



## 8<sup>th</sup> Annual Systems Engineering in Healthcare Conference April 26-27<sup>th</sup>, 2023 Minneapolis, MN Call for Presentations, Panels, and Tutorials

The INCOSE Conference on Systems Engineering in Healthcare enables participants to share the best practices in the latest Systems Engineering topics as applied to both Medical Devices and Healthcare Delivery. The theme for the conference is

### “Advancing the Practice of Systems Engineering in the Healthcare Industry”

Conference Website: <https://www.incose.org/hwg-conference/> (not updated yet). Potential tracks include

- Compliance/Safety/FMEAs
- Requirements and Test Mgt
- “Beyond the System”
- Digital SE (MBSE, Simulation)
- Agile & Lean Methods
- Machine Learning/AI

For this small and interactive conference, we seek practitioners to share their knowledge and experience through presentations and collaborative sessions. We encourage sessions focused on experience reports and case studies, since these were highly valued in previous conferences. Instructional tutorials are also welcome, which are better when they include examples that help the audience apply the learning to their context. Interactive panel sessions to explore a topic are also encouraged.

Potential invited content includes:

#### Speakers

- Chris Unger, GE HealthCare Chief Systems Engineer: “Why is Systems Engineering Hard for Medical Devices?”
- Bijan Elahi, Medtronic Corporate Advisor, Product Safety: “Medical Device Safety: FMEAs at service of Safety”
- Mike Celentano, ESEP, Systems Engineering Senior Director, Eli Lilly: “Predictive Safety Risk Analysis Methodology for System of Systems Using Systems Thinking”
- Kelly Weyrauch, Principal at Agile Quality Systems: “Aligning Systems Engineering and Agile Principles and Mechanisms”
- David Cronin, Founder, Cognition Corporation: “Digitalization of risk processes with advanced software tools”
- Matt Vorhees, Medtronic Engineering Program Mgr, Medtronic Product Security Office, “The Crossroads of Security and Safety Risk in Regulated Medical Devices”
- Shannon Allison, Medtronic Senior Mgr, Risk Management and Reliability, “Application of Cybersecurity Standard TIR57 vs. Risk Management Standard ISO 14971”
- Dr. Olaf Hedrich, Medtronic, Medtronic Corp. VP of Medical Safety, “Influence of System Design on Clinical Safety Performance of Medical Devices”
- Steve Zielinski on Machine Learning/AI

#### Panels and Roundtables

- “Best Practices in selecting and Deploying a SE Lifecycle Management Tool” Chris Unger, moderator; Diana MacKenzie, Werfen; Tom Fairlie, Medtronic; Kerry Griffin, Stryker
- “Med Device Interoperability Panel” Mike Celentano (Moderator), ESEP, Systems Engineering Senior Director, Eli Lilly
- “Agile Roundtable - Applying Lean/Agile Concepts in a Regulated Environment”, Kelly Weyrauch, moderator

Submissions are open; follow this link to EasyChair: <https://easychair.org/conferences/?conf=hwgsec23>

One author per paper gets a 50% discount on registration. In your abstract, emphasize:

- A compelling description – Why would someone want to attend your session?
- Your target audience – Who should (or should not) attend?
- Key takeaway – What knowledge and wisdom will your audience gain?

**Submissions Due – Feb 15, 2020    Acceptance Notification – Feb 22**

# INCOSE HWGSEC Benefits of Presenting

The INCOSE Systems Engineering in Healthcare Conference is a forum for sharing ideas with your colleagues. It is an 'intimate' conference, large enough to capture a good cross-section of companies yet small enough to meet the people you want to. The agenda is structured to give plenty of time for networking and informal sharing.

Presenters get several benefits:

- 50% off the already low attendance fees
- A chance to share your ideas in a friendly environment and get feedback on what has worked (or maybe more importantly what challenges were confronted) at other companies doing similar work
- Meeting colleagues with similar interest...as a presenter people from other companies you never knew will search you out in breaks to share insights

The committee structure has made the 'barrier to entry' relatively low. While we encourage submitting a story board/draft of your presentation (and those submissions will be given preference), we only require a short abstract to be considered.

## Speaker Testimonials

This conference was a great venue for presenting ongoing research in new engineering and management technologies. A very good group of diverse, knowledgeable, and engaged subject matter experts and decision makers. I'm confident the information on new techniques and tools presented will be thoroughly integrated in a cross-domain manner.

Mike Pafford, Johns Hopkins Instructor

The INCOSE Healthcare Working Group SE Conference is a great venue for exchange with the community on state-of-the-art methods, challenges, and opportunities. The targeted attendees are well-connected to the domain issues of the day, and the lively interactive atmosphere provides a stimulating environment that rewards the investment of time.

Bill Schindel, President ICTT System Sciences and INCOSE Fellow

As a speaker I got to share ideas and insights on how various aspects of SE fit in the product design cycle and contribute to the efficient development of medical devices that address real user needs while delivering product quality and reliability.

The conference offers multiple interaction opportunities with SMEs to discuss novel design approaches, methodologies and tools used by SE professionals in healthcare.

Ali Hamadeh, Systems Architect and Lead Systems Designer, GE Healthcare

# Submission Guide

More detailed instructions are given at EasyChair (<https://easychair.org/conferences/?conf=hwgsec23>). You will be asked to enter demographic information on the authors, and to identify a speaker/primary contact.

We will also ask you to complete:

- Submission length (select 30, 60, Either 30 or 60, Longer)
  - *Please plan on time for Q&A/Discussion...up to 1/3 of the available time. If your session could be either 30 or 60 minutes, or you would like to present a longer session either for a long presentation or a tutorial, the Program Committee will contact you to discuss options.*
- Abstract (text)
  - *Describe the key elements of your presentation, what you want the audience to get from your presentation. Describe your target audience - Who should (or should not) attend? Is this for novices or experts?*
  - *Keep in mind that attendees may attend a dozen presentations - what will make yours memorable?*
  - *After acceptance, we will ask you to update this section to be the abstract that goes into the program...typically less than 200 words or 1000 characters. Abstracts that are too long may be edited down by the conference organizers. In the abstract, please describe*
    - *A compelling description – Why would someone want to attend your session?*
    - *Key takeaway – What knowledge and wisdom will your audience gain?*
- Session Content (optional text)
  - *Describe the content and flow of your session. How many slides do you expect, and what is the key message of each slide. Describe how you will tell your story to deliver the key messages. This is optional, but it helps the committee have confidence for a positive recommendation.*
- Uploads (optional)
  - *If you want to upload your presentation file or other supporting documentation it would go here, as either a PDF or PowerPoint.*

We will not ask for an IP release form or require you to submit a presentation (you are welcome to submit your presentation for feedback after acceptance). We will share author contact information in the conference program and have people contact the author directly for copies of the presentations. We would prefer if the title page has “© Author, with permission granted to INCOSE to use” (but that is not required).