Source: KBISOSMasterIndex

1 | Strong inference notes

#disorganized

- "All science is equal": a fiction
  - Attempt at grant getting?
- "Primary factor in scientific advance is an intellectual one"
  - Fast moving fields have systemic research methods => strong induction, named "strong inference"
- String inference
  - Basic inductive reasoning
  - Basis of the scientific method
    1. Hypothesize all alternatives
    2. Devise experiments to rule out hypothesis
    3. Carry out the experiment
    4. Do it again with new subproblem
  - Not as simple as deduction
  - However, minimum sequence for knowledge production
  - Subject to squabbles
    - Whether to exhaust all possbilites or test simply the reasonable ones
- Conditional inductive tree
  1. Possible causes
  2. Crucial experiments
  3. Exclusions based on experimentation and adopting what's left
- Molecular biology: user of strong inference

  When we make a single hypothesis, we become attached to it

- Conflict with background and not hypotheses arises in not having multiple possible hypothesis
  - Traditional models of strong induction require the existence of only one true hypothesis out of multiple hypotheses
  - However, debate about hypothesis could only truly be had if there were multiple
- Inclusion of something does not mean anything, exclusion of all other possibilties proves a point