

# Preplication

NICAR 2015 (Atlanta)

Bill Alpert

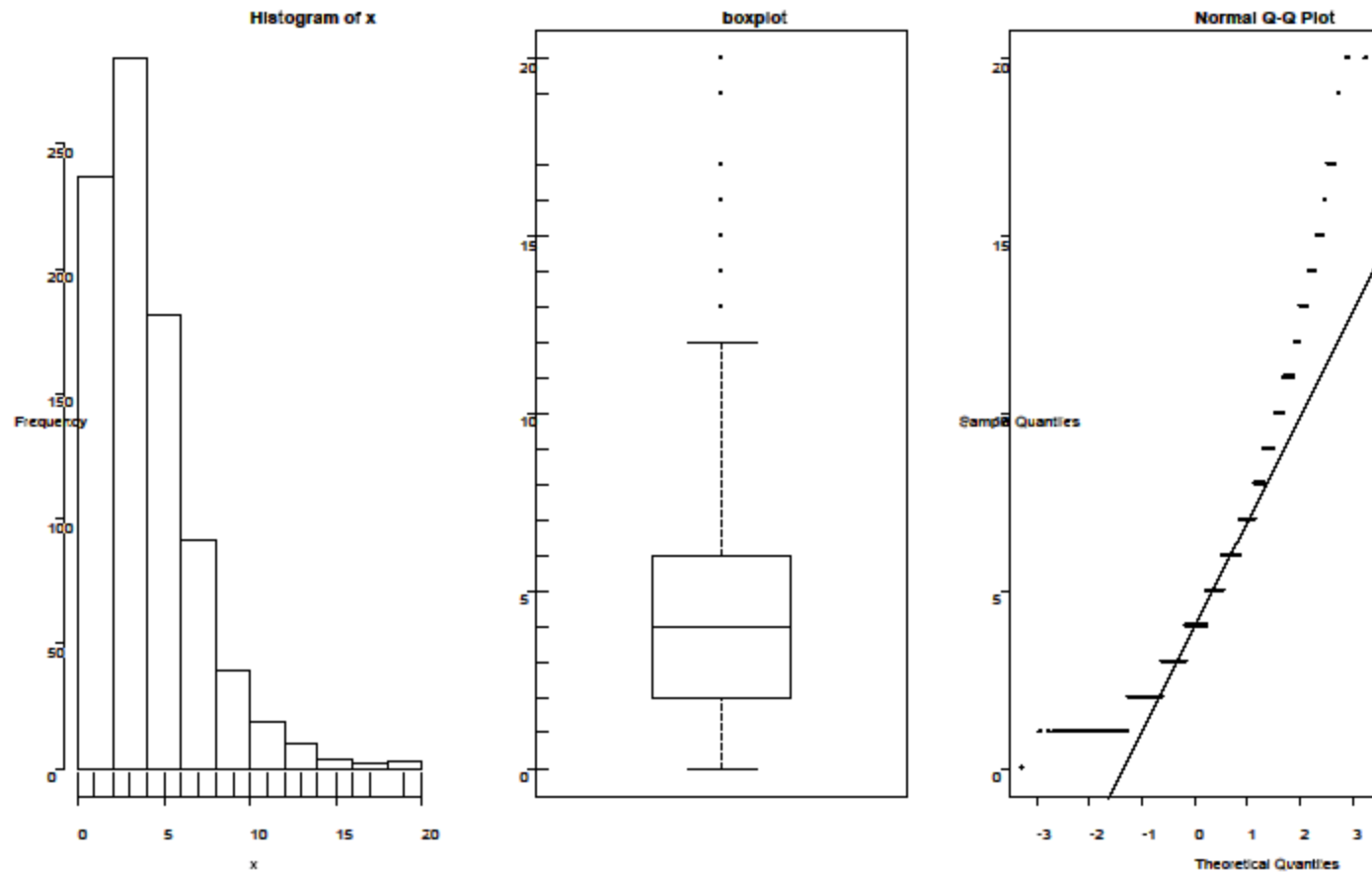
Barron's – Dow Jones

**HELLO**

my name is

Bill Alpert

# Andrx FDA applications were outliers among 1,000 generic drugs



Philadelphia NICAR 2002

# The FDA punished Andrx after our story



BARRON'S

**Monday, March 11, 2002**

**Dirty Tricks in the Land of Generic Drugs**



A financial weekly  
founded in 1921...



...by the owner of ***The Wall Street Journal***:  
a gentleman by the name of Clarence Barron.



# Clarence Barron helped expose the swindler Charles Ponzi in 1920



## PONZI PLAN MEANS

2,463% PROFIT IN YEAR

AN EASY WAY FOR THE ALLIES TO CLEAN UP  
THEIR WAR DEBTS OR GERMANY  
HER INDEMNITY

*One Million in Twelve Months Mounts to \$25,000,000 in  
Two Years to \$657,000,000—Compound Interest  
Expands \$100 to \$65,684 in Same Period—  
Every Lillion Means 20,000,000  
Reply Coupons*

Boston—It is a pity in these hard-up times that Ponzed finance wasn't earlier invented. Foreign exchanges have been out of joint for some years now. The chance was there right along. Chancellors of exchequers, secretaries of various treasuries, and other budget balancers, would have found Ponzi a very present help in time of fiscal trouble. He could multiply their revenue loaves and fishes.

The individual now suing Ponzi for a million on the basis of \$200 first placed with him, on alleged partnership grounds, has the right idea. For Ponzi's plan means a total return at the end of a year of 2,463%; at the end of two years of 65,587%; at the end of three years of 1,688,300%. Why keep on?

Give Ponzi a million, and in a twelvemonth he will expand it for you to some \$25,000,000; in two years to \$657,000,000; in three years to \$16,885,000,000. Surely the Allies could spare him a million, and within three years clean up that debt tangle. Germany might hire him to wipe out the indemnity within four years.

Great is the magic of compound interest—when you start off at the rate of 405% a year for your first forty-five days, and accordingly climb to your full 2,463% for your first eight 45-day periods, or one year. For who could refrain from reinvesting both principal and profit with such a wizard?

But the average citizen hasn't a million? Let him start with a mere \$100—a trifle in these times. What can Ponzi's magic do with it? Simply this:

First year			Second year		
\$100			\$2,562.90		
\$150	45 days		3,844.35	45 days	
225	90 "		5,766.53	90 "	
337.50	135 "		8,649.79	135 "	
506.25	180 "		12,974.68	180 "	
759.38	225 "		19,462.02	225 "	
1,139.07	275 "		29,193.03	270 "	
1,708.60	315 "		43,789.55	315 "	
2,562.90	360 "		65,684.33	360 "	
% profit	2,463%		Profit	2,463%	
Total profit on \$100 for two years			65,587%		

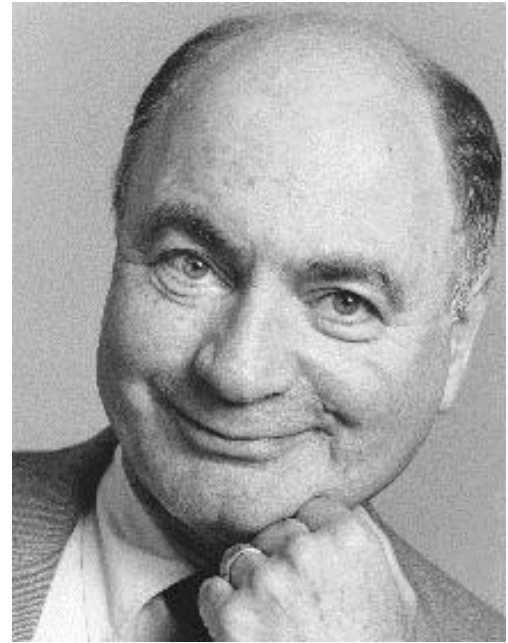
At the end of three years the aggregate profit would be a trifle over \$1,680,000, on \$100 first tossed to Ponzi!



We warned readers against Bernie Madoff in 2001, seven years before he turned himself in.



Alan Abelson  
started writing for  
Barron's in 1956,  
the year I was  
born





# Prof. Abe Briloff



# Why we're here

BARRON'S

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FEATURE

## **Exclusive: Who Makes Money on Your Stock Trades**

*Small investors actually get good prices from brokers and market makers. Barron's ranks them.*

By [BILL ALPERT](#)

February 28, 2015

In the furor surrounding last year's best-seller *Flash Boys*, by Michael Lewis, many retail investors were spooked by the book's i

# Why Reproducible Research ?

Credibility -- Evidence for your story's truth.

Sharing -- Give other groups a head start.

Quality -- Reinforces good work practices,  
e.g. Do It Once, commenting, version control,  
no cutting & pasting.

Teamwork – Easier collaboration,  
with others and your future self.

# Reproducing vs. Replicating

# Requirements for Reproducibility

1. Include the original unmodified data sources.
2. If raw data is transformed,  
preserve that transformation in scripts.
3. Document everything you do  
using # comments.
4. Produce a "human digestible" artifact  
(.html, .pdf etc.).

**The R Series**

# **Reproducible Research with R and RStudio**

Root			
Research Project			
Data	Analysis	Presentation	
MainData.csv	MainAnalysis.R	Article	Other
GatherSource	ResultsFigures	Paper.Rnw	Slideshow
Makefile	Figure1.R	Main.bib	Slideshow.Rnw
MergeData.R	Figure2.R	Packages.bib	Website
Gather1.R	Figure3.R	figure	Website.Rmd
Gather2.R		Figure1.pdf	
Gather3.R		Figure2.pdf	
		Figure3.pdf	

**Christopher Gandrud**

 **CRC Press**  
Taylor & Francis Group  
A CHAPMAN & HALL BOOK

# A Good Book

<https://github.com/christophergandrud/Rep-Res-Book>

<https://www.coursera.org/course/repdata>

“Reproducible Research

Part of the [Data Science Specialization](#) »

Learn the concepts and tools behind reporting modern data analyses in a reproducible manner...”

Don't just reproduce....



Don't just reproduce....

Preplicate !

Preplication =

Replication in a story's  
preparation.

# Why Preplication ?

- No Surprises – The data version
- Fairness
- Duty of care
- ...

# Why Preplication ?

- No Surprises – The data version
- Fairness
- Duty of care
- Getting the answer right

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# Requirements for Preplicability (continued)

5. Confidentiality: compartmentalize sources you're "confronting" from each other's data.
6. Free, open source (R, iPython notebook, PC/Mac)
7. Plain text: it's always in style.
8. Use a stable, vanilla software environment: to ensure needed software remains available.

Don't just reproduce....

Preplicate !