Professional Council Presentation:

*Sailing the High C’s*

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Disclosures and Conflicts

• I have nothing to disclose and no conflicts of interest
Introduction

“This year’s meeting will explore the ways in which we can bring our creativity and scientific expertise to continue building medicine of the future.” – Jim Dobbins, PhD, FAAPM (AAPM President)
What is creativity?

- A process of becoming sensitive to problems, deficiencies, gaps in knowledge, missing elements, disharmonies, and so on; identifying the difficulty; searching for solutions, making guesses, or formulating hypotheses about the deficiencies; testing and retesting these hypotheses and possibly modifying and retesting them; and finally communicating the results. (Dr. E. Paul Torrance)
What is creativity?

- Process involving the generation of new ideas or concepts, or new associations between existing ideas or concepts, and their substantiation into a product that has novelty and originality (New World Encyclopedia)

- How can we be professionally creative?
Change

• Get rid of complacency

• RO-APM

• New technologies
  • AI
  • Automation

• Changing clinical paradigms
  • Increased use of hypofractionation
  • MPA’s
Collaboration

• Across clinical medical physics subfields
• Among research, educational, and clinical medical physicists
• Institutional leadership
• Non-physicists

“The future suggests new opportunities for multi-disciplinary research bridging physics, biology, engineering, and computer science, and collaboration in medical physics carries a strong capacity for identification of significant clinical needs, access to clinical data, and translation of technologies to clinical studies.”

-Jeffrey Siewerdsen, PhD, FAAPM (APS March Meeting 2016)
Communication

- Interactions with various non-physicist groups
- Professional needs
- Social support
Complementarity

• Creating a team that is effective

• Too much homogeneity detrimental to productivity

• Consistent with AAPM EDI initiative (true diversity and inclusion)
Challenge

- Your skill sets
- Your thinking
- Your perceptions
C-suite

- Medical physicists must be in positions to influence the future
  - David Jaffray, PhD, FAAPM (*SrVP, Chief Technology and Digital Officer, MD Anderson Cancer Center*)
  - Jonas Fontenot, PhD, MBA, FAAPM (*Chief Operating Officer (COO), Mary Bird Pekins Cancer Center*)
  - Jim Dobbins, PhD, FAAPM (*Associate Vice Provost, Duke University*)
Conclusions

• The future will be different

• Be proactive in shaping it

• Develop skills

• Challenge your status quo

“The future cannot be predicted, but futures can be invented.”
-Dennis Gabor, Nobel Laureate
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