
 **Learning Objectives**

By the completion of this webinar, participants will be able to:

- Understand why laboratory professionals should have leadership skills
- Recognize the urgent need for a new scenario for serving as an effective leader in digital age
- Gain insights into personality characteristics and learn how personality influences effectiveness as a leader and a team member
- Describe a "Leader Development Framework" for the Essential Skills of Laboratory Leadership
- Explore the four "Self-Awareness" archetypes
- Describe the the Role of the Next Generation Laboratory Leaders in the digital age

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Scope

Leadership Essentials for the Future of Laboratory Medicine

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Live Webinar for the Malawi Association of Medical Laboratory Scientists, November 24, 2020, 3:00 – 5:00 pm East African Time

Key Trends in Laboratory Medicine: Predictions for the digital age

Laboratory Technology

- Automated test/caller technology
- Integrated testing platforms
- Regional laboratory failure rate reduction
- Modular robotic automation

The Practice of Lab Medicine

- Remote team management
- Consultation services
- Management of Information Technology
- Management of Evidence-based disease progress
- Direct patient access to laboratory services, direct to consumer tests
- Emphasis on telepathology practice
- Care identity (Laboratory Medicine or Pathology)

Healthcare environment

- Material science, AI, sensors, robotics
- 3D printing, big data, enhanced real-time asset monitoring
- Address supply of experts
- Telemedicine and POC testing
- Interconnected and integrated medical practice
- Emphasis on cost containment
- Choosing wisely

Practice of Medicine

- Emphasis on preventive medicine
- Primary care training practice
- Evidence-based disease management
- Care by large data sets

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The evolution from 20th Century Medicine to 21st Century Medicine

20th Century Healthcare	21st Century Healthcare
Doctor centered	Patient centered
Patient as passive complier	Patient as co-producer
Hospital	System
Bureaucracy	Network
Driven by finance	Driven by knowledge
Analog Healthcare	Digital Health w increased focus on individual care
Focused on effectiveness	Focused on value, eliminating waste
Challenges met by growth	Challenges met by transformation

Frost and Sullivan, 2019 Key 8 Predictions for Global Healthcare Industry
https://www.dailysally.com/pathologists-and-clinical-lab-professionals-urged-to-think-in-21st-century-terms-201/

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Laboratory Medicine: "Leading" in the digital age

Where are the biggest gaps?

<https://www2.deloitte.com/insights/us/en/focus/human-capital-trends/2019/21st-century-leadership-challenges-and-development.html>

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Laboratory Medicine: "Leading" in the digital age

Opinion: redefining the role of the physician in laboratory medicine in the context of emerging technologies, personalised medicine and patient autonomy ('4P medicine')

Thematic management

Together with the improvements made by IVD vendors, the role of the physician in Laboratory Medicine has changed fundamentally to focus on the diagnosis and management of disease, interacting with both physicians and patients.

Matthias Orth,^{1,2} Maria Averina,³ Stylianos Chatzipanagiotou,⁴ Gilbert Faure,⁵ Alexander Haushofer,⁶ Vesna Kusec,⁷ Augusto Machado,⁸ Siraj A Misbah,⁹ Wytze Oosterhuis,¹⁰ Kari Pulkki,¹¹ Patrick J Twomey,^{12,13} Eberhard Wieland¹⁴

Orth M, et al. *J Clin Pathol* 2019;72:191-197

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Sedef Yenic - Promoting Future Leaders of Laboratory Medicine

Laboratory Medicine: "Leading" in the digital age

All vital parts of an effective leadership strategy

The final step is to find and develop the individuals who will serve as the leaders themselves. But where can organizations find them?

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Components of Laboratory Medicine Leadership

Good leadership in laboratory medicine is comprised of many factors and characterized by;

- competency in practice,
- involvement in quality management (QM),
- being an effective problem solver and strategist, one who pursues improvement and excellence in service, and promotes the development and sustainability of this service.



Source: Randell E. Overview. In: Leadership Basics for Clinical Laboratory Professionals, ed. Sedef Yenice and Edward Randell. 2018. pp. 48-75. ISBN 978-88-87772-10-4. Available from: <http://www.ifo.org/fo-education/division/lead-committee/cmr7-c-dm-publications-and-survey-reports>

Leadership and the Medical Laboratory

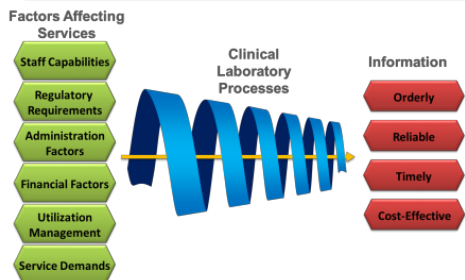


Challenges

- Changing payment schemes for services
- Changing Technology
- Advances in IT and “big data”
- Personalized Diagnosis and Management
- Age and Chronic Disease Focus
- Changing Demographics
 - Age
 - Ethnicity
 - Race
 - Sex/Gender

*) EW Randell – Leadership Attitudes and Styles

Leadership and the Medical Laboratory



*) EW Randell – Leadership Attitudes and Styles

Evolution of Leadership in Medical Laboratories

QSE	ISO 15189:2012	ISO/IEC 17025:2017	ISO 9001:2015
Organization and Leadership	4.1 Organization and management responsibility	4.1 Impartiality 5.1 Legal entity 5.2 Management with overall responsibility 5.7 Communication 8.1 Management system requirements - Options	5.1.1 Leadership and commitment – General 5.3 Organizational roles, responsibilities, and authorities 6.3 Planning of changes 7.4 Communication

QMS01-A Quality Management System Model for Laboratory Services, 5th Edition 2019.

Evolution of Leadership in Medical Laboratories

Standard Guidance

Human Resources Sustaining Standard of Practice 5 (HR S5):
Quality Systems Manager or, to use ISO terminology, a **Quality Officer**.


"The laboratory director shall designate a quality systems manager who has the training, experience and authority to provide **effective leadership** for activities necessary to ensure **communication**, training, competency assessment and ongoing compliance monitoring with requirements under the laboratory's quality management system".

QMS01-A Quality Management System Model for Laboratory Services, 5th Edition 2019.


Laboratory Management includes Laboratory Leadership*


Message	Organization Leadership	Laboratory Management*	Laboratory Personnel	Purchasing Department
Desire and reason for implementing a QMS	Communicate	Communicate	Communicate	Communicate
Laboratory's mission, vision and values	Communicate	Communicate	Communicate	-
Quality goals and objectives	Communicate	Educate	Communicate	-
QSE Suppliers and Inventory Management	-	Educate	Educate	Communicate
Supplier qualification	Communicate	Educate	Train	Train
Electronic ordering systems for supplies	-	Train	Train	-
Receipt of incoming materials	-	-	Train	-

QMS01-A Quality Management System Model for Laboratory Services, 5th Edition 2019.

 **Leading in the digital age**

The intersection of the traditional and the new



 **Leading in the digital age**


Int J Clin Biochem
<https://dx.doi.org/10.1007/s12291-019-00856-7>

EDITORIAL

Why Leadership Skills are Essential for the Future of Laboratory Medicine?

Sedef Venice¹

© Association of Clinical Biochemists of India 2019



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 **Are Leaders Ready for the Digital Economy?**



Survey respondents indicated a strong personal optimism among global executives about their readiness to lead, but less confidence in their organizations.

 71 71% agree they are prepared to lead in the digital economy	 48 48% agree their organizations are ready to lead in the digital economy	 40 40% agree their organizations are building the leadership pipeline they need to succeed
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January 21, 2020 BY DOUGLAS A. READY, CAROL COHEN, DAVID KIRON, AND BENJAMIN PRING
<https://sloanreview.mit.edu/interactive-a-page-from-the-new-leadership-playbook/>



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The Future of Leadership

- What key changes in the world around us (for example, digitalization, AI and machine learning, globalization, demographics, societal and cultural norms) will influence what it means to be a great leader?
- What will be the distinguishing characteristics of great leaders in the future? What will they do differently, do better, or stop doing?
- How will they behave differently? Will they think differently about their approach to leading?
- What organizational policies and practices will facilitate the identification and development of a next generation of leaders?
- Beyond policies and practices, what kind of organizational culture and climate will be needed to enable this new leader profile to emerge more organically?

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Readiness to Lead Into the Future

Three Types of Behaviors Affect Readiness to Lead Into the Future

Eroding	Enduring	Emerging
Asks for permission	Creates a clear vision	Is purpose-driven
Has no-exception protocols	Focuses on performance	Nurtures passion
Reinforces command and control	Maintains a profit orientation	Makes data-driven decisions
Manages top-down	Is customer-centric	Demonstrates authenticity
Avoids transparency	Leads by example	Demonstrates empathy
Micromanages	Demonstrates ethics and integrity	Employs an inclusive approach
Creates rigid long-term plans	Takes risks	Shows humility
Takes a one-size-fits-all approach	Leads change	Works across boundaries

<https://sloanreview.mit.edu/interactive-a-page-from-the-new-leadership-playbook/>

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What makes a great leader in this new economy?

- Do they build great teams?
- Do they understand the implications of technology on the business?
- Are they able to adapt to the speed at which business is happening?
- Can they operate at a high level and a low level simultaneously?
- Do they have the ability to build trust across the organization to get things done?

*] Comments on leadership by Dan Shapero

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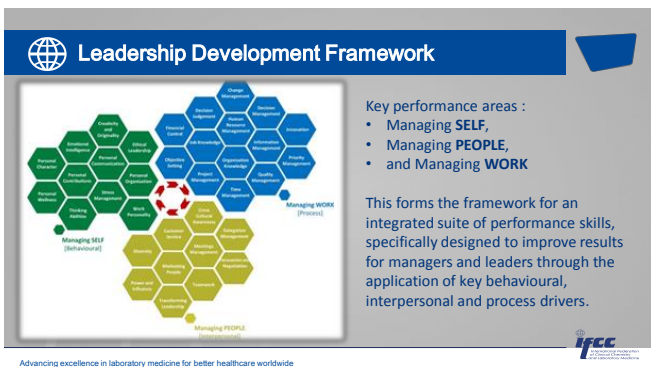


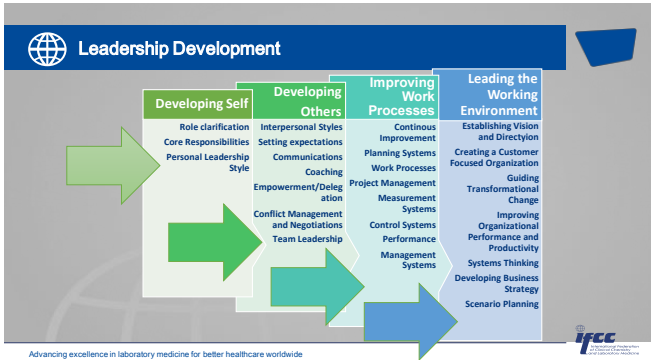


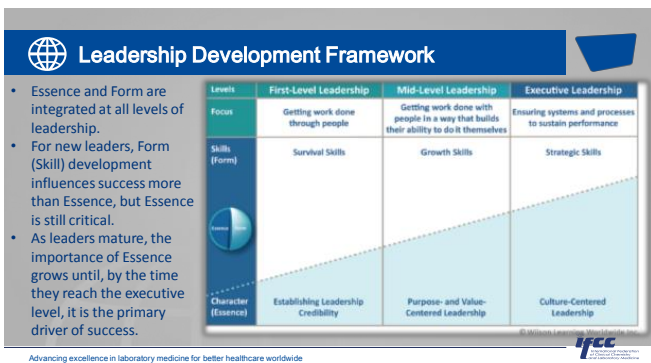
If I had one piece of advice to give it's that although you've been hired for your scientific skills and research potential, your eventual success will depend heavily on your ability to guide, lead, and empower others to do their best work.

—Thomas Cech,
Howard Hughes Medical Institute

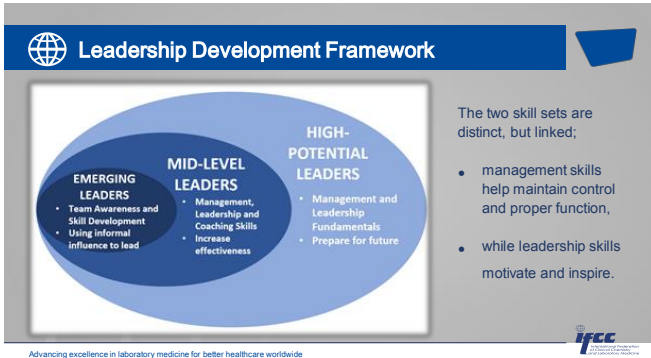
The Nobel Prize in Chemistry 1989 was awarded jointly to Sidney Altman and Thomas R. Cech "for their discovery of catalytic properties of RNA."











**Leadership Development for Laboratory Professionals:
A framework to identify priorities and make the right choices**

Leader Development Framework for the Essential Skills of Laboratory Leadership

This framework provides a strategic outlook for enabling an intentional culture and a consistent continuum of optimum leader development investment across the laboratory. This framework represents the essential components of leader development at all levels who drive strong mission performance in working environments across the laboratory department.

Key Performance Area	Tier	Focus	Requirements
Managing People (Interpersonal)	Team Lead – Group Lead • Leading others and projects	• Partnership and Credibility • Influence and Collaboration	Developing others • Interpersonal Styles • Setting expectations • Communications • Coaching • Empowerment/Delegation • Conflict Management and Negotiations • Team Leadership
Managing Self (Behavioural)	Team Member – Individual Contributor • Leading self	• Organizational Citizenship • Technical Leadership and Role Model	Developing and Leading self • Leadership Commitment • Understanding the leader development framework • Role clarification • Core Responsibilities • Personal Leadership Style

Managing Self: Self-Awareness

Self-management is a learnable skill. This is how you can start:



The Four Self-Awareness Archetypes

External Self-Awareness: How well you understand how others see you

	Low External Self-Awareness	High External Self-Awareness
High Internal Self-Awareness	INTROSPECTORS They are clear on who they are but don't challenge their own views or search for blind spots by getting feed-back from others. This can harm their relationships and limit their success.	AWARE They know who they are, what they want to accomplish, and seek out and value others' opinions. This is where leaders begin to fully realize the true benefits of self-awareness.
Low Internal Self-Awareness	SEEKERS They don't yet know who they are, what they stand for, or how their teams see them. As a result, they might feel stuck or frustrated with their performance and relationships.	PLEASERS They can be so focused on appearing a certain way to others that they could be overlooking what matters to them. Over time, they tend to make choices that aren't in service of their own success and fulfillment.

Internal Self-Awareness: How well you know yourself

Garick T., HRB, 02/2018

Managing Self: Leadership Styles



Managing People: Motivation and Engaging Others



Behaviors of engaged and disengaged employees:

Engaged behaviors	Disengaged behaviors
Optimistic	Pessimistic
Team-oriented	Self-centered
Goes above and beyond	High absenteeism
Solution-oriented	Negative attitude
Selfless	Egocentric
Shows a passion for learning	Focuses on monetary worth
Passes along credit but accepts blame	Accepts credit but passes along blame

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Managing People: Motivation and Engaging Others



- Are you clear what motivates your employees?
- What separates the motivations of Millennials from previous generations?
- Is money always a motivator...or can it even de-motivate?

What is a Leader's Role in Activating Optimal Motivation with Others?



Managing People: Effective Communication

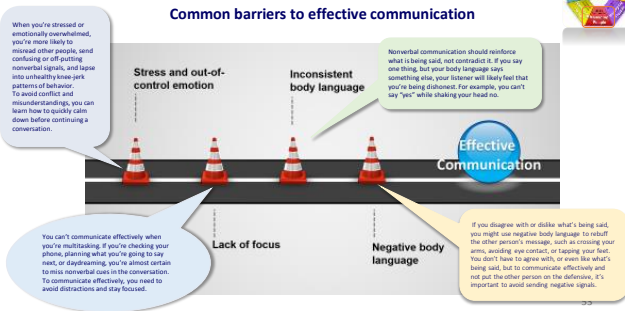


The difference between mere management and leadership is communication. - Winston Churchill

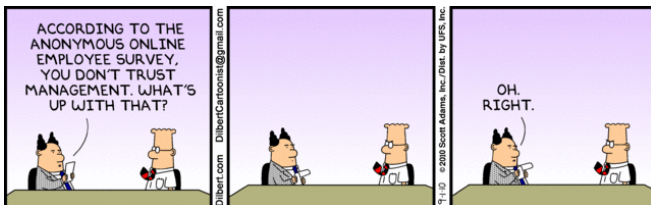
Managing People: Effective Communication



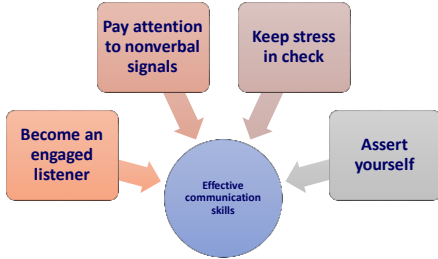
Common barriers to effective communication



Effective Communication...



Managing People: Effective Communication Skills



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Managing People: Emotional Intelligence



The mixed model has five key areas:

Self-Awareness	Self-Management	Motivation	Empathy	Social Skills
Involves knowing your own feelings. This includes having an accurate assessment of what you're capable of, when you need help, and what your emotional triggers are.	being able to keep your emotions in check when they become disruptive. Self-management involves being able to control outbursts, calmly discussing disagreements, and avoiding activities that undermine you like extended self-pity or panic.	Everyone is motivated to action by rewards like money or status. Goleman's model, however, refers to motivation for the sake of personal joy, curiosity, or the satisfaction of being productive.	While the three previous categories refer to a person's internal emotions, this one deals with the emotions of others. Empathy is the skill and practice of reading the emotions of others and responding appropriately.	This category involves the application of empathy as well as negotiating the needs of others with your own. This can include finding common ground with others, managing others in a work environment, and being persuasive.

The order of these emotional competencies isn't all that relevant, as we all learn many of these skills simultaneously as we grow. It's also important to note that, for our purposes, we'll only be using this as a guide. Emotional intelligence isn't an area that most people receive formal training in. We'll let psychologists argue over the jargon and models, but for now let's explore what each of these mean and how to improve them in our laboratory practice for the management.

The Role of the Next Generation Laboratory Leaders in the digital age

Leaders today face new challenges due to the speed of technological, social, and economic change.

Do these new challenges call for a new breed of laboratory leaders?

Sedef Yanice - Promoting Future Leaders of Laboratory Medicine

Scope

Young scientists typically work on projects alone and are promoted based on technical accomplishment. "At the senior level then, they have strong technical experts, but few who have the ability to lead groups." "Great science leaders emerge more by luck than through talent development."

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The International Society for Laboratory Medicine

Why promoting young leadership is essential?

- A new competitive landscape is emerging in life sciences as demographic shifts, mounting cost pressures, advancing digitization, emerging scientific breakthroughs, and powerful new competitors reshaping the laboratory medicine sector.
- Laboratory medicine likely will be more specialized, automated, digital, and agile in their operations; and more integrated with healthcare providers, clinicians, and patients.
- The leadership skills needed to shape and lead will be quite different.
- Investing in leadership development, focusing on the skills to remake the business has never been more urgent.

(HBR March-April 2019)

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The Leadership Pipeline

Passage Six Enterprise Leader

Passage Five Group Leader

Passage Four Business Leader

Passage Three Functional Leader

Passage Two Leading Others

Passage One Leading Self

- **The Leadership Pipeline: How to Build the Leadership Powered Company** – January 11, 2011 by Ram Charan, Stephen Drotter, James Noel
- The book identifies 6 levels of management.
- These different levels present steps on a grander career ladder focused on management. The pipeline aspect, then, gets to the notion of coaching and training high-potential employees at each role in preparation for the next one, with the expectation that they master both their current job the one they want to successfully move through this pipeline.

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 **In Industry 4 – The ultimate Goal is the creation of Smart Lab Medicine**




I think as a company, if you can get those two things right — having a clear direction on what you are trying to do and bringing in great people who can execute on the stuff — then you can do pretty well.
— Mark Zuckerberg

As we look ahead into the next century, leaders will be those who empower others.
— Bill Gates

My job is not to be easy on people. My job is to make them better.
— Steve Jobs

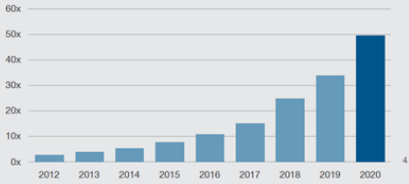
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 **In Industry 4 – The ultimate Goal is the creation of Smart Lab Medicine**

In 2014 the amount of information stored worldwide exceeded 5 ZetaBytes.


By **2020** the total amount of stored data is expected to be...
50x larger than today.



*Zetabyte = 35,000,000,000,000,000,000 bytes

The exponential growth of stored data illustrates the importance of data creation, collection, and manipulation that is happening in today's revolution.

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 **The development of soft skills is a key element**



- As automation and artificial intelligence dramatically change the nature of work, employees must fine tune the social and emotional abilities machines cannot master.
- To encourage this behavior, employers must adjust the ways they assess, educate, train and reward the workforce on **soft skills** such as collaboration, communication and critical thinking.

www.stantionchase.com

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What exactly are soft skills?

Commonly defined as non-technical skills that enable someone to interact effectively and harmoniously with others, are vital to organizations and can impact culture, mindsets, leadership, attitudes and behaviors. These skills fall into the following categories:

A key difference among today's large-scale skill shift and those in the past is the urgency for young scientists who exhibit these capabilities.

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The New Networked Leader

Ability to effectively lead, manage, and inspire others – are considered a bare minimum requirement

Essential in leading today's revolution. AL comes from the concept of "learning agility". Five facets of agility: innovating, performing, reflecting, risking, and defending, all of which play an important role in the leader's success. AL also includes the ability to manage a multi-generational workplace. The new generation of millennials tends to expect flexible working arrangements and a more cooperative and communicative structure. Successful leaders must recognize and adapt to the varying needs of the changing workforce.

The New Networked Leader

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The New Networked Leader

An increasingly key factor in determining a leader's success. Many organizations focus on the soft skills and experience that individuals bring to a workplace. But, leadership ethics is a fundamental feature.

Creating a diverse environment is critical to successful leadership in the digital age. It means welcoming and embracing a wide array of opinions, perspectives, and backgrounds. Great leaders intentionally surround themselves with those who disagree and can offer new and varied insights. This approach to diversity enhances a leader's knowledge and understanding of the issues at stake.

The New Networked Leader

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Identifying Potential Leaders

- Leadership development must start early. Management should assess each individual's development needs 10 or 15 years before the person is expected to reach his or her full potential.
- The emphasis should be on how people should best use their time:
- How can their skills be leveraged in new ways?
- Who needs to know these people?
- Who should be working with them, coaching and mentoring them?
- What experiences would be the most advantageous to them?
- Successors - Identifying potential leaders is also smart move for managers who want to advance their own careers.

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Why Succession Planning and Leadership Development are Important?

Major Reasons:

- Rapid radical and discontinuous change
- Increasingly complex challenges
- Greater leadership responsibility at lower levels
- Recruitment and retention of the best talent

One of the responsibilities of leadership is not only to lead but also to identify, inspire, motivate and develop future leaders. Helping others see the potential of their own leadership is an incredible privilege for the leaders. As many of the baby boomers will retire over the next few years it is anticipated that there will be shortages of experienced people to take their place.

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Keynote Messages

- The scientific research environment is changing—it's volatile and ambiguous. Researchers operate in a global information environment that runs 24/7, with new specialties such as data analytics and inexact boundaries between companies, institutions, and sectors.
- It's not enough to be a great scientist today. We need science excellence combined with leadership.
- Scientists need to be able to engage and lead a team of experts with diverse skills, mind-sets, and backgrounds. They need to be able to inspire a results-oriented but risk-taking culture and be resilient in the face of setbacks and failure that can be common in research. And they need to learn these skills early on.
- The concept of the leadership pipeline is that people are developed in their leadership skills to gradually take on higher levels of responsibility. As this takes several years to develop people through both mentoring, training and work experience it is critical that plans are in place to avoid a drought of people in leadership roles.

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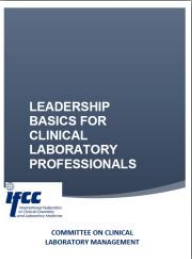
IFCC C-CLM Leadership Training Program

- The program curriculum is designed to assist the lab professionals in developing their own strategies for leading change within a rapidly evolving lab practice and service delivery system.
- Teaching/learning formats include case studies, self-assessments, interactive educational workshops and webinars.

S Yenice - EFLM Webinar/Dec.17, 2019

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IFCC C-CLM Publication



<http://www.ifcc.org/ifcc-education-division/emd-committees/c-clm/7-c-clm-publications-and-survey-reports/>

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IFCC C-CLM – LEADERSHIP TRAINING MODULE

Training Module



- MODULE 1 - Laboratory Leadership Overview - Ed Randell
- MODULE 2 - Defining the Laboratory Medicine Leaders - Aye Aye Khine Womano
- MODULE 3 - Effective Leadership styles - Aye Aye Khine Womano
- MODULE 4 - Management and leadership skills in the Clinical Laboratory - Matthias Orth
- MODULE 5 - The leader as a visionary and motivator - Sedef Yenice
- MODULE 6 - Work culture and leadership Ethics - Ed Randell

<http://www.ifcc.org/ifcc-education-division/emd-committees/c-clm/7-c-clm-publications-and-survey-reports/>

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FURTHER READING

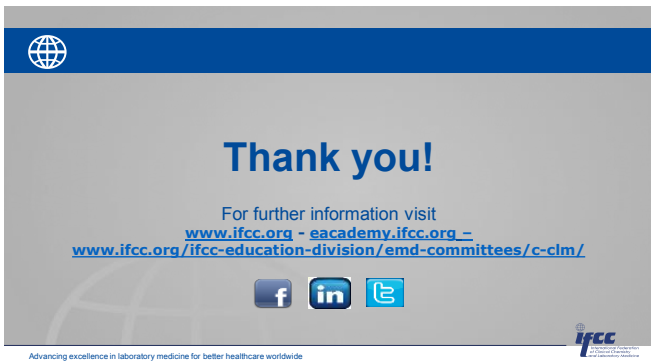
Yenice S. Why Leadership Skills are Essential for the Future of Laboratory Medicine? Indian Journal of Clinical Biochemistry. DOI: 10.1007/s12291-019-00856-7.


Yenice S. Motivating Laboratory Staff. Practical Tips to Help Your Employees Find Meaning in Their Work. Clinical Lab Manager. Issue September 2019, Volume 4, p.10-13.

Yenice S. Leadership basics for clinical laboratory professionals. C-CLM brings in a new manual to prepare laboratory leaders. IFCC eNews N° 3 – March 2019, p.8-9. <http://www.ifcc.org/media/477804/ifccenewsmarch2019.pdf>

Yenice S and Randell E. C-CLM survey results on laboratory leadership. IFCC eNews N°9 – October 2018, p.7-10. <http://www.ifcc.org/media/477453/ifccenewsoctober2018.pdf>




Yenice S. Educational workshop on leadership and management in the PathCape 2018, C-CLM Hosted by the Committee on Clinical Laboratory Management. IFCC eNews N°9 – October 2018, p.4-6. <http://www.ifcc.org/media/477453/ifccenewsoctober2018.pdf>






Thank you!

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