

Developing Curriculum

Joint Workshop on Cyber Security 2008

CEISARE

University at Buffalo

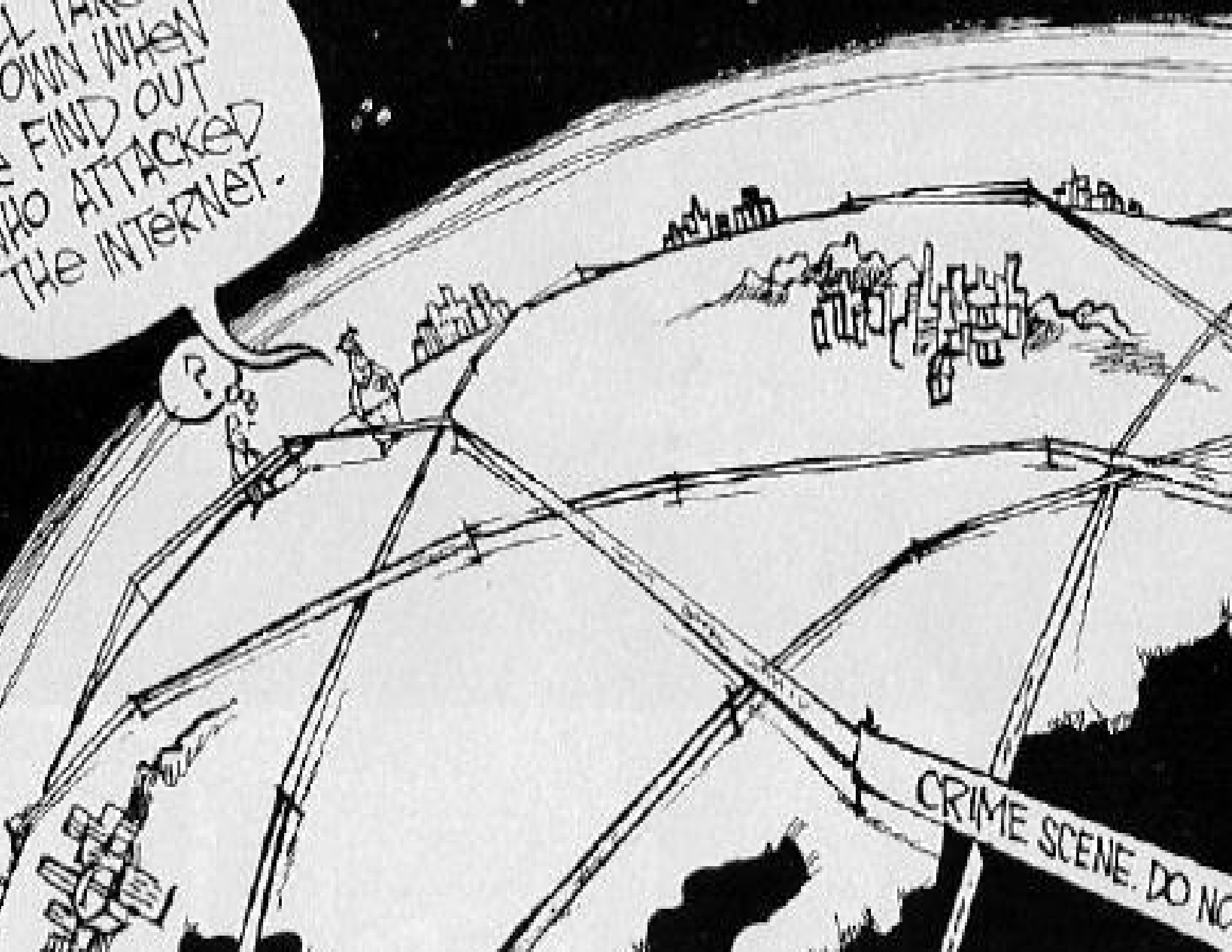
May 8th, 2008

- Dr. Marcus K. Rogers
- Professor/University Faculty Scholar
- Chair, Cyber Forensics Program
- Dept. of Computer & Information Technology
- Research Faculty, CERIAS
- Purdue University

Agenda

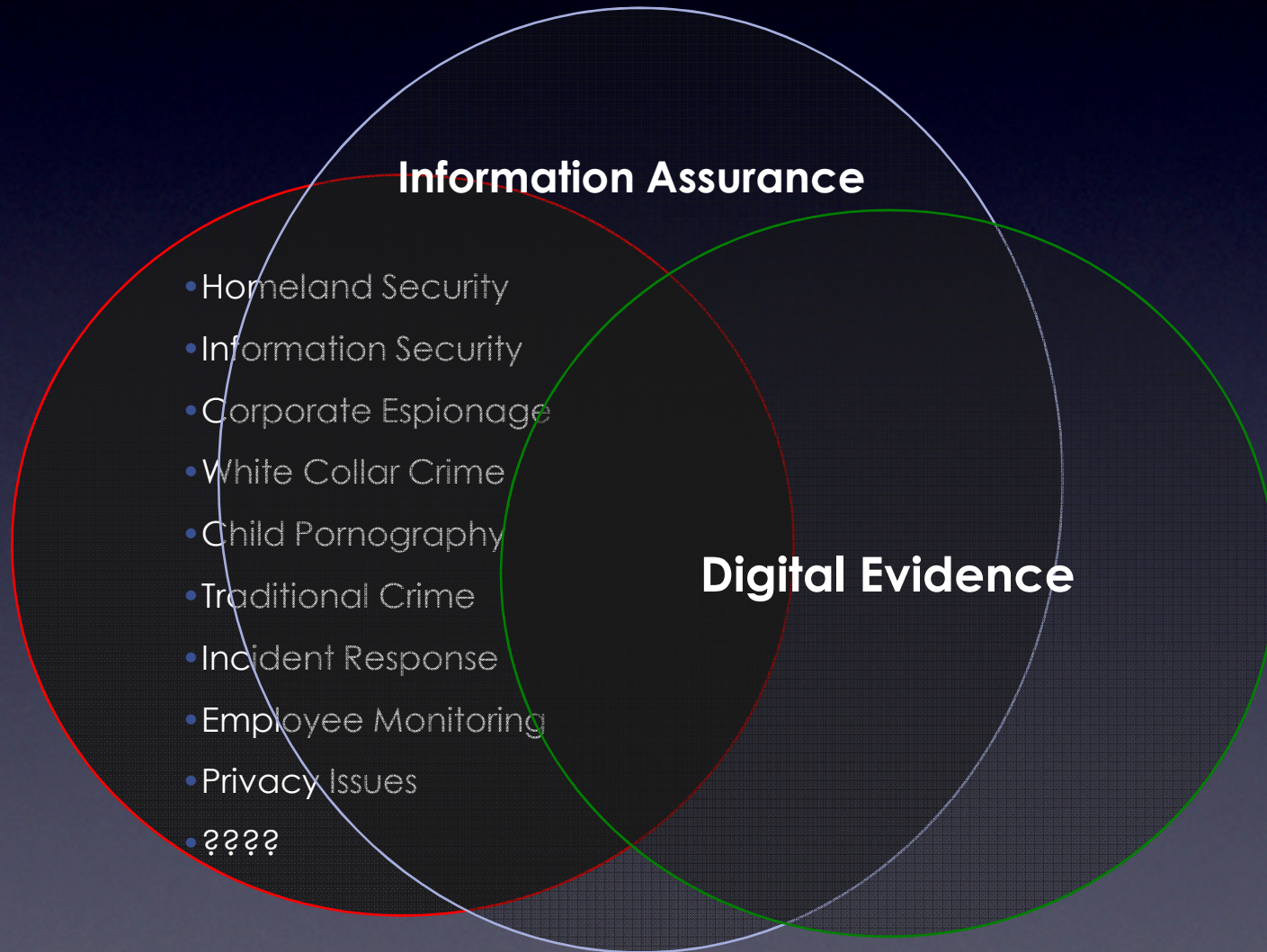
- Historical context of CF/DE Curriculum
- Grand Challenges
- Potential Solutions
- Looking Forward
- Concluding Remarks

...OWN AND
...FIND WHO
...WHO ATTACKED
...THE INTERNET.



CRIME SCENE DO NOT CROSS

Context



Historical Context

0's

1980's

1990's

2000

2001

2003

LE Investigative Units

International LE Meeting

1st International
Conference on CE

IOCE Formed

IOCE & SWGDE

RCFL in USA

COE Convention on
Cyber Crime

DFRWS

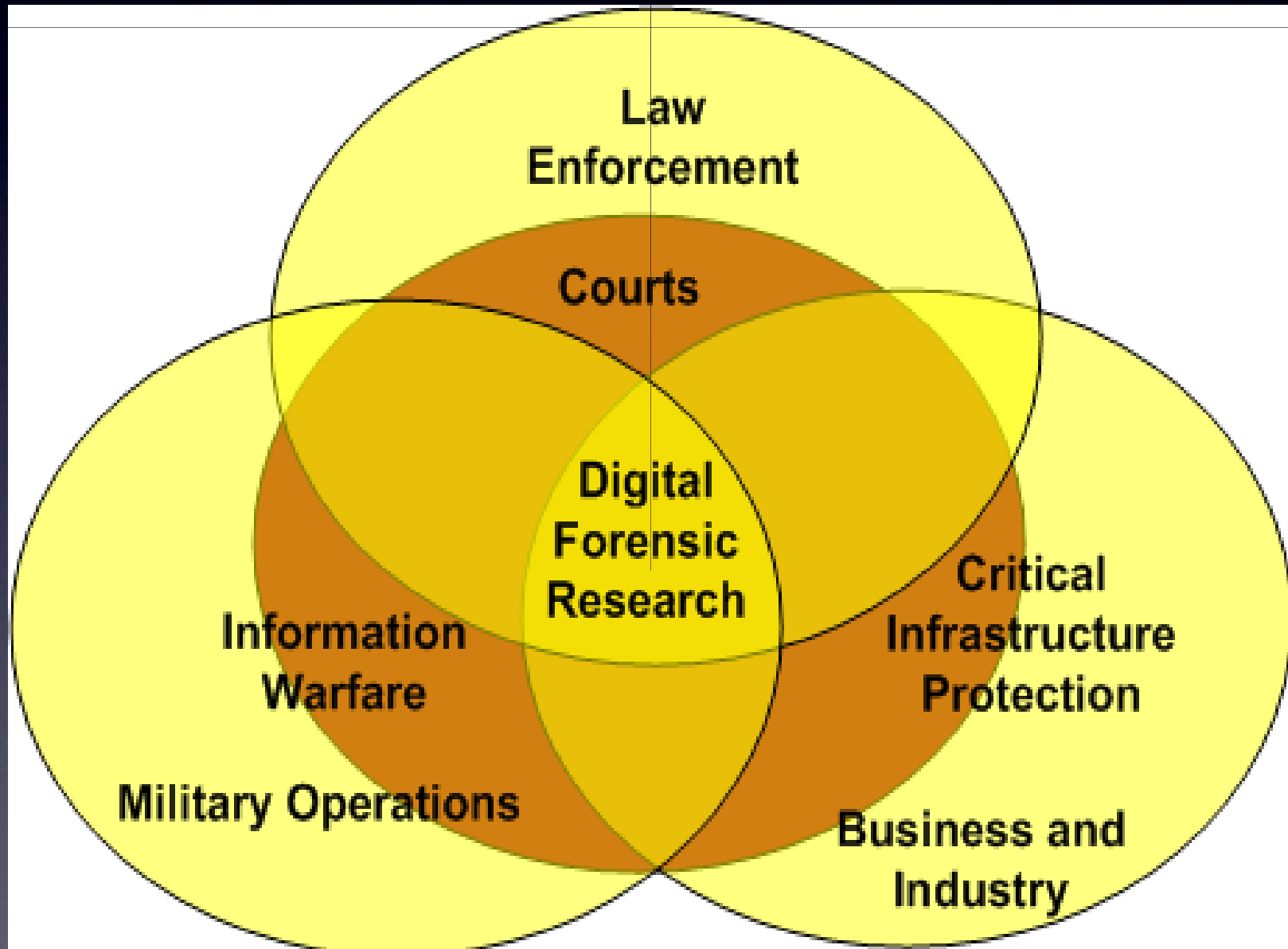
ASCLD/LAB-DE USA

ISO 17025

Journals Conferences

AAFS Subsection

Communities



Grand Challenges

- 4 Communities with competing goals?
- Investigation vs. Forensics
- Education vs. Training
- Corpus of Knowledge
- Curriculum Standards?
- Professional Certification(s)??

Law

Criminology

Engineering

Criminalistics

Management

Computer
Science

Techn

Math

Potential Solutions

- Keep in mind FORENSICS & EVIDENCE
- Despite the differences between communities the common element is:
 - Evidence that is DIGITAL

Possible Solutions

- Each community defines their own standards in cooperation with each other
 - Code of Ethics
- Put together the Corpus of Knowledge with the assistance of the different disciplines.
- Develop a “Gold Standard” Professional

Possible Solutions

- National accreditation program for Colleges/Universities offering degrees in this field
- National accreditation body for organizations offering training in this field

Possible Solutions

- MORE MONEY FOR RESEARCH!!

Looking Forward

- Continued lack of trained resources
- More specialization of KSA
- More & better scrutiny of DE by the courts
- More automation of tools and processes
- More need for a governing professional body - AAFS: Digital and Multimedia Sciences

Warning!!

- This will not become a commoditized industry!
- It will never be just about the tools!

Concluding Remarks

- The discipline is at a cross roads.
- We either become a true scientific discipline or we become a junk science
- We must become more formalized in our training & education
- There is/are common elements between the communities

A SCENE
FROM THE
NEW SHOW
'CSI: BEEHIVE'

AT THIS POINT IN THE
INVESTIGATION, I CAN TRULY
SAY IT REALLY IS NONE OF
YOUR BEESWAX.



Bl...

Contact Information

- Dr. Marcus Rogers
- rogersmk@purdue.edu
- 765-494-2561
- <http://www.cyberforensics.purdue.edu>