email whole list (get christine) the handout

introduction:
  o #CULWORKFLOW
  o think/pair/share
    ■ trouble starting things
    ■ figuring out where to go next
    ■ time management
    ■ motivation for stuff with less visible/tangible rewards
    ■ loose deadlines
    ■ knowing when you’re done
    ■ getting off topic in your reading
    ■ picking up where you left off
    ■ version control of documents
    ■ maintaining a routine

SCIENCEs: 18 attendees

Jenny Sones: Biomed: veterinarian trained at Louisiana State, talking about PhD experience in Biomedical sciences; talking about work life balance: had her children during this experience
  o becoming more productive
    ■ establish goals in the beginning
      • focus on getting a job, for example postdoc training, residency, lecturer, etc.
    ■ planning in advance has been crucial
      • annual goal list
        o set out major goals and objectives
      • monthly goals
      • daily goal list- done night before, when leave work
      • NOTE: be respectful of other’s time and their goals
    ■ staying organized is another key
      • don’t say you’ll go back, do it now!
        o example staying current with your lab notebook
      • analyze data and have ready for.. stay current for
        o progress meeting, conferences, work in progress seminar, etc.
    ■ know expectations of you as a graduate student
      • presentations at conferences
      • grant applications
      • collaborations
      • work in progress seminars
    ■ keep CV updated
■ be a “yes” person
  ● be prepared and be proactive
  ● ppl need to know you are up and coming

■ communicating
  ● grad students
  ● lab mates
  ● office of grad education
  ● committee members
  ● your advisor
    ○ your greatest advocate
    ○ do not fight and argue with

■ in biomedicine, we do experiments, so it’s important to ask the right questions.
  ● advice Jenny was given: “Conceptualize your research so that whatever result you get, it is meaningful.”

■ hypothesis driven research
  ● clearly state problem
  ● literature review
    ○ what’s known and what’s unknown
  ● relevant background from your lab
  ● BECOME AN EXPERT
  ● your own preliminary data, to generate your own hypothesis

■ study design
  ● think it through
  ● after lit review
  ● consult with peers
  ● ask for input
  ● do small, exploratory trials before HUGE experiment
  ● anticipate pitfalls
  ● LET THE RESULTS GUIDE YOU
  ● troubleshoot study design
  ● NOTE: you can reject your hypothesis

■ data analysis
  ● don’t wait, analyse your data!
  ● keep track of what works and what doesn’t work, reassess
  ● every result is significant
    ○ NEVER GIVE UP
    ○ rethink your approach

■ conclusions
  ● how did they approve or disprove your hypothesis
  ● have i addressed the problem?
  ● what is your take home message
    ○ OWN IT
STAY ON TRACK
• started a three year plan in the beginning

Q&A
• good idea to set goals on a yearly, monthly and daily basis, but I have trouble achieving those goals - how do you deal with that failure?
  ○ importance of daily goals - break it into small pieces that you CAN accomplish
  ○ be flexible, there will be times when the timeline has to change
  ○ attaining small goals and building from there
• deep dig of literature - how do you know when to stop?
  ○ refine your search as much as possible,
  ○ reviews can be very valuable
  ○ student in computer science, wonders if reviews exist, so suggests looking for a key figure in the field
• how do you balance with children?
  ○ I have a very understanding husband!
  ○ when I’m at work, I’m at work, when I’m home, I play with the kids, cook, etc.
  ○ key is to be very organized, budget your time
• To do list?
  ○ on paper

Karen St. Clair- Horticulture. Is an older graduate student and wanted to present about her experience learning to adapt to different technologies; about finding a tool that works for you; doing work in archives, researching horticultural history; experimented with Zotero and Mendeley, and finally settled on using ONeNote to manage her research
• set up different notebooks
  ○ has divided her dissertation into chapters, created a notebook for each of my major persons-of-interest and sub-notebooks for their works, as well as the books that she’s analyzing, other people, all of the information within the folders can be linked together in the program so that there can be cross-referencing among the research
• can work online and access from anywhere I can work on the program from my tablet in the archives and it simultaneously sync’s with the program online so that I can show my research to anyone/anywhere on their computer if I do not have my tablet with me
• uses color coding to pull out important notes and passages, keeping the colors consistent through the document, also color code my own thoughts as a way of "talking to myself' to remind
myself about key points: e.g. my own thoughts are coded in 'blue' and this stands out from the rest of the document

- can keep track of everything, while allowing her to move between folders, inserting links across notebooks

- record everything
  - Using one note is my tool that allows me to record everything. It may not work for you, but the important take home message is to record everything and to find the correct research tool for you.
  - Showed a photograph that she saw at the beginning of her research, and then lost, tried to find again when she realized it would be important to what her dissertation ended up being about, couldn’t find. finally found it

- Always leave yourself cushion time

Q&A

- OneNote seems to be a powerful tool for you, but how do you keep track of where you’re going without losing where you’ve been?
  - Can work alongside and separately, so can start writing dissertation text alongside the note that am using as source.

- You say that you don’t struggle with any of the challenges the group outlined at the beginning. Have you always been that way, or did something help you to get that way?
  - Background in science has helped, translating “data Karen” into “archival Karen” has been biggest challenge. OneNote has helped me in this transition by organizing my thoughts in a logical way. Finding the proper tool has allowed me to start things on time, direct me to where I need to go next in my research, manage my time, know when I am done with a particular part of my research (as I complete different folders), allow me to pick up where I left off, manage my time efficiently and without procrastination, as well as establish a good work routine.
  - at one point did realize that she was being too hard on herself, now has attitude that she does the best possible job, trust that, and move on.
  - Takes Fridays to be flexible with myself and my schedule whereas other days of the week are strictly scheduled.. If I am find I am tired and need a break, then I take a break. If I find I need the time to do work on emails, homework, or in the archives, then I do those things.
  - has been very conscientious to be conscientious and to be graceful with myself.

- how do you keep track of your color coding?
  - makes a note every time, is very redundant
  - don’t trust that you will remember!

- BE REDUNDANT!
Jennifer Novoteny: chemistry: Is a fifth year in chemistry and is currently writing her dissertation.

- productivity and procrastination
  - limited time, examples of everything going on...
    - experiments, reading papers, writing papers/grants
    - group jobs
    - teaching
    - processing data
    - helping lab mates
    - laundry
    - social life
    - mentoring
  - figure out a schedule that works well for you
  - create a to-list
    - helps put things in perspective and gets it out of your head
    - paper!
    - electronic= WunderList
    - in lab = on hood keeps a written list so doesn’t have to break momentum
  - determining a deadline
    - this allows you to prioritize
    - give yourself a deadline for tasks
    - allows you to schedule day effectively
    - tackle the task you want to do least, first!!
    - her list has time on one side, and priority number on the left
    - creates plan for the day
  - getting things started
    - Zeigarnik effect: subconscious drive to complete a task once started
      - do a small tiny part of the task, not the whole task
        - ex: get the test tubes out, gets her involved enough that she feels uncomfortable not finishing
      - start with the first step!
  - pushing through difficult problems
    - create a routine, allows you more time to focus on important decisions
      - when you are making choices about small things, will deplete your drive to work through difficult problems
  - routinize your routine
  - trick yourself
    - identify the root of the problem
      - FB or youtube
    - use time tracking software: Toggl
- when you have to report it, makes you more resistant to distractions and web surfing
- read papers where you read best (eg. library)
- set time limits
- block websites
- spend a lot of time in lab without getting a lot done
  - put a timer on herself, set whatever limit that you want for yourself for the day
  - “if you have time to lean, you have time to clean”
- talking too much
  - started listening to music
- rushing to complete tasks at the end of the day
  - schedule actions into day to create segments
  - include time for reading, give natural breaks and personal deadlines
- procrastinating writing a paper
  - write on paper instead of computer
  - create actions for a smaller tasks
    - write an outline, create figures
- difficulty continuing next step on a reaction
  - take a walk
  - do something make happy
  - get started after rejuvenated, you will want to finish
- create little victories to increase momentum
- being productive is a skill you work toward

Q&A:
- dissertation boot camps- have a piece of paper for thoughts that pop-up for distractions, after that you can jump on fb
- blocking websites
  - unblock website and can’t keep it blocked
  - application that will put it on a timer
    - “stay focused” app
      - timer
    - freedom app
- “most important task” app?
  - do the one you have to get done that day first
  - most productive in the morning
- when do you know when you’ve found all of the important literature in your field?
  - follow a citation chain, if you can identify the citations and they are familiar then you can know you’ve found most of them
- journal called Tox- sends you core list of journals
- RSS feed - keeps current, reads what journal is publishing every day
- tactics for dealing with a large influx at once
- TOC images are really useful

Annie Scofield- Natural Resources
- tools and technologies
  - organizing thoughts, to do list, checking things off
    - to-list for her to-do list because I’m tracking short and long term projects
      - short-term
      - long-term
      - pacing of deadlines
    - tools
      - “remember the milk”
      - “todoist”
        - make many projects and categories
        - tasks within each category
        - assign a deadline or not
        - can assign tiers of priority
        - look at by date, and can have an email reminder sent to you day before or can sort by priority
      - “wunderlist”
  - paper to do list
    - break down by short tasks
      - ex: need to get through a book
        - break down by chapter
    - plan ahead and go backwards
      - semester long calendar
      - month long calendar
      - break down into days
      - really helps to build in this manner
  - the “pomodoro technique” (Francisco Cirillo) - use especially for unattractive tasks
    - tomato-timer.com
    - set a timer, work on task till timer expires
    - take a short break (5 min)
    - every four “pomodoros” take a long break (10 min)
    - has a google chrome alert
  - citation management
    - zotero
      - can take notes within program and tie to pdfs and store all there
      - cite as you write
      - only drawback: work in progress or unpublished data
        - trouble integrating with bibliography
      - zotero and cornell box feature
- file storage and back ups
  - organize files and backups
    - BACK UP EVERYTHING
    - dropbox, sync
    - cornell.dropbox + cornell.box
- collaboration
  - can share folders in zotero
  - can share in cornell box and drop box
    - Authorea: (https://www.authorea.com/)
      - tutorial: www.authorea.com/help
      - write your paper on the web, collaboratively
      - uses version control with Git (tracks every change)
      - write in a variety of formats (LaTeX, markdown, HTML, javascript, etc.)
      - data rich science: Ipython notebooks, d3.js, Plot.ly
      - data integration (R in progress)
      - work offline using a github repository
      - insert citations: drag and drop from zotero, mendeley, or endnote and find it on the web through Authorea
      - also there is a cornell dissertation format
      - cost money??
        - unlimited documents
        - only one for free for private
        - not private, unless $5/month for 5 documents
        - very responsive customer service group