#### SAGES NBT INNOVATION WEEKEND



# AGENDA (Preliminary) - SDTS Summit February 22-24, 2024

Chairs: Erik Wilson and Christopher Schlachta



# Thursday, February 22, 2024

Registration: 5:00pm-8:00pm

Welcome Reception: 7:00pm-9:00pm

Friday, February 23, 2024

Registration: 7:00am-6:00pm

Sessions: 7:45am-5:00pm Innovation Dinner: 6:00pm-9:00pm

7:00-8:15 AM | Breakfast

7:15-7:25 AM | Opening Welcome and Introductions: Christopher Schlachta & Erik Wilson

#### 7:25-11:45 AM | The Digital Surgery Landscape (7 min talks)

These sessions will explore issues associated with integrating digital technology into surgical practice, evaluating the potential advantages and drawbacks of training and education with digital platforms as well as the changes digital analysis, augmented reality and machine learning can make in the operating room. Multiple sessions and panel discussions will include the following topics:

7:25 | 2023, a monumental year for technological innovation in review – Filippo Filicori

#### 7.35-8.20 Postoperative and Intraoperative Navigation Tools

Moderators: Teodor Grantcharov, Tony Jarc

Imanol Luengo- Unlocking the power of surgical video

Jocelyn Barker- Accelerating and Scaling AI Model Deployment for Surgical Video Analysis

Ozanan Meireles-SAGES CVS Challenge

Nobuyoshi Takeshita- Deep learning-based anatomical image recognition models in laparoscopic colorectal/gynecological surgery

Mahdi Azizian-New frontiers in edge computing, Nvidia's perspective

# 8:20-9:10 Video Capture Approaches and Annotations, Telementoring, Telepresence, and Telesurgery

Moderators:, Daniel Donoho, Steven Schwaitzberg

Natalie Holger-Theator intraoperative assistance

Nadine Haram- Unlocking breakthroughs in surgical excellence through OR video data

Margaux Masson- Enhancing Medical Research: Applying Artificial Intelligence in Surgical Video Analysis

Dennis Fowler- Is it (finally) time for Remote Surgery?

#### 9:10-9:45 Objective Performance Indicators and Digital Gestures

Moderators: Gretchen Purcell Jackson, Filippo Filicori

Dani Kiyasseh- Decoding surgery with artificial intelligence

Anthony Jarc-

Sarah Choksi- Kinematic data to unlock the true power of robotic surgery

#### 945-10.15 Coffee break

#### 10:15-11:10 Digital Enhancement of Operating Theater and Surgical Efficiency

Moderators: Oz Meireles, Nadine Haram

Teodor Grantcharov- optimizing operational efficiency in surgery – using objective data and modern science David Atashroo-Do what you want, how you want, when you want: application of LLM and AI in surgical practice David Schummers- Scalable Applications of AI in Surgery

Nadine Haram- The power of data in measuring success and driving OR efficiency

#### 11:10-11:50 Infrastructure, Governance and Regulation in Artificial Intelligence

Moderators: Patricia Sylla, Erik Wilson

Gretchen Purcell - Clinical Nuances in Al Evaluation

Daniel Donoho

Bruce Ramshaw – Algorithms for Good: Using AI for a Sustainable Healthcare System Darren Porras - Bridging the connectivity gap, intelligent data flow for digital surgery

#### 12:00-1:10 PM | Lunch - The changing centers of care are driving innovation

**Moderator: Joe Mullings** 

**Invited Speakers:** Todd Pope, Sandeep Chauhan, Ashley Seehusen, Feby Abraham, Tom Calef, Joe Amaral, Stephan Kruzer

The pathway of innovation applies across many aspects of the health care system from the investor to the entrepreneur to the provider. Just as devices and procedures are disruptive, new disruptive centers of care are transforming surgical approaches. Home hospital models, outpatient surgical centers, community hospitals, and tertiary referral centers are all developing and evolving. This panel will examine how the value propositions of bringing life changing ideas and devices to the health care environment modify with these adjusting centers of care and by extension how the changing centers of care are being altered by innovation.

#### 1:10-2:30 PM | An Innovators M&M

(10 min each)

Moderator: Billy Cohn

Invited Speakers: Ray Onders, Oz Meireles, Darren Sherman, Dennis McWilliams/Ashley Seehusen, Tony Jarc, Dan Sheehan, Barry Salky(neatstitch), Schwaitzberg (microwave blood warming), David Mintz (NeoGuide), Helmuth Billy() (Ne

This session is a new twist on a regular event in the life of surgeons: the morbidity and mortality conference. M&M is an open forum were a surgeon discusses a complication that occurred from a surgical case with colleagues, analyzing it with an honest view to try to determine what could have been done better to improve the outcome. This M&M is no different but the surgeons are replaced by innovators and the complication is from a surgery but from a company and its devices. We will hear the cases, looking at past decisions and learning in hopes of making better moves in device development in the future. Each panelist will present a company or device followed by feedback from the audience.

#### 2:30-3:00 PM | *Break*

#### 3:00-5:00 PM | SAGES Shark Tank Semi Finals

The SAGES Shark Tank semi-finals was very well received last year and will be live and in-person again. Ten innovations will be presented and evaluated with audience and panel participation. The finalists will be selected from the group for the Finals at SAGES Annual Meeting in Cleveland. An audience favorite from the semifinals will be announced and previous Shark Tank winners will present an update on their progress. Each semi-finalist will have 8 minutes to present plus discussion.

#### 6:00-9:00 PM | Cocktails followed by Dinner Discussion: The New Normal in Innovation from 2019 to 2024

This dinner discussion will be provocative and engaging with Dr. Billy Cohn giving an overview of the process of innovation in and then a panel discussion comparing and contrasting the changes in the road of development new surgical technologies from 2019 to 2024. Economic challenges, financial support models, production supply chains and regulatory adjustments are vastly different in the past 5 years. A global pandemic changed many things in our surgical world including vast changes in how we innovate surgery.

Speaker: Billy Cohn

Moderators: Erik Wilson and Joe Mullings

Panelists: Fred Moll, Manisha Shah-Bugaj, Brian Dunkin, Joe Amaral, Billy Cohn, Richard Vincent, Darren Sherman

## Saturday, February 24, 2024

Registration: 7:00am-4:00pm

Sessions: 7:45am-5:00pm

#### 7:00-8:15 AM | Breakfast

#### 7:15 AM-12:00 PM | My Favorites

The my favorites format was very popular last year and returns in full force with new topics. This session will compare and contrast surgical devices and techniques with short explanations of each approach and a comprehensive question and answer discussion. Panelists will spend one minute describing their approach and then an open debate of technique and devices will continue until potential gaps in the toolset are revealed that could lead to further innovative options for the future of procedures. Topics being debated include the following:

Pat Sylla, Rachel Moore, Helmuth Billy, Christopher Schlachta, Joe Amaral(I), Jonah Stulberg, Ray Onders, Tom Calef, Barham Abudayyeh, Billy Cohn, Brian Tinkham, Dennis McWilliams, Filippo Filicori, Aurora Pryor, Brian Dunkin, Natan Zundel, Santiago Horgan, Joe Mullings

**7:15-7:40 AM | My Favorite Digital Surgical Analysis Tool:** The panelist each have chosen one digital tool which they feel is useful during surgery or planning surgery. Moderators: Erik Wilson, Maureen Halligan

Intuitive Hub: Filippo Filicori Theator: Barham AbuDayyeh Proximie: Natan Zundel Activsite: Edwardo Parra Davila Asensus: Michael Cook Terra Recon: Billy Cohn

OR Black Box: Tom Calef SAGES CVS: Brian Dunkin None Really Useful: Steven Schwaitzberg

**7:40-8:25 AM | My Favorite Surgical Trainer or Simulator:** The panelists each have chosen one tool or technique which they feel is useful for teaching surgical skills. Moderators: Carla Pugh, Tom Calef

Fundamental VR: Caitlin Houghton SSI Maya: Sudhir Srivastava dvSim: Filippo Filicori
Virtamed: Steven Schwaitzberg Surgical Sciences: Rick Hoedt Vicarious Sim: Igor Belyanski
OSSO VR: Justin Barad Innovus Medical: Elliot Street Medical Holodeck: Billy Cohn

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Chamberlain Abd Sim: David Noonan Patients: Vip Patel GI Mentor: Christopher Schlachta

**8:25-8:45 AM | My Favorite Ergonomic Tool in Surgery:** The panelists each have chosen one tool or approach which they feel is useful for surgeon well-being. Moderators: Aurora Pryor, Manisha Shah-Bugaj

DaVinci Next Gen: Amit Hazan Moon Platform: David Noonan Dexter Platform: Greg Roche
Surgical Speed: Ray Onders Locking Chair: Todd Wilson SSI Command Center: Sudhir Srivastava
Jokes and Music: Natan Zundel Thai Massage: Vip Patel Purpose Built Attire: Barham AbuDayyeh

8:45-9:10 AM | My Favorite Tool for Incisional Hernia Repair: The panelists each have chosen one tool, material or approach which they feel is useful for repairing incisional hernias. Moderators: Todd Wilson, Ray Onders

Laparoscopic Synecor: Helmuth Billy Don't Make One: Pat Sylla

Autoharvest of Skin: Michael Cook

Proceed IPOM: Schlachta Vicarious Platform: Adam Sachs Robotic Retromuscular: Igor Belyanski Echo Positioning System: Jonah Stulberg

9:10-9:35 AM | My Favorite Ablative Energy Device: The panelists each have chosen one modality or tool which they feel is useful for application of energy in surgery. Moderators: Dennis McWilliams

Thunderbeat: Rachel Moore Harmonic Scalpel: Ray Onders

Barrx: Brian Tinkham

Ligasure: Pat Sylla Erbe: Todd Wilson

Vessel Sealer: Caitlin Houghton Histosonics: Joe Amaral

Robotic Scissors: Shelley Scerbo

Pulsed Field: Barham AbuDayyeh

9:35-9:50 AM | Break

9:50-10:15 AM | My Favorite Insufflation and/or Trocar System: The panelists each have chosen one insufflator or trocar which they feel is most useful for access and exposure laparoscopically. Moderators:

Airseal: Steven Schwaitzberg

Whatever is Available: Rachel Moore Anything But Airseal: Jonah Stulberg

Airseal Normal Mode: Ed Parra Davila Nuview: Tom Calef

Trocarwash: Billy Cohn

Palliare: Brian Dunkin Lexion: Helmuth Billy

Anything but Airseal: Caitlin Houghton

10:15-10:35 AM | My Favorite Trocar Closure Device or Technique: The panelists each have chosen one tool which they

feel is useful for repairing trocar sites. Moderators: Darren Sherman

Laparoshark: Helmuth Billy Needle and Suture: Rachel Moore

Neoclose: Shelley Scerbo

Weck Teleflex: Michael Cook Vicarious Closure: Adam Sachs

Anaconda: Billy Cohn

Carter Thomason: Pat Sylla M close: Jonah Stulberg

10:35-11:05 AM | My Favorite Anastomotic Device or Technique: The panelists each have chosen one tool, material or approach which they feel is useful for creating luminal anastomoses. Moderators: Rachel Moore, Brian Dunkin

Suture: Christopher Schlachta Seger IA60: Barry Salky

GT Metabolic: Helmuth Billy

Barbed Suture: Shelley Scerbo SSI Nadi: Sudhir Srivastava GI Windows: Erik Wilson

Double Linear Stapler: Dmitri Oleynikov

FlexA by Cardica: Billy Cohn

11:05-11:30 AM | My Favorite Flexible Endoscope: The panelists each have chosen one tool or device which they feel is useful for flexible visualization during endoscopy. Moderators: Brian Tinkham

Endoquest Endodrive: Todd Wilson Ambu Disposable: Caitlin Houghton

USGI IOP: Barham AbuDayyeh

DaVinci SP scope: Vip Patel Endosound EUS: Brian Dunkin Fuji Therapeutic: Michael Cook

Boston Disposable EGD: Shelley Scerbo Olympus EndoEye: Natan Zundel

Monarch: Adam Sachs

11:30-11:55 My Favorite Endolumenal Tool: The panelists each have chosen one tool or approach which they feel is useful for addressing endolumenal procedures. Moderators: Brian Dunkin

Storz TEO: Pat Sylla Robotic TAMIS: Ed Parra Davila T-knife: Todd Wilson Tattoo: Shinil Shah

Endoquest: Amit Hazan Endolumenal Sim: Rick Hoedt

Occlusion Balloon Guidewire: Barham AbuDayyeh

Transanal SP: Adam Sachs Overstitch: Micheal Cook

#### 12:00-1:15 PM | My favorite unmet surgical need

This lunch session will take the my favorites format and dive into what clinical problems exist which surgeons find common or important. The clinic, operating room, and procedure suite all have daily challenges which innovation has failed to fully address. The panel members will present one of their most relevant challenges and a discussion will proceed to determine why these areas of clinical practice have been so difficult to solve. Moderators: Erik Wilson, Dennis McWilliams

Weaning from the Ventilator: Ray Onders

Operative Notes: Tom Calef Safer Anastomoses: Brian Tinkham

Consistent Competency in the OR: Maureen Halligan Laparoscopic Acute Care Surgery: Shinil Shah

Eliminating Surgeon Skill Variability: Igor Belyanski

Organ Preserving Surgery: Barham AbuDayyeh Eliminating 6% Readmissions: Joe Amaral Better Access to Robotic Tech: Dmitri Oleynikov Preventing, Recognizing, Managing Leaks: Pat Sylla

Robotic Diversity and Telesurgery: Vip Patel

#### 1:15-5:00 PM | Digital Surgical Platforms: State of the Technology

The recent substantial rise in robotic surgical platforms has occurred with soft tissue robotics receiving large amounts of investment, research, engineering, and commercialization. Surgical robots are being made and released all over the world and the focus of these platforms are broad and varied. These sessions will evaluate current, new to market, and potential digital surgical platforms which argue to become the new way we will operate and perform advanced procedures over the next 5 to 10 years. Robotic platforms will be presented in multiple sessions with panel discussions encompassing the following topics.

Ecosystems built into Robotic Platforms
Robotics Focused on the Site of Care
Variability in Robotics Patient Cart Footprints
Multiport versus Single Access Approaches
Ergonomic Approaches to Robotic Surgery
Task Focused Robotic Platforms in Surgery
Cost Efficient Models of Robotics Adoption

#### 1:15-2:30 PM

CMR Versius: Mark Slack 10 min Intuitive DaVinci: TBD-Dave Goldman 10 min

Medtronic Hugo: Arvind Ramadorai 10 min
SS Innovations Mantra: Sudhir Srivastava 10 min
Cambridge Consulting: Alex Maret 10 min

Panel Discussion: 15 min

#### 2:30-2:50 PM | Break

#### 2:50-3:55 PM

Asensus: Michael Cook *10 min*Asian Robotic Systems: Vipul Patel *10 min*Virtual Incision: John Murphy *10 min* 

Vicarious: Igor Belyanski/Adam Sachs 10 min

Panel Discussion: 15 min

#### 3:55-5:00 PM

Moon Surgical: David Noonan *10 min*Levita: Alberto Rodriguez-Navarro *10 min*Noah: Enrique Romo *10 min* 

Endoquest: Todd Wilson 10 min

Panel Discussion: 15 min

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