Managing your Postdoc: Mastering the Core Competencies

Government-National Laboratory Perspective

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Who Am I?

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NPA Core Competencies

1. Discipline-specific conceptual knowledge
2. Research skill development
3. Communication skills
4. Professionalism
5. Leadership and management skills
6. Responsible conduct of research
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Communications Skills
Writing

“This year we have received a large number (257) of … concept papers. In order to most expeditiously downselect these concept papers to about 50 concept papers that will go forward …”

• Recommend 20

• “[Last year] 11 awards were made out of 234 concepts that were submitted.”
Communication Skills
Speaking
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Communication Skills
Speaking

\[ T^{\mu\nu}(x^\lambda) = (\rho + p)u^\mu u^\nu + pg^{\mu\nu} \]

\[ G_{\mu\nu} = R_{\mu\nu} \square \frac{1}{2}g_{\mu\nu}R = \kappa T_{\mu\nu} \]

\[ \hat{h}_{\mu\nu} = h_{\mu\nu} - \frac{1}{2}\eta_{\mu\nu}h_\alpha^\alpha \]

\[ \Delta t \propto \int h_{ij}(x, t) \, dr \]

Therefore

\[ \Delta t \sim h/f \text{ and } h \sim \sigma_{\text{rms}}/T \]
Communications Skills
Speaking

• Objective: Ensure that your key points are communicated to the audience.
• Do not assume that your audience is an expert in the subject.
• Provide background.
• Ensure that everything on your slide is there for a reason and is explained.
• Your audience can read your slide.
Communication Skills

Listening
Leadership and Management Skills
Leadership and Management Skills
Lines, Timescales, and Budgets, Oh My!

Dammit, Jim, I’m an astronomer, not an accountant!
Responsible Conduct of Research