

Societal and Ethical Implications Associate Director Report

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Farewell to:

Jan Youtie –
SEI coordinator
at SENIC



Quinn Spadola –
NNCI Co-Director
for Education

Welcome to:

Diana Hicks –
SEI coordinator
at SENIC

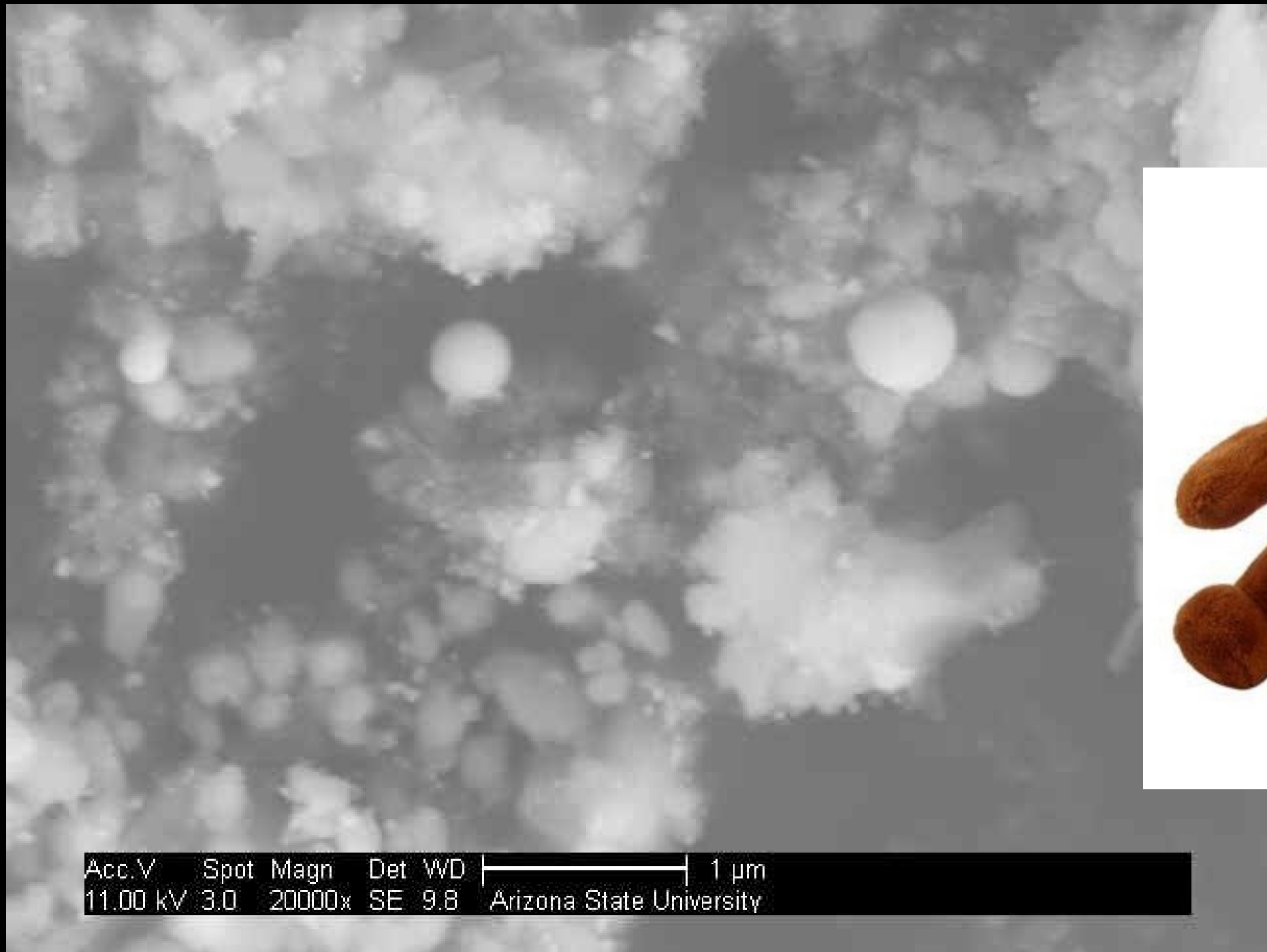


Mikkel Thomas
NNCI Co-Director
For Education



Benny the Bear





Acc.V Spot Magn Det WD |-----| 1 μ m
11.00 kV 3.0 20000x SE 9.8 Arizona State University

Many stuffed animals are filled with harmful bacteria, mold and mites... Our technology uses real silver, which is naturally anti-mite, anti-mold, anti-microbe, and it fights odors too. Silver is a safe, clinically proven antibacterial agent that fights harmful bacteria at the respiratory level.



- PurePlushy



2006 People's
Choice Award –
from some
organization...



I don't know whether Benny is safe or not. Silver is pretty non-toxic to people at low levels, and so I would doubt whether Benny presents a problem if used sensibly. But you always have to think a little more carefully when it comes to things kids could put in their mouths.

-Andrew Maynard, Project on Emerging Nanotechnologies, Woodrow Wilson Center (2007)



We have used nano silver in the past. There's a lot of speculation as to how much nano silver technology is accepted. Anytime you see controversy you try to sort of avoid it.

- Roy Sharda, partner,
Pure Plushy



SEI scholars/practitioners can:

- Analyze the broader context of S&T
- Consider the institutions that impact and are impacted by S&T
- Draw from the history of technology and social change to understand trends
- Not good at predictions, but can develop and present possible futures
- Usually best to do this earlier rather than later (i.e. sometime before the product is already on the shelves)
- **Warning:** Often develop more questions than answers

Spreading SEI through Graduate Student Training

- Why Graduate students? Because they...
- Are incredibly bright
- Are intellectually curious
- Have an aptitude for integrating new ideas into their practices
- Are motivated: many have a strong interest in better understanding their role in the world
- Can be ambassadors by sharing their knowledge and sparking decisions across the NNCI



Science Outside the Lab

Training in:

Discerning how work at the lab bench affects the outside world

Building ways for science and policy to benefit each other

How funding decisions are made

How to better ensure that R&D has a positive impact

How to advance science outside the laboratory



Science Outside the Lab

- 93 students trained in 6 programs (4 on site, 2 virtual)
- NNCI sites represented: ASU, Georgia Tech, Harvard, Minnesota, Montana State, Nebraska, NC State, North Carolina A&T, Northwestern, Oregon State, Pennsylvania, Stanford, Texas, UNC Greensboro, Washington
- 2 dozen “SEI Ambassador Projects” commenced in last two years
- Graduates have inflected discussions in their labs and changed their career trajectories through AAAS S&T Policy Fellowships, National Academy Fellowships, State of California S&T Policy Fellowship
- One just got poached by my university to help coordinate R&D funding efforts at our DC office

Winter school on Emerging Technologies



Training in:

How to work in
interdisciplinary teams

Some of the latest SEI
tools

Recent programs
focused on increasing
the Impact of academic
work



Winter School in Remerging Technologies

- 88 participants since NNCI started funding in 2016 (135 total)
- 11 different countries (all continents except Africa and Antarctica)
- NNCI sites represented: ASU, Cornell, Georgia Tech, Harvard, Minnesota, NC State, North Carolina A&T, Stanford, Virginia Tech, and Washington
- Graduates meet frequently at international meetings
- They have been quite successful in transitioning into academic jobs

Science Outside the Lab for Faculty

- As our programs at the grad level have been successful in a variety of ways, it's time to consider a faculty program
- Possibly in Summer 2023
- An opportunity to engage with policymakers and scientific decisionmakers across DC
- Many questions left unanswered like – How long? Virtual or in DC?
- Please let me know if you are interested in either participating, know someone who would want to participate, and/or would like to be part of the discussion of how to organize the program

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