

# EWLSE Update

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## Environmental Enablers and Inhibitors to Leadership in Systems Engineering

The Empowering Women as Leaders in Systems Engineering (EWLSE) welcomes men and women who are passionate about raising awareness and advocating for women as leaders in systems engineering. At the INCOSE IW 2018, EWLSE completed a leadership exercise on environmental enablers and inhibitors to leadership in systems engineering. We also welcomed presentations from David Long on the INCOSE nomination and elections process and from Don Gelosh on the INCOSE Technical Leadership Institute (TLI), shared what we found empowering in our careers, reviewed the state of EWLSE, and presented two Calls from EWLSE. The first call is for authors and editors for a book of "Letters To My Younger Self: How Systems Engineering Changed My Life". The second call is for abstracts for articles related to diversity in systems engineering in practice (for a dedicated INCOSE *INSIGHT* edition in 2019) or research (for the INCOSE *Systems Engineering Journal*). Please see the two calls immediately following this email.

For the EWLSE leadership exercise we formed small groups to discuss environmental enablers and inhibitors to leadership in systems engineering. The first statement heard from the group discussion was: "All I have are inhibitors." Once the groups completed their discussions, each person wrote down on sticky notes their top personal environmental enablers and shared them. Five clear groupings for environmental enablers for leadership emerged (the number of each type are in parentheses – please note some responses address more than one):

1. Positive relationships (10): peer/network/colleague (7), boss (2), men (2), trust (2)
2. Opportunities for learning, training, education, gaining knowledge and skills (8)
3. Career opportunity (8): rotation of job (3), open leadership positions/succession planning/need for resources (3), organization buy-in to systems engineering (1), organization need to understand systems engineering (1)
4. Encouraged by others (5): female mentors (3), leaders (2)
5. Organizational culture (5): mutual respect (1), public recognition (1), culture (1), innovation (2), empowerment (1)

Next people wrote down their top environmental inhibitors to leadership. These were grouped as follows with "lack of organizational support" as a super category:

1. Lack of organizational support (17):
  - bias/unconscious bias (6): bias (5), unconscious bias (2),
  - exclusionary behavior / lack of promoting women into leadership (5)
  - lack of learning opportunity (3)

- unclear career progression (2)
  - control instead of lead (1)
2. Organizational culture/structure (10): inflexible (1), unappreciative (1), competitive (1), too much talking (1), communication flow (1), ad hoc processes (1), large matrix (1), lack of systems engineering buy-in or understanding (2), initiative overload (1), time/priorities (1)
  3. Lack of diversity (5): in organization (1), limited view (1), in domain (1), only woman (2)
  4. Negative Relationships (4): manager/management (2), other women (1), customer (1)

The group will investigate individual enablers and inhibitors at our next gathering and then develop strategies for moving forward.

David Long shared a personal experience relating how his INCOSE leadership journey started with his involvement in INCOSE (since 1997) and included an initial loss of a local INCOSE election. His passion and interest in INCOSE, in part demonstrated by the simple act of running for a local leadership position, caused a member of the local leadership team to reach out to David and ask him to serve in another supportive role. David later successfully ran for and was elected President of the local chapter. His beginning experience of putting himself out there clearly set forth a series of events that resulted in David eventually being elected to and serving as INCOSE President from 2014 to 2015, and he continues to serve and lead in INCOSE today. The overall takeaways for pursuing leadership roles were the willingness to serve above all else, how persistence plays a role in securing leadership opportunities, and the importance of others purposely reaching out to those who demonstrate leadership qualities and supporting them in their leadership journey. David also mentioned that the board positions for INCOSE, with the exception of the role of President-elect and President, do not require the candidate to hold leadership positions at the local and regional levels within INCOSE; rather other qualifications are important such as experience running a small business or a non-profit can support the Treasurer role, etc. It is recommended to review for any INCOSE leadership positions, the position description and requirements, in order to understand what is expected and required for those seeking to serve through a leadership role within INCOSE, and to send any questions to the nominations and elections group serving those positions.

Don Gelosh reviewed data on the first four cohorts of the INCOSE Technical Leadership Institute (TLI) and reviewed the process for INCOSE members to apply to the fifth cohort of the TLI. As a strong showing of support, all of the INCOSE TLI instructors, Don Gelosh, Mike Pennotti and Patrick Godfrey, and TLI graduate Suja Joseph-Malherbe, attended the presentation and participated in the question and answer session. The next set of

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INCOSE TLI candidates need to send in their completed packages, including a nomination letter from an INCOSE leader that meets the requirements set forth by the INCOSE TLI, by midnight, U.S. PST today,, March 15, 2018. For those interested in nominating a candidate, or being a candidate, please obtain the latest requirements from the INCOSE TLI instructors directly.

In summary, EWLSE members are empowered by others – by being able to set up an environment where others can flourish; by supporting others; by mentoring or being mentored; by being a role model to other women including younger women and children; by their ability to be a positive influence to others; by their spouses and family; by being among strong encouraging people; by leaders and colleagues who trust in their abilities to deliver high quality work; by watching their students grow, flourish, and make a difference in the world; and by EWLSE. EWLSE members are also empowered by the systems approach – using systems engineering to solve complex problems and improve the world, teaching systems engineering to others; having a strong technical understanding; and by the synergy of strong technical products and good teams that come together to succeed. EWLSE members are empowered by interesting and challenging work; by having the freedom to work on what interests them; by greater purpose for work; by completed projects and happy stakeholders (and knitting ☺); and by personal success. EWLSE members are empowered by self-esteem as defiance against stereotyping; by confidence and bravery to allow one to act despite challenges; by love, smiles, and science; and by feeling respected and appreciated.

The meeting ended with a scheduled one-hour period of informal networking starting at 5pm with snacks and drinks, where members stayed on and networked well past the original hour and some formed groups and went on to other activities while some remained and continued socializing.

Interested in joining EWLSE? We welcome you! To become a member of EWLSE please log into your account on [incose.org](http://incose.org), go to Profile Home and add “Empowering Women” to your Committees/Working Groups. Are you interested in being matched to a systems engineering mentor who is standing by ready and waiting to be connected with you? Please start by emailing [ewlse@incose.org](mailto:ewlse@incose.org) with your interest.



## IT Update

Bill Chown, [cio@incose.org](mailto:cio@incose.org)

**W**e are very pleased to announce the appointment of two new assistant directors in the IT team, Robert Edson and Angela Robinson. We will be working on a comprehensive strategic plan for INCOSE IT, but I would like to share with you some of our key initiatives that we are currently working on for 2018.

### Expanded Online Store with Wider Product Range

This will soon include differentiated sections for INCOSE developed products, member contributed products, and relevant external systems engineering products that are available for purchase through an external site.

### Member Data Management and Privacy Support

In order to protect our members' personal information, and additionally to comply with new European General Data Protection Regulation (GDPR) personal data policies that will come into force in May, we are fully reviewing our policies and practices around the capture, storage, and use of personal information. Personal data is increasingly exposed through deliberate action, but also by inadvertent lack of care and consideration. We will be making recommendations to all our membership, as well as applying the best possible security (without preventing your participation) across INCOSE.

### Increased Automation of Membership, Certification, Collaboration, and Mailing Processes

We are continuing a process of improving online access and easy management of key capabilities so that members, chapters, and working groups get the capabilities needed for participating in INCOSE.

You can tell us about your specific needs and favorite challenges via the help pages in INCOSE Connect.

### IT Team and Resources

In addition to recently appointing our new assistant directors, we will be establishing professional IT help that we will progressively make available for all those who need it. If you would like to join our team in volunteer, assistant director, or professional capacity, please let me know.



## **EWLSE Call for 'Interest' in Letters Written to Your Younger Self**

Empowering Women as Leaders in Systems Engineering (EWLSE) invites all systems engineers to consider submitting a letter written to your younger self for an upcoming INCOSE EWLSE Book titled: "**Letters To My Younger Self: How Systems Engineering Changed My Life**" targeted to the systems engineers of the future. The goal of the book is to serve as an engaging and enlightening resource for those early in their education or career considering engineering and systems engineering as part of their future career path.

INCOSE EWLSE plans to produce a book targeted to secondary and higher education students and young professionals with contributions from our global membership and interested parties, that contains an equal number of letters from men and women in systems engineering from around the world – letters written to their younger self about lessons learned from pivotal moments in their systems engineering journey that changed their life making them the systems engineer they are today. These pivotal moments could include challenges, events, overcoming obstacles, whatever you are passionate about sharing that had an impact on your systems engineering journey. Authors will need to provide permission for letters to be published and the book is intended to represent a diverse set of individual viewpoints. Specific criteria for what we would like included in the letter and limits on length and other guidance will be forthcoming.

Please express your interest in writing a letter for the book and/or serving as an associate editor by May 30, 2018 to be considered for Volume 1, by sending your name and a description of your interest to [ewlsepubs@incose.org](mailto:ewlsepubs@incose.org). We will share additional criteria for associate editors and first-pass letter due dates to those who express an interest in being authors on, or shortly after, June 5, 2018.

### **Join EWLSE!**

We invite men and women to join EWLSE to advocate for women as leaders in systems engineering. Sign-up and to be added to the email distribution list is through [www.incose.org](http://www.incose.org):

- Login to your member account
- Select 'Profile Home'
- Scroll to 'My Committees/Working Groups' and select 'Browse/Join a Working Group'
- Select 'Empowering Women' on the right
- Scroll down to Committee Tasks and select 'Join this Working Group'
- You will now also have access to the Empowering Women area on INCOSE Connect



## **EWLSE Call for Papers**

### **Diversity in Systems Engineering**

Empowering Women as Leaders in Systems Engineering (EWLSE) invites everyone to submit papers focusing on diversity in systems engineering and related systems areas for consideration for publication in INCOSE's journals. We invite articles on any topic relevant to diversity, equity, and inclusion in systems related fields across industry, government, and academia.

We are especially interested in papers addressing topics that show the importance and value of diversity in enabling, promoting, and advancing systems engineering and systems approaches to address complex societal and technical challenges for a better world.

Possible topics include, but are not limited to:

- Effective techniques for overcoming the challenges of working across cultural boundaries
- Global diversity policies, best practices, and lessons learned in creating an inclusive systems engineering enabled workplace
- How building diverse systems' teams produces optimal systems
- How diversity drives innovation and competitive advantage
- The role of diversity, equity, and inclusion in a well-prepared systems engineering workforce
- Institutional considerations or approaches for creating an open inviting systems focused culture
- Broad training in knowledge, skills, and ability that includes traditionally underserved groups
- Case studies demonstrating the importance and value of diversity in systems engineering
- Embracing diversity of thought or approach for resourceful problem solving

EWLSE is working with INSIGHT (INCOSE's journal on state of the practice of systems engineering) toward a dedicated *Diversity in Systems Engineering* themed volume in 2019. The EWLSE publications committee will also be assessing articles for fit within the SE Journal (state of the art of research in systems engineering). Please first send an abstract (up to 500 words) by July 31<sup>st</sup>, 2018 to receive an invite to submit a paper due by October 30<sup>th</sup>, 2018. Both should be sent to the EWLSE publications committee at [ewlsepubs@incose.org](mailto:ewlsepubs@incose.org). We welcome topics that fit within either journal.

Papers will be peer reviewed and judged on the degree of innovation, intellectual merit, described outcomes or impact, and relevance to diversity, equity and inclusion in systems engineering and related fields. EWLSE uses double-blind review for papers. Until final papers are uploaded all references to the author(s) and their institution should be redacted in some way. Citations that would identify the author(s) should state, "details withheld for review" in the bibliography. Other formatting and technical guidelines are found [here](#). ALL authors must review the Style Guide and Citation Quick Guide before submission to be certain to meet all requirements.

For more information, contact the EWLSE Publications Committee: [ewlsepubs@incose.org](mailto:ewlsepubs@incose.org)