

COMMUNITY

Read the latest news from the world of AO Trauma North America

SUMMER

2020

ISSUE

CPP BONE INFECTION RESEARCH COVID-19

N95 MASK RECYCLE SYSTEM



COMMUNITY & FELLOWSHIPS

AO TRAUMA NA JOURNAL CLUB

EDUCATION

PIVOTING TO ONLINE LEARNING

RESEARCH

RESEARCH AWARD

OUTREACH

YOUNG INVESTIGATORS AO HURRICANE **RELIEF**

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Letter from the Editor

Letter from the Editor

Dear colleagues, Welcome to the latest edition of the AO Trauma North America newsletter!



There is no doubt that the world has been rocked by the coronavirus pandemic. All of us have been affected personally and professionally.

AO Trauma NA has worked hard to adapt to the new environment imposed by the restrictions caused by the pandemic. Courses have been cancelled, delayed, or reconfigured to online venues. The AONA headquarters is vacant as all staff have been working from home since March 13th. During this challenging time the Education Committee has worked extremely hard to continue to offer AO education that is up-to-date, timely, and engaging. AOTNA continues to offer grants to outstanding research proposals and the Fellowship Committee reviewed a record number of applications.

I hope you enjoy this latest update on AO activities! In addition, you will get interesting information on education, staff members, and the results of our latest "fun" question to the members.

Enjoy!

Langdon A. Hartsock, MD, FACS

Chair AO Trauma North America Community Development Committee

COVID-19 Study

Stephen Kates, MD, Professor and Chairman Dept. of Orthopaedic Surgery, Virginia Commonwealth University



The COVID-19 pandemic has resulted in a pause of research at most universities. Virginia Commonwealth University (VCU) is no exception but has permitted the study of COVID-19 as a research topic. Therefore, using technologies and methodologies developed for AO Trauma CPP Bone Infection research, we have embarked on exploratory research on COVID-19 during the research pause and perhaps as a new line of infection research for my lab. I have partnered with Dr. Patricia Sime, Department Chair of Internal Medicine at VCU.

The disease now known as COVID-19 was first reported in Wuhan, China, in December 2019 as a viral pneumonia. This outbreak was found to be caused by a novel coronavirus SARS-Cov-2. Diagnosis has included a nasopharyngeal swab examined with PCR.

COVID-19 as a disease includes significant systemic inflammation. The C-reactive protein (CRP) is an inflammatory marker that is usually elevated in hospitalized patients. Similarly, inflammatory mediators such as interleukin-6 (IL-6) have been shown to increase with COVID-19 infection. "Cytokine storm" is a key element in the pathogenesis of acute respiratory distress syndrome (ARDS) and the response to SARS and MERS, and appears to be an important pathogenic factor in seriously ill COVID-19 patients as well. Cytokine storm is an out-of-control proinflammatory cytokine response characterized by overproduction of pro-inflammatory cytokines leading to immune cell activation, epithelial cell damage, impaired barrier function, edema and respiratory failure. Resolution of inflammation is now known to be an active process controlled by a family of specialized pro-resolving mediators (SPMs) derived from dietary omega-3 polyunsaturated fatty acids.

Immunodominant antigens have been identified for SARS-Cov-2 with known genetic sequences. It is presumed that most or all patients infected with SARS-Cov-2 will develop neutralizing antibody titers against dominant antigens as they recover from the disease. The Kates lab can measure these antibodies with a custom Luminex assay.

We hypothesize that patients undergoing treatment for COVID-19 will experience a marked elevation in inflammatory markers in the first few days after admission which will reduce down to a normal or convalescent level by week 12 and that during disease progression, pro-resolving mediator levels will inversely correlate with pro-inflammatory cytokines; that high levels of pro-inflammatory cytokines and/or low levels of pro-resolving mediators at admission, and during treatment and recovery, will be correlated with poorer outcomes; and that anti-SARS-Cov-2 antibody levels will remain elevated after infection indicating immunity to the virus. We will examine the physiological behavior of cytokines, CRP and anti-SARS-Cov-2 antibodies in the early hospitalization and convalescent period. This will establish what is normal to see in a laboratory pattern of tests in the patients with COVID-19 infection. To our knowledge, no studies have examined all of these tests in combination.

We are grateful to AO Trauma for ongoing research support of the CPP Bone Infection program and are pleased that the know-how gained from prior projects can be used to help others in this global pandemic.



Virginia Commonwealth University Medical Center Creates its own N95 Mask Recycle System

By Stephen Kates, MD

Even with a small surge of COVID-19 patients in early February, the staff and hospital leaders realized we would quickly run out of N95 masks. Since it became very clear we weren't going to get masks from the federal government, we went to work to figure out how we could extend our supply.

After scouring every research lab in the university for masks and looking at donations from the community, we still weren't going to have enough.

We would only have about three days' supply if we had a real surge, so we looked at ways to reuse the masks.

Instead of the hydrogen peroxide vapor used by the Battelle CCDS Critical Care Decontamination System™, the team settled on ultraviolet light disinfection, as the hospital already owned six machines to clean our hospital rooms. VCUMC uses Tru-D.

In my home metal shop, we built multiple racks to hold 40 masks each and tested various angles, times and light intensities to find a combination that would clean each mask as many as 20 times without changing the fit or affecting filtration.

In an empty building across the street from VCUMC, four rooms were utilized to: inspect incoming masks, decontaminate, reinspect, and repackage. Seven days a week in shifts, 24 staff members worked on decontamination of the masks with an output of 3,000 a day and a capacity of 12,000 per day.

VCUMC will publish its findings in a journal so more hospitals can replicate the system.



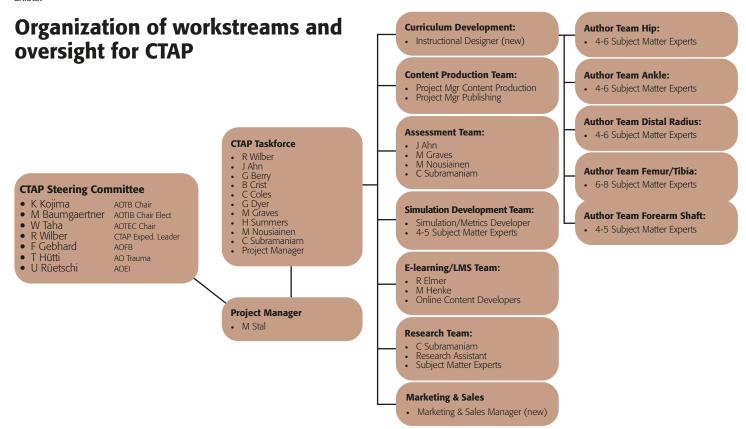
CTAP Update

Roger Wilber, MD—CTAP Task Force

The novel coronavirus has become a catalyst for change, accelerating our learning evolution here at AOTNA. What we initiated because of a desire for a personalized curriculum is now a necessity we are striving urgently to meet. With the cancellation of our face-to-face educational events, the AOTNA Board and Education committee have been meeting weekly to create opportunities for online learning. The success of the online Osteotomy course chaired by Brett Crist and Michael Sirkin has reinforced our conviction that we are on the right track in our goal to provide online education combined with skills training. Previously, a course would have 30 enrolled participants which has now grown into an event logging in over 200 individuals weekly. The assets that are being created are reusable, can complement or supplement other AONA assets we already have. When a safe opportunity presents itself, we will complete the education with face-to-face skills training. This is the proof of concept for the Competency Based Training and Assessment Program (CTAP). It is timely, essential, and I wish we were further along in its creation to meet the educational void that currently

Content production for the CTAP intertrochanteric hip fracture pilot module is well under way. Instructional design of content to define the structure, packaging and delivery is complete and production is in progress. The CTAP task force has worked with our Montreal-based industrial partner CAE on the storyboard details for the first HoloLens augmented reality simulator. Completion of the Beta version of the simulator, by January 2021, will mark the launch of the CTAP pilot phase.

With the help of numerous individuals, we have made significant progress toward our vision for CTAP though we still have considerable work ahead. The work streams have been clearly defined and organized in Microsoft Teams by our project manager Marc Stal. This will streamline our efforts and help manage communication and interactions across the global teams assigned to the project.



We are continuing to work on the development of performance metrics with Rolando Del Maestro and his simulation team from McGill University, while consulting with Anders Ericsson (author of "Peak") and Dr. Gerald Fried, Associate Dean of Education at McGill. As we look to the future, we are planning the subsequent modules, based on ACGME Core Competencies/Milestones and focusing on development of situation-based skills and fundamentals training. There is no doubt that the pandemic is having an impact on our long-term goals, yet we are finding unexpected opportunities for progress. **Stay tuned for more updates.**

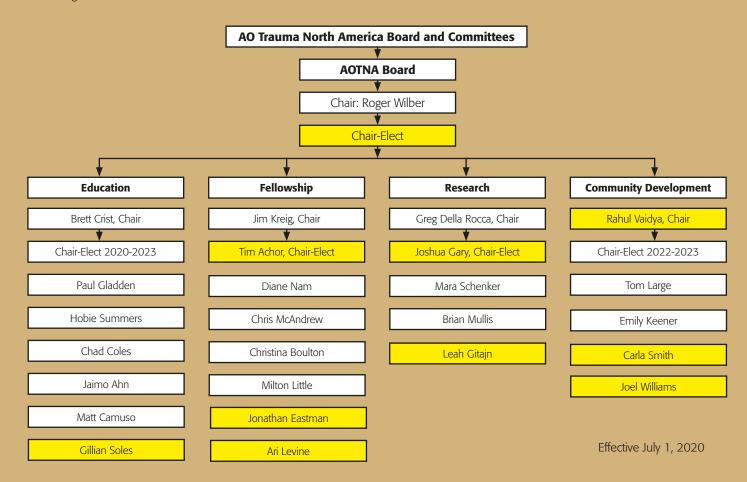
AO Trauma North America Board Update

A Message from Roger Wilber, MD—Chair AO Trauma NA Board

Thank You and Welcome!

The division of Trauma is welcoming new committee members to their governance roles and saying thank you for the time and service provided by the outgoing faculty. We had a record number of applications this year and wish to thank everyone for their interest in contributing to the organization. We are fortunate to have such dedication, and have prioritized improving opportunities for all that are interested in being active in the organization.

The Research Committee is welcoming Leah Gitajn as its new member, and Josh Gary has been chosen as Chair-Elect and will be taking over from Greg Della Rocca in July 2021. Fellowship has added Jonathan Eastman and Ari Levine while electing Tim Achor to assume the Chair role in July 2021. Rahul Vaidya will be replacing Langdon Hartsock as the Chair of Community Development this July with the additions of Tom Large, Carla Smith and Joel Williams to the committee. The tireless Michael Sirkin will be stepping aside as Chair of Education this July and Brett Crist will be assuming the role. Gillian Soles has been chosen as the newest member of the Education Committee.



The election for the Chair-Elect of the AOTNA Board is planned for this fall after changes to the governance rules have been completed for AONA.

I wish to thank everyone for their dedication to AO Trauma NA, and would especially like to thank Derek Donegan, Conor Kleweno, and John Scolaro for their time and contributions to the Community Development, Fellowship and Research Committees respectively. A special thank you and recognition to Michael Sirkin and Langdon Hartsock for their dedication and amazing efforts as Chairs of their Committees and members of the AOTNA Board.

Committee Updates

Education

Brett Crist, MD —Chair-Elect AO Trauma NA Education Committee



Although the pandemic has led to multiple course cancellations, your Trauma Education Committee along with Chitra Subramaniam, and Roger Wilber have taken this opportunity to move toward the goal of a blended learning environment including online and a concentrated in-person event for practical skills exercises.

The first offering, Lower Extremity

Deformity and Nonunion Course, started on April 18th. It includes ten Saturday morning live sessions that are recorded. Participants receive a link to the recording on Sunday via Zoom, and then the recordings are posted on YouTube on Monday. On the following Thursday, there is a "Meet the Experts" session to allow the participants to get their questions answered. Faculty will also do a short recap of the Saturday session, go over assigned homework, and go over cases that solidify

the learning outcomes for that session.

These sessions will also be recorded and available for viewing. Four of the Saturday sessions will be discussion groups over specific anatomical regions. Following the online discussion group, the participants can submit their cases for the faculty to review during the following Thursday, "Meets the Experts" sessions. The plan is to have a live in-person event in Las Vegas at the Oquendo Center in the Fall to do the cadaveric and synthetic bone practical exercises that were planned for the original event.

We had over 380 participants register for the first week, and 217 participated during the live Saturday session. We got off to a great start with Mitch Bernstein and Rahul Vaidya discussing lower deformity evaluation.

The Trauma Education Committee's hope is that we will be able to move forward with other course offerings in a similar format moving forward. Please join us for the Lower Extremity Deformity and Nonunion Course and/or catch up on YouTube and give us feedback.

Hand Specialty

Chaitanya Mudgal, MD, MS (Ortho), MCh



The hand specialty is now offering additional web-based learning sessions to the 2020 curriculum. The hope is to have these sessions be a surrogate for lost surgical experience for residents and fellows during the COVID-19 pandemic.

The "Must Know Series—How I Do It" emphasizes surgical tips and tricks. Each session consists of two half-hour sessions: the first half is dedicated to a common injury in the hand and wrist and its management. The second half is dedicated to a common flap utilized for coverage in the hand and upper limb. The entire AO North America Hand Education Committee (NAHEC) participates as the panel to produce highly interactive sessions.

Another scheduled online offering is the bi-weekly "Sage on Stage Series" featuring a one-on-one interview with a Sage. Surgeons who have made seminal contributions to the field will be interviewed about their careers, contributions, missteps and lessons learned, as well as advice for the next generation of surgeons.

NAHEC recently added new members. A resident, Kiran Agarwal-Harding, MD, from the Harvard Combined Orthopedic Residency Program will attend committee meetings and provide his perspective to the hand curriculum. In addition, Kim Mezera, MD, and Becky Neiduski, PhD, CHT, bring a uniquely wonderful perspective to our

team as a woman surgeon/ educator and as a hand therapist/ educator.

At this time, the Advanced Wrist Summit is still on the schedule for October 23-25, 2020, in Jacksonville, FL. This newly designed course will focus solely on the fractures, soft tissue injuries and complications seen in the wrist. The interactive learning environment and format will allow participants to review and discuss clinical cases. Participants are encouraged to bring their own challenging cases and receive feedback from expert faculty.

2020 Courses

Live Activities

Date	Activity	
Oct 15-17	AO Trauma Seminar—Think Tank 2 (Marco Island, FL)	
Oct 15-17	AO Trauma Seminar—Update: Tips and Tricks (Marco Island, FL)	
Oct 22-25	AO Trauma Course—Basic Principles of Fracture Management (Jacksonville, FL)	
Oct 23-25	AO Trauma Seminar—Advanced Wrist Summit (Jacksonville, FL)	
Nov 7	AO Trauma Course—Hand and Wrist Fracture Management (Cleveland, OH)	
Nov 19-22	AO Trauma Course—Basic Principles of Fracture Management (Baltimore, MD)	

Online Activities

Date	Торіс
June 4	AO Trauma Internet Live Osteotomy Series Ask the Experts: Periarticular Knee / Distal Femur
June 6	AO Trauma NA Internet Live Osteotomy Series: Peri-articular Knee (small group discussion)
June 10	AO Trauma Webinar—Humeral Shaft Fractures: When and How?
June 11	AO Trauma Internet Live Osteotomy Series: Ask the Experts: Periarticular Knee
June 13	AO Trauma NA Internet Live Osteotomy Series: Tibia
June 18	AO Trauma Internet Live Osteotomy Series: Ask the Experts: Tibia
June 20	AO Trauma Internet Live Osteotomy Series: Diaphyseal and Tibia SMALL (small group discussion)
Sept 2	AO Trauma Webinar—But Doctor, It Hurts! Pain Management After Fracture Care
Sept 9	AO Trauma Hand Webinar—Advanced Reconstruction for Combined Injuries in the Hand (Case-Based)
Sept 23	AO Trauma Fellows Webinar—Fixation Options in the Pelvis
Oct 7	AO Trauma Webinar—Deformity Correction Planning: Art & Science of Straightening Bones
Nov 11	AO Trauma Webinar—Anterior Intrapelvic Approach: Why It's Loved and When It's Useful
Nov 18	AO Trauma Fellows Webinar—Kocher Approach and Reduction
Dec 16	AO Trauma Hand Webinar—Management of Proximal Phalanx Fractures and their Complications

Committee Updates

Research

Gregory Della Rocca, MD, PhD, FACS



The AO Trauma North America Research Committee (AOTNARC) has been very active since the beginning of 2020. The committee (consisting of Joshua Gary, MD, Brian Mullis, MD, Mara Schenker, MD, John Scolaro, MD, and me) met during the OneAO meeting in February to discuss resident research grant applications and funding.

There continues to be a strong interest in our resident research program, with a total of total of 11 applications received by the December 31, 2019, deadline. The quality of research submissions continues to improve, and the funding decisions were very difficult. Ultimately, the committee decided to award four resident awards. The summer cycle of resident research grants is generally when most applications are

received. We look forward to the next round, with the call for applications opening in June 2020. Also, in July 2020 we will open the application round for AOTNA-supported fellowship research awards, available to fellows at AOTNA-sponsored trauma fellowship sites.

Recently, the AOTNARC launched a new research award program: the Young Investigator Research Development Award. The goal of the program is to identify and support trauma fellowship-trained individuals entering academic practice, in order to support their early research endeavours. The committee is proud to announce the inaugural (2020) winners: Ashley Levack, MD, who is completing her fellowship at Memorial Hermann—University of Texas Health Science Center at Houston, and James Patterson, MD, who is completing his fellowship at Harborview Medical Center—University of Washington.

Dr. Levack and Dr. Patterson were invited to the OneAO meeting in February, at which time they were introduced to the AONA community as Young Investigator Award recipients and also presented a brief synopsis of their proposed research projects to the AOTNARC. AOTNA will provide funding for Dr. Levack and Dr. Patterson to take to their institutions as start-up funding

for their research projects. We will also be providing funding for the following programs: travel to the OTA meeting in 2020, travel to the 2021 OneAO meeting, for AOTNARC-approved grant writing or research development workshop, and for statistical analysis in support of research already being conducted during their fellowship years. We are very excited to foster the development of young research talent and create a cadre of AOTNAsupported researchers who will flourish in their academic careers and maintain a link to AO Trauma moving into the future.

The AOTNA Research Committee is also proud to support the Kathryn Cramer Career Development Award. This research award is designed to provide orthopedic traumatologists with financial support to aid in starting a research path early in their careers. This award honors the late Dr. Kathryn Cramer by fostering senior orthopedic residents, orthopedic trauma fellows, and junior orthopedic trauma faculty who are interested in educational and research endeavors in orthopedics. The 2019 grant was awarded to Dr. Zachary Working for his project on quantification of fracture healing biology with a novel collagen X bioassay. The 2020 call for

applications ended on April 30, 2020. Applications are currently under review by the AOTNARC. Stay tuned for the announcement of the award at some point in the next few weeks.

We are very pleased to announce the election of Leah Gitain, MD, to occupy the committee position being vacated at the end of June by John Scolaro, MD, whose term on the AOTNARC is coming to an end. The committee is grateful for Dr. Scolaro's contributions during three busy years of committee service. Finally, we are also pleased to announce the election of Joshua Gary, MD, as chair-elect for the AOTNARC. He is a current member of the committee. and will serve as chair-elect (while continuing his duties as committee member) starting on July 1, 2020, prior to assuming the chair position on July 1, 2021. Congratulations to Drs. Gitain and Gary, and many thanks to Dr. Scolaro.

2020

Research Awards

2020 Resident Research Awards Winter Cycle

Casey Beleckas, Indiana University:

Correspondence of Initial Metabolomic Response with Surgical Metabolomic Response in Patients Sustaining Severe Peri-articular Lower Extremity Fractures

Dencel Garcia Velez, St. Louis University:

Dual Versus Lateral Locked Plating in Elderly Cadaveric Bicondylar Tibial Plateau Fractures: Does Medial Comminution Matter?

Adam Park, University of Texas Health Science Center at Houston:

The effect of tranexamic acid on fracture healing in a rodent model

Augustine Saiz, UC Davis Medical Center:

Biomechanical Analysis of a Modified Triangular Osteosynthesis Technique for Treatment of Spinopelvic Dissociation

2019/2020 Young Investigator Research Development Award Winners

Ashley Levack, University of Texas at Houston—Proposed study question:

Are antibiotic-loaded calcium sulfate beads a useful adjuvant to prevent infection and biofilm formation after definitive fixation of a contaminated open fracture?

Joseph Patterson, University of Washington—Proposed study question:

Pathogenesis of delayed union in femoral neck fractures. Does the synovial environment alter the acute inflammatory response?

Young Investigator Research Development Award winner project proposals presented at the OneAO Meeting in Phoenix.



Committee Updates

Fellowship

James Krieg, MD



I recently had several long discussions with senior mentors of AONA regarding the progress being made through the AOTNA Fellowship Committee, and the AO in general. In reflecting on our conversations, in the midst of the greatest disruption to business as usual that we have ever experienced, I realize how great institutions manage crises, and grow through them. In that light, it is important to recognize not only where we are, but where we have been, and where we want to go next.

Arbeitsgemeinshaft für Osteosythesefragen. That is a mouthful, even for someone who studied German as a child. It is no surprise that to most we are simply "The AO." German is an obviously literal language, and it is tempting to break down the nomenclature and translate the name as a "working group" for the study of fracture fixation. However, we know that the name had a much deeper meaning to the founders in 1958.

The term "arbeitsgemeinshaft" was chosen to represent a union, or a fellowship. While German may not seem like a language that lends itself easily to nuance, this choice of words was deliberate, and intended to convey a much broader meaning than simply a working group.

While English is a much less literal language, we are often in need of context. For example, the word "fellowship" is a homonym. It can mean a friendly association, or it can be a professional teaching program. For us, they can mean both at the same time.

The AOTNA Fellowship
Committee is the real bridge to
professional engagement. It is
the portal through which learners
enter, and professional colleagues
emerge. Our goal is to support all
learners, but especially those who
have committed to professional
careers in Orthopaedic Trauma.
We do that, in part, by supporting
Fellows in various programs
throughout North America, and
nurturing them to become part of
our AO Fellowship of Colleagues,
our "arbeitsgemienshaft."

The work of the Fellowship
Committee has not slowed during
the present crisis. We continue
to support trauma fellowship
programs throughout North
America with an increasingly
competitive grant program. The
AOTNA Fellowship Grant was
historically a stipend to defray
the costs of educating Fellows in
the most qualified programs in
the country. We have moved in
recent years to Fellow support
that is of far greater value, not

only to the programs, but to the Fellows themselves. In addition to a variable stipend for the program, each Fellow in every AOTNA supported program is afforded the opportunity to attend a Fellowsonly cadaver course on surgical approaches, and can apply for competitive grants for research support, a Young Investigators Award, the Davos Experience (funded attendance at a Masters Level course in Davos). They are invited to social events for Fellows only at the OTA Annual Meeting, to introduce them to the broader AOTNA community. This year was to be the Inaugural Fellows Forum in Bonita Springs, Florida. While it was put on hold this year, we look forward to the newest offering of AOTNA on behalf of our Fellows in 2021. We continue our highly successful Fellows Webinar series, which serves as a template for much of the online teaching being conducted by AOTNA for a broader audience.

None of this support could be possible without the efforts of many people, working every day, all of whom have adapted to new ways of doing business. While the means with which we support our trainees, and each other, has changed, the commitment has not. The entire organization continues to embrace the mission of training and supporting clinicians who care for patients with fractures. The Fellowship Committee serves as that portal. where new experts become colleagues, friends, and teachers.

The nature of our organization is dynamic. In that vein, the newest members of the AOTNA

Fellowship Committee will be Jon Eastman and Ari Levine, beginning in July, 2020. The Chair-Elect is Tim Achor, who will co-chair the Inaugural Fellows Forum in March, 2021. We look forward to the coming chapters in the story of the AO. For sure, we have all come to recognize that we can't simply chart a path for our future, but we can prepare for what may come, and meet the challenges head on to continue to grow, no matter what they may be.

2019-2020

Graduating Fellows

Allegheny Health Network

Eric Hempen, MD Benjamin Wheatley, MD

Carolinas Medical Center

Stephen J Gibbs, MD Abby M Howenstein, MD Matthew C Starke, MD

Cedars-Sinai Medical Center

Sohaib Hashmi, MD

Dalhousie University, Halifax

Rashed Salem Alqudhaya, MD

Hospital for Special Surgery

Burak Altintas, MD Troy Bornes, MD Jeremy Kubik, MD

Indiana University School of Medicine

Brandon Jonard, MD Robert Wessel, MD

Massachusetts General Hospital / Brigham & Womens Hospital

Kyla Huebner, MD Matthew Morin, MD

MetroHealth Medical Center/ Case Western Reserve University

David Ramski, MD

Orthopaedics Indianapolis / Ortholndy

Andrew Bodrogi, MD

R. Adams Cowley Shock Trauma

Marissa Bonyun, MD Bennet Butler, MD Christopher Cosgrove, MD Rane Ajinkya, MD Christopher Renninger, MD

Rutgers New Jersey Medical School

Stephen Shymon, MD

St. Louis University School of Medicine

Mandip Singh, MD

Tampa General Hospital

Brandon Hull, MD Luke Lopas, MD Ruben Lufrano, MD

University of British Columbia, Vancouver

Scott Middleton, MD James Ardell, MD Justues Chang, MD

University of California, Davis

Ravand Khazai, MD Kimberly Grannis, MD

University of California, San Francisco

Jacob Matz, MD Jordan Barker, MD

University of Minnesota

Daniel Carlson, MD Khalid Azzam, MD

University of Missouri-Columbia

Jane Liu, MD Adam Fahs, MD

University of Oklahoma Health Sciences Center

Jeremy Sparkman, DO

University of Southern California / LAC+USC Medical Center

William Pannell, MD

University of Tennessee College of Medicine at Chattanooga

Michael Yee, MD

University of Texas Health Science Center at Houston Program

Jacob Duncan, DO Ashley Levack, MD Krishna "Chandra" Vemulapalli, MD David Zuelzer, MD

University of Toronto / Sunnybrook Health Sciences Centre

Jean-Phillipe Cloutier, MD Richard Felix, MD

University of Washington

Sean Campbell, MD lain Elliott, MD Erik Magnusson, MD Joseph Patterson, MD Stephen Wallace, MD

Vanderbilt University

Lauren MacCormick Tatman, MD Donald Adams, MD

Wake Forest University School of Medicine

R. Bradley Kessler, MD

Washington University/B-JH/SLCH Consortium

Tyler W. Smith, MD

Yale—New Haven Medical Center

Jen-Chen (Mark) Huang, MD

Welcome to Our New Members

December 1, 2019 to May 31, 2020

Nicodeme Agassy Saud Alfayez Fahad Alnuaimi Greg Altman Paul Alvarez Vibhatsu Amin Mark Amirtharai Alex Anatone Hayden Baker Keith Baldwin David Beaton Comulada Ariane Bergeron Robert Birch Kristofer Bires Kayla Bradburn Michelle Bramer Matthew Broggi Brandon Cabarcas Chloe Cadieux James Campbell Salvatore Cavallaro Justues Chang Aaron Chen Paul Codioe Andrew Coskey

Eric Czer Agnes Dardas Matthew De Ruyter Ryan DeAngelis Amna Diwan John Donoughe James Dove Jacob Duncan O. Folorunsho Edobor-Osula Robert Elrod Ali Ftemad Adam Fahs Ryan Falbo Evan Fene Brandon Fisher Alex Forrester Stephen Forro Zac Fulton David Galos Matt Glazier Matthew Godlewski Samuel Grant Shivali Gupta

Morgan Hadley

Paul Hannon Austin Hardaway Timothy Harris Lee Haruno Todd Heig Nathan Heineman Katherine Hill Christopher Hinh John Holbert David Houserman Meghan Hughes Mitchell Hunter Minju Hwang Eric B. Johnson Jordan Johnson Elias Joseph Kelvin Kim Logan Kolakowski Drew Krumm Nathan Kukowski Jace Kusler Christopher Langhammer Garrett Latham Kellie Leitch

Johnathan Lex Daniel Li Philip Lim Justin Loder Alfred Luciani Alexander Malik Natalie Marenghi Joseph Massaglia Erik Mayer Alexander Mayers Yeshuwa Mavers Richard McKinney Cory Meixner James Messina Andrew Moon Michael Motto Hamza Murtaza Vidushan Nadarajah Abhinav Nalluri Lauren Nelson Russell Norris Brandon Nudelman William Obremskey Alexander Orfanos Amit Parekh

Braden Passias Anthony Pastore Christopher Pedneault Rémi Pelletier-Roy **Emily Perez** Christian Peterson David Pettit Jared Potts Ali Qadeer Zachary Quanbeck Jesse Raszewski Jarod Richards Mariel Rickert Adam Ross William Ryan Augustine Saiz Jason Sansone Marc Schatz Alex Schmucker Sidney Schulman Nichole Shaw Vithal Shendge Chirag Sheth Brian Skura Melissa Soderquist

Jason Squires Matthew Stein Derek Stenguist William Steward Erin Stockwell Jason Stoneback Adam Taylor Andrea Tian Devon Tobey Thomas Toole Erika Valentine Dallas Vanorny Justin Vickery Amrit Vinod Alexander Volkmar William Waddell John Waggoner Ryan Wagner Johnny Wang Benjamin Wie David Yin Julian Zangrilli



2020-2021 Award Sites

Allegheny Health Network Medical Education Consortium

Carolinas Medical Center

Cedars-Sinai Medical Center

Cooper Medical School of Rowan University/Cooper University Hospital Program

Dalhousie University, Halifax

Detroit Medical Center/Harper University Hospital

Hospital for Special Surgery/Cornell Medical Center

Indiana University School of Medicine—IU Methodist Trauma Fellowship

Jack Hughston Memorial Hospital

Massachusetts General Hospital/Brigham and Women's Hospital/Harvard Medical School

MetroHealth Medical Center/Case Western Reserve University

Orthopaedics Indianapolis / Ortho Indy

R. Adams Cowley Shock Trauma Center

Rutgers New Jersey Medical School

St. Louis University School of Medicine

Tampa General Hospital

University of British Columbia, Vancouver

University of California, Davis

University of California, San Francisco

University of Minnesota

University of Missouri—Columbia

University of Oklahoma Health Sciences Center

University of Southern California

University of Tennessee College of Medicine at Chattanooga

University of Texas Health Science Center at Houston

University of Toronto/Sunnybrook Health Sciences Centre

University of Washington

Vanderbilt University

Wake Forest University School of Medicine

Washington University/B-JH/SLCH Graduate Medical Education Consortium

Yale University—New Haven Medical Center

Community Development

Langdon Hartsock, MD



Since our last newsletter in the fall of 2019 so much has changed due to the coronavirus pandemic. In orthopaedics and trauma, elective surgery has been cancelled, clinics have been reduced and many people are working from home. To those AO members who are working on the front lines, especially in "hot spots" in the USA and around the world, I send a heartfelt "Thank You!" for all you are doing to save lives.

The Community Development Committee works to raise awareness of the AO, communicate with the AO membership as well as retain and recruit new members. We work in harmony with the larger AO Community Development Commission at the international level. Internationally, the AO Foundation is developing new materials and information to raise awareness of what the AO does and how AO has revolutionized care in orthoapedics and trauma for over 60 years. The AO Foundation website is being redesigned to create easier access to AO materials and content. Over time, the AO North America site will be "rebranded" and have a new interface for access to AO information.

We continue to offer membership in AO as an added benefit to the participants in the Principles and Advanced courses. We want to engage the next generation of learners in orthoapedics and trauma to all that AO has to offer.

We have many members who wish to participate and contribute in AO activities and the CDC is working with the other committees to expand the opportunities for surgeons to be involved. A potential outcome from the pandemic is awareness and understanding of new opportunities for involvement beyond the traditional in-person courses.

While the coronavirus pandemic has necessarily resulted in a slower pace of work due to social distancing, working from home, absence of in-person meetings and discussion, we are still working on improving our social medical presence and developing a new video for new members to help "onboard" them to the AO.

I rotate off the CDC at the end of June and it has been my pleasure to serve as the Chair of the committee. We have an enthusiastic committee and very capable assistance from the AONA headquarters staff in Wayne, PA. The committee is well positioned to provide value to the AO membership.

Be well! Be safe!

AO Trauma North America Journal Club

Rahul Vaidya, MD, FRCSc Detroit Receiving Hospital Detroit Medical Center/Wayne State University

I am very pleased to say a few words on a special project, the AO Trauma NA Journal Club that was created and launched as a part of the AOTNA Community Development Committee. Whenever we talk about AO Trauma, we often wonder, where is this ship is going? Who are we targeting? The education of residents through Basic and Advanced Principles courses has been the gold standard of trauma education, but who else? There is another group of orthopaedic surgeons who take care of a significant number of fractures in the US. These surgeons are either not fellowship trained in orthopaedic trauma or are fellowship trained in another area or have never completed a fellowship. For many of these surgeons, fractures are an important part of their practice. They are finding themselves taking call at Level 1, Level 2 or now Level 3 trauma centers and they have continued to serve our population honorably. Where do they obtain current information on fracture care? The AAOS? Implant companies? The internet?

Recently, I started working at a community hospital that is a Level 2 Trauma Center in the suburbs of Detroit. This hospital needed some help with more complex orthopaedic cases. They had established a very good trauma program, had complete specialty coverage but needed help with complex articular cases, pelvic/acetabular fractures and complications of fracture care. As a part of our Trauma Program's outreach, I decided to add this to my practice. Of course this is occurring across the country with new Level 2 facilities and trauma care becoming decentralized as hospitals are trying to keep patients within their walls. The orthopaedic surgeons I met were interested in discussing cases, presentations and interested in a journal club. We run a monthly trauma journal club for our Trauma Fellowship and extended an invitation to these new partners I've started to work with, however, they are very busy in their own practices and while they relish CME's, they cannot make the commitment of a three-hour meeting on a weeknight (driving, dinner, conversation and the articles).

Many community surgeons are in similar situations. They are interested in a journal club but their time is limited. This is what sparked my interest in starting either an online journal club or virtual journal club. I brought this to the attention of the AO Trauma Community Development Committee and Social Media Task Force. We discussed some ideas and first launched it as a segment on the AOTNA Facebook page and then as a component of the YouTube channel. We enlisted authors to talk about their research. My colleagues enjoyed this venture and it was especially easy to get their participation at AO meetings or through an email invite. We enlisted some new AO Faculty who were previous Davos Fellows as well. With the support of Langdon Hartsock (Chair-Community Development), Eben Carroll (Social Media Task Force Champion), the Community Development Committee and Roger Wilber (AOTNA Board Chair) the AOTNA Journal Club has been developing over the last six months. There have been several trial segments with a good audience response, and now what looks to be a regular session headed by the Davos Fellows.

I'd like to thank—alphabetically—Tim Achor, Mike Baumgaertner, Steve Benirschke, Tim Chesser, Mike Gardner, Tom Higgins, Chris McAndrew, Soheil Najibi, Peter O'Brien, Bryant Oliphant, Chip Routt, Roy Sanders, John Scolaro, Mike Sirkin, and Clay Spitler, who have all contributed articles on Facebook and the AO Trauma North America YouTube channel. Please check it out! If you are contacted about your excellent groundbreaking article, please know it could give one of your peers great information or encourage the new generation to take up the cause and do great research of their own. Tell a friend and support our upcoming journal clubs!! The next one headed by Andrew Chen, Adam Lee, and Arun Aneja will be out soon.



Chitra Subramaniam, PhDAONA's Chief Learning
Officer

Pivoting to Online Learning: Designs for learning efficiency

The COVID-19 situation has challenged us to think innovatively about reaching out to our learners and engaging them in the learning process about which we are all passionate. Many organizations, universities and other education providers are converting to online delivery very quickly. AO North America is no different. I want to share my utmost gratitude and a heartfelt THANK YOU to all the faculty who took the chance to help establish our online footprint. Questions that I am trying to answer are "Is there going to be a new norm? Is learning going to be different? What is the new normal going to look like? I am sure all of you are probably asking the same questions. While we wait to see what happens, I wanted to write about something that might be useful to you as you are all involved in teaching online and are virtual faculty.

Researchers have made significant advances in studying the application of cognitive processes to learning (Weinstein, Yana & Madan, Christopher & Sumeracki, Megan. (2018). Teaching the science of learning. Cognitive Research: Principles and Implications). These studies have provided us with several teaching strategies that help to maximize learning efficiency. These strategies are applicable to both face-to-face and online learning. For now, let's think about how they apply to online learning.

Table 1: Learning strategies to maximize learning efficiency

Strategy	Description	Application
Spaced practice	Several research studies that support creating a schedule for continuous learning that spreads out over a period. Key concepts delivered with multiple developmental milestones delivered over a period of time. The advantage for memory is greater. Repetitions spaced over time lead to greater retention than the same number of repetitions close together. It promotes deep learning and retention.	Weekly, bi-weekly or monthly recurrence of topics and discussions rather than massing or cramming all together at one time.
Interleaving	Taking ideas and concepts and mixing them up or switching between ideas and changing the sequence or order in which they appear over time.	Present a concept and discuss three different case examples or switch between worked out/solved examples and those that the learner needs to solve in one session. When you summarize or reinforce the concepts, relate and link back to the case study examples in a different sequence from how they were originally presented.
Elaboration	Process of adding features to one's memory. For understanding to happen, new information needs to be connected to pre-existing knowledge. Promotes deep learning.	Elaborative interrogation: small group discussions that highlight the "Why and How" questions and responses. Concrete case studies, examples and sharing of experiences help elaborate a concept and its meaning. Presentation of the same concept and its application in different formats—visuals, video, and other media after it is once shared. Allowing learners to answer questions during an online session, present solutions and self-explain strategies that helped solve the problem or the concept of self-explanation.
Concrete examples	Reinforcing concepts or principles with multiple examples.	Novices, in contrast to experts, focus more on the surface details in examples. Experts can extract underlying problems and stay focused on them. Thus, multiple different representations of the same concept are essential for learners. It is, however, the instructor's role to make the connection explicit for the learners, thus, the need to use the right examples, case studies and challenges for the right group of learners at the right time!
Dual Coding	When text is combined with visuals, our learning is enhanced since text and visuals are processed through separate channels and there are two ways of remembering the information later.	Text descriptions with relevant images. Images with labels that describe different parts of the image. Visual cues on images to focus the learner. Procedural videos (with no audio) with text annotations.
Reinforcement (Retrieval practice)	Bringing information to mind from memory to support long term learning.	Review of what was previous learned; assignments, activities, and tests that help retrieve and apply concepts. Online discussion forums to promote retrieval and application of concepts. Provide feedback.

Note: adapted from Weinstein, Yana et al. Understanding How We Learn: A Visual Guide (Routledge, 2018).



It's not a lecture online. It's an active learning session online. The packaging of the content to allow for interactions and the effective use of technology to promote some of the above principles and augment the learning is key. Also, when you are in cyberspace you feel isolated though you are with your learners (in synchronous settings) because you cannot see them. That presents a challenge. But chats, question-andanswer, group discussions, and opportunities for learners to self-explain, create the interaction needed.

- Engage with learners—Sessions need to be dynamic, to encourage interactions, comments and collaboration with co-faculty to drive concepts.
- Create a supportive environment—Do your check-ins after every 10 minutes, let the conversation flow well and do not be too prescriptive. Recognize challenges and difficulties and respond to questions with the help of moderators.
- **Use a mix of learning tools**—Make the interaction dynamic; audio, video, tools, additional resources, discussions, and other complementary interactions will help.
- **Provide ongoing feedback**—Response to assignments, coaching sessions, access to experts.
- Make content mobile—Bite-size chunks of content easily accessible through different devices that can be easily digested.

Even when learning in the virtual world, it would be important to stay connected to the "Deep Smarts" (Leonard-Barton & Swap, 2004)—those who have built up technical, professional and business expertise through years of experience, which makes them wisely think critically, make swift decisions and effectively problem solve. Deep Smarts do not just have facts and data that one can access, they have "know-how", skilled ways of thinking and associated behaviors that consistently lead to success. Learners need to take every opportunity to identify such "Deep Smarts" and pull knowledge from them, be open to mentoring, receiving feedback and reaching out frequently to access the expertise available to them. Expert panels, virtual coaching and mentoring are key to the success of online learning as well.

Food for thought! How do you learn and make yourself an expert? What helps build such Deep Smarts?

Until our next article!



Digital Transformation at AONA—The Why, How, and What?

By: Josh Block, AONA, Project Manager



AO North America is hard at work on a new and exciting project—a full digital transformation. What does this mean, and how will it affect you? A digital transformation is a reimagining of business in the digital age, and that's just what we're doing. We are going through the complex and detailed processes of redesigning our website, drafting new communication and social media strategies, and rethinking our online presence. We've chosen to engage in this project because we are committed to serving the needs

of our surgeons and offering them more of what they told us they want and need.

Our new website will feature enhanced capabilities including a personalized experience for surgeons based on their clinical division and experience level, easy access to information about all AO North America initiatives, and increased integrations with the AO Foundation website.

In March, we began the digital transformation by interviewing 23 surgeons across all clinical divisions and levels of experience. From those interviews, we validated our hypotheses and learned new things about our surgeons' needs. Now, we're embarking on the bulk of the project! All members of the AONA staff and countless surgeons from the AO North America community are working together to make this project a reality. For now, watch for changes over the next few months in our marketing behaviors, and stay tuned for our new website which will include implementation of the new AO branding and will be launched in October 2020.



From the Faculty Development Desk

Sally Peters-Gaffney, Faculty Relations Manager

Starting with our renowned face-to-face courses which began back in the late 1980s under the guidance of Joan Rousseau, Jim Gerry and yes, some of you, our 'grand master' surgeons, AONA continues to offer several opportunities for learning for residents, fellows and practicing surgeons. Led by the Trauma clinical division in 2011, we incorporated surgeon faculty development programs that led to access of these types of events for the other clinical divisions.



Hopefully many of you have had the opportunity to participate in at least one of the three offerings. Of approximately 1,000 faculty members, ortho has trained approximately 400 faculty in one or more of the below, not including the coaching/mentoring programs. The three different programs as you know them are:

- FEP—Faculty Education Programs offered to vetted and approved faculty which focus on the AO teaching methods
- CEP—Chair Education Programs offered to those who first attended FEP and are now assigned to chair a course
- LEP—Leadership Education Programs offered to Governance Committee and Board members who have completed the FEP and CEP.

Program	# Events	# Trained
FEP	28	316
СЕР	6	60
LEP	4	20
TOTAL	38	396

In the fall, with the launch of the new website, we hope to have the first release of our AONA Faculty Resource Center. The resource center will provide the necessary materials you need to teach and be a part of the AONA faculty community.

Coming soon as well is a Faculty Engagement Pathway—look for more details in the next issue. The pathway will provide everyone with a chance to align their interests with diverse opportunities that have been identified within AONA. These different opportunities (besides teaching) may be for you no matter whether you are a resident, fellow, or an attending physician.

Remember—all these current and future opportunities require you to be an AO Trauma member.

Education Advisory Board Update

Dear AO North America Colleagues:

It is not a surprise to see such an impressive response by AONA to the educational deficit created by COVID-related course/seminar cancellations/face-to-face learning opportunities. Across divisions, there has been a focused effort to develop innovative and rapidly deployable distance learning resources. This effort has been impressive and wideranging, driven by the dedication of AO faculty to our core belief in the importance of surgical education and improving outcomes.

Even though we are one foundation with unified leadership, our divisions work independently to serve their unique populations of learners and needs. Not surprisingly, there has been unique development of distance learning options. One of the powerful ways the Education Advisory Board (EAB) can support divisions is by fostering communication and sharing of ideas across divisions.

I would like to share the innovative efforts already underway:

Trauma

Developed online osteotomy course with 14 faculty. The course runs for 1.5 hours every Saturday for 10 weeks for live didactic and interactive educational content and one hour every Thursday night for nine weeks for interactive discussion. Early participation has been enthusiastic (over 200 participants).

Planning is underway for a similar pelvis course and Basic Principles course.

Veterinary

Developed online versions of cancelled courses (Equine Principles and Small Animal Advanced). Both interactive didactic and discussion sessions are planned.

CMF

Rapidly mobilized a weekly webinar format with wide-ranging topics. Extremely well attended with some events having over 500 participants, exceeding our available Zoom capacity.

Spine

The Spine Fellows course that was scheduled to be held in March in Banff, Alberta, this year is now online. 117 Fellows have presented their research through posters which were evaluated by the faculty with online feedback.

Planning for potential online Oral Board Review course (pending ABOS board exam format) and maintaining webinar schedule.

Hand

Web-based learning sessions called the 'Must Know Series—How I Do It' emphasizing surgical tips and tricks. Each session consists of two parts: the first half is dedicated to a common injury in the hand and wrist and its management. The second half is dedicated to a common

flap utilized for coverage in the hand and upper limb. The entire Hand Education Committee is the panel and these are highly interactive moderated discussions.

Another scheduled online offering is the bi-weekly "Sage on Stage", a one-on-one interview with surgeons who have made seminal contributions to the field, interviewed about their careers, contributions, missteps and lessons learned and advice for the next generation of surgeons.

Divisions have also shared early learning from this rapid response and deployment of distance learning. Across divisions, the organizers report a learning curve with the online technology but a significant willingness by faculty to contribute and learn. Online course planning and administration demands a large time commitment and significant faculty engagement. Success will require planning and structure. It is encouraging to see a hugely enthusiastic response to the offerings, potentially indicating a long-standing need we have not fully appreciated or previously explored.

Our ability to reach more learners is immense via this pathway. Already between April 8th—May 5th, AONA has provided at least six sessions with 6.5 hours of instruction and involving 2842 participants. With the proliferation of online teaching, we anticipate the need to assist our faculty in learning how to educate effectively in distance learning platforms.

In sharing these offerings and observations, I hope you appreciate the dedication of the AO Educational leadership under the guidance of our CLO Chitra Subramaniam and her staff, and the tremendous amount of work that has been done to get us to this point so quickly. I also hope that hearing some of the different offerings inspires you to explore these for your own divisions or to continue development of other even more innovative offerings. Many of these approaches are adaptable to your institutional educational efforts, and I hope you will innovate locally as well.

AONA has always provided top-quality educational offerings and even though our delivery technique has changed, we must continue to challenge ourselves to maintain excellence and fully compliant approaches. Our first and most significant challenge was certainly initiating these experiences. Our next challenge will be to make sure they provide the same level of excellence we and our learners have come to expect.

Sincerely,

Mark A. Lee, MD, FACS Chair, Education Advisory Board

AO Foundation Update

Introducing myAO: Grow Your Reach

The AO is innovative to its core. As part of our digital transformation, and to enhance our ability to respond to your current and future needs, we introduce myAO—your personalized digital gateway to expertise and innovation.

Launched at the AO Davos Courses 2019, myAO is the AO's latest digital tool designed to support our global network of health care professionals. It is a knowledge exchange platform that will provide you with dynamic, verified, personalized information, giving you what you need, when you need it—wherever you are.

Developed with INSIGHTS, myAO offers you direct access to dependable knowledge, AO-approved clinical experts, AO videos, and the chance to interact with others in our growing global community of over 200,000 health care professionals.



As part of this growing global community you will have the opportunity to connect and interact with each other, share experiences, and seek advice. We look forward to welcoming you to myAO.

The myAO community embraces all medical areas, and is growing every day. It offers you the chance to build collections of articles in your field, share recommendations with your colleagues, and connect with surgeons across the world.

As an expert in your field, myAO gives you a new way of helping to expand the knowledge and skills of surgeons across the world. Senior figures from across the AO are already active on myAO, and the range of features provided and content available will continue to expand.

Whatever stage you're at in your career, myAO offers targeted resources to support you in developing your skills and expanding your network.



In April, responding to overwhelming demand from our global network of surgeons and ORP, we have developed a COVID-19-specific resource within myAO. An editorial board comprising specialists from across the AO select the most relevant sources of information in this field: cutting through the noise, and delivering clarity where it is most needed.

This curated collection provides links to relevant trusted information, including best practices and guidance that specifically target the concerns and challenges of health care professionals specialized in the treatment of trauma and musculoskeletal disorders.

Click the titles of the myAO COVID-19 Information Hub collections to view them. They include:

- CMF—guidelines & research—CMF surgery
- Spine—guidelines & research—spine surgery
- Trauma—guidelines & research—trauma and orthopedic surgery
- Veterinary—guidelines & research—veterinary surgery
- Educational resources & best practice
- Recommended and trusted COVID-19 sites for surgeons

myAO is constantly expanding the features it offers its community. Additional enhancements delivered in April include the integration of AO Surgery Reference directly into search results, the addition of search and language filters to the AO videos section, and more prominent placement of key content for improved user experience.

As a growing global community, myAO is your chance to connect with your peers and exchange knowledge and experience with leading experts in their field.

Find out more on the **AO website** and **sign up here**.

AO Surgery Reference: More responsive, tailored access for users

The AO's premier offering for medical professionals, AO Surgery Reference, has been updated and integrated into myAO. It is more responsive and easier to use. The improved search functionality offers users greater opportunities to narrow their search by selecting specialty, module, or content type. Our content for orthopedic trauma (including pediatrics), CMF, spine, and veterinary practitioners helps them improve patient care every day. **Click here** for a short tutorial on how to directly access the AO Surgery Reference within myAO!

Members Speak Out...

During this time of "binge watching and sheltering at home" what is your favorite movie of all time and why?

Steve Haase, MD

The Shawshank Redemption

An amazing story, superb cast, and based on a short story by Stephen King (my favorite author).

Brent Dressler, DO

My favorite movie is *Star Wars Episode 5: The Empire Strikes Back*. Why??? I mean, Darth Vader.... Come on. I love Star Wars so much, my 2 sons are named Luke (4) and Ben (2). They both love the films as well. Ben knows 4 words: Mama, Dada, Star Wars (sounds like Ta Woh).

Ashish Anand, MD

The Good, The Bad And The Ugly. Helps you identify different people in your life.

Tyler R Morris, M.D.

My favorite movie of all time is *Misery*. The hobbling scene, where Kathy Bates "hobbles" James Caan, represents a fantastic constellation of injuries to his bilateral lower extremities that would need extensive reconstructions going forward. Truly an Orthopaedic Traumatologist's dream.

David Sokolow, MD

Cinema Paradiso, it captures the essence of my love for movies.

David Beigler, MD

Clearly Apocalypse Now—can't get more title appropriate!

Arun Aneja, MD

Step Brothers 2008 with Will Ferrell and John C Reilly—incredibly funny.

Adam Starr, MD

Raising Arizona

Laugh out loud funny no matter how many times I watch it.

Chris Finkemeier, MD

My favorite movie of all time is *Chariots of Fire*. It's a fact-based period piece centered around the 1924 Olympics and highlights the perspectives and motivations of two different and likable characters: Eric Liddell (Christian Missionary) motivated by his profound faith and Harold Abrahams (English Jew) motivated by his quest to overcome prejudice. Each have their own, but different conflicts to overcome in their personal lives as they prepare and compete in the Olympics. Amazing low budget, Best Picture Winner (1983). I always like underdog stories. Not only were the characters somewhat underdogs, but the film itself was an underdog in its own right.

Ross Leighton, MD

Tombstone—Great historic event Well played with excellent wardrobe and music Strong actors and the story had some fictional twists that were appreciated and fun to watch Wonderful one liners—"You're a Daisy if you do"

Langdon Hartsock, MD

Ford vs Ferrari: Love the great photography and acting! The storyline is exciting, you get a great sense of the intense competitive spirit of the characters!

Gillian Soles, MD

Just saw the Guy Ritchie film

The Gentlemen with Matthew

McConaughey and Hugh Grant and it
was really good!



Surgeon Accolades, New Appointment

Clifford Jones recently accepted a new position as Chief Orthopaedic Surgery, Dignity Health—Arizona, and Professor Orthopaedic Surgery, Creighton Medical School—Phoenix. Dr. Jones has a new team of orthopaedic trauma surgeons at two Level 1 trauma centers in Phoenix, St Joseph Medical Center and Chandler Regional Medical Center. The team consists of Neil Motzkin, Benjamin Geer, Ammar Karim, Adam Lee, Matt Morin, and Jacob Duncan. Dr. Jones is looking forward to working with such a great group of surgeons.

Clifford B Jones, MD, FACS
Chief Orthopaedic Surgery, Dignity Health—Arizona
Professor Orthopaedic Surgery, Creighton Medical School—Phoenix
clifford.jones@dignityhealth.org

AO Helps with Hurricane Relief

By Ross K. Leighton, FRCSC, MD, FACS, BSc



Left to right: Ross Leighton, Dane Bowe (Bahamas—Dalhousie trained), Dave Simpson, CEO J&J Canadian Office, Rob Pikula, J&J Canadian Office, and Jeff Deane, J&J Canadian Office.

On September 1, 2019, the Bahamas was devastated by Dorian, a Category 5 hurricane in the Atlantic. Marsh Harbor and Freeport were hit terribly, but fortunately Nassau was left relatively unhurt. The country was inundated with people suffering from major compound injuries, but also severely lacking in medical resources. Hospitals had bare shelves and no equipment to handle the onslaught despite the manpower and expertise to treat these patients.

Dane Bowe, an orthopedic surgeon trained at Dalhousie in Halifax, Nova Scotia, contacted me for help, and I am grateful to have been able to respond quickly and coordinate incredible assistance from our industry partners.

- 1) We gathered over \$200,000 dollars of equipment that had been made ready and saved to go to such an effort. This was shipped by Smith and Nephew along with some basic insertion equipment—they were able to get this all shipped and on the ground within six days.
- 2) I contacted Johnson and Johnson who responded in spectacular fashion. They gathered over \$1,000,000 worth of external fixator sets and had them on the ground in Nassau within five days.

We were truly impressed by these absolutely incredible humanitarian responses. A special thanks to **Matt Duffett**, Territory Manager, Smith & Nephew Orthopaedics, Nova Scotia, our local Smith and Nephew representative, and **Ryan Huggett**, Regional Business Manager, Johnson & Johnson, Toronto, in the head office, who oversaw this shipment. Also, profound thanks to **Claire Horne**, National Sales Director, DePuy Synthes Company, Johnson & Johnson, Ontario; **Jeff Deane**, Director, Johnson & Johnson, Toronto; **Rob Pikula**, Director of Marketing, Trauma, DePuy Synthes, Toronto; and

David Simpson, Vice President, Sales, Johnson & Johnson Medical, Toronto, for all their aid to a weather-torn country.

Dr. Bowe was able to stock his shelves and utilize this equipment to treat the victims of Dorian, many of whom had suffered compound fractures that were soaked in sewage-contaminated water for two to three days.

The AO and our industry partners should all feel very good about helping our friends in the Bahamas.

From Dane Bowe:

"The equipment donated was a gift of a lifetime. I would like to express my gratitude to Dalhousie University for training me and assisting with the donation. I can never stop thanking Dr. Ross Leighton for his generosity and for being a mentor. I also would like to thank Dave Simpson, Jeff Deane and Rob Pikula from the Canadian office of Johnson and Johnson plus Ryan Huggett in organizing the shipping of the equipment. Gratitude is also extended to Gwenael Gouery, Amanda Paniagua, and Matt Duffett in addition for their aid in getting the equipment to us from Smith and Nephew. We are forever in your debt."

From Angela Taylor (Mrs.), Permanent Secretary, Mr. Marco Rolle, Ministry of Health—Commonwealth of the Bahamas

"We appreciate you for your kind assistance to the people of the Commonwealth of the Bahamas in our time of need."

We were able to get a picture while attending the OTA, where we celebrated the fantastic response and the resulting improvement in care for the victims of Dorian.

Tales of Telework

Andrea Mower, Chief Human Resources Officer



On March 13th the Wayne, PA staff started to work at home. At first, it was just a handful of people who were sent home, because of County mandates. By March 20th, the entire Wayne office was working at home. By March 23rd, Pennsylvania was officially on a stay-at-home order for two weeks. As of this publication, it remains in effect until further notice.

The hardworking team had to quickly pivot from a fully equipped office suite to a workat-home space. For many, a designated space at home did not exist. Moreover, spouses, significant others, other family members, and children were suddenly at home as well.

A college student home from school two months early definitely has an impact on the grocery and water bill!

The AO team made an exceptional transition in a very short time. Online learning, already a top priority, became the full focus. The team is also fully immersed in an entire digital transformation for the organization which will allow members to have a fully interactive experience.

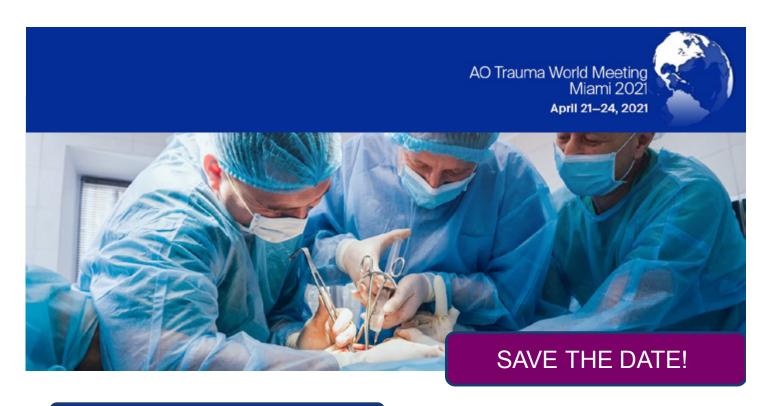
The team has been able to achieve their own professional development and training goals while working at home. Project Management, Advanced Computer Skills, and Management/Leadership

Techniques are some of the subjects studied.

Staff meetings, via Zoom, allow everyone to "see" each other in "Brady Bunch" style windows.
Photography contests, dressing up during Zoom meetings, wearing new Team AO tee shirts, attending Yappy Hour with furry friends as well as the occasional funny email about the current situation are real morale boosters!

Despite these challenging times, this is an opportunity for creativity and innovation. Some of the best ideas and work output is happening right now! When faced with a challenge, AO employees rise to the top!





Join us in Miami

The AO Trauma World Meeting taking place in Miami from April 21-24 provides an outstanding selection of masters courses designed to meet your specific professional needs.

Your current level of knowledge, attitudes, and skills will be challenged throughout the week. The **best-in-class curriculum and faculty** will provide you with a memorable learning experience that will remain with you for a lifetime.

Six reasons why you should attend:



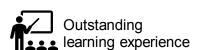
Excellent faculty



Great networking opportunities



Extended wet labs





Knowledge sharing

Educational offerings:

Best-in-class curriculum

All courses include one day of anatomical specimen lab

AO Trauma Masters Course—Shoulder Trauma

AO Trauma Masters Course—Fractures around the Elbow

AO Trauma Masters Course—Hip Fractures

AO Trauma Masters Course—Knee Injuries and Deformities

AO Trauma Masters Course—Foot and Ankle

Visit AO Trauma's homepage regularly for further details about the courses.

We are proud to be AO Trauma Members!

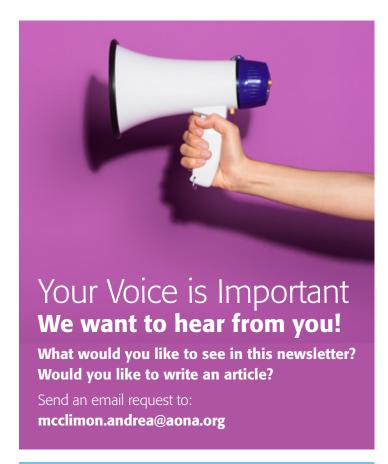
Our international membership base shares in a common mission to provide education and networking opportunities for the global membership community.

Members have access to a broad range of valuable benefits and services that assist in daily clinical practice and improve patient care.

MEMBERSHIP







What's Coming Up in the Winter 2020 Issue

CTAP

Michael Baumgaertner—Chair AO
Trauma International
Amy Kapatkin, President AONA
Digital Transformation
Executive Retreat July 2020 Outcomes
OneAO 2021
AONA and Digital Learning

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