



AMD Technology in the Public Health Laboratory *Opportunities and Challenges*

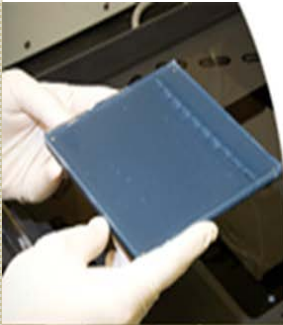
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AMD Technology in the Public Health Laboratory

Opportunities and Challenges

My perspective...

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Opportunities and Challenges



WSLH into the deep end...

- 2014-15 ELC funding
 - Extension of PulseNet
 - ID and susceptibility testing of *M. tuberculosis* complex
- 2015 CDC Influenza Division funding
 - Pilot extension of National Influenza Surveillance Reference PHL activities

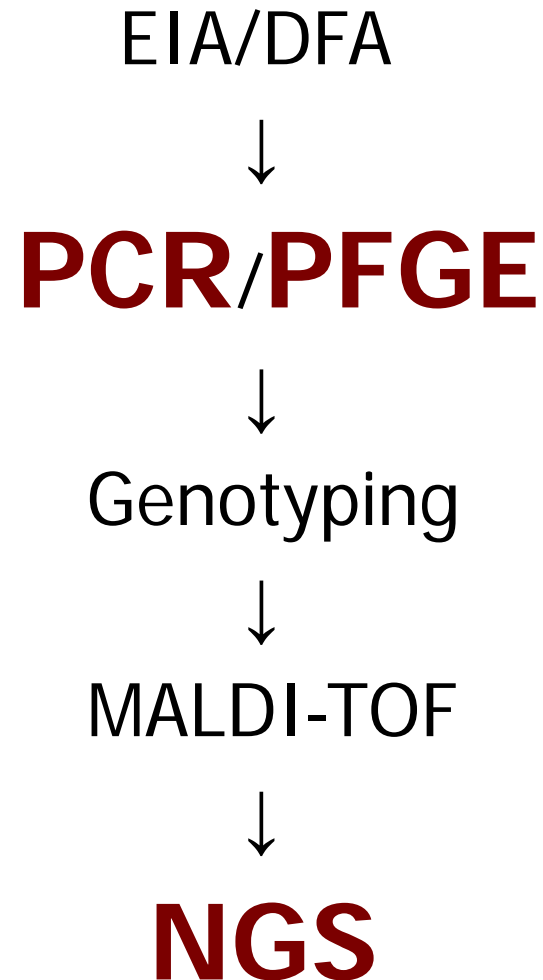




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Opportunities and Challenges

OK, time to take a
DE-E-E-E-P breath!





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Opportunities and Challenges

Enabling infrastructure at WSLH

- Member of CDC/APHL National Networks
 - Long-time PulseNet Lab
 - National Influenza Surveillance Reference PHL
 - National VPD Reference PHL
 - CaliciNet-OSC
- Significant molecular capability and capacity
- Other WSLH and University resources and experience
- Strong clinical laboratory network



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Opportunities and Challenges

Opportunities

- Multiple potential uses
 - Enhanced molecular epidemiology
 - Identify resistance, virulence factors, genetic drift, etc.
 - **Applied** vs. **basic** research
 - Defined by individual PHL mission, opportunity
- Support CDC and other PHLs as Reference Center
- Resource for other external customers
 - Academic labs, clinical labs



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Opportunities and Challenges

Challenges (internal /institutional)

- Labor and staff intensive
 - Fitting into operations and workflow
- Finicky equipment and procedures
- Optimizing/minimizing costs
 - Keeping up with maintenance
 - Maintain batch sizes
- Educating the epi's - *What does it all mean?*
- Bioinformatics and IT support needs
- Don't forget the basic microbiology



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Opportunities and Challenges

Challenges (CDC partnership)

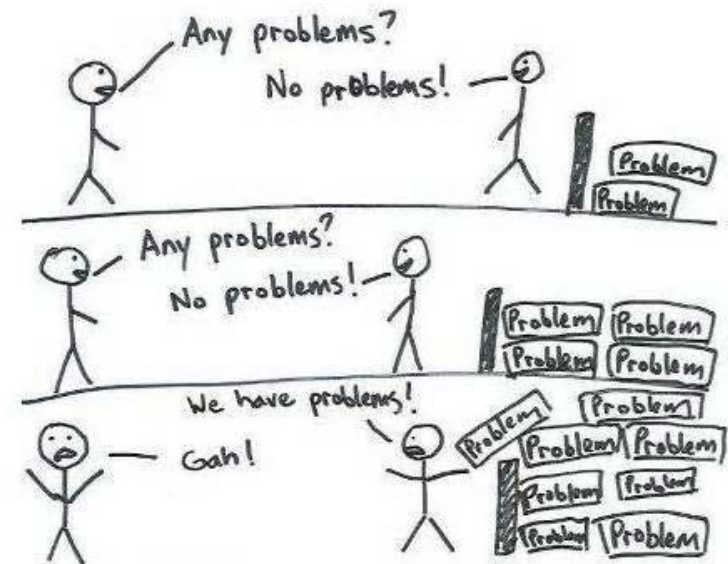
- Partnering with multiple CDC groups
 - So many targets, so many interests!
 - Which should we choose?
 - Need for harmonization
 - Viability of partnerships with PHL enhanced by uniformity in SOPs, platforms, informatics
- Robustness of CDC-developed methods in the PHL
- Compounding of challenges among different PHLs
- Balance with other PHL mission responsibilities



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Opportunities and Challenges

...but none of these challenges are necessarily deal-breakers. They do, however, need to be *identified, discussed, and addressed!*



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Opportunities and Challenges



**What have been your
experiences?**

**What opportunities and
challenges do you see?**