

# Effective Communication in Science

Presentations and Posters

# Preparing Effective Presentations

- An effective talk has a clear purpose
  - If you don't know what it is, the audience won't either
- The title should convey the findings, briefly

# Keep the Number of Slides to a Minimum

- 1.0 – 1.2 slides per minute
- For INBRE Grand Island, suggest 12 slides, no more than 15
  - A talk is not a movie!

# Keep The Slides Simple

- A minimum of words, a maximum of graphics
  - We can either listen to you, or read your slides, we can't do both
  - We'd rather listen to you
  - No bullet points
- Leave out the cheesy stuff and the elaborate slide designs

# Methods

- Keep to a minimum
- Refer to methods by generic names
  - we don't need details like time, voltage, concentration
  - e.g. “ ... by Western blot”
  - “.... using a sucrose gradient”
  - “... immunohistochemistry and confocal microscopy”
- Your audience is scientifically literate, but is not familiar with the specifics of your area of enquiry
  - We know in a general sense what the various methods are for
- Except if you did something novel
  - Explain with a separate slide

# Rehearse, Rehearse, Rehearse

- Did I say rehearse?
- Use direct language
  - I did ....
  - Then I did ....
  - I found that ....
- And links
  - This led me to ...
  - The obvious next step was to ....
  - I found that

# Pointers

- Limit use to highlighting specific items on a slide
  - e.g., features of a figure, particular data points
  - even then, often done better using an arrow on the figure itself
- If you are going to use the pointer, have something important to say with it

# Movies are Dangerous

- Sometimes the representation computer or the projector at a meeting site is not fast enough
- Be prepared to be disappointed
- Movie should be in the same folder as the presentation file when preparing
- Remember to copy the movie as well as the presentation file



# Finish with a Summary Slide

- With the take-home point(s)
- And with acknowledgments – including INBRE
  - Supported by Grant Number P20 RR16469 from NCRR, NIH
- No babies or family pets

# An Effective Poster is Self-Contained and Self-Explanatory

- It should be understandable to a scientifically literate reader without you being there to explain it
- Keep it simple
- Your poster is going to be viewed from a distance – use large letters and graphics

# The Title is Very Important

- It should be immediately clear from the title what the poster is about
- Authors and affiliations in smaller type (but still large)



# The Message is in the Figures

- One or two major points per figure
- Heading with the take-home message on each panel
- Technical detail in smaller type below
- Place the most significant findings at eye level immediately below the title bar

# Introduction and Conclusion

- Introduction - one panel at the left
  - Set up the *question*
  - Not a treatise
- Methods
  - Brief, generic, and out of the way (e.g., at the bottom)
  - Amplify only if someone asks
  - If there is something *novel* about your method, put it in a panel!
- Conclusion – one panel at the right
  - To the point – a few lines only
  - Save “Discussion” for anyone that asks

# References

- Not needed
- However, if you use a figure or quotation from another source, acknowledge it in small print underneath (e.g., Hallworth et al. (2007))

# Acknowledgments

- Who paid for it
- Especially INBRE!!
  - Supported by Grant Number P20 RR16469 from NCRR, NIH
- Anyone who helped



# Preparation for Grand Island

- Our poster size: 48" wide by 36" high
  - other meetings differ
- Easiest to prepare in PowerPoint
- Set to half-size in PowerPoint, i.e., 24" by 18"
- View at 200% to judge legibility from a distance
- Allow up to a week for printing

# Arachidonic Acid Anomalously Accumulates after Archetypic Apoptosis at Aardvark Association Areas. Anna Author, Aaron Associate, and Alana Advisor. Dept. of Neuroscience, Univ. of Affiliation Medical School, Affiliation, AZ. 208.17

## Introduction

Author and Associate apostrophized alligator, amphibians, albacore, amphioxus, amphiuma, albatross, anchovy, anemone, angora, *Anisodorus*, annelid, Aplysia, armadillo, *Ascaris*, and *P. americana*, affirming and adopting aardvark as an artifact-avoiding Alzheimer's animal archetype, admitting atypical axonology.

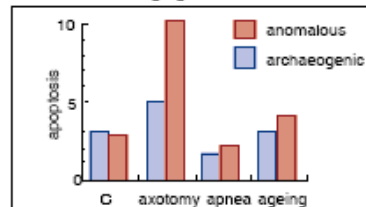
Again aardvarks advance aspects associating areas as advanced as agonist/antagonist alternation, axotomized amygdala, AMPA-activated aspartate afterdischarge, antisera antibodies, and auto-associative algorithms.

## Methods

As an alternate approach, all astrocyte arrays are attached to acrylic agar-agar absorbers and arranged as architectural assemblies. All advanced apparatus aligned as advised annually. Anodal aniline anhydrides antagonized automatically. Arousal and apprehensive attitude apportioned as anomalous auditory aversion.

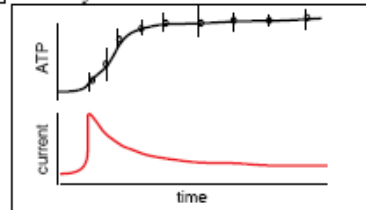
Apposed axes and adjacent angles are acquired as alphanumeric ASCII and arbitrarily approximated arithmetically, applying ALGOL, as appropriate. Aerobic and anaerobic aerosols avoided. All additional aspects are applied as arrived at artfully after Authority, Adjunct, Advisor, Affiliate, Antodidact, Ally, Academic, Alert, Associate, and Author's archetypal and apodictic articles; Adversary's, Ambivalent's, Ambiguous's, and Administrator's aggravated artifacts are abjured.

## 2 Accidental Axotomy Augments Anomalous Apoptosis



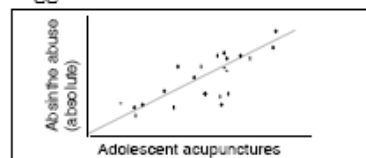
The effect of axotomy on archaeogenic, rather than anomalous, apoptosis is not significant ( $\chi^2 = 0.36$ ).

## 3 Astrocytic A-current Affects ATP



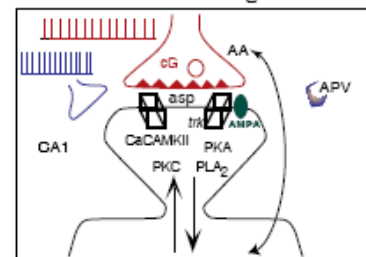
Note the increasing trend: ATP synthesis is clearly related to and driven by the A-current.  
Another noteworthy in general is that the A-current (A-current) is consistent with conventional biophysical models derived from a set of tractable preparations such as *Anisodorus*.

## 4 Adolescent Acupuncture Addiction Aggravates Adult Absinthe Abuse



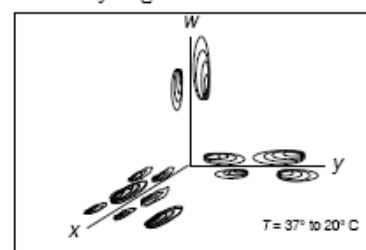
These retrospective unincubated data confirm earlier claims using the current-models approach to deal for adolescent acupuncture addiction.

## 5 APV Abolishes Arachidonic Acid Accretion Affecting AMPA-Activating Aspartate Analogs After Associative Ammonic Afterdischarge



The text. As a note refer to an early name for the hippocampus, part of which is depicted and shown, the Cornu Ammon.  
The figure above clearly shows the consequences of treatment with APV (an ionophore/homocysteine acid) without in any way bringing a mechanism (and a good thing, too).  
Note the activation of one or more protein kinases, none of which begin with the letter A.

## 6 Artificial Auto-Associative Annealing Algorithms Adiabatically Approximate Asynchronous Attractors Along Arbitrary Algebraic Axes



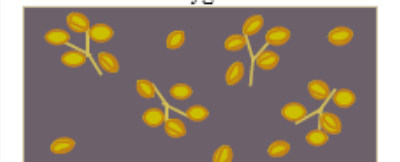
Annealing, as understood, from 37°C to 20°C.  
For a more detailed and totally unadorned description of neural network theory see the current, revised edition: Gardner, D. 1995. *The Neuroscience of Neural Networks*. Cambridge, MA: MIT Press. This entire work is written without a single use of the letter A!

## 7 Anterior Analgesic Antisera Antibody Antagonizes Antisense Antipsychotics

Antisera antibodies				Antibodies absent				All antibodies			
0.0	0.1	0.2	0.3	0.0	0.1	0.2	0.3	0.0	0.1	0.2	0.3
0.4	0.2	0.1	0.0	0.4	0.2	0.1	0.0	0.4	0.2	0.1	0.0

This can be poster in a work of fiction, no mean chance is intended to the work of any neuroscientist, living or dead, funded or unfunded. Any such mean chance is entirely coincidental.  
Any results or findings described in this can be poster are intended for the purpose of illustrating a postulate style alone, if any such findings appear to be plausible or consistent with common sense, they probably exist. However, should any poster be granted to appear in any way mean being any art (or other) described herein, this poster will constitute a denunciation of your art.

## 8 Ascending Aspiny Accessory Arcuate Afferents Absorb Anhydrous Agranular Amyloid A4 Aggregates at Axotomized Amygdala



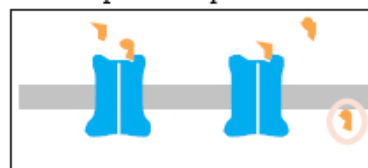
Wasn't you told when young that you could ruin your eyes by trying to focus on eyes that was too small? This was good advice then, and it is good advice now. Visit the Exhibit, where several electron micrographs are on display, place this page on a suitable microscope stage and adjust into it. Much to see worth.

## Conclusions

1. Axotomy augments apoptosis.
2. Annealing approximates attractors.
3. Afferents absorb amyloid.
4. ATP affected after astrocytic activation.

World Wide Web URL of this poster:  
<http://www.neuro.affil.edu/neuro/post/AAA.html>

## 1 Agonists and Antagonists Alternate Allosterically at A9 and A10 Acidotropic Autoceptors



Left: With agonist bound and antagonist approaching, acidotropic autoceptor activated and acid available.  
Right: Alternatively, with antagonist bound and agonist alongside, acidotropic autoceptor inactivated and alkaline occurs.