Scientific Productivity
Managing Your Research Career – Behavioral, Clinical and Public Health Sciences
UCSF Faculty Development Day, 2022

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Starting at the End: Get it Done

• Make the lay up!
  – Get it done

• Perfect is the enemy of the good
  – Be meticulous in the beginning
  – Figure out what you need to do to complete the paper/ grant and let some stuff go if you need to

• If it’s not a published manuscript or submitted grant, it’s like it never happened
Most Important Ingredient for Success?

GRIT
THE POWER of PASSION and PERSEVERANCE

ANGELA DUCKWORTH

“Psychologists have spent decades searching for the secret of success, but Duckworth is the one who found it... She not only tells us what it is, but also how to get it.”
—DANIEL GILBERT, author of Stumbling on Happiness
Most Important Ingredient for Success?

- Grit=perseverance=stick-to-it-ness
- Most successful professional baseball players HOPE for an average success rate of “300” (meaning 0.3 or 30%)
- Rejection is part of the game
  - Ideas
  - Papers
  - Grants
Therefore:

- Emelia Benjamin, MD, ScM (Professor of Medicine at BU, Framingham Heart Study Executive Committee member; Assistant Provost for Faculty Development): “It’s all about shots on goal”

"You miss 100% of the shots you don’t take"

-Wayne Gretzky
Key is Often: to Just Begin

- Can be an overwhelming number of things to do (K23 or R01)
  - Break into pieces and take one at a time
- “Once begun, it’s half done”
Diversify Your Portfolio

• Do not rely on just one project or one finding

• Have some that are feasible
  – That are secondary data analyses

• Make use of time
  – Do things with due dates or anticipated wait times first
  – When all else equal, work on project most close to completion
Make things Easy (for your reviewers and collaborators)

• Help people do what you want by removing barriers for them (more effective than carrots)
  – Make manuscripts, grants SIMPLE and EASY
  – Lay it on a plate for reviewers
Some Specifics about Scientific Writing

• You don’t want reviewers to have to think
  – Be consistent
    • Same order in Methods, Results, Conclusions
      – If adjusted for HTN, DM, etc. one place, always keep in
        the same order
    – Really make efforts to keep formatting consistent and avoid typos
      • It tells them about you
        – You want them to give you the benefit of the doubt

• Responding to reviewers
  – Remember comments are for the READERS
    • Not the reviewer personally per se
Don’t Fight the Data

The Nobel Prize in Physics 2011

The Nobel Prize in Physics 2011 was divided, one half awarded to Saul Perlmutter, the other half jointly to Brian P. Schmidt and Adam G. Riess “for the discovery of the accelerating expansion of the Universe through observations of distant supernovae”.

Photo: U. Montan
Saul Perlmutter
Prize share: 1/4

Photo: U. Montan
Brian P. Schmidt
Prize share: 1/4

Photo: U. Montan
Adam G. Riess
Prize share: 1/4

Present Day Acceleration
Big Bang
Inflation
Expansion
Thank you!

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