# Mentor fecundity and protégé performance

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### Questions

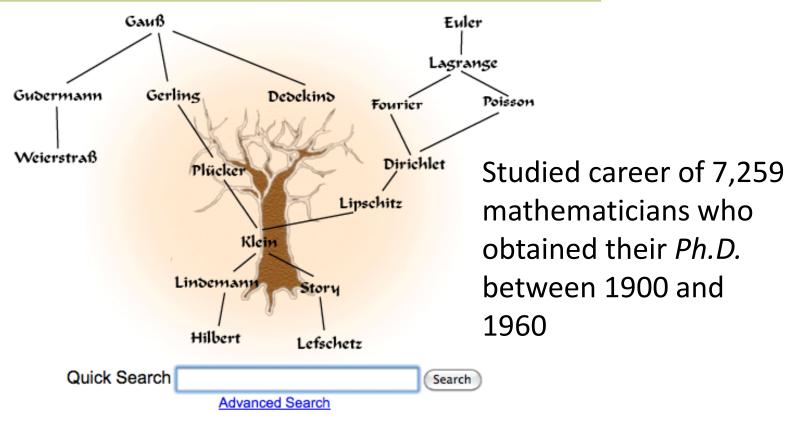
✓ Does mentor fecundity correlate with other measures of academic productivity and recognition?

✓ Does mentor fecundity impact fecundity of protégé?



## Large longitudinal database

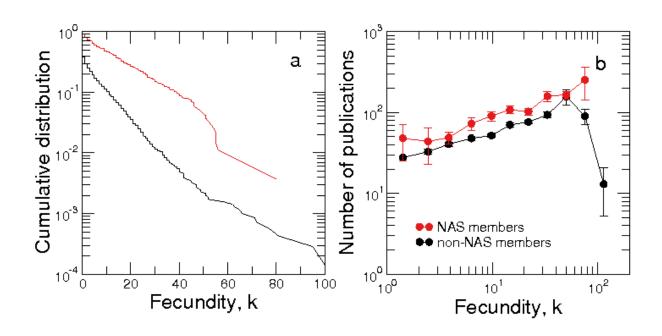
#### **Mathematics Genealogy Project**



141184 records as of 20 April 2010



## Fecundity and academic success



469 members of NAS4,447 mathematicians with publication counts7,259 mathematicians with fecundity counts



### Questions

✓ Does mentor fecundity correlate with other measures of academic productivity and recognition?

✓ Does mentor fecundity impact fecundity of protégé?



### Fecundity of proteges

k<3 3≤k < 10 K ≥10

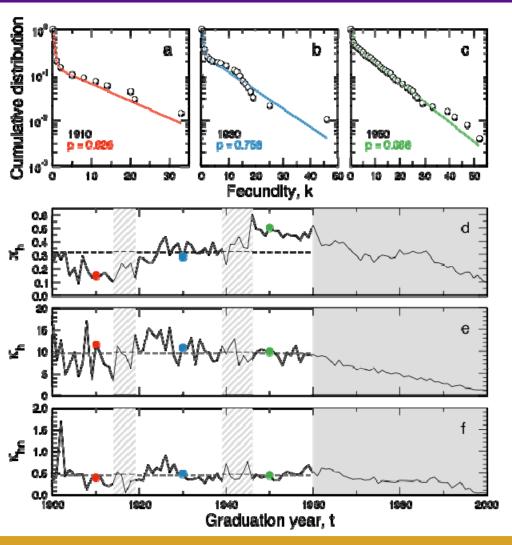
1<sup>st</sup> third of career

2<sup>nd</sup> third of career

3<sup>rd</sup> third of career



### "Haves" and "have-nots"



P(k) decays exponentially



### Fecundity of proteges

	k<3	3≤k < 10	K ≥10
1 <sup>st</sup> third of career	37% larger		29% larger
2 <sup>nd</sup> third of career	37% larger		
3 <sup>rd</sup> third of career	37% larger		31% smaller