

Professor of Developmental Biology - Arthur “Art” Rosen



“Making new discoveries and sharing knowledge with others are the drivers behind everything I do.”

Bio

A boyhood interest in how humans grow and develop led Art to pursue developmental biology for his PhD. After graduating he began work at an academic health center. He has been a researcher there for 25 years, and has run his own lab for 15. Art oversees around five extramurally funded projects at a time, with most of his time spent on grant writing and progress reports; manuscript preparation; lab management, including hiring, mentoring, and training staff, graduate students and postdoc fellows; reviewing manuscripts through his NIH study section; and university committee work. Making regular progress on each of his projects is Art's highest priority, and in his capacity as lab manager he does all he can to ensure this happens, including paving the way for collaborations and taking the time to ensure that his lab staff have all the support they need to succeed. All the lab staff know “Art's door is always open,” and they drop in frequently with questions. This often leads Art to continue his work later in the day, either on his commute home, finishing literature searches or manuscript reviews on his tablet, or later at night on his laptop.

Education: PhD, Developmental Biology

Years of experience: 25

Work location: University offices, lab, mobile on his laptop

Goals

- To engage in unconventional collaborations to further discovery; explore new organizational models for team science
- To use more quantitative and visual tools
- To contribute to the reclassification of diseases



Software attitude & use

- Embraces new technologies for collaboration and prefers simple interfaces with minimum clicks to find the information he needs
- He would like to learn some of the sequencing and “big data” mining techniques that several of the new postdoctoral fellows in his lab use
- Research and collaboration: PubMed, Box, Slack, video conferencing software
- General: MS Office and Google Suite

Scholarly Outputs

- Articles/manuscripts
- Conference presentations & posters
- Class lectures, materials
- Reviews manuscripts for NIH study section



Pain Points

- Lack of time; administrative duties compete with research and grant writing
- Challenges of consistently hiring productive lab staff
- The speed of advancements in bioinformatics tools

Motivators

To solve confounding problems and satisfy curiosity about human development questions

To publish his lab's findings advancing knowledge of development, to obtain grant funds, and to conduct new research

To meet the requirements and guidelines for the ethical conduct of research

To do accountable, reproducible science that ensures the safety and security of patient data

Wants/Needs

- Good collaborators
- Help with informatics/data processing
- Uniformity in regulatory and reporting requirements across different funding agencies
- A public platform for informing the public or patient advocate groups about what basic scientists do
- Recognition for contributing to human health advances, such as requiring a list of important basic science articles in bibliographies for publications on new drugs and devices

Professional Development

Art would like to learn more about high throughput sequencing platforms and data mining tools, but is worried about his ability to adapt to new techniques

Art excels at mentoring others in their careers in basic science. He ensures that his postdoc fellows, graduate students, and summer students all have projects to either manage or contribute to, that they meet their stated goals, and that they receive the maximum benefit from their time in Art's lab.