

# Idaho WIN's "My Amazing Future" Program

Frances M. Marshall, International Atomic Energy Agency, <u>F.Marshall@iaea.org</u> Michelle T. Bingham, Idaho National Laboratory, <u>Michelle.Bingham@inl.gov</u> Ann Marie Phillips, Idaho National Laboratory, <u>Annmarie.Phillips@inl.gov</u>

#### Motivation for Program

- Focus on STEM Workforce Development
  Provide Girls Exposure to the Wide Variety of STEM
- topics
  Increase Potential for Girls', Women's Economic
- Opportunities

  Show Female Technical Competence and Leadership –
- Role models for girls deciding career paths
- Sustainability for Idaho's Technology Foundation
- Focus on Eighth Graders Before high school curriculum is developed
- Background Research on Education Supports the Need for Similar Programs – All agree that women are underrepresented in STEM careers

## 2015 Workshops

- 3-D Symmetry and Geometry
- Arrive Alive to Your Amazing Future
  Dancing Craisins and Other Science Magic Tricks
- Experiment with a Chemist
- DNA Isolation from Strawberries
- Human Factors: Using Psychology to Improve Nuclear
- Power Plant Control Rooms
   Nuclear Space Batteries
- Nuclear Forensics and Radiochemistry
- Our Amazing Aquifer: Protecting Our Most Precious
- ResourceOur Amazing Bodies: Continued Use When Hip Joints
- Wear Out • Our Amazing Robots: Shaping the Future with Your
- Our Amazing Tobols: Shaping the Future with Tour Imagination
   Our Amazing Technology: Protecting Our Data
- Our Amazing Technology: Protecting
   Phenomenal Physics
- Radiation and Life
- Rainbow Density Drink and Magic Colored Milk
- Science of Energy
- Wave your Wand in a Cave



## References

- K. MODI, J. SCHOENBERG, K. SALMOND, "Generation STEM: What Girls are Saying about Science, Technology, Engineering, and Math," Girl Scouts of America, 2012
- D. BEEDE, T. JULIAN, D. LANGDON, G. MCKITTRICK, B. KHAN, M. DOMS, "Women in STEM: A Gender Gap to Innovation," US Department of Commerce, Economics and Statistics Administration, August 2011 sponsorship, IWIN leadership
- C. HILL, C. CORBETT, A. ST. ROSE, "Why So Few? Women in Science, Technology, Engineering, and Mathematics," American Association of University Women, February, 2010
- A. CARNEVALE, N. SMITH, M. MELTON, "STEM: Science, Technology, Engineering, and Mathematics," Georgetown University Center on Education and the Workforce, October 2011

## History of Program

- 2006 Initiated as part of College of Southern Idaho "Girls in Technology" program
- 35 girls from 3 schools, 4 workshops, only INL presenters and sponsorship, IWIN leadership 2015 Not Part of "Girls in Technology," but an independent program
- 150 girls from 9 schools, 17 workshops, 15 community presenters and sponsors, still IWIN leadership

Idaho National Laboratory



#### Planning Considerations

- Need Event Organizing Committee
- Obtaining Space in Facilities to Host Workshops
- Laboratories Safety briefings
- Conference Rooms
- Outside or Inside?
- Transportation for students?
- Food and Drinks Need to host breaks, lunch Printed Program?
- Printed Program?Handouts/Giveaways?
- Seek Feedback Ask during the day, not afterward



https://youtu.be/-VVXFWk8P4o

#### Feedback

- "All the girls expressed enthusiasm and interest, and a desire to keep taking science and other classes that would prepare them for STEM careers."
- "All of this engineering stuff is really cool. It's really changing my mind about what I want to do. I like doing things with my hands and I've learned a lot about what kind of careers are out there."
- "I didn't think about a STEM career before I attended My Amazing Future at INL. Now I want to be a Mechanical Engineer."

