Poster Presentation Instructions and Template with Example

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UT San Antonio
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Student Conference Presentation

15 minute presentation
- 10 Minutes Talk
- 5 minutes for questions
- At most, 15 slides
Outline of Entire Presentation

- Title Slide: Strong title, your name, mentor, school.
- Introduction/Background (2–3 slides).
  - Why/How is your topic important (health?)
  - Give brief literature background (broad to specific)
  - Goals of project
  - Hypothesis
- Methods and exptl design (1 to 2 slides– flowcharts good)
- Results (1 – 2 experiments) 2–3 slides
- Summary/Conclusions
  - Bulleted and refer back to hypothesis
- Future Directions
- Acknowledgements
- Questions?
Slide Characteristics

- Uniform Font
- Uniform title size and position
- Short phrases
- ~Six lines per page
- Story carried by images
- Contrast between background and text
- All text big (even on figs)
Ergot-Derived Substance-X Reduces Tumor Growth and Size in Nude Mice with MCF-7 Mammary Adenocarcinoma

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NOTE! I have Made up all of the data in this study.
Introduction – Breast Cancer

- 100,000 diagnoses annually\(^1\)
- Leading cause of death in women 15-54\(^1\)
- Vary in metastatic capacity
- Vascularization required for growth/metastasis
- MCF-7: Human adenocarcinoma cell line

\(^1\) Centers for Disease Control, 2010
Introduction – Treatment

- Generally surgery & chemotherapy
- Mortality __% at 5 years¹
- More effective chemotherapeutic agents needed
- Some work by inhibiting vascularization²


Introduction - Ergot

- *Claviceps purpurea* fungus
- “Cocktail” of active substances
- CNS - Psychoactive Ergotamine ~LSD
- Peripheral Effects –
  - Tingling- “St. Anthony’s Fire”
  - Inhibit vascularization and promotes gangrene
- Vasoactive Substance-X isolated\(^3\)
  - Inhibits growth of cultured endothelial cells\(^3\)

\(^3\)Taylor, GP (2011) Terrific thought experiment on using a deadly scourge to humanity to cure cancer. Journal of Positive Data 3(3), 210-212
Hypothesis

- MCF-7 tumor growth will be inhibited through treatment with vasoactive Substance-X. Inhibition will be associated with reduced angiogenesis.
Experimental Design/Methods

Culture
- MCF-7 Cells
- DMEM
- 2 weeks
- <40% conf.

Induction
- Athymic mice
- N=40 (4 grps)
- SubQ Injection
- Thigh
- $10^6/50ul$
- 1 mo growth

Treatment
- SubQ injections
- Control (solv)
- 1, 10 100 uM SubX
- Daily for 8 wk

Analysis
- Weekly caliper measurement
- 8 weeks sac
- Cryosection
- ICC anti-BV
- Density Test
- Stats – T-Test
Results

Substance-X Inhibited MCF-7 Tumor Growth

P < 0.01
Results

Angiogenesis Inhibition

200X

Graph showing the mean vascular density (% area) at different concentrations of Substance-X: 0 uM, 1 uM, 10 uM, and 100 uM. The graph indicates a significant inhibition at 100 uM compared to the control.
Conclusions

- Substance-X (10 uM – 100 uM) inhibits growth of MCF-7 tumors in athymic mice
- Angiogenesis significantly inhibited at higher dosages
- Hypothesis retained
- Substance-X may be a powerful treatment against adenocarcinoma breast tumor growth
Future Directions

- Establish LD-50 curve
- Explore concentrations
- Vary treatment schedules
- Examine effects on metastasis
- Compare with standard chemotherapeutic agents
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Questions?