



Building College-University  
Partnerships for Nanotechnology  
Workforce Development

# Challenges Facing Nanotechnology Education Programs

April 25, 2014

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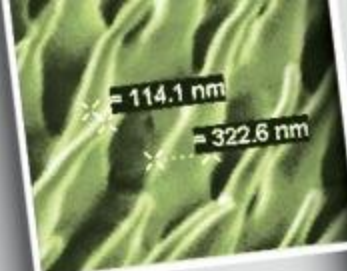
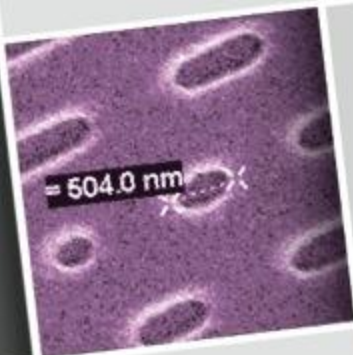
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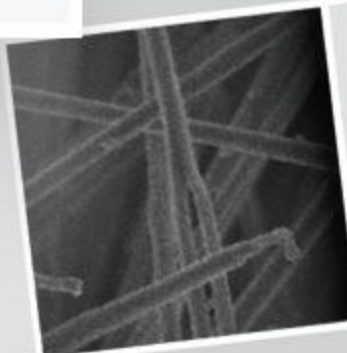
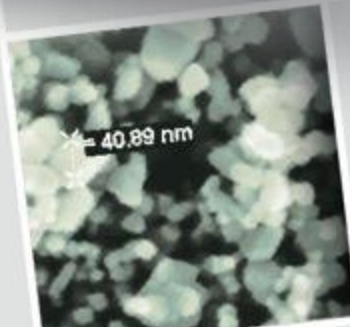
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Hosted by MATEC NetWorks [www.matecnetworks.org](http://www.matecnetworks.org)



# Today's Presenters



**Moderator: Sam Agdasi**

Assistant Professor and Chair, Nanotechnology  
Ivy Tech Community College  
[aaghdasi@ivytech.edu](mailto:aaghdasi@ivytech.edu)



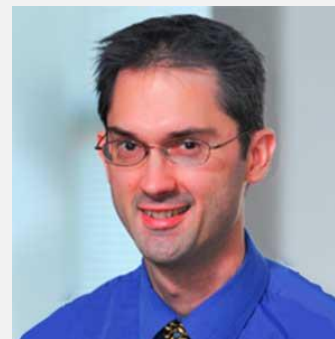
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**Kevin Conley**

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Host: Mike Lesiecki  
MATEC



**Students**

**Educators**

**Industry**

## **SHINE's vision**

- Expand the diversity, number and quality of trained nanotechnicians entering the workforce in WA, OR and ID
- Promote and support nanotechnician education in the region
- Connect nanotechnology stakeholders: Students, Educators and Industry in WA, OR and ID

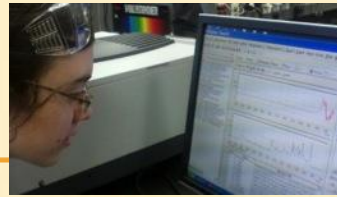




# Nanotechnology Program at Northwest Vista College

## Current Enrollment: 54 in technical courses

- [Level One Certificate](#)
- [Associate Degree \(AAS\)](#)
- [Advanced Technical Certificate](#)
- [2 + 2 Bachelor Degree Program in conjunction with the University of Texas at San Antonio \(UTSA\)](#)



Electron  
Microscopy

Infrared  
Spectroscopy

Particle Sizing



Biological  
Surface Analysis

Fluorescence  
Microscopy

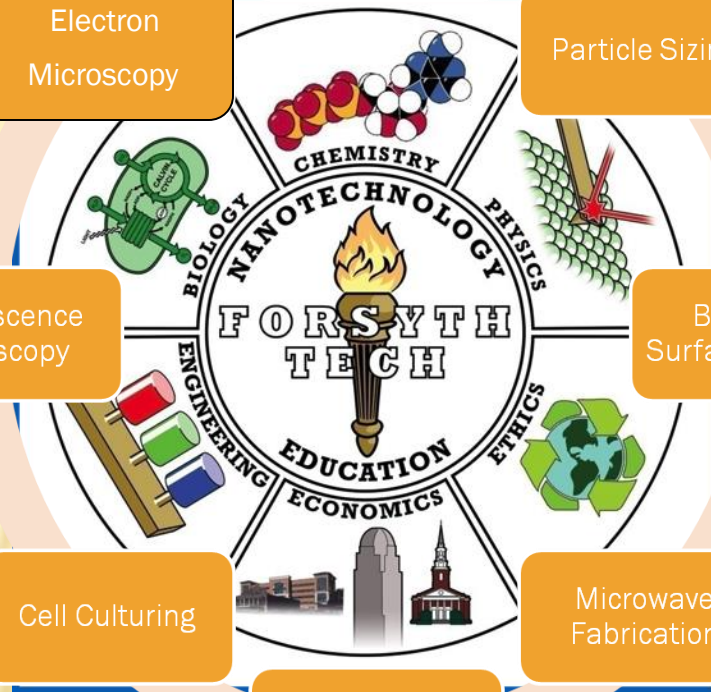


Cell Culturing

Microwave  
Fabrication



Bioprinting

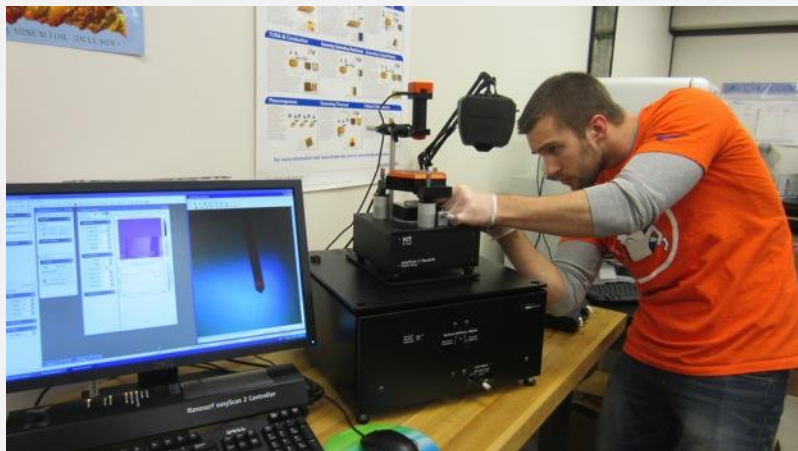


# Ivy Tech Community College

- The only ATMAE-Accredited Nanotechnology Program in the U.S.
- Teaches all NACK nanotechnology courses and labs
- Strong partnership with University of Notre Dame
- Collaboration with local start-up companies including F Cubed, U.S.Nano and Indiana Integrated Circuits
- Transfers to Purdue University, North Central as a 2+2 program



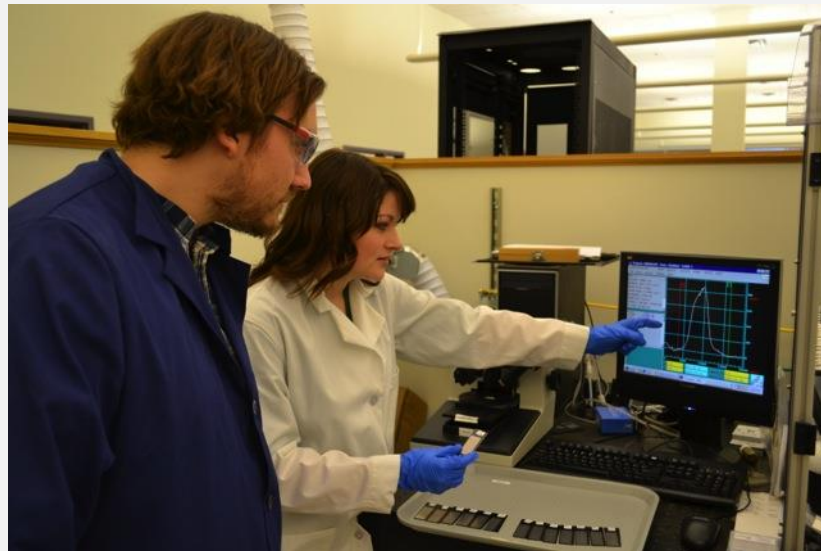
# Panelist Discussion



# Establishing the Need

Community Colleges are considered as an important force for economic development in a region through preparation of the workforce.

- What benefits are there for colleges to have technical programs?
- What can college administrations do to highlight / promote tech programs and get local industry and business to know and really understand the value of graduates from these programs?



# Issues

- How can a college justify maintaining currency of the programs and the labs and the faculty who support them?
- What can we do to better recruit and retain academically strong modern neo-millennial students into these programs?





# Technology

- What can be done to support the development of online technologies for nanotechnology education?
- What are the critical few issues and the few, major possible solutions and ideas?

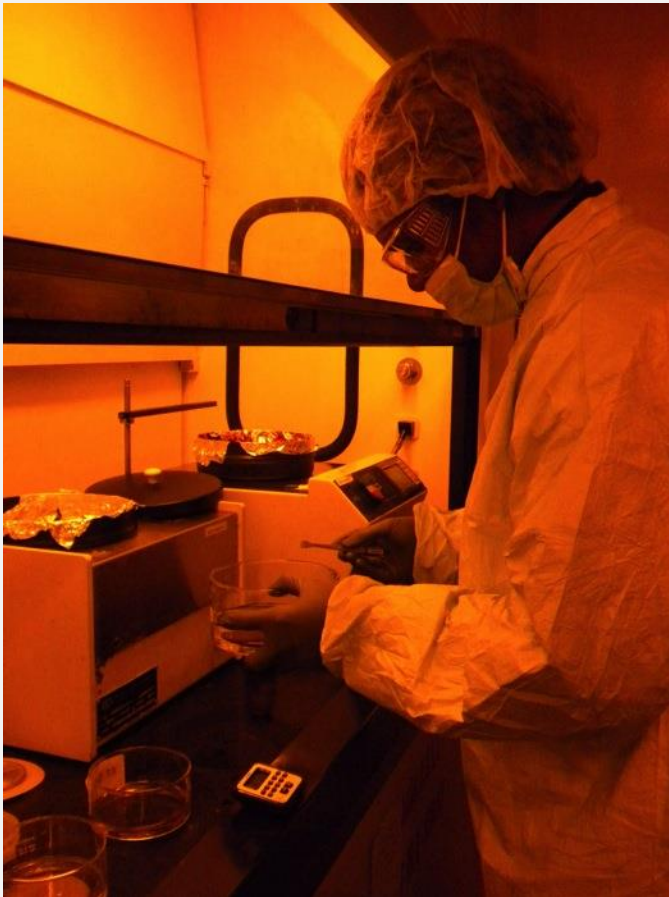


# What is your special sauce?

- What is unique about your program that makes it stand out from others?
- What do you tell people is your “special sauce”?



# Summary



**ForsythTech**

*More Than You Know*





# How Can We Better Serve You?

Whether you are joining us live or watching the recorded version of this webinar, please take 1 minute to provide your feedback and suggestions.

<http://questionpro.com/t/ABkVkZQFNn>



# Webinar Recordings

To access this recording, slides, and handout visit  
[nano4me.org/webinars.php](http://nano4me.org/webinars.php)



# Certificate of Participation

If you attended the live version of this  
1.5 hour webinar and would like a  
certificate of participation, please email:

[sbarger@engr.psu.edu](mailto:sbarger@engr.psu.edu)





# 2014 Events Calendar

**May 13 – 15:** Hands-On Introduction to Nanotechnology for  
*Workshop* Educators

**May 15:** Electrospinning  
*Webinar*

**Aug 11– 14:** Nanotechnology Course Resources II: Patterning,  
*Workshop* Characterization, and Applications

Want more events? Visit [www.nano4me.org/webinars](http://www.nano4me.org/webinars) for more details about these and other upcoming workshops and webinars in 2014.



Thank you!

Thank you for attending the  
NACK Network webinar

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