Science and Society at Arizona State

Jane Maienschein
and Marine Biological Laboratory

Jason Scott Robert
and Lincoln Center for Applied Ethics
ASU: A New American University

ASU is committed to excellence, access, and impact. We measure ourselves not by who we exclude, but rather by who we include and how they succeed.
Eight design aspirations guide ASU’s transformation into the New American University

Emphasize:  Transforming Society
Use-Inspired Research

Integrating Disciplines

Through:    Community
Commitment
Connection
Collaboration
Entrepreneurship
In the beginning . . .

1. History and Philosophy of Science
   + Bioethics, Policy, and Law
   + 4E (Ecology, Economics, and Ethics of the Environment
     = Biology and Society
     (BS, MS, PhD as grounded in life sciences)
     (and undergrad certificate)

Then . . .

2. History and Philosophy of Science  PhD
3. Human & Social Dimensions of Science &Technology PhD
4. Law, Science, and Innovation JD, Master’s, and certificate
5. Science, Technology, Society (on Poly campus)
And more:

Master’s of Applied Ethics (various tracks)
Master’s of Science and Technology Policy

Undergrad Science and Society course
required for all science majors

Nonfiction Writing Certificate

Students served *per year* in Biology and Society alone:
100 undergrad majors
1000s of students in science and society courses
25 PhD students
20 Master’s students
Integrative HPSBPL4E&C: A genesis story

• New American U → Design-build phase
• Genuinely integrative, interdisciplinary
• Talking the talk but walking the walk – with still so many paths to explore
• Tremendous, multi-level mentorship
• “A tyranny of opportunities” – each and every one compelling in its own right
A beneficent tyranny of opportunities
Integrative HPSBPL4E&C: Bioscience Focus

- Real cases (historical, contemporary, literary, realistically futuristic) motivate inquiry
- Based on embedded and otherwise intensive mutually respectful collaboration with scientists, clinicians, and engineers
  - (while maintaining critical distance)
- Leading to public engagement and deliberation to create a culture of civic responsibility and collective lifelong learning
Bioscience ethics as moral architecture

People who help to design, build, and maintain “a certain kind of reflective space (literal and figurative) within an institution, within its culture and its daily life” (Walker 1993)

Producing:

– genuine dialogue,
– tools for talking,
– well-informed critical analyses,
– resources for teaching and learning, and so on
Opportunities and challenges

• The work is at its core collaborative – *but vigilant about the prospect of capture*

• The subject matter is actual or actualizable (technically sound, critically interrogated)

• The audiences are diverse and cross-sectoral

• The chief ambition – and the measure of success – is informed critical, civic dialogue
What’s distinctive about ASU?

High proportion of honors students = excellence
High inclusion of diverse population = access
Increased retention and persistence to grad = success

Undergraduates all do research projects
Students work on production and + communication + impact

Biology and Society Unusual Student Project Fund
Global Engagement

Travel to AAAS
Travel and leadership with ASBH

Teamwork with other units, cross-listing, credit for sharing
Research projects

Carnap Project
Computational HPS
Ecological Ethics and Zoo Conservation
ecoSERVICES Projects
Fire and Society
Neuroscience and Society

With MBL and ASU Digital Humanities Lab:
  MBL History Project
  Embryo Project
  (a new research and education system available for “franchise”)
High points

(JM) Working with Congressman
(JM, JR, ML, SP) Leadership of professional organizations valued
Teaching highly valued –
  high number of Regents’ and President’s Profs, awards

Leadership in and for the university valued
(JR) Leading Lincoln Center, networking with donors
(JR) Link with medical networks, including Mayo Initiative
(ML) Leading Complex Adaptive Systems
(ML) Leading Santa Fe Institute Initiative
(BH) (co)Leading Science and Religion Initiatives

Collaborative work and teamwork highly valued
Funding (just part of the larger picture)

NSF – over $4 million in last 10 years to CBS
ASU – President’s Strategic Initiative Funds
Philanthropy – Lincoln Center and family, newly constituted Lincoln Center funding board
Partnerships – MBL, Mayo-Scottsdale, ABN
Recent developments and future plans:

CSPO as a school and grad program

Ethics@ASU – across the curriculum, across the extracurriculum; faculty in residence, under the banner of the Associate Vice Provost for Ethics

Expand Embryo Project Research System

Expand Computational HPS, including into BPL
Key Messages

Demand key strategic and sustained investment from the top

Transcend boundaries, break down silos, *for real*

Celebrate and reward non-traditional forms of collaboration, and of connections between teaching, research, and service

Always put the student first – not in terms of what s/he thinks s/he needs, but in terms of what will help to achieve personal, professional, and civic success

This requires commitment to (and from) a central coordinator