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# How to Tell When an Insider is About to Go Bad MiniMetriCon Conference - Feb 14, 2011 Lightning Talk!!!

#### Dr. Fred Cohen President - California Sciences Institute CEO – Fred Cohen & Associates

## California Sciences Institute Insiders Go Bad

- Insiders
  - Systems administrators / privileged users / high level executives / employees who work there
- Go
- Transition of some sort
- Bad
  - Do things they shouldn't for example...
    - Take control and don't release it
    - Leak classified data to Wikileaks
    - Cause systems to fail (and save the day?!?)
    - Corrupt content intentionally
- Take money from the organization Fred Cohen & Associates California Sciences Institute is a 501(c)3 non-profit educational and research institution. We do not discriminate in our hiring, admissions, offerings, or in any other way except by ability to do the work and learn the material.

## California Sciences Institute What is most common?

- They have a common pattern of behavior
  - 80+% of caught display this sequence
    - Do something bad
    - Don't get punished
    - Escalate (likely loop once or more)
    - Do something really bad
    - Get fired / prosecuted / etc.
  - As they escalate, they tend to "cover up" more and better than before

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#### California Sciences Institute An insider about to go bad?

- If you see rat droppings, likely rats
  - Look for disciplinary problems
  - Look for "it's OK" management attitude
  - Look for cover-up attempts
- Metrics:
  - How do you measure "disciplinary problems"?
    - Especially when management lets it slip...
  - How do you detect cover-ups?
    - Seek inconsistencies

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#### California Sciences Institute Cover-up detection

- Alterations produce trace inconsistencies
  - If they are not don the "normal way"
- Look for inconsistencies but...
  - Must be associated with cover-ups
  - Must have low or 0 base-rates
  - Better if they are more generic classes
  - Better if particularization is feasible
- Or generate your own...
  - Create added traces to produce more readily detectable inconsistencies

- Low base rates, etc. also needed ...

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