Mid-Career: Labs/Industry Promotion to the Next Level

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Special thanks to previous CRA-WP CMW speakers
Understand the promotion process and criteria: What is valued by your organization?

Every organization is slightly different so it’s important to investigate what **YOU** need to do in the context of your current environment.

**Understand your environment:**
*Talk to others…*

- Talk to your supervisor
  - about the process & criteria
  - about promotion readiness
- Talk to (recently-promoted) peers
  - How did they make the case?
  - What was the key change or contribution that earned the promotion?
- Talk to those who can write letters of support, if needed

**Understand yourself:**
*Get feedback…*

- What are your strengths?
- Where are your gaps? What can you do to fill the gaps?
- What are your values? Your goals?
- In what type of job assignments do you thrive?
- Attend mock review sessions
- Solicit a 360 evaluation
- Solicit a mentor for candid feedback
Example Value System

Technical Expertise
- Depth – Recognized expert
- Breadth – Facilitator of ideas
- Innovation and creativity
  - Trusted advisor/eco-system influencer
  - Role model of continuous learning
  - Anticipates emerging trends and customer needs
  - Develops pragmatic solutions

Impact and Consequence
- Program impact
- Discipline impact
- Visibility to management, sponsor, community
- Consequence of error
  - Focuses on solving the most important problems
  - Delivers leading solutions
  - Influences standards
  - Owns accountability

Leadership
- Project management
- Program management
- Line management
  - Sets technical direction
  - Challenges the status quo
  - Develops technical talent and fosters inclusion
  - Builds trust, relationships, network

Collaboration and Service
- Number and type of technical and strategic collaborations
- Mentor and advocate
- Professional service
- Lab service
- Community service
Career ladder

• Multiple career pathways
  • Technical or non-technical
  • Individual contributor or manager

• Career “ladder “
  • Promotion is like advancement to the next rung (i.e., next grade or level)
  • Each rung has its own set of expectations

• Mid-career goal: e.g., Getting to “Principal”
  • A rung on the technical ladder to Fellow
  • Highly competitive – in terms of %’s
  • Considered a distinguished terminus
When might you be ready for promotion?
Step 1: Do excellent work at your current level

• Know your business. Know your long-term ambitions.
• Understand expectations
  • Exceed them wherever and whenever you can!
• Be accountable - credibility matters
  • Consistently keep your promises and follow through on assignments
• Deliver impactful results
• Take your job seriously. Have a good attitude!
  • Be a role model. Inspire others. Grow team spirit. Collaborate.
• Think about the big picture
  • Innovate to influence the broader eco-system
Step 2: Demonstrate you are ready for the next level

- **Ask for critical assignments** at the next level - show you deserve them and that your talents are underutilized

- **Take risks** - Step outside your comfort zone – stretch professionally

- **Volunteer** to represent your department at meetings, on committees, on important projects

- **Identify opportunities** to put unused skills to the test
Increase Your Visibility

• Do impactful work!
  • Understand what really matters to your boss, organization & company
    • What sorts of projects receive funding or extra funding?
    • What gets your management excited?

• Don’t just know your department
  • Know who the key decision makers are
  • Ensure THEY know who you are, your accomplishments, your expertise and what value you bring to the organization
  • Know (adjacent) organizations/departments and what they do and the key people within them

• Make sure you, your work and your team are visible
  • Internally and externally

*: Increasing visibility is not the same as bragging or clamoring for attention
Online presence is important to visibility

• Have a home page that includes a description of your research, full CV, biography, publications, etc.
• Join LinkedIn
• Create a Google Scholar page
• Blogging, facebook and X/twitter
Take Initiative

• Actively participate
  • Give opinions, voice ideas in meetings, propose solutions
  • Volunteer for new kinds of assignments
    • Even if they’re scary and beyond what you think you know!
    • Offer to serve as a reviewer, advisor, coach

• Initiate new work
  • Particularly when you see a technical gap
  • Particularly when you are passionate about an area

• Build bridges
  • To new collaborators and co-travelers

• Take leadership
  • When needed, when asked, when opportunity arises!
Include Mentors and Sponsors in your Network to help ensure success

- **Network**: Leads to sense of belonging, stronger community, loyalty
- **Mentor**: Helps advise you on your career and company culture
- **Sponsor/Champion**: Advocates for you; making sure your work is visible to influential people in the company
- Can help identify opportunities to shine
  - Speaking/presentation/job opportunities
  - Help you identify and pitch your strengths
  - Be sure to share your career goals!
- Have a variety of mentors and sponsors
  - Become a mentor or sponsor yourself
Actions that increased chances for promotion

• Volunteered for a variety of assignments - some were not very glamorous, some had high ambiguity, some were highly inter-disciplinary

• Stretched professionally – took on senior leadership roles and then worked hard to ensure they succeeded

• Found great mentors and sponsors… and mentees

• Took advantage of opportunities when they presented themselves – say Yes!

• Focused on improving presentation skills and speaking up more in meetings

• Introspected to understand strengths and weaknesses

• Built diverse teams with complementary skill sets
Other Helpful Learnings
*(especially when promotion is delayed)*

- Be positive while remaining realistic.
- Get comfortable getting outside your comfort zone; Growth can be uncomfortable.
- Be ready to seize unexpected opportunities.

*No such thing as failure; You are constantly learning!*
Thank You

Q&A
Promotion to the Next Level

Karina Edmonds, Ph.D.
VP, Global Lead for Academies and University Alliances at SAP
@dr_karinae

Jeanine Cook, Ph.D.
Principal Member of Technical Staff
Sandia National Laboratories, NM
Karina’s Story

About Me

1. Immigrated from Dominican Republic
2. Encouraged to consider a different career path
3. Distinguished Alumni Award
4. Caltech Aeronautics & Materials
5. Engineering Hall of Fame & Distinguished Alumni Award

Mother of 3 strong, intelligent, kind daughters
Karina Montilla Edmonds

- BS in Mechanical Engineer at University of Rhode Island
- MS, PhD at California Institute of Technology (Caltech)
- Northrop Grumman (Automotive Division for TRW)
- Jet Propulsion Laboratory (NASA, Managed by Caltech)
- Director of JPL Technology Transfer at Caltech
- US Department of Energy, under Secretary Chu (Obama Administration)
- Executive Director for Corporate Partnerships at Caltech
- Lead for University Relations at Google Cloud AI
- VP, Global Lead for Academies and University Alliances
Jeanine’s Path

Education: B.S, Electrical Engineering
University of Colorado
M.S., Computer Science
University of Colorado
Ph.D., Electrical & Computer Engineering
New Mexico State University

Career:
• Sandia National Labs - 7 years
  • Came in at almost the highest level, Principal
    Member of Technical Staff
• New Mexico State University – 11 years
  • Promoted to associate
  • Pressured to go up for full, but decided to leave!
    • Did everything to make full, just wasn’t committed
to institution
• McDonnell Douglas – 6 years (a long time ago!)

I enjoy technical work, leading projects, and driving the technical vision, which is why I have successfully and intentionally avoided the management path!
Overcoming Obstacles

Almost didn’t get a PhD
• Academic institutions often NOT accessible

Treated different than male colleagues in academia
• In spite of (or because of!) success
  • Wouldn’t count credits from 10 grad students as class
  • Wouldn’t let me buy-out of courses

Women have to yell to be heard!

Fresh out of graduate school
• Male classmates got offers for 20% higher salaries
• Offer withdrawn within seconds of deadline

First job out of graduate school
• Never recognized or heard
• Customer held very high opinion of me, but not my boss
Overcoming Obstacles

Amazing opportunity almost missed
• ‘She is not going to want to move with three young kids!’
• Best intended colleagues can hold you back

Recognizing when no longer a fit
• ‘You need to smile less.’

Watch out for re-organizations
• Re-organization can effectively lead to demotion
You Don’t Get What You Deserve, YOU GET WHAT YOU NEGOTIATE

- The first offer is hardly ever the best offer
- If they want you, they will value your skills
- If they are not willing to negotiate, likely not a good place to be

know...
- Women request raises less frequently
- Women apply for promotions at strikingly lower rates
Promotion at the Lab

• LTE ➔ MTS ➔ PMTS ➔ DMTS

• Distinguished Member of Technical Staff
  • Very hard to get
    • Positions are EXTREMELY limited and these typically go to people who have spent their careers there
  • Alternative path until a position opens
    • Lead (PI) of every project you’re involved with!

But what should you do to try to get promoted?
Increase Visibility

• Do impactful work!
  • Understand what really matters to your organization
    • What sorts of projects receive funding or extra funding?
    • What gets your management excited?

• Don’t just know your department
  • Know who the key decision makers are
    • They should know who you are and what value you bring to the organization
  • Know the other organizations/departments and what they do and people within them

• Make sure you and your work are visible
Show Initiative

• Take leadership when needed

• Participate
  • Give opinions, voice ideas in meetings
  • Volunteer for assignments
    • Even if they’re scary and beyond what you think you know!

• Initiate new work
  • Particularly when you see a technical gap
Networking, mentoring, and sponsorship

Good Mentors Can:
• Give you additional perspective and advice on hard decisions
• Alert you to opportunities inside and outside your organization
• Tell you what you need to hear. Not just what you want to hear

Good Sponsors:
• Can and will attest to the impact you can provide 1st hand
• Are in the circle of trust where they can impact your path

Networking
• As your job grows, you will need to depend on others to help achieve goals
• Networking gives you the opportunity to help and be helped
• The most sought-after opportunities may require more than a single sponsor
Other Helpful Learnings

• Be positive while remaining realistic.
• Persevere is a must. Be resilient and flexible.
• Get out of your comfort zone, growth is uncomfortable.
• Be ready to seize unexpected opportunities.

No such thing as failure, you either win or you LEARN
Q&A
PROMOTION WITHIN THE NATIONAL LABORATORIES

Lori Diachin
Principal Deputy Associate Director, Computing
Lawrence Livermore National Laboratory
Who am I?

The work me:
A Project Leader: 1995-present: Latest is the DOE exascale computing project $1.8B over 7 years; ~1000 researchers
A Line Manager: 2010-2016: Director, Center for Applied Scientific Computing, a 100 person research organization focused on math, CS and data sciences; 2016-2018 IT Dept Head (400 people); 2020-present PDAD for Computing (1400)
A Program Developer: 2003-2018: Math/CS Office of Science Portfolio at LLNL (30 projects); 2011-2018: Computation’s LDRD portfolio at LLNL (10 projects)
Education: PhD in applied mathematics 1992

The non-work me:
A reader: I love novels
An Artist: I like to work on watercolors, stained glass
A nature lover: Love to hike, etc
A Doer: I love to cross things off my “to-do” list
An introvert: I crave quiet alone time
Where I work – Lawrence Livermore National Laboratory

- National security mission
- Established in 1952
- Approximately 8,500 employees
- 1 square mile, 684 facilities
- Annual federal budget: ~ $3B

Experimental Test Site (11 miles² near Tracy, CA)
Step one – do excellent work at your current level

• Deliver impactful results. Be accountable.
• Keep your promises and follow through on assignments. Credibility matters
• Take your job seriously. Have a good attitude.
• Think about the big picture. Know your business.
• Know the expectations and exceed them where ever you can
Step two – show you are ready for the next level

• **Ask for more responsible assignments** and do them well – show you deserve them and that your skills are underutilized

• **Take risks** - Step outside your comfort zone – stretch professionally

• **Volunteer** to represent your department at meetings, committees or projects

• Look for opportunities to put unused skills to the test
Increasing your visibility is critical to career advancement and promotion

- You must work hard, but others need to know of your accomplishments and expertise
- Increasing visibility is not the same as bragging or clamoring for attention
- Key decision makers should know:
  1. Who you are
  2. What value you bring to the organization
Your online presence is important to your visibility

- Have a home page that includes a description of your research, full CV, biography, publications, etc
- Join Linked-In
- Create a google scholar page
- Blogging, facebook and twitter
Understanding the process is important – what is valued by your organization?

Every organization is slightly different so it’s important to investigate what you need to do in the context of your current environment.

**Understanding your environment: Talk to others…**

- Talk to your supervisor about the promotion process
- Talk to peers who were recently promoted
  - How did they make the case?
  - What was the key change that earned the promotion?

**Understanding yourself… get feedback**

- What are your strengths?
- Where are your gaps? What can you do to fill the gaps?
- What are your values?
- In what type of job assignments do you thrive?

- Have a 360 evaluation done
- Have a mentor give you candid feedback
An example: The CASC value system has four basic axes we consider for promotion

- Technical SKAs
  - Depth
  - Breadth
  - Innovation and creativity

- Impact and Consequence
  - Program impact
  - Discipline impact
  - Consequence of error
  - Management/sponsor visibility

- Leadership Skills
  - Project management
  - Program management
  - Line management

- Collaboration and Service
  - Number and type of technical collaborations
  - Mentoring
  - Professional service
  - Lab service
Include mentors and sponsors in your network to help ensure success

- **Mentor**: Helps advise you on your career and company culture
- **Sponsor/Champion**: Advocates for you; making sure your work is visible to influential people in the company
- Both can help you identify opportunities to shine
  - Speaking/presentation opportunities
  - Help you identify and pitch your strengths
  - Be sure they know your career goals!
- Have a variety of mentors and sponsors
- Become a mentor or sponsor yourself
Other Helpful Learnings

• Be positive while remaining realistic.
• Perseverance is a must. Be resilient and flexible.
• Get out of your comfort zone, growth is uncomfortable.
• Be ready to seize unexpected opportunities.

No such thing as failure, you either win or you LEARN
Actions I have taken that have helped my chances for promotion

• Volunteered for a variety of assignments (some were not very glamorous)
• Stretched professionally – taking on deputy and leadership roles and then working hard to ensure they succeed
• Found great mentors and sponsors
• Take advantage of opportunities when they presented themselves – say Yes!
• Focused on improving presentation skills and speaking up more in meetings
• Introspection to understand strengths and weaknesses; build support teams with complementary skill sets
Eve’s original slides
### Expertise
- Recognized domain expert
- Trusted advisor and influencer
- Role model and advocate for continuous learning
- Facilitator of ideas across the company and industry
- Synthesizer and or simplifier of complex technical issues
- Expertly negotiates trade-offs and develops pragmatic solutions
- Anticipates emerging trends and future customer needs

### Leadership
- Fosters a culture of inclusion, innovation, and empowerment
- Builds trust, relationships, networks and followership
- Develops technical talent and community
- Acts as a change agent, challenging the status quo
- Admits mistakes, owns accountability and learns from failure
- Effectively influences at all levels
- Sets technical direction
- Aligns organizational goals to technical vision and desired outcomes

### Impact
- Formulates strategy to deliver leadership solutions
- Focuses on and prioritizes solving the most important problems
- Leads delivery of solutions that consistently outperforms competitors
- Invents breakthrough technical solutions
- Influences industry standards
- Demonstrates a track record of relentless execution to bring solutions to market
- Shapes the technology ecosystems in which the company competes
Industry Promotion:
A ladder of grade-level expectations

• Each rung is an increased level of responsibility
  • # of rungs is organization-specific
• **Mid-career goal:** Getting to “Principal”
  • First rung on the technical ladder on route to Fellow
  • Highly competitive – rarified honor in terms of %’s
  • Considered a distinguished terminus
• Alternate ladders may exist
  • Technical or non-technical
  • Individual contributor or manager
  • Organization-specific criteria at each rung