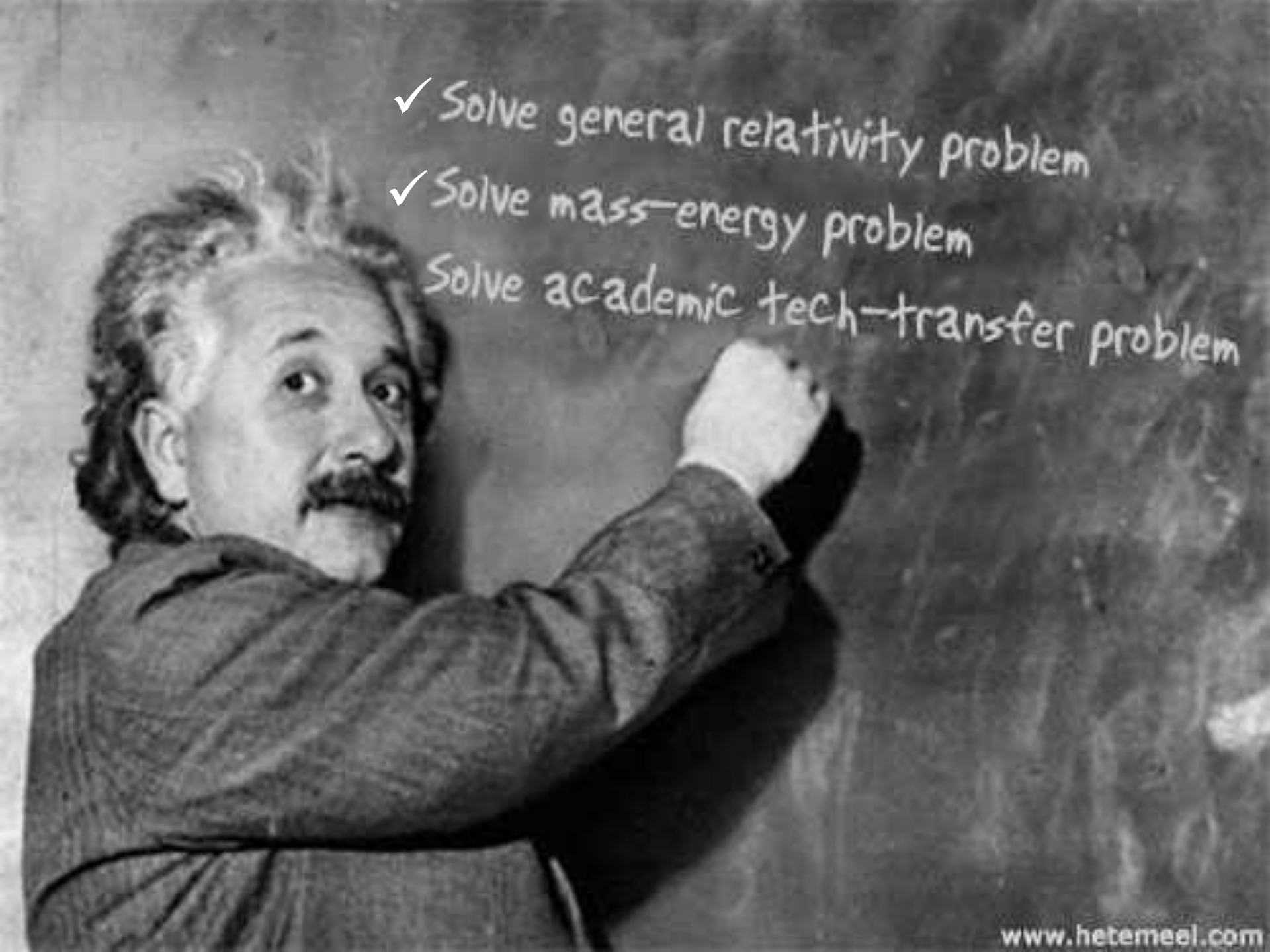


Academic Technology Transfer Expense, Income and Efficiency

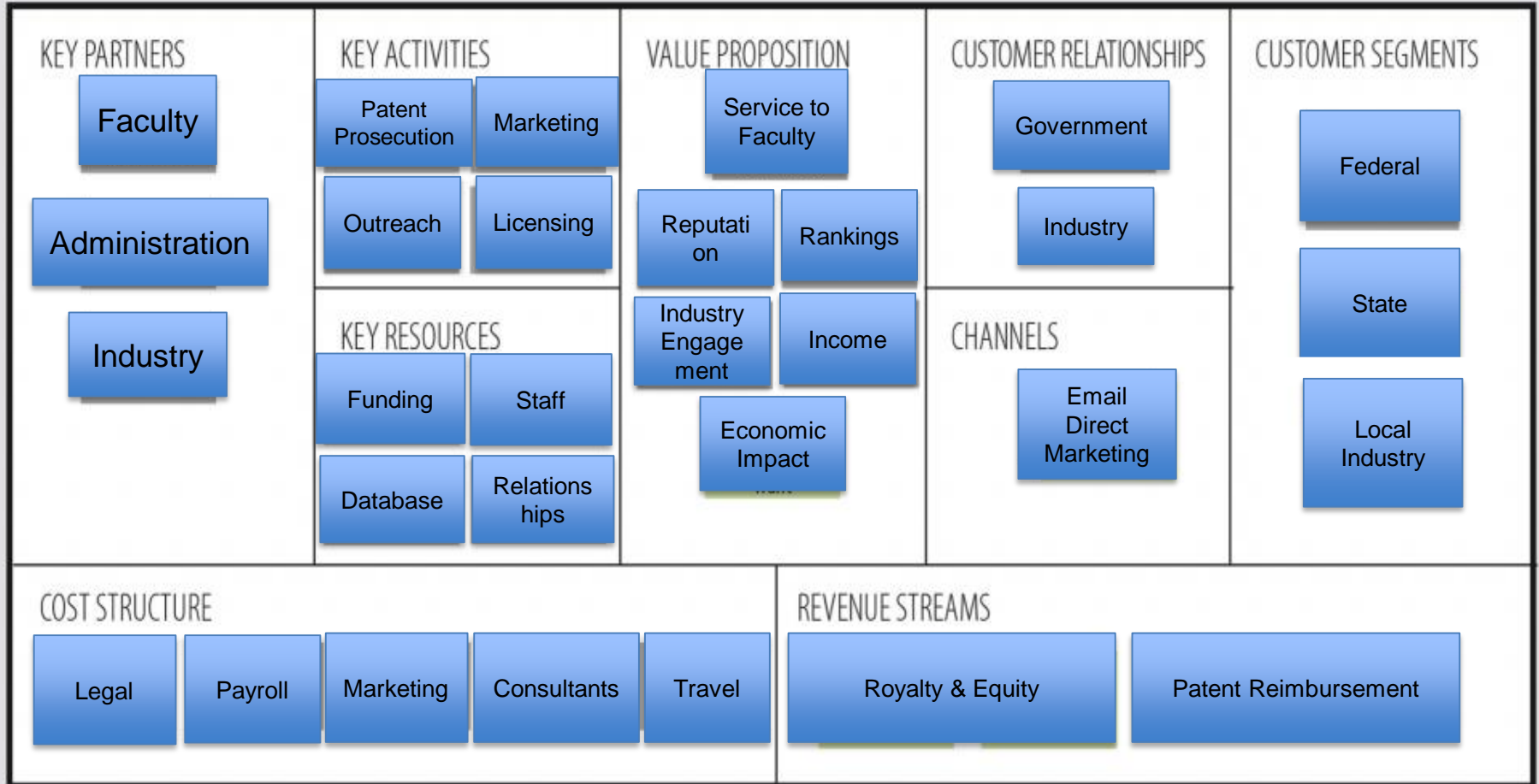
**Ken Polasko
IGF Consulting**

- 
- ✓ Solve general relativity problem
 - ✓ Solve mass-energy problem
 - Solve academic tech-transfer problem

Outline

- Academic Technology Transfer “Business” Model
 - ❖ Expense
 - ❖ Income
 - Academic institutions
 - Summary database, AUTM
 - Venture capital
- “Efficient” zone
- Conclusions

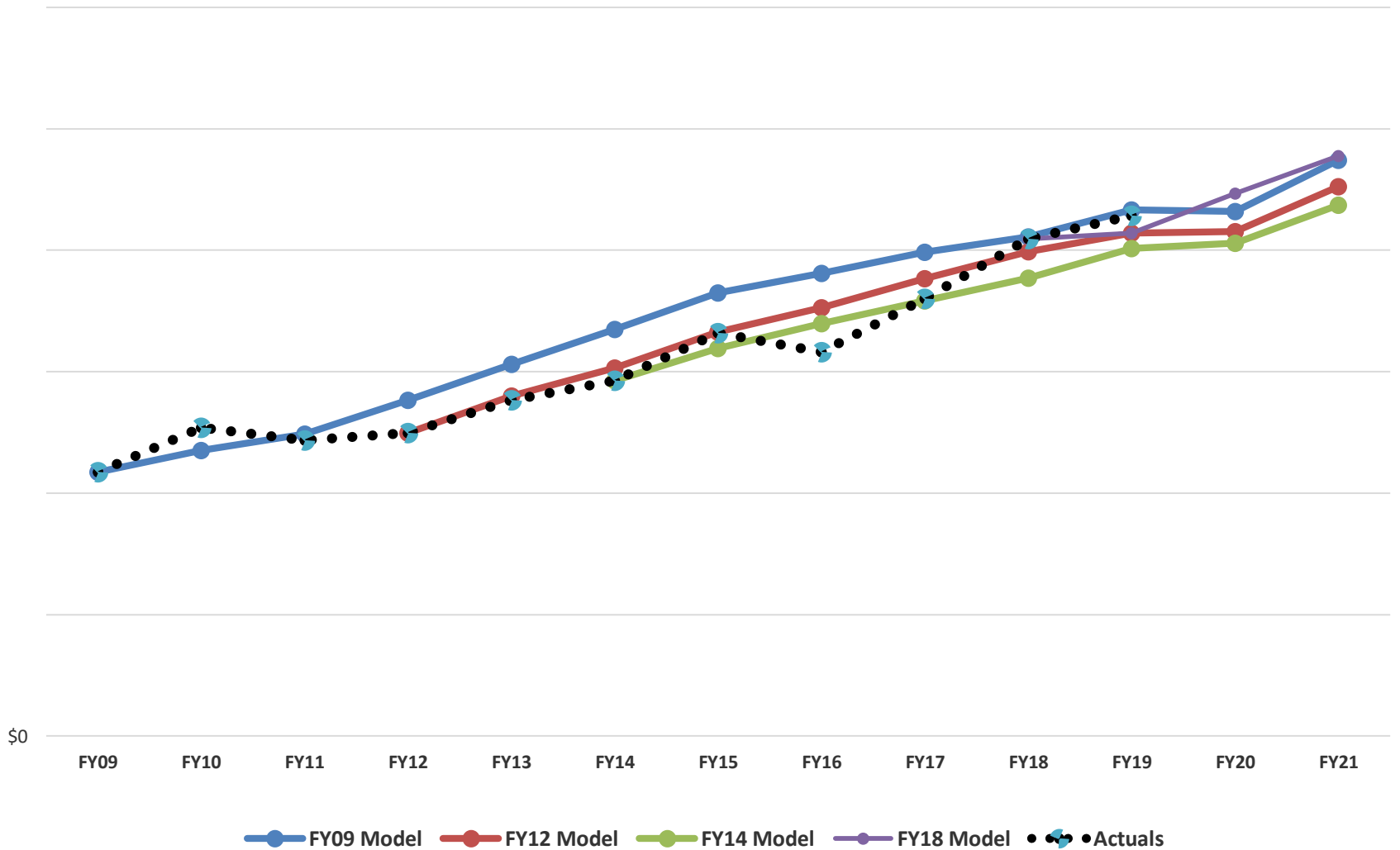
Business Model



Technology Transfer Office Expense

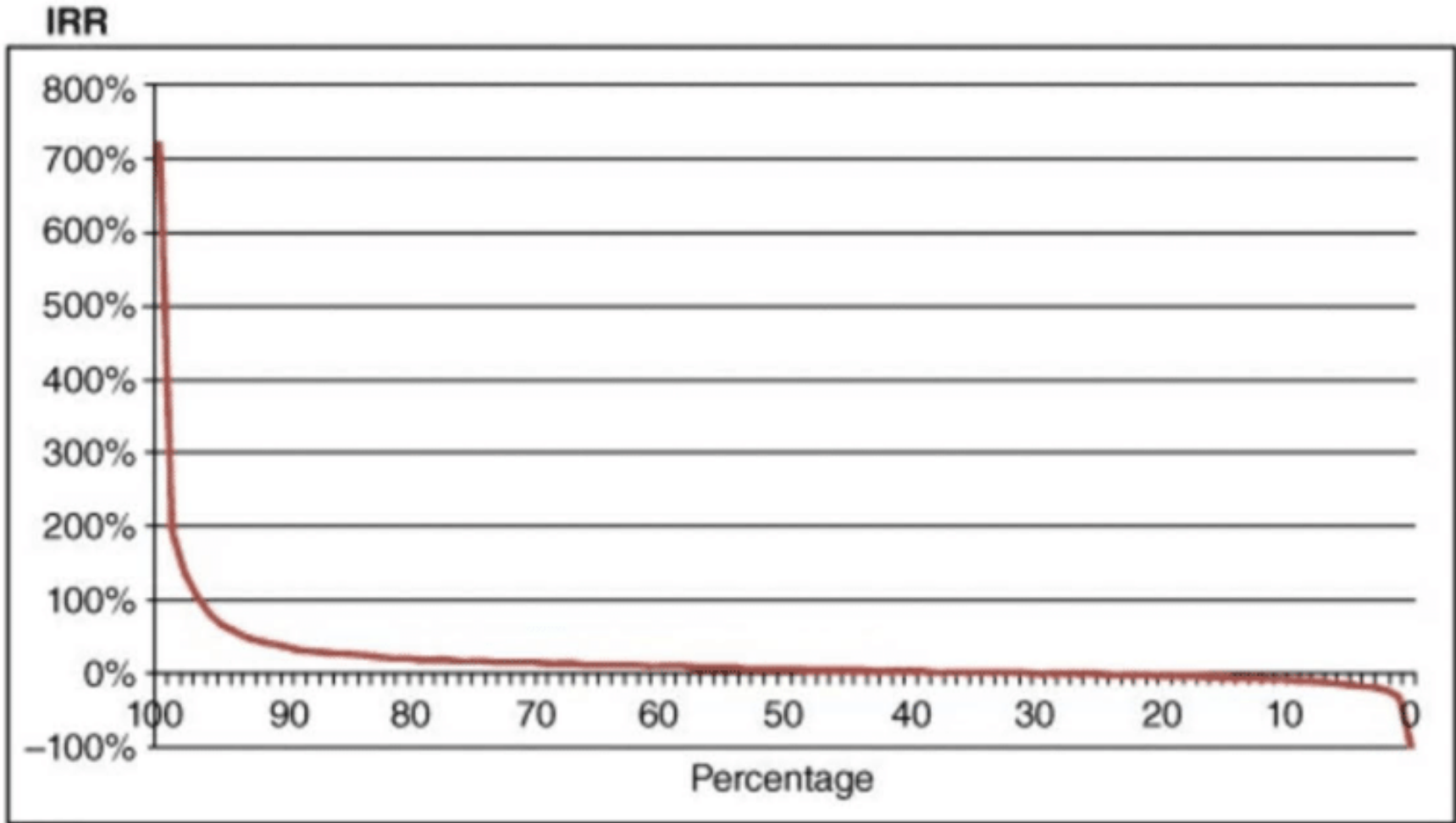
Patent Prosecution Cost Model

Back testing

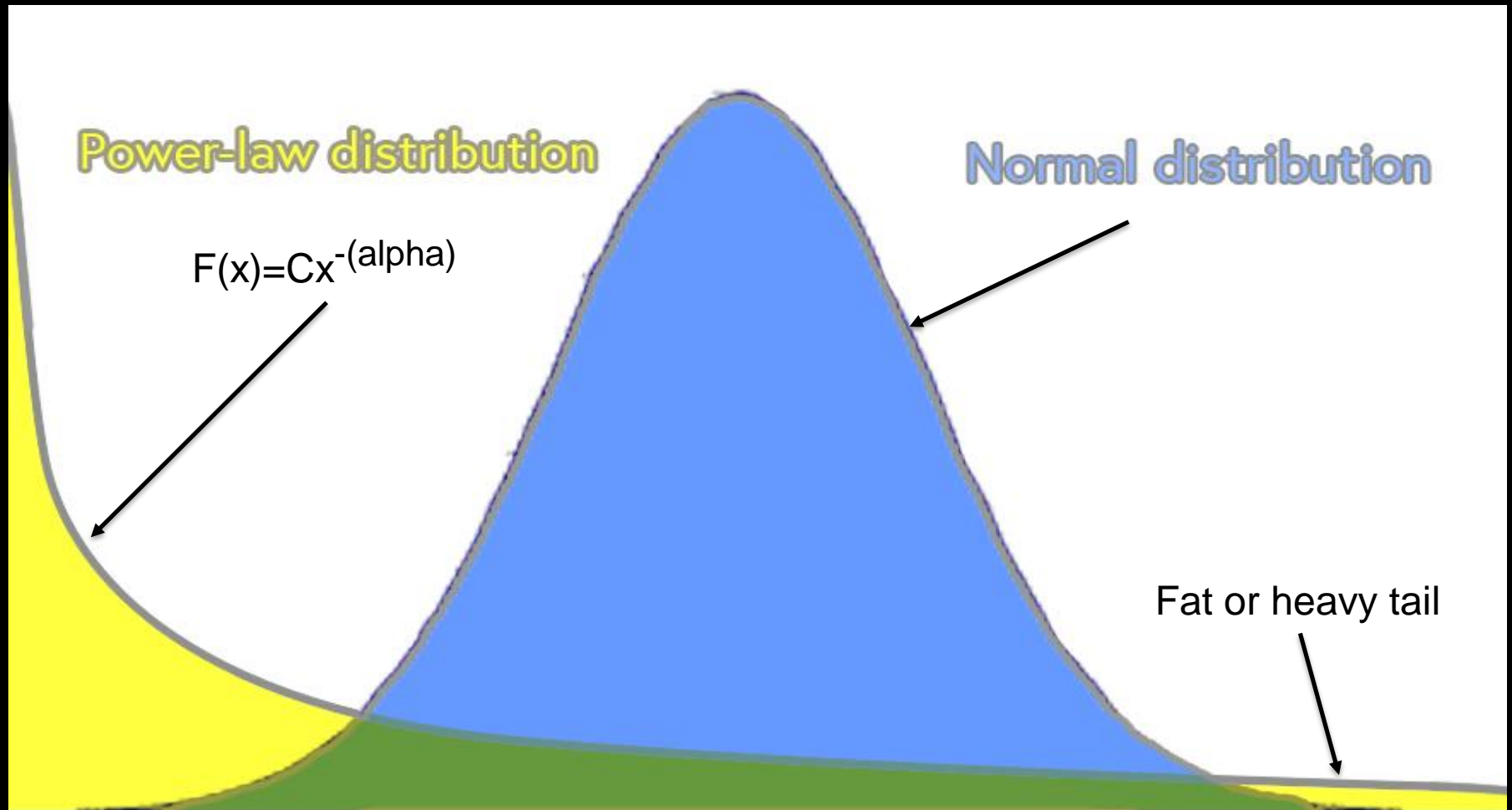


Technology Transfer Office Income

Historical Venture Capital Returns



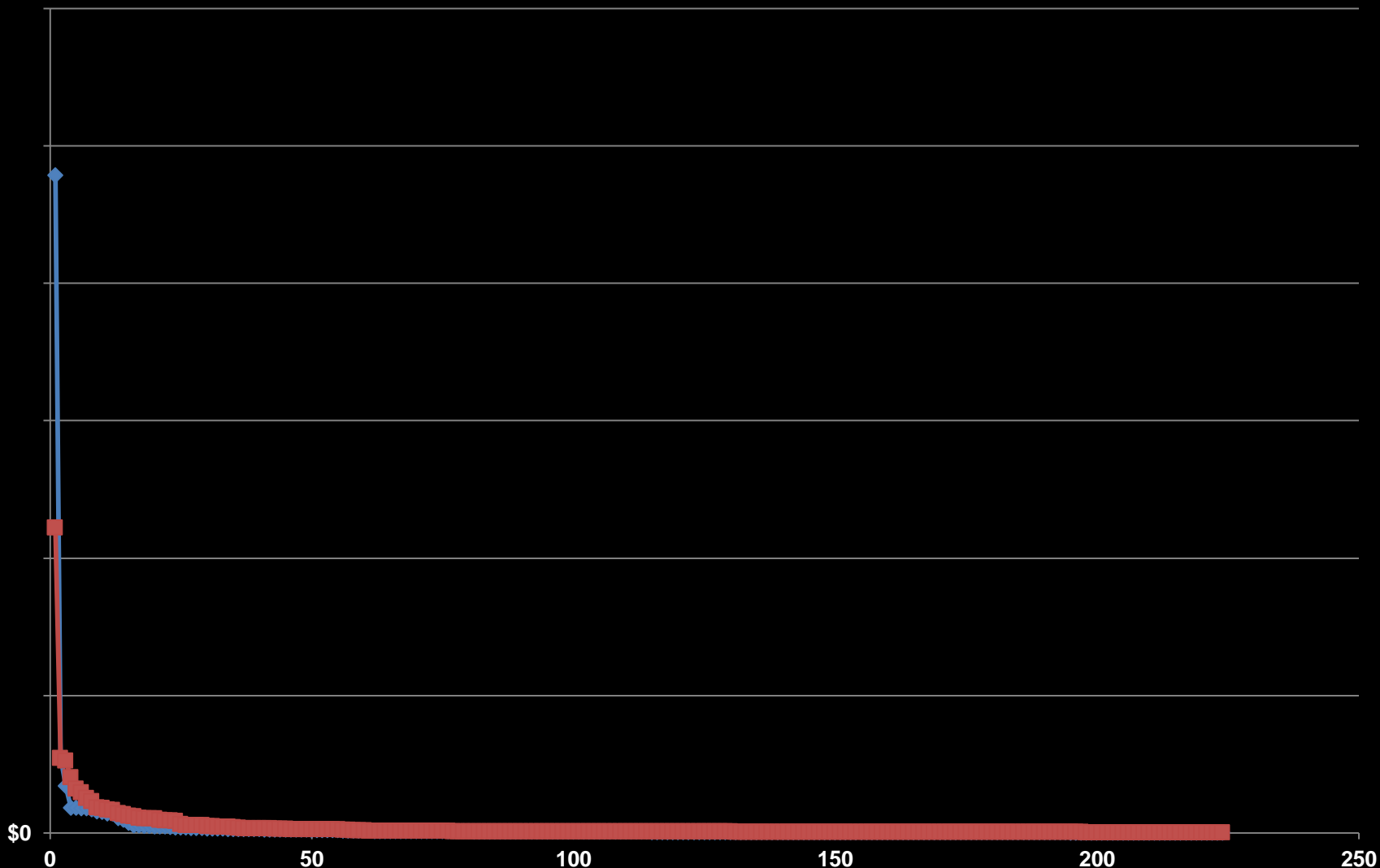
Power-law Distribution



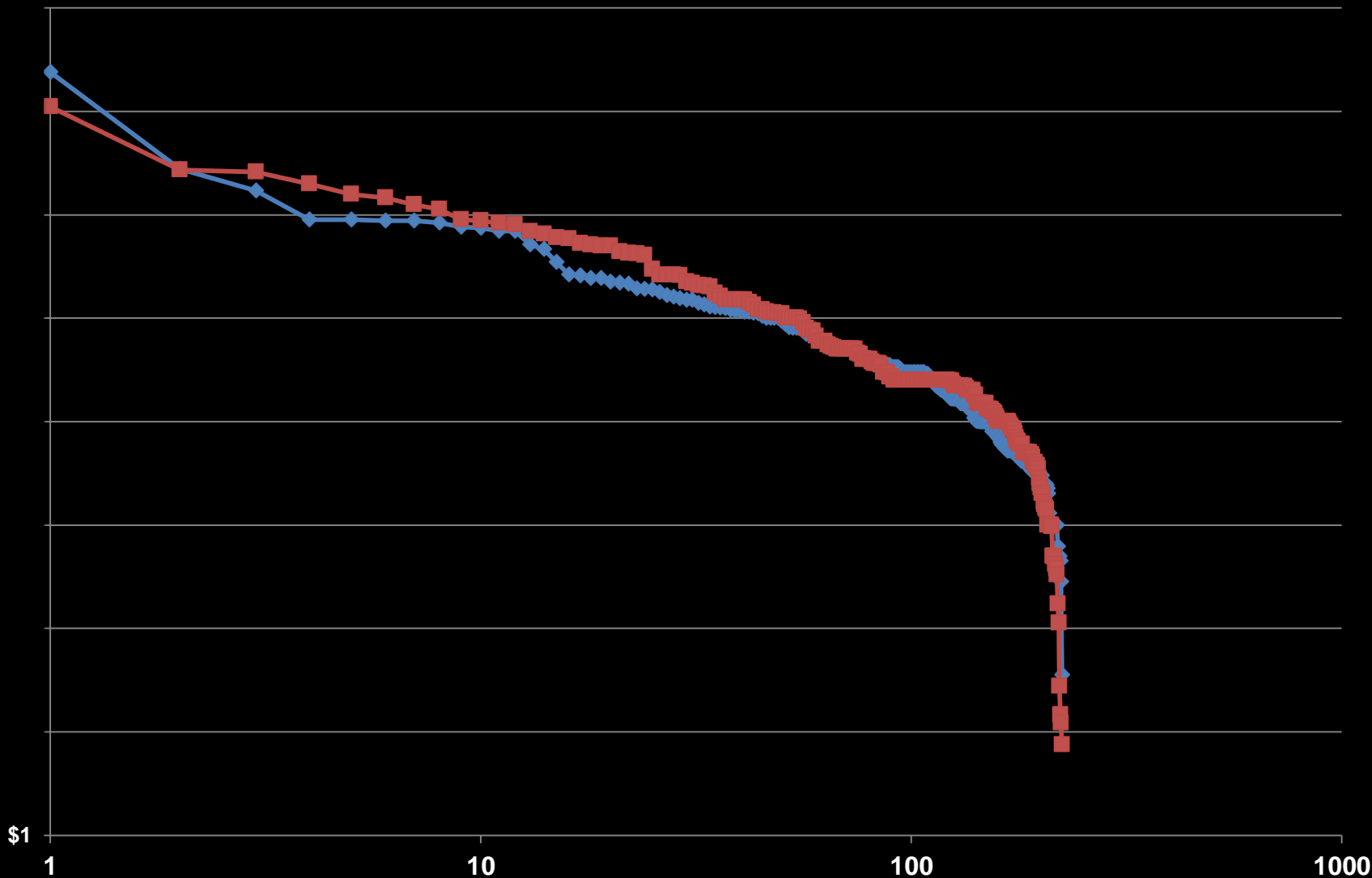
Power-law Distributions are Not Rare

- Early stage venture capital returns
- Name frequency in US
- US city population
- Paper citations
- Web hits
- Individual net worth
- Books sold
- Telephone calls
- Earthquakes
- Solar flare intensity

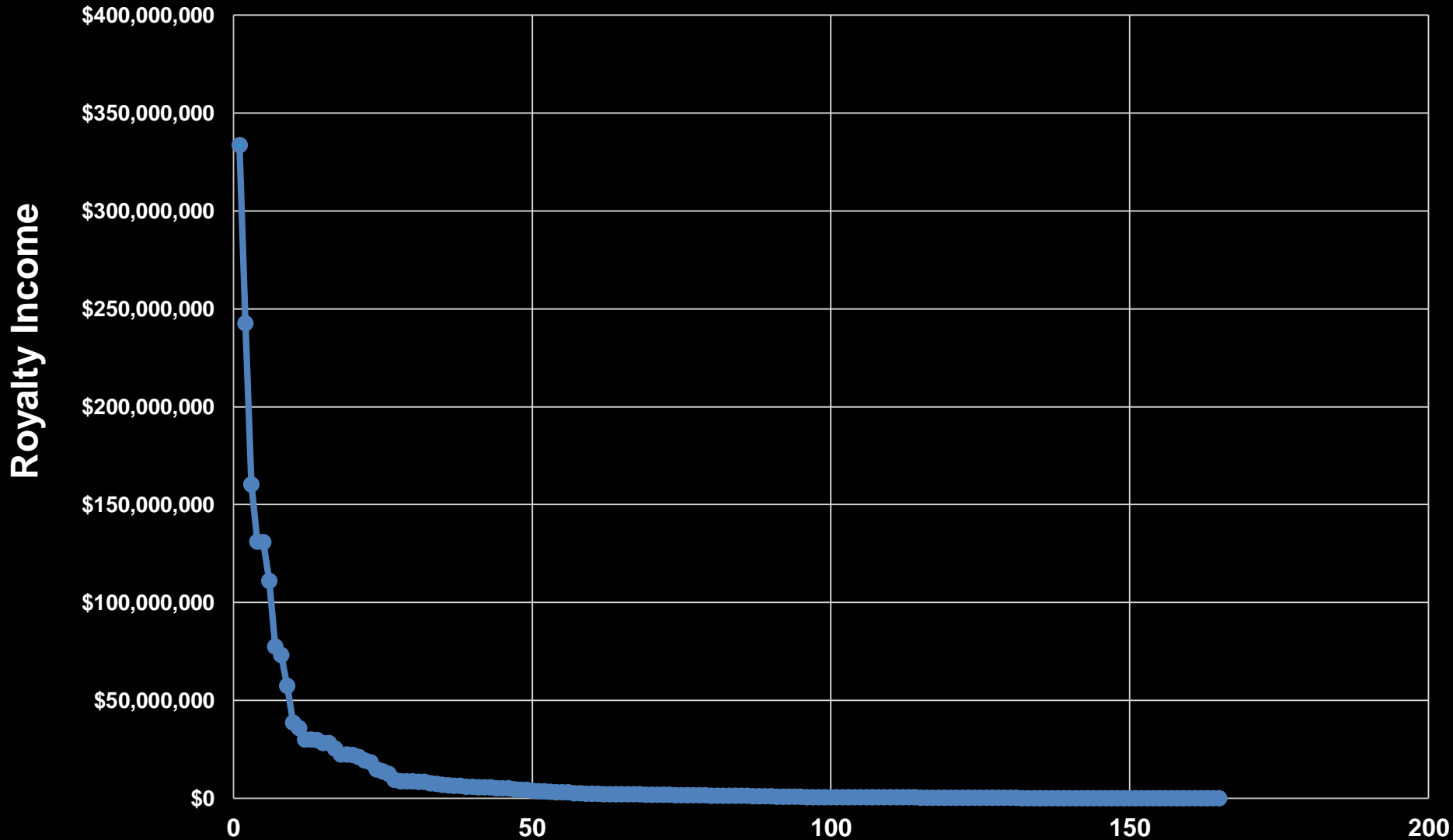
Two Very Different Academic Institutions



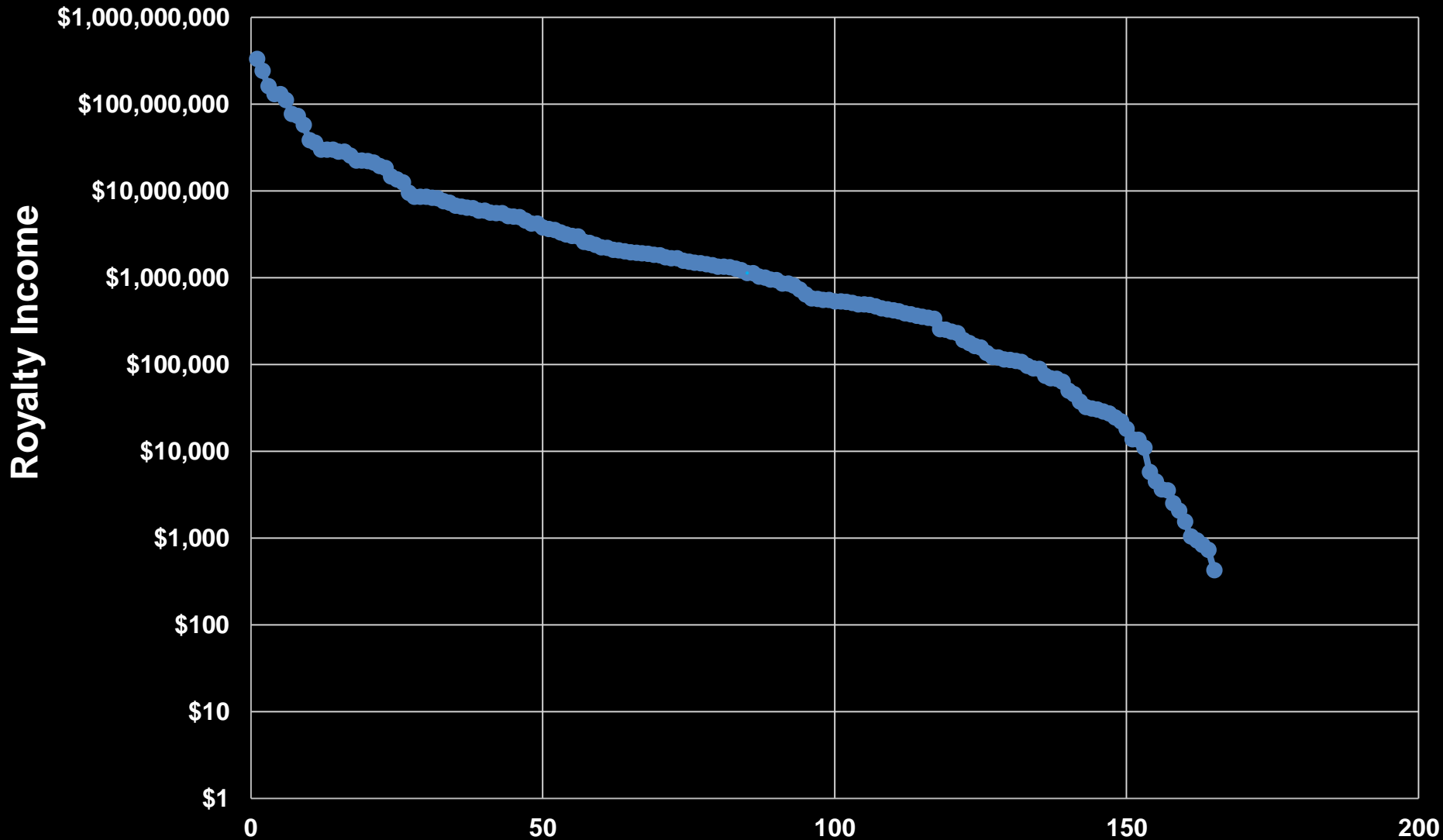
Two Very Different Academic Institutions



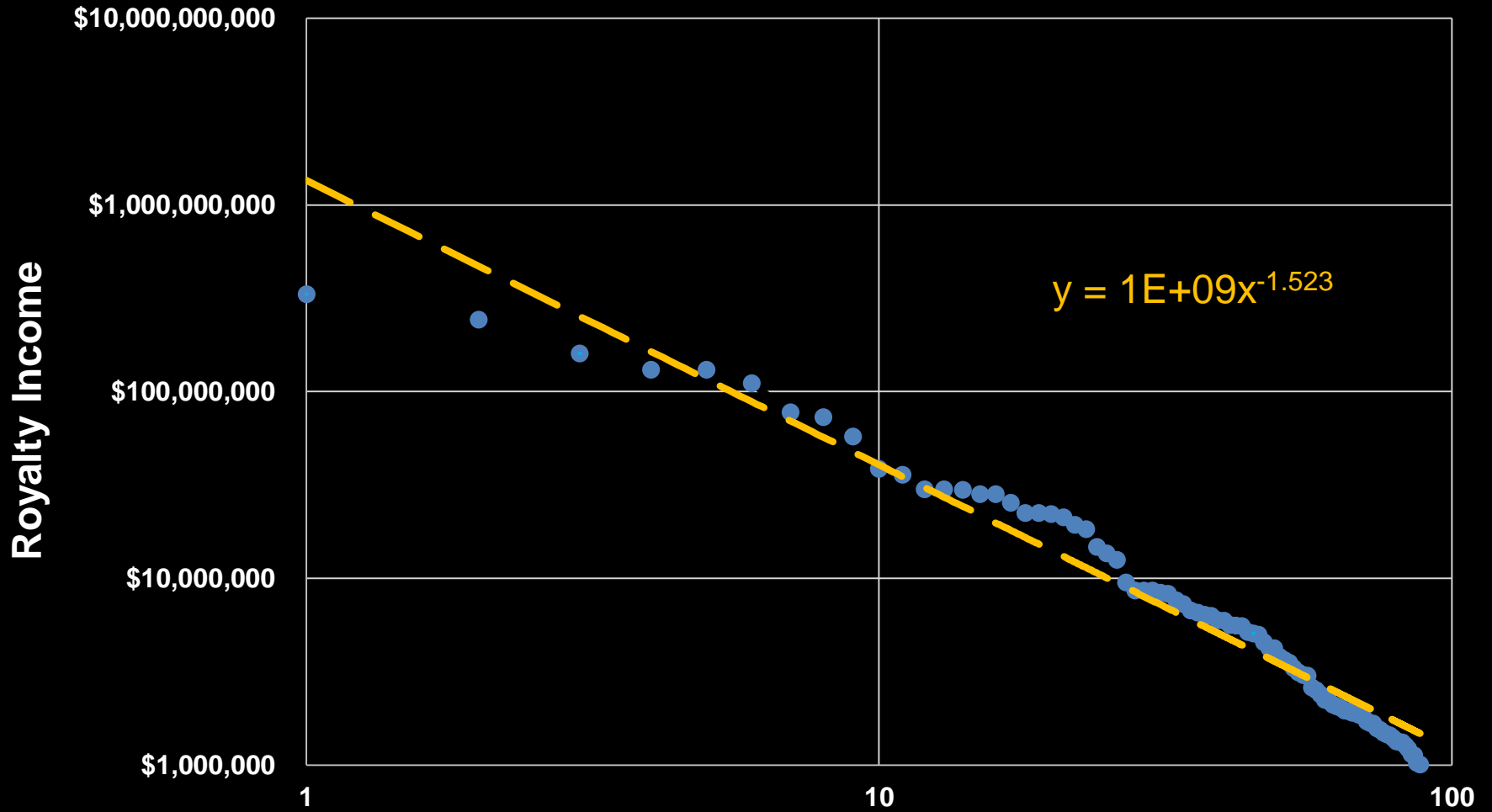
Institutions Reporting to AUTM



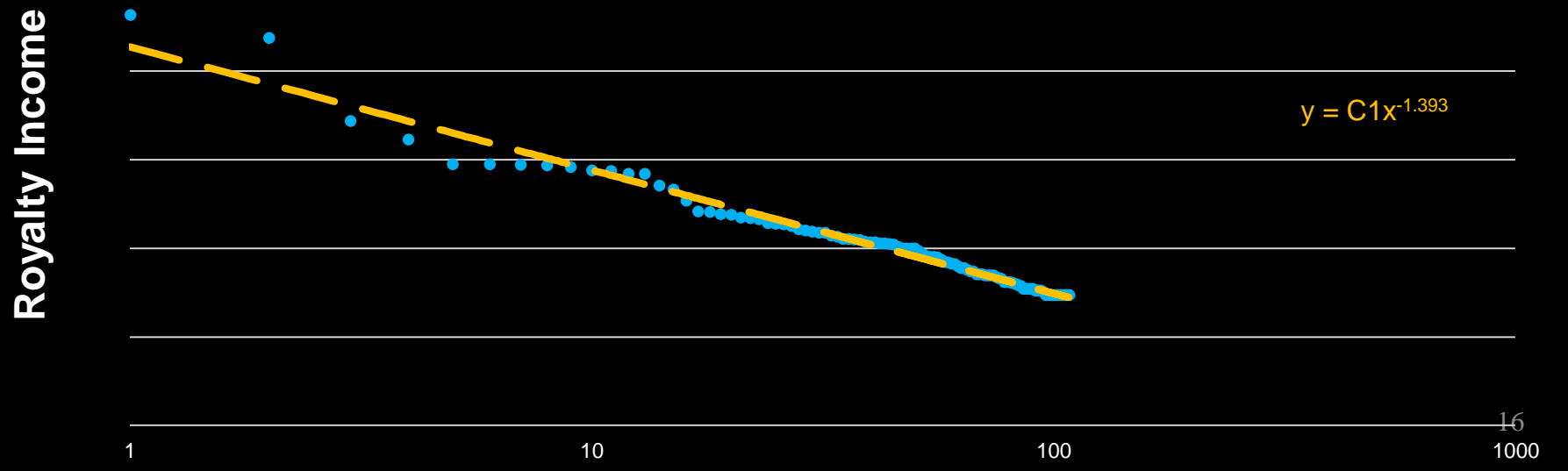
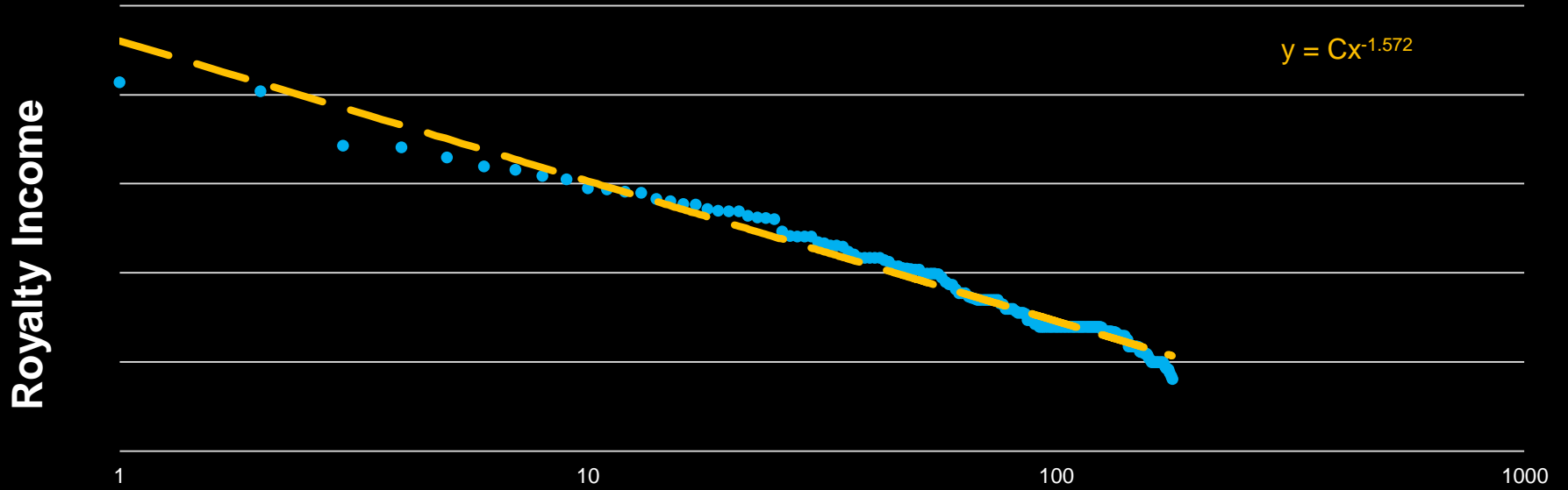
Institutions Reporting to AUTM



Institutions Reporting to AUTM

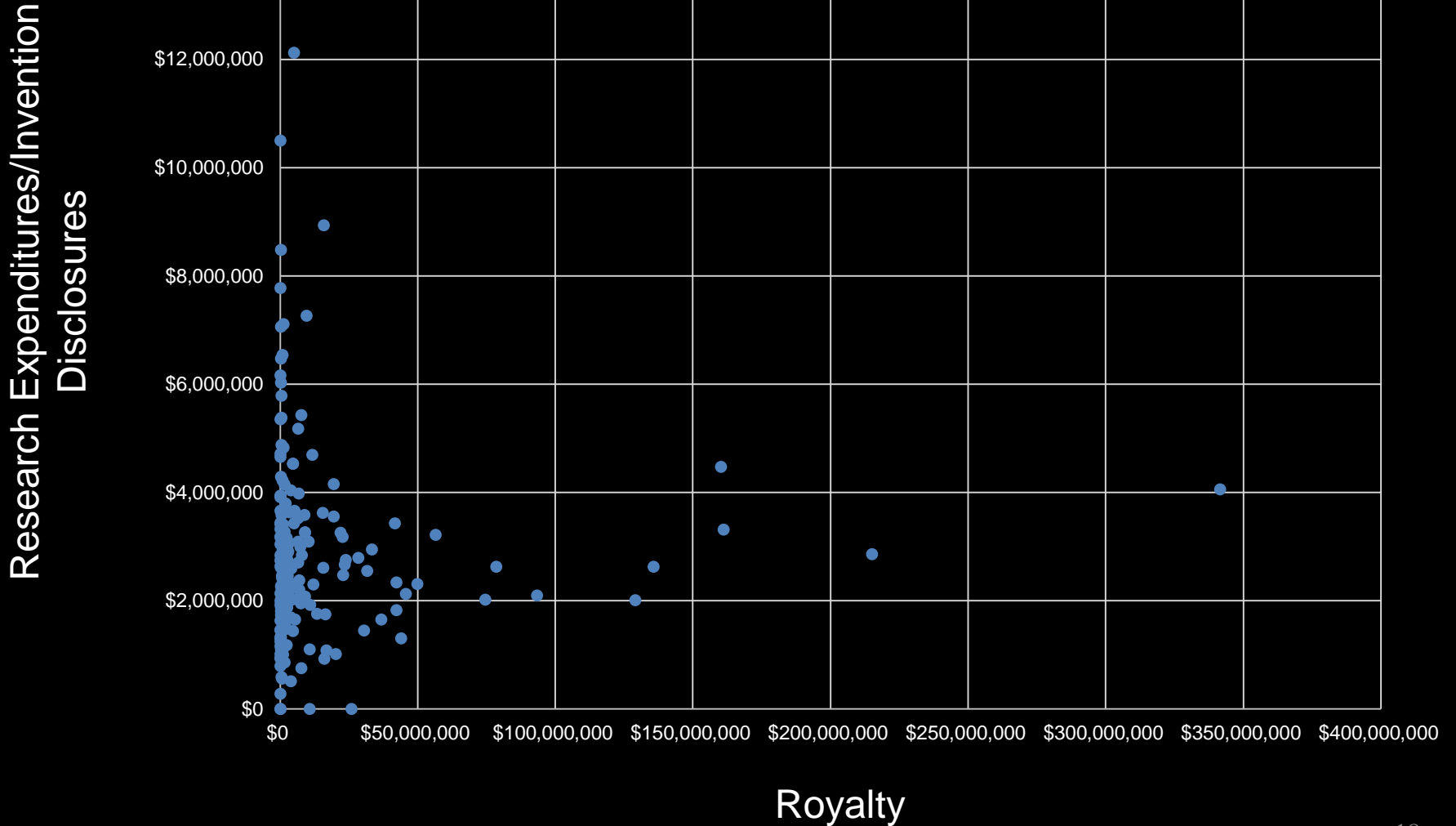


Two Very Different Academic Institutions

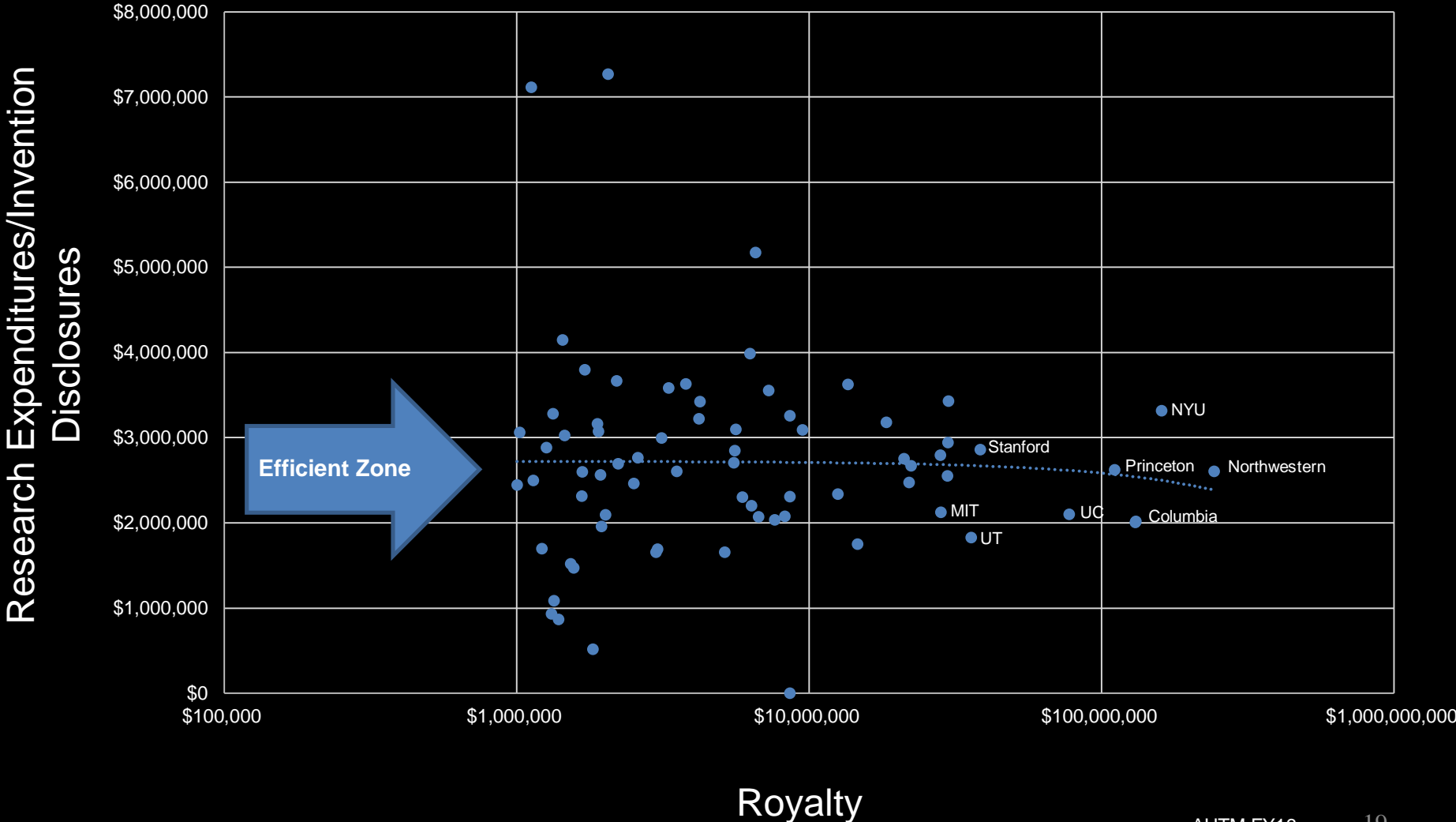


Technology Transfer Office Efficiency

Efficient Operating Zone



Efficient Operating Zone



Conclusions

- Academic technology transfer income tends to be a fat/heavy tailed distributions.
- Similar to venture capital the hits/winners are a significant percentage of the total return.
- AUTM and academic technology transfer data indicate that royalty income is power-law distributed.
- Ideas are cheap; get as many as possible (e.g. invention disclosures), is reasonable; however, inefficiencies of scale (cost) may eliminate or limit return.
- AUTM data indicate an income optimum of \$2-2.5M in research funding per filed invention disclosure.

**Ken Polasko
IGF Consulting**

(310) 923-5502

kenpolasko@mail.com