Self defense
5. Protection of a third party

### 6. Abortion

Some people believe that there is never a valid reason to intentionally kill a human. Other people think that killing humans is reasonable under certain conditions. And some people think that it is acceptable to kill humans at any time or for any reason.

A debate should be based on reality and not obfuscated by wishful thinking or statements that are off the subject. For example, a human is formed when a human sperm fertilizes a human ovum. To say anything else is scientifically incorrect. A debate on abortion

should center on the validity of killing a human, and not on whether the fetus is, in fact, human.

I personally can rationalize the killing of humans for all of the above reasons. I must admit, however, that I prefer that such a decision is not made for me by a committee with an agenda.



Willem Martinus Beijerinck

Drawing by Ivan Bogdanovich Streblov 1931

## Portraits of Eminent Scientists — Willem Martinus Beijerinck

I have a personal collection of drawings of historically eminent Scientists, I intend to post a drawing along with information about the Scientist, on a bi-weekly basis. These pictures will become part of my book, "History of Biology", in process.

Willem Martinus Beijerinck was one of the most famous biologists of the late 1800's and early 1900's. He was born, raised, and lived most of his life in the Netherlands where he was both a teacher and a scientific investigator.

In 1888 he demonstrated that nodules on the roots of legumes contain bacteria enabling the legumes to utilize (fix) nitrogen in air as their necessary nitrogen source for growth and metabolism. He named one such bacterium *Azotobacter*.

He demonstrated and worked out the life cycle of the first filterable infectious agent, the tobacco leaf mosaic virus. He coined the term *Virus*.

He also defined General Microbiology as a major biological discipline, and established the Delft School of

Microbiology in *The Netherlands*.

It has been suggested by many scientists that if Beijerinck had worked on humans instead of plants, that he would have been considered as great a scientist as Max Planck and Louie Pasteur.

## Books I Read Recently

I may have mentioned that several years ago I went into a bookstore in Newport, Oregon, to find a book on the local fauna and flora. I found what I was looking for, and while checking out, the owner asked why I did not buy the whole bookstore?

I thought he was joking. He told me that he had advertised in several venues and wished to sell. Like a fool, I asked him, "How much do you want for the store?" He quoted a price, and I purchased the whole thing. I did not realize at the time that I just purchased a job. It was more than I needed or wanted. I had just retired from teaching, was a bit bored, and just wanted to read a book in my spare time.

The book I purchased was *Beyond the Outer Shores* by Eric Enno Tamm. It was advertised as "The Untold Odyssey of Ed Ricketts, the Pioneering Ecologist Who Inspired John Steinbeck and Joseph Campbell."

I first became aware of Ed Ricketts when I attended a summer biological session in 1961 at the Oregon Institute of Marine Biology in Charleston, Oregon. Ed Ricketts wrote a book called *Between Pacific Tides*, and this was the semi-official textbook for the class. It was also when I first became aware that the character "DOC" in Steinbeck's book *Cannery Row* was modeled after Ed Ricketts.

Further study informed me that Ed Ricketts, John Steinbeck, and Joseph Campbell were close friends for many years in the Cannery Row section of Monterey, California. Tamm goes a bit further and suggests that Ricketts was more than just a close friend to these famous authors, but was their mentor. Tamm's biography of these people at this time in their lives is an excellent read.

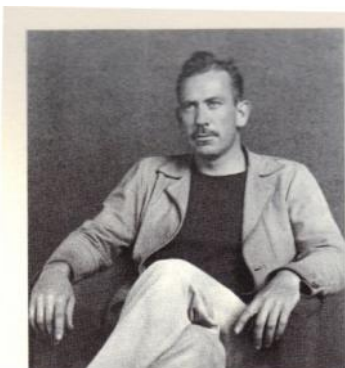
While working toward my doctor-

ate at the University of Minnesota, I was required to be able to read two foreign languages, pass a two week written examination, take an oral examination, and spend a period at a marine station. The introduction to Ricketts and marine biology I received that summer has remained one of the highlights of my education. Ed Ricketts became one of my heroes, and still is today.

It is a special pride to me that the paper I wrote about research I did at the Oregon Institute of Marine Biology that summer is cited in the newer editions of Ed Ricketts' book *Between Pacific Tides*.



Ed Ricketts



John Steinbeck



Joseph Campbell

## I Do Not Like Programmed Research

Programmed research is research done by a committee. The committee decides which goals they are going to pursue, the direction the research will take, and what results they wish to obtain. This type of research is promulgated, in part, by the complexity and expense of certain research endeavors. I have heard scientists say that certain projects are too grandiose, too expensive, and too time consuming for individuals to carry out.

Colleges and universities derive their income from tuition, State funds, and philanthropic sources. Additional income is supplied when they receive overhead money from grants their faculty members receive from outside agencies, such as the federal government. This overhead money amounts to between 40% to ~55% of the total grant fund. Academic institutions tend to actively encourage grant application and funding.

Advancement and promotion at colleges and universities are frequently tied to the numbers of professional papers a faculty member publishes and to the grant money he or she acquires. This

stimulates and encourages researchers to apply for and receive as many grants, and get as many papers published as they can. This is true even if the author list on the published paper is shared with many other individuals. The demand placed on researchers to acquire grant funding encourages misconduct in their activities. "The Scientist Dec 30,2013" recently published articles about more than twenty separate examples of research misconduct.

Since institutions get to spend received overhead money as they wish, they can pay research scientists less from their own funds and more from the granting agency. Whereas academic staff can expect to achieve continual employment and tenure, people paid from grant overhead money are hired on a temporary basis. When the grant is over, they are unemployed. Grant money is known as "soft money". Employees hired from college or university funds are said to be on "hard money".

Many such temporary employees must spend research time applying for either new grants, or continuation of existing grants.

For the above reasons, much research today, is done by groups. The work is divided up and assigned to individuals. These individuals are sometimes ignorant of the general purpose of

**Fred's Whole Picture Principle:**  
*Research scientists are so wrapped up in their own narrow endeavors that they cannot possibly see the whole picture of anything, including their own research.*

the research project. It has been my personal experience that "getting my hands dirty" while in a lab sometimes gave me insights that I would not have observed if I just perused the results from a table of data.

I believe researchers sometimes miss important observations when they "farm out" lab work to other people. I also believe that some of the most significant research findings are done by, as I call them, Review Artists.

### **Parkinson's Sixth Law:**

*The progress of science varies inversely with the number of journals published.*

## Student Loans

Today seems to be another rave for my ranting. I don't know whether to follow the Bard ("suffer the slings and arrows of outrageous fortune"), or rant a bit ("Was soll all der Schmerz und Lust" Goethe), or just shut up and quit whining.

Last week I received a letter from a collection agency suggesting that if I didn't pay the balance on a student loan, they would "stand

me on my head and pound sand ... my ass". It seems that there is a balance on a student loan I co-signed almost 30 years ago with Sallie Mae. With the interest and fees and fines, the amount of money they are asking for is now ten times greater than the original loan. Meanwhile, the government is taking the money out of my social security payment. Oh well, easy come, easy go.

Anyway, I don't have the money, and if I did, I think I would take up drinking and spend it all on booze.

Thanks, I feel better now. Do we have debtor's prisons yet?

I'll conclude by saying that, in spite of the cost, a college education is worth the time and money spent obtaining it. I believe this is true financially in the long run, but more important, for self-esteem and acquired knowledge.

Having said all of the above, I recommend that you carefully explore options available to you for college education. Check out **\$ for Dummies**, etc.

And! **Never** co-sign a Note that you don't expect to have to pay.



# Food for Thought

Number 1

Number 2

From Survivorship Bias  
"You Are Not So Smart"

Distorted from cartoon by S.  
Haris

## The Misconception:

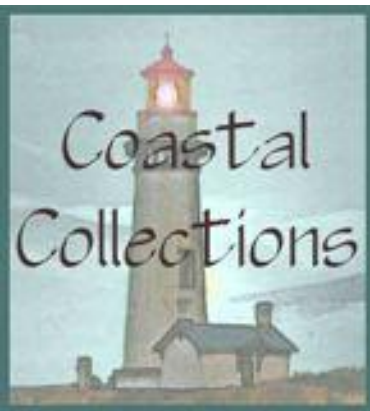
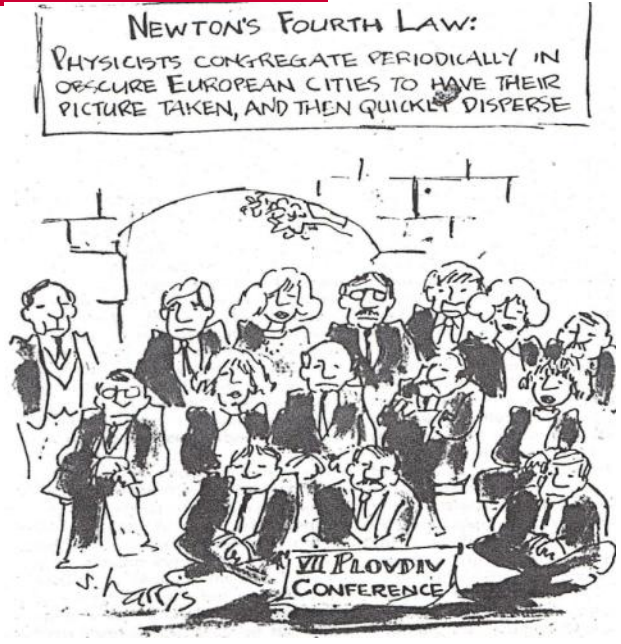
You should focus on the successful if you wish to become successful>

## The Truth:

When failure becomes invisible, the difference between failure and success may also become invisible.

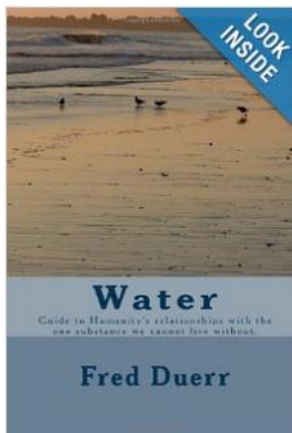
## Newton's Fourth Law of Motion:

Scientists congregate periodically in obscure European cities to have their picture taken, and then quickly disperse.



## Coastal Collections

My wife, Diana, and I have somehow acquired several thousand books on various subjects. Click on the image at left to take you to our website, where you can search our inventory of books for sale at Biblio.com.



I have written a small, 54 page, primer on water. It is designed to give basic information to the general public.

to adjust the price to as low as \$0.99 in certain cases.

It is available as a paperback book (Water, by Fred Duerr), ISBN 10 - 1482773872, and as a Kindle, ASIN B0OCMI3K5A from Amazon.

Click on the book image to take you to it's page on Amazon.com.

Amazon has various promotions