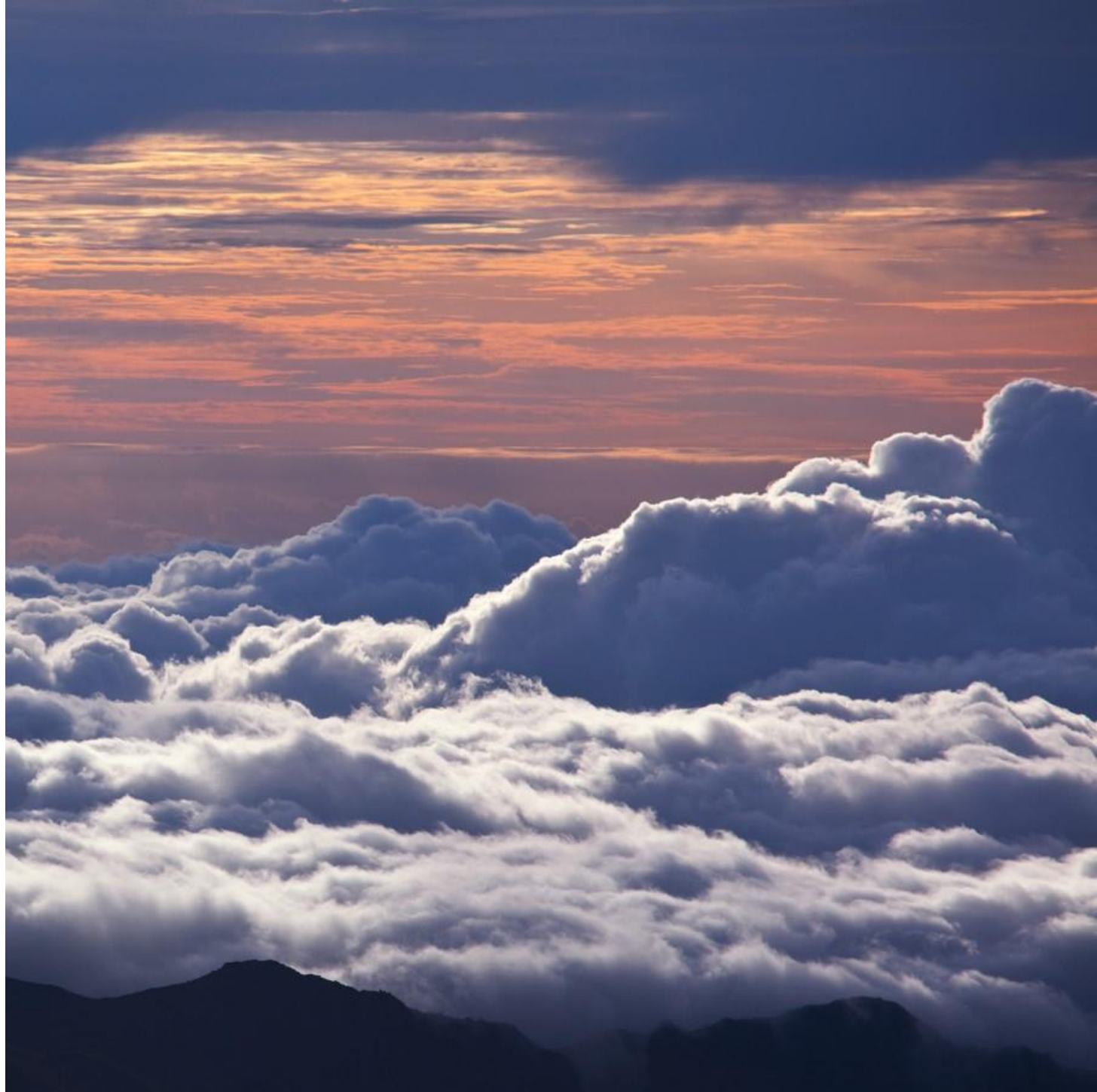
Pacific Northwest
NATIONAL LABORATORY

Leveraging the Coaching and Development Program to Advance Your Career

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U.S. DEPARTMENT OF ENERGY BATTELLE

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Purpose

The purpose of this talk is to get you to think critically about how to leverage the CDP process to advance your career at PNNL.

1. Understand and leverage the Leveling Guide.
2. Articulate your unique skills and value proposition.
3. Develop and act on a personal definition of success.
4. Define where you want to go and identify the skills you need.
5. Learn to accept and adapt to feedback.

Understand and Leverage the Leveling Guide

The Professional Hierarchy – Scientist and Engineer Leveling Guide defines PNNL's performance expectations for every level of the S&T ladder. The core components are: Technical leadership, organizational leadership, project execution, and impact.

Professional Hierarchy - Scientist and Engineer							
Levels	P1	P2	P3	P4	P5	P6	P7
Technical Leadership	Applies basic S&E theories to well defined tasks with minimal oversight. Requires conceptual knowledge of scientific or engineering theories, practices, and procedures within specialization.	Building reputation through application of S&E principles and theories and developing technical approaches to solve challenges.	Established local reputation with specialization in at least one S&E domain. Making key contributions in setting technical direction.	Expert in at least one S&E domain and the ability to connect multiple domains. Sought after within PNNL for technical leadership to set technical direction.	Established nationally as an expert in at least one S&E domain. Establishes new approaches at a national level and advances state of the art concepts.	Recognized internationally or beyond their domain as an authority in their S&E domain. Develops and advances state of the art concepts and helps define the agenda for resolving major challenges in their field; redefines problems in their field in novel ways.	Broadly recognized both inside and outside of their research domain as an authority Creates or redefines entire fields of research.
Organizational Leadership	Working locally as an individual contributor. Building and maintaining effective internal relationships on individual or team level.	Building networks at a local and capability level. Effectively teaming to share resources and optimize research at the group and division level. Mentoring junior staff and students.	Developing and optimizing capabilities at the division level. Developing external reputation. Building effective project teams with membership across a group, S&E domain and/or directorate. Contributing to the local organization through mentorship of junior staff and taking on operational assignments.	Using established cross organizational network, external peers, and clients to further outcomes. Leading organizational teams that proactively identify and promote new capabilities within a division and S&E domain, and advance the directorate strategy. Mentoring staff and peers across directorate. Leading through operational assignments that benefit the group and directorate.	Established network across PNNL, other national laboratories, academia, industry, and professional societies. Collaborates effectively with other Labs, academia, industry and leads multi-Lab projects. Leads the development and execution of directorate strategies and builds multi-directorate teams. Mentors and develops mid-level to senior staff across PNNL.	Established network comprised of other institutions' most senior technical leaders. Builds and leads multi-institutional teams that influence the national science and technology agenda. Leads Laboratory and/or sponsor strategic initiatives to expand capabilities for transformational solutions to complex scientific and technical challenges. Mentors and helps to develop staff across PNNL and collaborating institutions.	Cornerstone of PNNL's reputation in a key research area. Key leader in defining, developing, and executing national and/or international level strategies, technologies, and/or policies. Builds and leads strategically important multi-institution research teams. Track record of developing SE5-6 level staff, and mentors' staff at all levels including at collaborating institutions.

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Project Execution	Receives instruction on required tasks and reports results on time and on budget, while working under guidance from experienced staff. Takes initiative to set personal direction and goals. Work is conducted with a high standard of quality, safety, and security.	Receives guidance on new assignments, making preliminary selections on technical alternatives; independently completes recurring assignments. Defines and leads project work at a small task/project level, reporting results on time and on budget. Contributes to proposals. Embraces expectations for quality, safety, and security. Communicates the importance within the work team.	Selects and develops technical approaches on assignments with occasional oversight on complex problems. Principal investigator or co-PI on projects or tasks, while integrating capabilities of work team members. Supports scoping, scheduling, and budgeting at a project or major task level. Generates new ideas for proposals and business development opportunities while leading development of technical section of small to medium proposals. Demonstrates ability to acquire funding for self with programmatic impact at the sector and division level. Serves as a role model for quality, safety, and security.	Selects and develops technical approaches to complex challenges. Principal investigator or co-PI on multiple or significantly complex, and/or high risk projects or tasks and/or involving multiple tasks, capabilities, and organizations. Develops, and realizes new significant project opportunities, leading the development of technical sections of large proposals. Takes lead in scope, schedule, and budget for projects or large tasks Demonstrates ability to acquire funding for self and task level teams. Serves as a role model for quality, safety, and security. May contribute to directorate level operational improvement activities.	Conceives, plans, and executes R&D with considerable influence on scientific and technological developments. Displays considerable leadership in defining scientific and technical objectives across programs. Leads in the capture, planning, and technical execution of complex interdisciplinary projects and programs across directorates and/or institutions. Captures and enables sufficient funding to support self and project teams. Serves as a role model for quality, safety, security, and inclusivity. Contributes to directorate level or lab level operational improvement activities.	Conceives, plans, and realizes lab-level R&D strategies and objectives. Plans, organizes, and guides complex national and international programs. Captures and enables sufficient funding to support complex, strategically influential project teams. Defines and builds new and enduring capabilities or technical areas across directorates and/or institutions. Models and promotes quality, safety, and security, and inclusivity. Serves as a guiding resource to lab level operational improvement activities.	Conceives, plans, and realizes national or international level R&D strategies and objectives. Demonstrates an exceptional degree of scientific and technical creativity, foresight, and judgment in planning, organizing, and guiding complex national and international programs. Captures and enables sufficient funding to support major program/capability growth. Defines and builds signature laboratory-level capabilities Models and promotes quality, safety, and security, and inclusivity, beyond institutional boundaries. Serves as a guiding resource to lab level operational improvement activities.

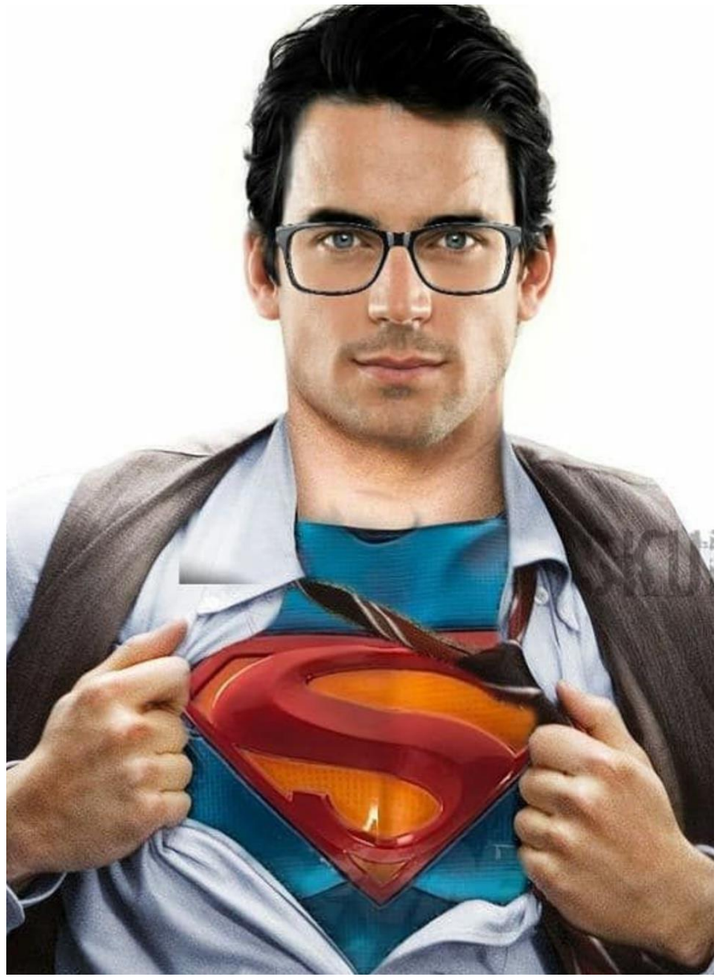
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Impact Technical products vary given the breadth of PNNL's mission, and include (1) advancing the human understanding across a discipline, (2) developing and deploying solutions to the nation's most important challenges, and (3) conducting analyses guiding national and international policy. This aspect of impact will be measured based on major contributions in one or more of these areas.	Contributes to technical products such as: • Topical Reports • Peer-reviewed Publications, including conference presentations • Patents/intellectual property • Software technical standards • Software/Data Artifacts • Hardware/Materials/ Electronics Artifacts • Reference Architectures • Business/technical roadmaps • Systems design and implementation	Member of external professional community. Presenter at national or international forums. Leads elements or sections of technical products.	Establishing leadership role in professional community including professional societies, other laboratories, academia, and industry. Lead of technical products.	Holds leadership role in professional community. Organizes and chairs sessions at national meetings of professional societies. Lead author or developer on a significant number of technical products. Recognized by sponsors and collaborators for delivery on important programmatic elements.	Leads seminal publications and reviews that establishing the foundational aspects of a discipline. Sought out as an invited speaker at national forums. Displays a significant record of technical products that influence the discipline. Recognized by Lab leadership, sponsors, and collaborators as a resource for resolving challenges with impact at a significant programmatic or Lab mission level.	Sought out to organize, chair, and/or keynote highly visible meetings, workshops, or symposia that advance the discipline. Displays an exceptional and sustained record of technical products influencing their technical discipline. Receives professional society and other national and international awards for their research contributions. Sought out by leaders inside and outside PNNL to provide strategic insight around emerging challenges and set national program direction with impact at a Lab mission level. Provides thought leadership that influences national-level sponsor or technical community policies, standards, or technical directions.	Routinely sought out to organize and lead meetings, workshops, or symposia at highly visible national and/or international events that define the discipline. Regularly delivers keynote and plenary talks that raise PNNL visibility in strategic areas. Displays an exceptional and sustained record of high impact technical products influencing their discipline. Receives multiple high level professional society and other awards. Provides thought leadership that influences governmental policies, national professional policies, and standards. Sought out by Lab leadership to define future Lab strategy.

Articulate Your Unique Skills and Value Proposition

- Need
- Approach
- Benefit
- Competition



Develop and Act on a Personal Definition of Success

My definition:

- Do cool science with cool people
- Work on important problems
- Work on problems that force me to learn new things
- Work in a collegial environment
- Have a good work life balance





https://www.sperton.com/blog/how-to-build-top-performers-in-the-societies-of-the-xxi-century/

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Stack Skills

“There are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns – the ones we don’t know we don’t know.” Donald Rumsfeld



Will Shaw

Sarah Higley

Samson Hagos

Dave Millard

Jerome Fast

Chris Vernon

Zoe Guillen

Jennie Rice

Larry Berg

Ginny Collier

Chuck Long

Nathalie Voisin

Heng Xiao

Marshall Wise

Phil Rasch

Ian Kraucunas

Hailong Wang

Yun Qian

Carina Lansing

Samson Hagos

Brad Isom

Hui Wan

Zhe Feng

Suzy Cadinha

Bob Houze

Ben Kravitz

Vanessa Bailey

Amanda Smith

Jennifer Comstock

Steve Ghan

Beat Schmid

Jim Mather

Dale Bailey

Shannon Robinson

Todd Taylor

Charlette Geffen

Accept and Adapt to Feedback

"Regarding where to focus in order to advance your career, as you already recognize, leading more seminal publications that define foundational aspects of a discipline will not only strengthen your CV and project but also enhance your prospects for recognition and promotion."

"I encourage you to continue to identify areas where additional support can free up your time to make contributions to projects and papers, particularly first-author and high-impact papers."

"He might benefit from enhancing his visibility in the academic network with scientific journal editorial roles and service to the scientific community (in addition to MSD)."

"For you personally, this likely also implies the potential risk of being stretched too thin and underlines the need to strike a good balance between managing projects and advancing your own research."

"As a final piece of forward-looking advice, I encourage you to continue building your CV with high-impact publications even as you continue taking on additional responsibilities."

Random Thoughts

- Think of your career as a long-term investment.
- Be specific in your self-evaluation and peer feedback.
- If you're not failing somewhere you're not pushing hard enough.

