Strategies for Working Remotely

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EXASCALE COMPUTING PROJECT

National Nuclear Security Administration

U.S. DEPARTMENT OF ENERGY | Office of Science

Speaker Bio

Elaine Raybourn is a social scientist in the Statistics and Human Systems Group (Applied Cognitive Science) at Sandia National Laboratories. Her research focuses on virtual teams, HPC developer productivity, and transmedia learning. She holds a PhD in Intercultural Communication with an emphasis in Human Computer Interaction and a graduate certificate in Modeling and Simulation of Behavioral Cybersecurity. Elaine has worked remotely for a combined total of 15 years while at Sandia National Laboratories: from the UK as a guest researcher at British Telecom; Germany (Fraunhofer FIT) and France (INRIA) as a Fellow of the European Research Consortium in Informatics and Mathematics (ERCIM), and most recently as Sandia's Institutional PI for the IDEAS-ECP productivity project. She leads PSIP and the ECP panel series *Strategies for Working Remotely*.

Moderating the ECP panel series from home, in response to the COVID-19 pandemic. Image Credit: Elaine M. Raybourn

Presentation Outline

PERSPECTIVE TAKING

- Rethinking what we know about working remotely
- Reimagining flexible work

REVISITING RESILIENCY

- Given what you've already heard about effective teaming and virtual collaboration (for yourself, individuals, and teams) – what questions do you still have?

CREATIVITY and INNOVATION

- Opening up a space for informal community dialog
- Communicating wide and deep

CONCLUSION and DISCUSSION

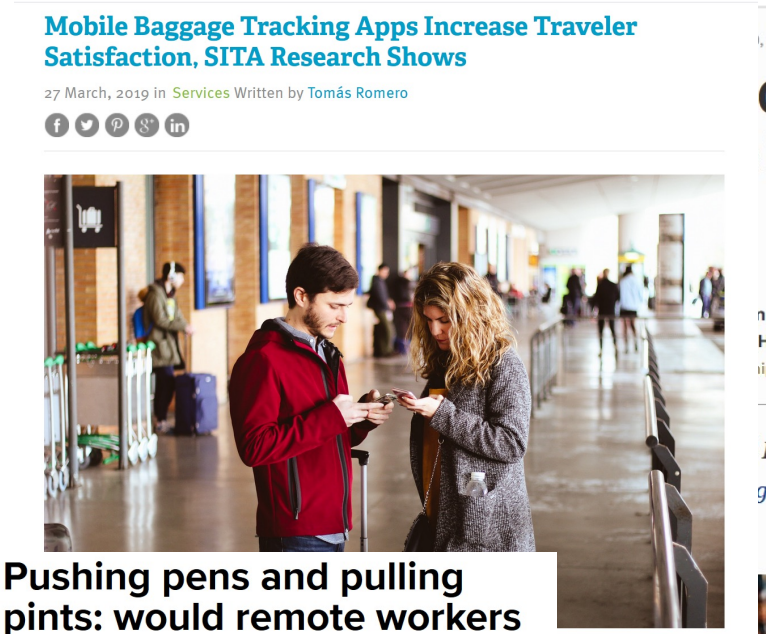
- Collaboration equity empathy, inclusion, authenticity

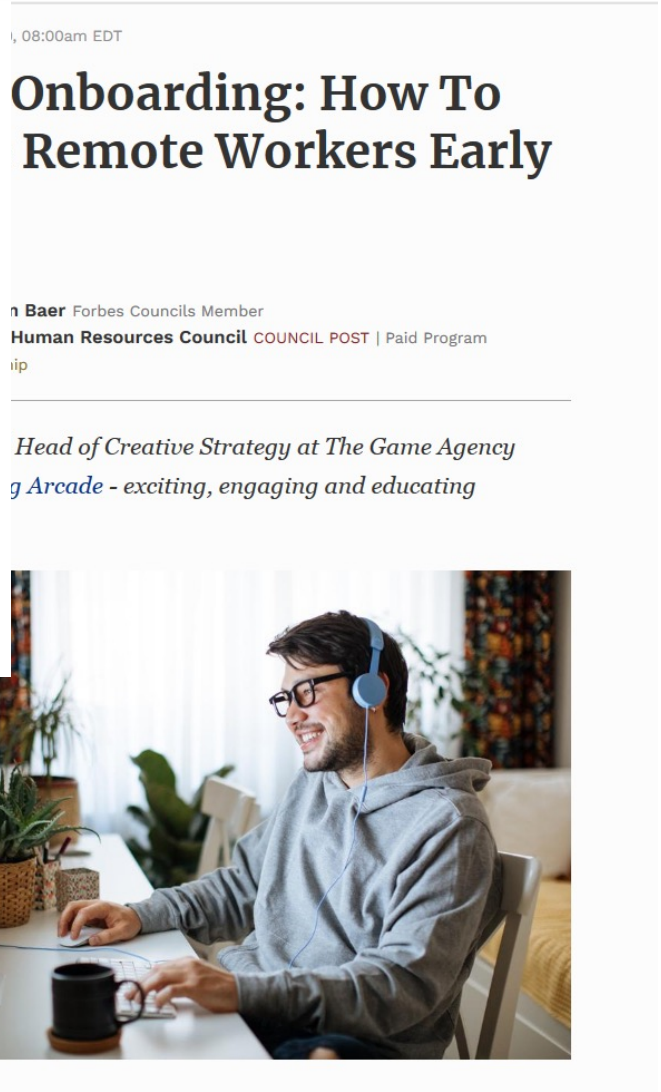
"You have no idea how depressing and fatiguing it is

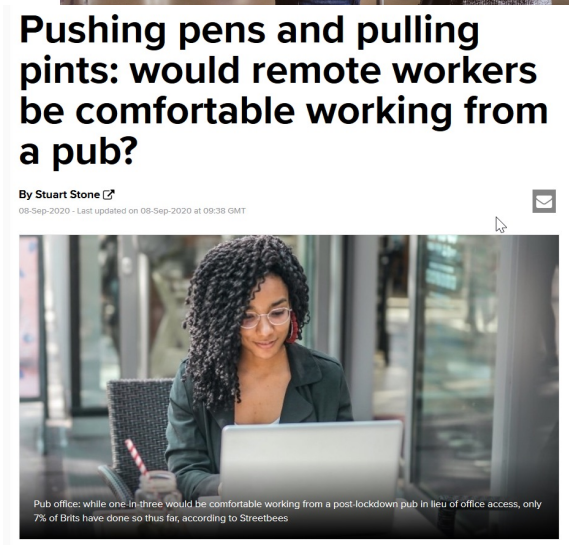
to live in the same house where you work."

U.S. President Chester A. Arthur, 1881-85

What is your pre-pandemic experience with working remotely?







You are a
remote worker when
you travel,
work offsite,
work with a team
on different floors of the same building,
or from a co-located space
across the laboratory complex,
and yes,
when you work from home.

E. M. Raybourn (2020) Why We Need Strategies for Working Remotely: the Exascale Computing Project (ECP) Panel Series. State of the Practice: Responding to Pandemic Driven Change, International Conference for High Performance Computing, Networking, Storage, and Analysis, SC20, November 17, 2020

How is working remotely now qualitatively different?

Image Credit: @GretchenTG / Gretchen Goldman

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Why do we need strategies for working remotely?

Our media habits

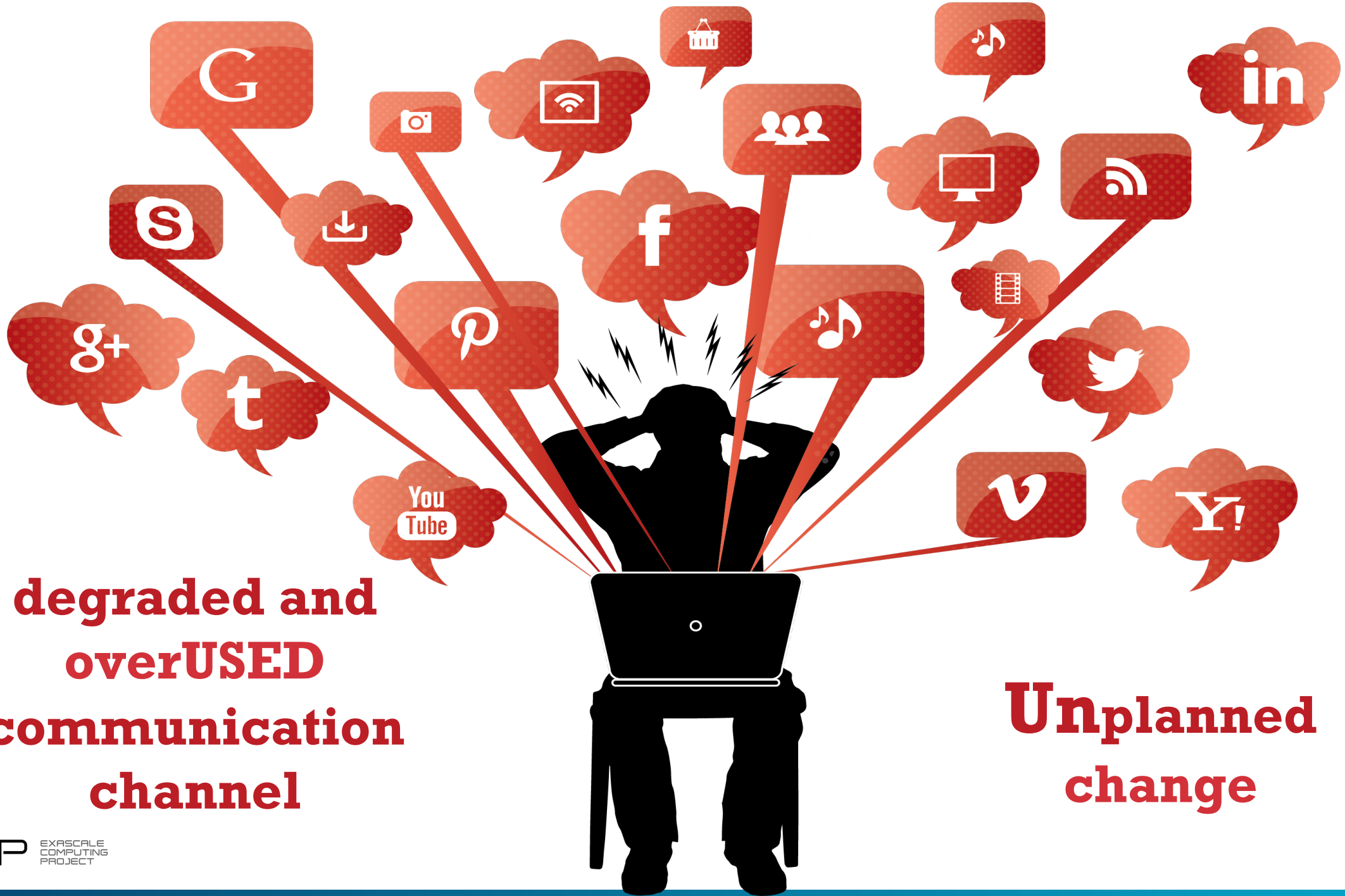
are changing

and

Our cognition is

increasingly

distributed

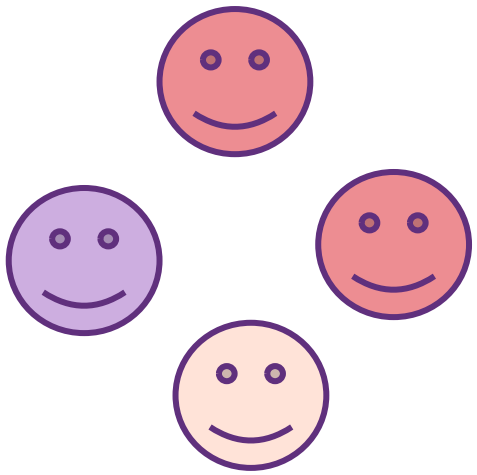


degraded and overUSED communication channel

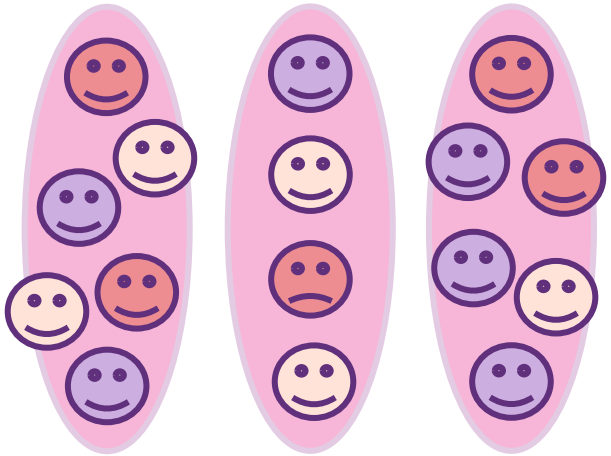
Unplanned change

Fluid scenarios versus static configurations

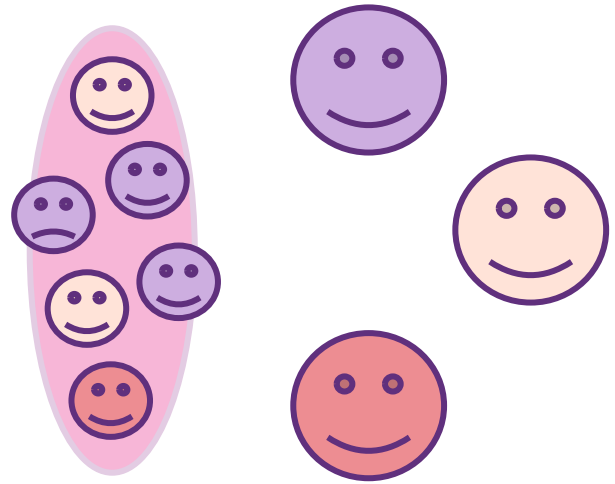
Remote First



Single or Multi-site



Flexible + Dispersed



- Imagine a day in the life of a flexible worker, virtual worker, or telecommuter.
- How many of the scenarios above are you a part of?

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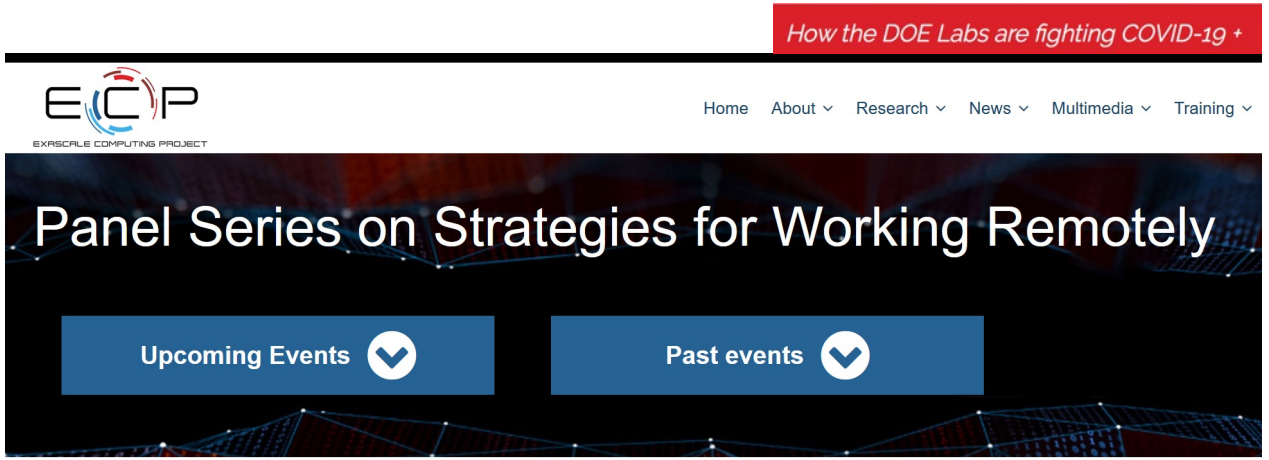
Lab-wide informal community dialog: the ECP Panel Series



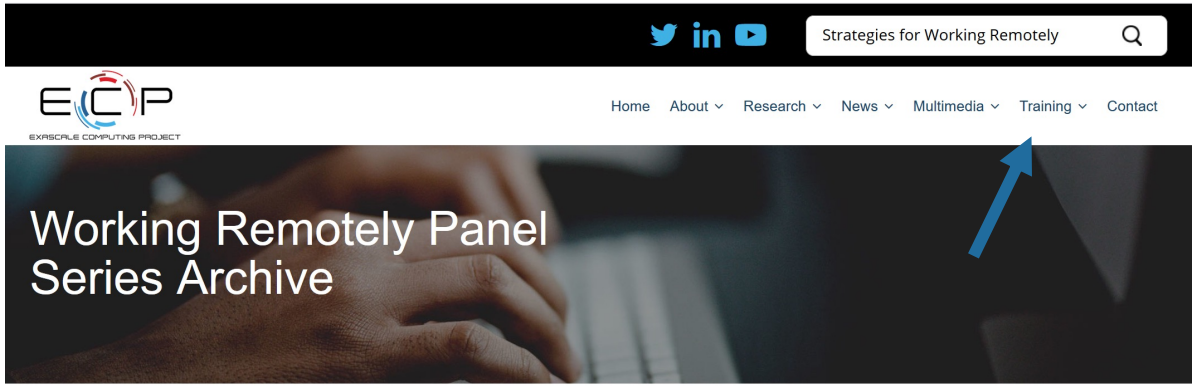
UPCOMING EVENTS

Strategies for Working Remotely Panel Series – Sustainable Hybrid Approaches

October 29, 2020

In Spring 2020 many workers abruptly transitioned from a primarily on-site to a

In response to the COVID-19 pandemic, the Interoperable Design of Extreme-scale Application Software - Exascale Computing Project (IDEAS-ECP) launched the panel series Strategies for Working Remotely.



ALL PAST EVENTS

Strategies for Working Remotely Panel Series – How to Make Teams Tick

August 27, 2020

In response to the need for many to transition to unplanned remote work, the IDEAS-ECP Productivity project launched the panel series Strategies for Working Remotely. This panel discussion "How to Make Virtual Teams Tick" addresses ways to bring teams who have been disrupted by change back into balance.

View Training Event >

Strategies for Working Remotely Panel Discussion – Virtual Onboarding and Mentoring

June 30, 2020

Several laboratories have onboarded interns and new team members to work remotely with geographically dispersed teams. What are some lessons learned and best practices that we can take away from this experience? Staff members of DOE laboratories will speak about their experiences in onboarding and mentoring new hires virtually.

View Training Event >

Strategies for Working Remotely: Making the Transition to Virtual Software Teams

May 21, 2020

As working remotely has suddenly become a near-universal experience, many software teams are now functioning as completely virtual teams. This panel brings together staff members of DOE laboratories, who will speak about experiences in recent transitions from co-located and partially distributed software teams to fully virtual software teams.

View Training Event >

Strategies for Working Remotely: Challenges Faced by Parents Who are Working Remotely, and Overcoming Them

April 24, 2020

While working remotely is challenging enough, many are currently experiencing unique complexities involved with parenting, transitioning to online school at home, and

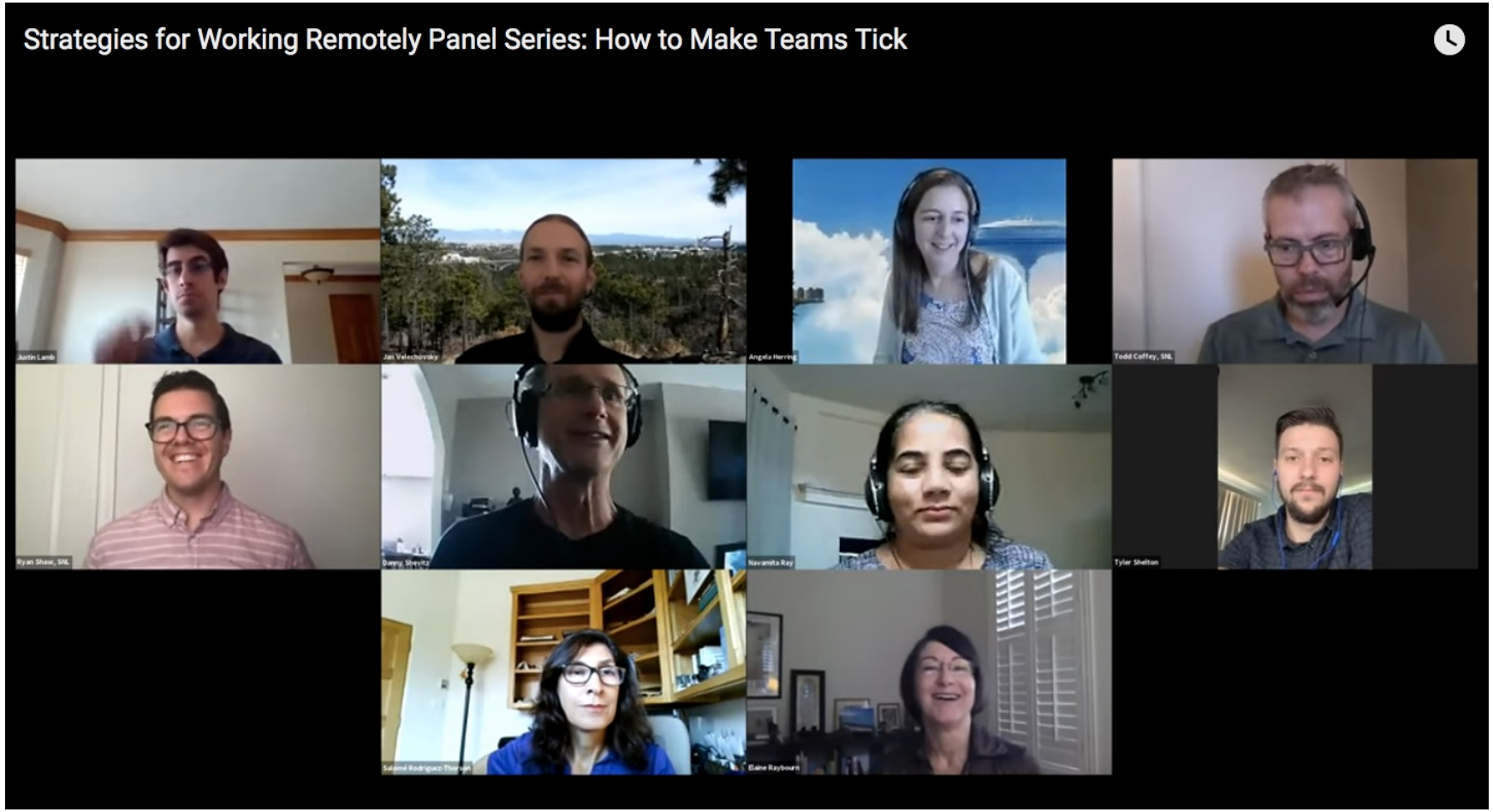
Strategies for Working Remotely: Advice from Colleagues with Experience

April 3, 2020

Working remotely has suddenly become a near-universal experience for staff members of research organizations, but for some it has been a way of life for years. This panel brought together five staff members of U.S. Department

Future of work: collaboration equity, empathy, inclusion, authenticity

- Be a team player, and if you lead a team – *do it well*.
- Leave digital footprints that are persistent, collaborative, and shared
- Know the pros and cons of communication and when to use for best results
- Carve out time on your calendar for thinking, reflection, exercise, and eating lunch
- Learn new skills, *unlearn old habits*
- Seek new perspectives on diversity and inclusion
- Expand your mental model of "productivity"
- Keep process changes that are positive – challenge assumptions, and "how we used to do it"
- Scale productivity of small teams to Teams of Teams



Screen capture of How to Make Teams Tick panel, August 27, 2020.

Image Credit: Elaine M. Raybourn

It's not perfect now, so use this opportunity to position our organizations for the future of work

Acknowledgements and Resources

- Special thanks to ECP, IDEAS, Ashley Barker (ONRL), Mike Heroux (SNL), Lois McInnes (ANL)

- Raybourn. E.M. Why We Need Strategies for Working Remotely: the Exascale Computing Project (ECP) Panel Series. State of the Practice Talk: Responding to Pandemic Driven Change, SC20, November 17, 2020.
- Raybourn E.M., Moulton J.D., Hungerford A. (2019) Scaling Productivity and Innovation on the Path to Exascale with a “Team of Teams” Approach. In: Nah FH., Siau K. (eds) HCI in Business, Government and Organizations. Information Systems and Analytics. HCII 2019. Lecture Notes in Computer Science, vol 11589. Springer, Cham.
- Raybourn, E.M., Milewicz, R., Rogers, D., Sims, B., Watson, G., Gonsiorowski, E., Willenbring, J. “A Data-driven Approach to Rethinking Open Source Software Organizations as a Team of Teams.” The International Conference on Software Engineering Research & Practice, SERP’21, July 26-29, 2021.

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For more IDEAS-ECP information: https://exascaleproject.org/better-scientific-productivity-through-better-scientific-software-the-ideas-report