

# Data Management Best Practices



Hollings Cancer Center

An NCI-Designated Cancer Center

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#### **Conflicts of Interest**

 Dr. Toll testifies on behalf of plaintiffs who have filed litigation against the tobacco industry

## How To Appropriately Protect Your Data

- If you are using cloud based storage, work with your cancer center to ensure appropriate firewalls and encryption
- Always use two factor authentication (2FA)
  - Security method requiring two forms of identification to access data (e.g., an authentication code, text, phone call)
  - Many large entities are using 2FA (e.g., NIH)
- Never carry data on a thumb drive unless they are encrypted
  - Many centers are requiring encrypted drives with a pin
  - Only insert thumb drives into trustworthy ports
  - Use a data blocker —



#### How To Be a Good Steward of Your Data

 Paranoia is <u>unjustified</u> suspicion and mistrust of other people or their actions



Stephanie O'Malley, Ph.D.
Professor of Psychiatry
Yale Cancer Center

Super = Paranoid

Only statisticians and data managers had access to the data

## How To Work with Big Data

- Big data may be easier to work with as they often have their own encryption and require multiple safety protocols
- These sources often have a fee and require a formal data sharing plan that will go through your office of sponsored research project
- With these data, if you step out of line, you may be subject to fines – be careful and never share passwords
- Always be vigilant about protecting your data

# Thank You! @bentollphd

Everything negative pressure, challenges - is all an opportunity for me to rise. KOBE BRYANT



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