



# NUTS & BOLTS OF DYSPHAGIA AND AERODIGESTIVE SCIENCES: UNTANGLING COMPLEX CLINICAL CARE THROUGH INTERDISCIPLINARY LEARNING

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www.dysphagiaresearch.org/ page/DRSIE\_Fall\_Conference

The 2nd DRS Institute for Education (DRSIE) Fall Conference will appeal to multi-disciplinary groups of clinicians and researchers who are in the beginning of their careers with a focus on swallowing and aerodigestive sciences. This exciting hybrid (in-person and virtual) meeting will have a multi-age patient focus, with **workshop style interactive presentations that will include case-based discussions**. Hence this conference will be limited to ~50 in-person attendees. Personalized interactions and networking opportunities will be encouraged to develop future leaders in clinical, educational, and research realms. LIVE STREAMING WILL BE AVAILABLE FOR WORLDWIDE AUDIENCE. Virtual attendees are welcome to register to participate in the event. Access to the recordings will be available if participants are unable to tune in during the live presentation.

#### **SESSIONS AT A GLANCE**

- I. Cross and Inter-Systemic Neural Communication
- II. Aerodigestive Cross-System Interactions
- III. Be Inspired!
- IV. Problem Solving 101
- V. Aerodigestive Problems and Disorders
- VI. Be Successful!
- VII. Pediatric and Adult Case Mini Workshops
- VIII. Be Motivated!

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## CONFERENCE SCHEDULE

THURSDAY, SEPTEMBER 8<sup>TH</sup>
Times listed are Central (Chicago) Time.

12:30 - 1:00 PM

1:00 - 2:30 PM

#### **Registration and Welcome**

**Session I:** Back to Basics - State of the Science Session: Physiologic Interdependence of Deglutition and Aerodigestive Functions

Moderator: Mark Nicosia, PhD

**1.A. Cross and Inter-Systemic Neural Communication:** Deglutitive and Aerodigestive Neurophysiology

Speaker: Lee Akst, MD

#### **OBJECTIVES:**

- Describe comparative phylogeny of deglutition and respiration from an evolutionary perspective to demonstrate importance of – and challenges in – cross-system coordination of swallowing and breathing.
- Describe the neural control and physiologic function of the muscles of the head and neck in deglutition.
- Describe the cross-system neural communication with the upper respiratory system required for successful deglutitive function.

## **I.B. Cross and Inter-Systemic Neural Communication:** Esophageal and Aerodigestive Neurophysiology

Speaker: Francis Edeani, MD

#### **OBJECTIVES:**

- Describe the esophageal structure, function, and neural control needed for successful deglutitive function for oral nutrition.
- Describe the cross-system neural communication that the digestive system (specifically the esophagus) has with the respiratory system required for successful deglutitive function.

## I.C. Cross and Inter-Systemic Neural Communication: Oropharyngeal and Aerodigestive Neurophysiology

Speaker: Corinne Jones, PhD, CCC-SLP

#### **OBJECTIVES:**

- Describe the evaluative methods used to assess the integrity of neurophysiologic deglutitive function required for oral nutrition and successful coordination with respiration.
- Describe the unique role of the speech-language pathologist/clinician in assessing successful respiratory and deglutitive function.

#### FOR THE LEARNERS:

At the end of this session, the learners will understand the neurophysiology of successful deglutitive functions required for meeting nutritional needs via oral feeding, and the neurophysiological cross-system dependence required between deglutition and aerodigestive function to attain that success.

2:30 - 3:00 PM

**BREAK** 

3:00 - 4:30 PM

## **SESSION II:** Back to Basics - RESPIRATORY-DIGESTIVE INTERACTIONS, AND ROLE OF ESOPHAGUS

II.A. Aerodigestive Cross–System Interactions: Clinical importance,

Perturbations, and Interventions

Moderator: Reza Shaker, MD

Speaker: Bonnie Martin-Harris, PhD, CCC-SLP, BCS-S

#### **OBJECTIVES:**

- Discuss how breathing interacts with swallowing: anatomy, physiology, and neural control.
- Describe the relevance of breathing coordinated with swallowing on airway closure and pharyngeal clearance.
- Discuss interventions that target respiratory swallowing coordination directly in dysphagia rehabilitation.

II.B. Aerodigestive Cross-System Interactions: Esophageal Peristalsis, Compensatory Processes, and Role of the Diaphragm Speaker: John Pandolfino, MD

#### **OBJECTIVES:**

- Describe the phases of aerodigestive swallowing- from an esophagus perspective.
- Discuss how repetitive antegrade contractions protect against aspiration and reflux injury.
- O Discuss how crural diaphragm functions may impact bolus transit.

FOR THE LEARNERS: At the end of the session, the learners will understand the complexity of the airway-digestive interphase in terms of anatomy and physiology, as well as of its inter-dependent functions required to promote successful oral intake to meet nutritional requirements.

4:30 - 5:00 PM

BREAK

5:00 - 7:00 PM

## **SESSION III:** RECEPTION, DINNER and EVENING SESSION - Be Inspired!

#### III. BE INSPIRED: Leading by Example and Learning from Experience

Speakers: Heather Shaw Bonilha, PhD, CCC-SLP; Sudarshan Jadcherla, MD; with contributions from all mentors

Be Inspired! Career examples including strategies to succeed in a career pursuing research and clinical practice in dysphagia and aerodigestive sciences will be presented. These examples will include approaches for overcoming perceived failures, burn out, and fatigue, improving work-life balance, and the use of mindfulness activities.

#### **OBJECTIVES:**

- Describe strategies for succeeding in a career of research and clinical practice in dysphagia and aerodigestive sciences.
- Describe approaches to overcome obstacles, create work-life balance, and incorporate mindfulness activities.

#### FOR THE LEARNERS:

At the end of this session, learners will be able to list general strategies commonly used to succeed in an academic career. Learners will also be able to describe specific strategies for overcoming career obstacles and creating work-life balance. Lastly, participants will be able to list mindfulness activities that may be incorporated into daily life to help them be and stay inspired.

#### FRIDAY, SEPTEMBER 9TH

Times listed are Central (Chicago) Time.

7:00 - 7:30 AM

#### **BREAKFAST AND NETWORKING**

7:30 - 9:00 AM

## **Session IV:** Problem Solving 101: Unimodal and Multimodal Evaluations to Aid in Diagnosis of Swallowing Impairment and Aerodigestive Pathologies

Moderator: Caryn Easterling, PhD Speakers: Martin Brodsky, PhD, ScM, CCC-SLP; Francis Edeani, MD; Maggie Kuhn, MD

This is a focused review of two cases that will highlight how interdisciplinary teams choose specific assessment modalities to screen and evaluate dysphagia in different clinical settings. The cases are followed to determine optimal interventions to maximize return to safe oral intake to meet nutritional needs. Factors related to ethics and social determinants of health that impacted patient care will be highlighted.

#### **OBJECTIVES:**

- Describe the spectrum of screening and diagnostic tools (both clinical assessments and available for comprehensive dysphagia evaluation).
- Discuss how clinical presentation, medical comorbidities, and nutritional status guide personalized dysphagia workup.
- Describe how clinical care and findings during dysphagia assessment may prompt additional testing or development of management strategy.

#### FOR THE LEARNERS:

At the end of this session, the learners will be able to identify appropriate modalities for dysphagia evaluation in different clinical scenarios and recognize which aerodigestive pathologies are revealed through specific findings. Learners will differentially assess multiple treatment approaches demonstrating an understanding of optimizing treatments to allow patients to return to meeting nutritional requirements via oral intake.

9:00 - 9:15 AM

#### **BREAK**

9:15 - 10:45 AM

## **Session V:** Aerodigestive Disorders in Pediatrics and Geriatrics

V.A. Pediatrics - Multidisciplinary Evaluation and Management of Children with Aerodigestive Disorders: What Factors Guide Decision-Making?

Moderator: Maureen Lefton-Greif, PhD, CCC-SLP, BCS-S Speakers: Maureen Lefton-Greif, PhD, CCC-SLP, BCS-S; Praveen Goday, MD; Prasanth Pattisapu, MD; Christina Valentine, MD

A pediatric aerodigestive patient is defined as a child with a combination of multiple and interrelated congenital and/or acquired conditions affecting airway, breathing, feeding, swallowing, or growth that require a coordinated interdisciplinary diagnostic and therapeutic approach to achieve optimal outcomes. This session will focus on the underlying etiologies, clinical presentations, ethical considerations, and social determinants of heath factors that influence the evaluation and re-/habilitation of these complex children. The roles of the different team members and the impact of the multidisciplinary team approach on outcomes will be highlighted.

#### **OBJECTIVES:**

- Provide an overview of the presentations of children with aerodigestive disorders.
- o Discuss the airway, growth/nutrition, and developmental factors that influence

- evaluation and management decision-making for children with aerodigestive disorders.
- O Discuss the role that individual providers play on the multidisciplinary team.
- Describe the impact of the multidisciplinary aerodigestive approach on outcomes of children, their caregivers, and health care utilization.

#### FOR THE LEARNERS:

At the end of this session, the learners will be able to identify the relationship between dysphagia and the development of feeding disorders and discuss the impact of aspiration on the developing lung and respiratory health. Learners will also be able to describe the work up strategies for the child with aerodigestive disorders, and the importance of nutrition on overall well-being and health during development. Lastly, learners will be able to identify the burdens associated with pediatric dysphagia and optimal goals of the multidisciplinary team.

## V.B. Geriatrics - Approaches to Diagnosis of Swallowing and Aerodigestive Problem: Geriatric Age Group

Moderators: Catriona Steele, PhD, CCC-SLP, S-LP(C); Maggie Kuhn, MD Speakers: Nicole Rogus-Pulia, PhD, CCC-SLP, BCS-S; Kulwinder Dua, MD, Doug Van Daele, MD

This session will provide an overview of swallowing and aerodigestive functions in older adults. Changes in swallowing and aerodigestive function with advancing age and frailty status will be described. Next, optimal approaches to evaluation and diagnosis of dysphagia in older adults will be discussed. Finally, considerations for treatment planning with the goal of optimizing nutritional intake and quality of life will be presented. Case examples will be included to highlight issues specific to vulnerable older adult populations include issues related to ethics and social determinants of health.

#### **OBJECTIVES:**

- List the changes in swallowing and aerodigestive function expected with advancing age.
- Describe approaches to evaluation of swallowing and aerodigestive disorders in older adults.
- Discuss considerations for treatment planning to optimize nutritional intake and quality of life in older adults.

#### FOR THE LEARNERS:

At the end of the session, learners will be able to describe the changes in swallowing and aerodigestive function common in the older adult. Learners will also be able to describe considerations for evaluation of these functions specific to the older adult patient. Lastly, learners will be able to discuss considerations in treatment planning to optimize nutrition and quality of life of older adults.

10:45 - 11:00 AM

#### **BREAK**

11:00 - 12:30 PM

#### Session VI: LUNCH and LEARN: Be Successful!

Moderators: Caryn Easterling, PhD; Sudarshan Jadcherla, MD; with contributions from all mentors

Be Successful! After a brief overview on career planning, round table discussions with mentors will include: How to focus on developing and implementing a career development plan, preparing abstracts, from abstract to manuscript, and applying for grants - which one, how and when?

#### **OBJECTIVES:**

- O Discuss career development plans, their uses, and strategies for creating them.
- Provide examples on how career development plans can help towards achieving career goals such as promotion, grant funding, etc.

#### FOR THE LEARNERS:

At the end of this session, learners will be able to describe career development plans and discuss their uses. Learners will also be able to draft a career development plan aligned towards their next big goal(s).

12:30 - 2:00 PM

## **Session VII:** MINI-WORKSHOPS: PEDIATRIC AND ADULT

VII.A. Pediatric Case Mini Workshop: Case Presentation of Child with Aerodigestive Disorders (AD)

Moderator: Joan Arvedson, PhD, CCC-SLP, BCS-S Speakers: Maureen A. Lefton-Greif, PhD, CCC-SLP, BCS-S; Praveen Goday, MD; Prasanth Pattisapu, MD; Christina Valentine, MD

A case-based presentation will illustrate the multidisciplinary evaluation and nutritional and feeding management approach for a child diagnosed with aerodigestive disorders (AD). Clinical and research ethics, and social determinants of health will be discussed. This session will also encourage small and large group discussions.

#### **OBJECTIVES:**

- Describe the airway/respiratory, growth/nutrition, and developmental factors that influenced evaluation and management of decision-making for this casebased presentation.
- Identify and stratify the need and timing for AD evaluations/procedures and interventions
- Describe optimal airway, nutrition/growth, and developmental outcomes for the case presented.
- Identify the ethical considerations and social determinates of health care pertinent to this case.

#### FOR THE LEARNER:

At the end of the session, learners will be able to list the benefits and limitations of specific AD evaluations/procedures and interventions. Learners will also be able to identify how optimal airway, nutrition/growth and developmental outcomes are determined/measured. Lastly, learners will discuss approaches to ethical considerations, social determinants of health, and burdens for children with AD and their families.

VII.B. Adult Case Mini Workshop: Oropharyngeal and Esophageal Dysphagia in an Older Patient: Interdisciplinary Collaboration and Problem-Solving for Optimal Management

Moderator: Heather Bonilha, PhD, CCC-SLP Speakers: Georgia A. Malandraki, PhD, CCC-SLP, BCS-S; Francis Edeani, MD

A case-based presentation will illustrate the multidisciplinary evaluation and management approach for an adult diagnosed with aerodigestive disorders. Clinical and research ethics, and social determinants of health will be discussed. This session will also encourage small and large group discussions.

#### **OBJECTIVES:**

- Describe the differential characteristics of oropharyngeal and esophageal dysphagia and the multi-factorial nature of both.
- Discuss the roles of different disciplines (SLP, GI, nutrition, neurology) in correctly identifying and treating oropharyngeal and esophageal dysphagia in a complex patient.
- Identify optimal ways of collaboration between disciplines for the care of complex patients with an emphasis on decisions related to oral and enteral nutrition.

#### FOR THE LEARNERS:

At the end of the session, the learners will understand the complexity of multi-factorial dysphagia that affects all swallowing phases and the significance of interdisciplinary care in effectively treating these patients. Learners will discuss the medical, ethical, and social factors that have a role in the decision making with an emphasis on decisions related to oral and enteral nutrition.

2:00 - 2:15 PM

**BREAK** 

2:15 - 3:45 PM

#### **SESSION VIII: BE MOTIVATED!**

Moderator: Heather Shaw Bonilha, PhD, CCC-SLP Speakers: Nicole Rogus-Pulia, PhD, CCC-SLP; Bonnie Martin-Harris, PhD, CCC-SLP; Kulwinder Dua, MD, Doug Van Daele, MD, along with contributions from all mentors

Be Motivated! This session will focus on how to stay motivated and build resilience during challenging times. The session will begin with the speakers sharing their stories and strategies for staying motivated and persist towards achieving their goals and then will progress to mentored table discussions. Table discussions will focus on attendees identifying their next big goals, anticipating challenges, and planning ways to stay motivated to accomplish their goals.

#### **OBJECTIVES:**

- Describe how to stay motivated and build resilience during challenging times.
- Describe from speaker's stories suggested strategies for staying motivated and persistent.
- Participate in mentored table discussions that will focus on assisting attendees in identifying their next big goals, anticipating challenges, and planning ways to stay motivated to accomplish their goals.

#### FOR THE LEARNERS:

At the end of this session, learners will be able to describe their next big goal, and list facilitators and barriers for achieving the goal. Learners will also be able to describe approaches for staying motivated while overcoming barriers to achieving their goals.

3:45 - 4:00 PM

#### **Session IX: CLOSING COMMENTS**

Speakers: Sudarshan Jadcherla, MD; Heather Bonilha, PhD, CCC-SLP; Caryn Easterling, PhD, ASHA Fellow

## This initiative is supported in part by an unrestricted educational grant from Mead Johnson Nutritional Institute.

The 2nd DRS Institute for Education (DRSIE) Fall Conference will appeal to multidisciplinary groups of clinicians and researchers who are in the beginning of their careers with a focus on swallowing and aerodigestive sciences. Please make plans to join us for this exciting virtual event and get connected with distinguished mentors! Access to the recordings will be available if participants are unable to tune in during the live presentation.

#### **REGISTRATION RATES:**

#### **In-person Attendees:**

Submit your application by May 31 at 12 Noon, CDT. If accepted, your registration is complimentary!

#### **Virtual Attendees:**

DRS member: \$125 • Non-member: \$225



American Board of Swallowing and Swallowing Disorders

Advanced Level 1.25 ASHA CEUs

#### **CME WILL BE AVAILABLE.**

Watch for more details coming soon!

#### **DISCLOSURE STATEMENTS AVAILABLE ONLINE**

www.dysphagiaresearch.org/page/DRSIE\_Fall\_Conference

#### **MORE INFORMATION AND OUESTIONS**

Please contact the DRS office at 920-560-5624 or DRS@badgerbay.co (not .com).



## DRSIE ADVISORY COUNCIL

Sudarshan Jadcherla, MD, DCH, FRCP (Ireland),

AGAF, Chairman, 2020-2023

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Caryn Easterling, PhD, ASHA Fellow

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Mark Nicosia, PhD

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PhD, CCC-SLP, BCS-S

Reza Shaker, MD

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#### **CONFERENCE FACULTY & MENTORS**

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Martin Brodsky, PhD, ScM, CCC-SLP Nicole Rogus-Pulia, PhD, CCC-SLP, BCS-S

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Corinne Jones, PhD Doug Van Daele, MD

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