

Mentoring Masterclass

Daphna Link-Sourani

Leadership, management and a balanced career in Medical Imaging









Class Guide: Leadership, management and a balanced career in Medical Imaging

Daphna Link-Sourani

Dr. Daphna Link-Sourani is the manager of the Technion Human MRI Research Center, with over a decade of experience in MRI research and extensive experience working with MRI systems. Daphna has published multiple papers and presented her findings at numerous scientific conferences, with a focus on fetal and placental MRI as well as neural circuits in neurodegenerative diseases. Daphna is dedicated to providing high-quality imaging services and support to researchers, physicians, students, and industry players. She is committed to advancing the field of MRI research and exploring new avenues for understanding the human body and brain, while fostering a collaborative and innovative research environment.



Introduction

Managing a human MRI research facility requires far more than technical excellence. It demands strategic vision, leadership, communication skills, organizational flexibility, and the ability to balance professional and personal growth.

Drawing from her experience in neuroscience research, fetal imaging innovation, and leadership in building a national human MRI research center, Daphna Link shares insights into managing and leading imaging facilities - while maintaining a balanced and sustainable career.





1- Building a Leadership Mindset

Leadership in imaging facilities is about more than just technical oversight - it's about **shaping a long-term vision and building collaborative ecosystems**.

Key Strategies

See the Bigger Picture: Successful facility leaders integrate technical, scientific and management perspectives when making decisions.

Lead with Passion and Purpose: Deep belief in the center's mission is what drives resilience and motivates the team.

Create a Unique Identity: Identify your center's niche — whether technical innovation, clinical partnerships, and specialize deeply.

Leadership Can Be Quiet: Leadership doesn't require loudness; consistent integrity, strategic vision, collaborations and support for others build true influence.

Focus on the Next Generation: Develop educational programs, workshops, and mentorship initiatives to nurture future researchers.

"Leadership is about being part of something bigger than yourself"



2. Core Facility Management: Challenges and Best Practices

Managing a high-end imaging facility includes both **visible and behind-the-scenes work.** Establishing a strong operational base is critical for long-term success.

Essentials of Facility Management

Building Infrastructure

- Coordinate construction, installations, and equipment purchasing.
- Secure regulatory approvals early (e.g., Ministry of Health certifications).

Operational Excellence

- Create detailed safety workflows, emergency protocols, and standard operating procedures.
- Stay current with new technologies and evolving research needs.

Budgeting and Sustainability

• Understand financial management basics.

Staff Recruitment and Training

- Hire people who share the center's values.
- Invest in professional development and cross-training.

User Support and Communication

- Support users' scientific goals.
- Act as a bridge between technical possibilities and research questions.



3. Practical Tips for Effective Facility Leadership

Document Everything: Create written workflows, meeting notes, troubleshooting logs, future-proofing the facility for growth and transition.

Create Space for Team Creativity: Encourage staff and researchers to solve problems their own way, building ownership and innovation.

Stay Open to Advice: Listen to engineers, administrators, students, and external advisors. Good ideas often come from unexpected places.

Value Human Relationships: Relationships matter more than technology, mutual respect builds sustainable teams and collaborations.

Master the Fundamentals: Deep knowledge of imaging physics, protocols, and methods strengthens credibility and adaptability.

Brainstorm and Share Ideas: Foster an open environment for exchanging ideas, even if many ideas don't materialize, they build creative muscle.

Act Quickly: Address problems proactively, don't let issues snowball.



Manage Without Ego: Focus on solving challenges, not on being "right."

4. User Engagement and Community Building

"A thriving imaging facility depends on strong engagement with its user base"

Engagement Strategies

Understand Diverse Scientific Languages:

Learn enough of different fields (biology, engineering, medicine) to help users translate their questions into imaging strategies.

Create Educational Touchpoints:

- Host technical lectures and workshops.
- Offer training sessions tailored to users' backgrounds.

Celebrate Achievements:

Acknowledge even small milestones - publications, successful pilot scans, grants involving the facility.

Foster a Non-Judgmental Environment:

Create a culture where users and staff feel safe asking questions and sharing ideas.



5.Challenges and Opportunities in Facility Management

Common Challenges

- High responsibility for expensive equipment and human subject safety.
- Technical malfunctions outside your immediate control.
- Financial management and marketing activities outside scientific comfort zones.
- Navigating complex institutional structures and policies.

Opportunities

- Freedom to drive innovation.
- Building a unique and visible research infrastructure.
- Supporting groundbreaking interdisciplinary science.
- Leading a dynamic, future-oriented community.



6.Reflections on Work-Life Balance

Sustaining a leadership role requires emotional resilience and adaptability.

Key Lessons

Recognize Life's Phases: Different times require different balances between work and personal life.

Honor Real Pauses: After life-changing events (e.g., childbirth), taking real time off is important for returning stronger.

Holistic Living Enriches Work: Hobbies, friendships, exercise, and creativity fuel better scientific leadership.

Productivity is Emotional, Not Just Logical: Sometimes short, focused work sessions outperform long, drained ones.

"Ideas often come not while sitting at a desk, but during a yoga class, a walk, or a moment of quiet"



7. Conclusions

Leading an imaging facility - and building a career in medical imaging - requires **strategic thinking**, **emotional intelligence**, **social communications** and the courage to **stay true to one's passions**.

Every challenge faced offers an opportunity to grow, innovate, and contribute to **something larger than oneself**.

