

67th
ANNUAL
CONFERENCE
& EXHIBITION



30
JULY
02
AUGUST

2019
ASHEVILLE, NC

elevate

HEALTHCARE ENGINEERING

elevate

HEALTHCARE ENGINEERING



LARRY HOLDER CHE
DUKE REGIONAL HOSPITAL
NCHEA 2101 President

NCHEA 67th Annual Conference & Exhibition | July 30 – August 2, 2019

Greetings

As the 2019 North Carolina Healthcare Engineers Association's annual conference is quickly approaching, I would like to extend you an invitation to join us at the Grove Park Resort in Asheville.

This year's conference promises to be one to remember and you certainly don't want to miss our keynote speaker Curt Steinhorst. His message will improve your focus and rescue us from all the technology distractions we experience from our jobs and daily lives. Philip Johnson, Program Chair, has again assembled an outstanding agenda of educational courses applicable for today's Healthcare Engineers and Associates. Our vendor show is always one of the highlights of the annual conference, Arthur Blue, Vendor Chair, guarantees this year's show will surpass. As always there will be numerous opportunities for networking with friends and colleagues. I encourage you to come to Grove Park, ELEVATE your career and enjoy all NCHEA has to offer.

Larry Holder

President NCHEA



ARTHUR BLUE
CONE HEALTH
NCHEA 2019 Vendor Chair
nchea.vendorchair@gmail.com

Join our sponsors in support of NCHEA 67th Annual Conference Education Sessions and Special Events. Whether your company is interested in strengthening relationships with current customers or meeting prospective customers, the NCHEA Annual Conference & Exhibition connects you with key purchasers and decision makers in the healthcare facility management field.

We appreciate and depend on all of our sponsors support. Contact Arthur Blue for more info or questions.



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AGENDA

KEYNOTE

MONDAY
July 29, 2019

8:30 AM - 11:00 AM	Planning Committee Pre-Con
11:00 AM - 12:00 PM	Finance Committee Meeting
11:00 AM - 12:00 PM	Certification Committee Meeting
12:00 PM - 1:00 PM	Planning Committee Lunch
1:00 PM - 5:00 PM	Board Meeting

TUESDAY
July 30, 2019

7:00 AM	Golf Registration
8:30 AM	Golf Shotgun Start
2:00 PM - 5:00 PM	Education Registration/Vendor Registration
5:00 PM	VIP Reception
5:30 PM - 7:00 PM	Opening Reception In Vendor Exhibit Area

WEDNESDAY
JULY 31, 2019

7:00 AM - 8:00 AM	Registration & Breakfast
8:00 AM	Welcome – Opening Ceremony Keynote Speaker
9:45 AM	Break
10:00 AM - 11:00 AM	A Facility Managers Guide to Owning & Operating Air Handlers Alex Harwell and Nick Walters - Dewberry
11:00 AM - 11:30 AM	Haywood Community College Alex Harwell - Dewberry
11:30 AM - 2:00 PM	Vendor Show LUNCH in EXHIBITOR AREA
2:00 PM - 3:00 PM	The Benefits of Healthcare Prefabrication Construction in Today's Market Moderator: Jeff Schroder, Panelist: Denton Wilson, Terri Slick, Kent Hodson, Jason Dodd, Julie Casper
2:00 PM	ASSOCIATES FORUM
3:00 PM	Break
3:15 PM - 4:15 PM	Pharmaceutical Waste Management Dr. Amy Cheatham - Wood Environment and Infrastructure Solutions, Inc.
4:15 PM - 5:15 PM	Generator Docking Jonathan A. Sunde - Trystar

THURSDAY
AUGUST 1, 2019

7:00 AM - 8:00 AM	Registration & Breakfast
8:00 AM - 9:00 AM	Power Electronics Microgrids Len White - NC State University
9:00 AM - 10:00 AM	Optimize Facilities Operations by Going Mobile Todd Moore - ARC
10:00 AM	Break
10:15 AM - 11:15 AM	Design for Combatting Infections Construction Specialities
11:30 AM - 2:00 PM	Vendor Show – Lunch in Vendor Area
2:00 PM - 3:00 PM	A Comprehensive, Defensible and Operational Water Management Program Scott Whipp - Phigenics
3:00 PM	Break
3:15 PM - 4:15 PM	Healing the Healthcare Environment Casey Johnson - Forbo
4:15 PM - 5:15 PM	District Meetings
5:45 PM	Board Members Photos
6:00 PM	Annual Banquet Reception
7:00 PM - 9:30 PM	Annual Banquet Dinner

FRIDAY
AUGUST 2, 2019

7:00 AM - 9:15 AM	NCHEA Business Meeting & Breakfast
9:15 AM - 10:15 AM	Selecting the Right Fire Extinguisher for the OR Bret Martin - CNA Insurance
10:15:00 AM - 11:00 AM	Break
11:00 AM - 12:30 PM	DHSR Update – DHSR Staff Jeff Harms and Group



CURT STEINHORST

it's time to
TAKE CONTROL OF YOUR ATTENTION

Curt Steinhorst is the bestselling author of *Can I Have Your Attention? Inspiring Better Work Habits, Focusing Your Team, and Getting Stuff Done in the Constantly Connected Workplace*, and a regular *Forbes* contributor. He is on a mission to rescue us from our distracted selves. After years studying the impact of tech on behavior, Curt founded Focuswise, a consultancy that equips organizations to overcome the distinct challenges of the constantly connected workplace.

Diagnosed with ADD as a child, Curt knows intimately the challenges companies face to keep the attention of today's distracted workforce and customer. He has coached executives, TV personalities, and well-known professional athletes on how to effectively communicate and create focus when they speak to audiences, lead their employees, and engage their customers.

Curt's unique insight and entertaining speaking style has captured the attention of audiences worldwide. He speaks more than seventy-five times a year to organizations that include everyone from global leadership associations and nonprofits to Fortune 100 companies.

*Curt's speeches on the topics of generations and Millennials occur on behalf of the Center for Generational Kinetics. The Center studies generational trends to convert them into breakthrough business opportunities. The organization and its founder, Jason Dorsey, has been featured on 20/20, the Today Show, 60 Minutes, and the View. Curt's personal experiences leading Gen Y and his direct work with business leaders and top performers make him a powerful voice for and to the emerging workforce.

KEYNOTE SPONSORS





PHILIP A. JOHNSON CHE
WELL-SPRING, A Life Plan Community
NCHEA 2019 Program Chair

A Facility Managers' Guide to Owning & Operating Air Handling Units

Nick Walters & Alex Harwell - Dewberry

Managing barriers in today's healthcare facility can be a real challenge. There is a multitude Air handling units are some of the most numerous and varied pieces of large utility equipment under the supervision of hospital facility managers. They provide vital air pressure relationships, filtration, air exchanges, and temperature control to every space within our facilities.

With the ongoing loss of our senior technicians to retirement, this presentation seeks to help the facility manager with the basics of AHU layout, maintenance, controls, repairs, troubleshooting, and replacement.

- How do you help technicians with both short term corrective actions and long term repairs to AHU performance issues without impacting compliance or efficiency?
- What does a good AHU predictive maintenance regimen look like?
- How do you verify and correct controls systems performance for aging and varied systems?
- How do you establish effective testing and documentation programs?

Nick Walters, PE, CHC, CEM, ASHE Certified Health Care Physical Environment Worker: Nick Walters is a Project Manager for Dewberry Engineers Inc. in their Charlotte office. Nick brings 8 years of experience that ranges from conception through design and implementation of identified projects. His past experience lends itself to a practical and real-world approach to the end goal. He has worked as both a consulting engineer and an engineer for a mechanical contractor and service company, which gives him a broad understanding of building systems from a design, installation and operation perspective.

Alex Harwell, ASHE Certified Health Care Physical Environment Worker:

Alex Harwell is a Project & Client Manager for Dewberry Engineers Inc. in their Raleigh office. Alex brings over 20 years of multi-disciplinary utilities systems engineering and operations experience from the Healthcare Facilities, Pharmaceutical Manufacturing, and Nuclear Power fields. Alex is also a former North Carolina Division of Health Service Regulation (DHSR) engineering plan reviewer/inspector.

Generator Docking

Jonathan A. Sunde - Trystar

Learn to quickly and safely connect a portable energy source to your healthcare facility, protecting you from expensive and potentially dangerous power outage.

Learn how recent changes to the NEC code may affect you. The requirement of article 700 Emergency System applies to buildings such as: Hospitals and healthcare facilities, public safety communications, places of large assembly (including hotels, theaters, sports areas, etc.) and industrial processes where the interruption of power would create serious health hazards.

John Sundae a highly skilled Master Electrician, license in 8 states, with a strong background in the National Electric Code, began his career at Trystar in 2011 as the head of the Trystar Electrical Group. Besides from being part of the Electrical team at Trystar, John has been teaching Master, Journey Man, and Continuing Electrical Education Courses in MN since 2000. When John is not working at Trystar or Teaching, you can find him working on his hobby farm or with his wife and 6 children.

Pharmaceutical Waste Management

Dr. Amy K. Cheatham, PhD, PE | Associate Engineer – Environmental

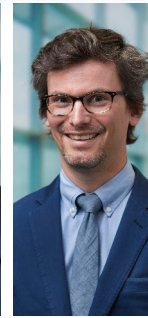
As federal regulation specific to the management of pharmaceutical wastes continues to slowly progress, regulatory agencies have increased their scrutiny on current generator practices within the framework of existing hazardous waste and other applicable regulations. As a result, pharmacies, retail operations, and healthcare facilities are experiencing an increase in the number of citations or notices of violation as well as in the amount of monetary fines associated with inspections conducted of pharmaceutical waste management practices. Even those healthcare facilities without a pharmacy may generate wastes considered pharmaceutical in nature and are subject to this increased interest from their regulators.

The purpose of this presentation is to identify typical areas of risk and challenges for healthcare facilities as they relate to the management of pharmaceutical wastes; provide tips and strategies for establishing a compliant program through coordination of critical stakeholders; and offer insight for program maintenance, continual improvement, and best practices that may achieve waste minimization and cost savings.

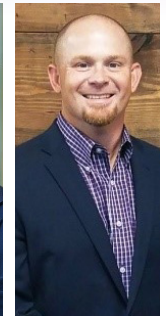
Amy Cheatham with Wood Environment and Infrastructure Solutions, Inc. is an environmental engineer specializing in supporting medical treatment and research facilities as they navigate complex requirements to achieve compliance with environmental regulations and maintain accreditation. In this role, she has collaborated with environmental regulators in the development of requirements specific to the healthcare industry, including Management Standards for Hazardous Waste Pharmaceuticals and Amendment to the P075 Listing for Nicotine that was published by EPA in February 2019.



NICK WALTERS



ALEX HARWELL



JEFF SCHRODER



DENTON WILSON



TERRI SLICK



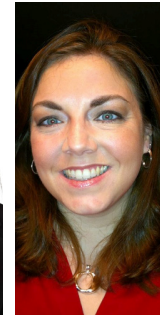
KENT HODSON



JASON DODD



JULIE CASPER



DR. AMY CHEATHAM

The Benefits of Healthcare Prefabrication Construction in Today's Market Panel Discussion

Moderator:

Atrium Health Jeff Schroder, Assistant Vice President of Planning, Design and Construction

Panelist:

Denton Wilson, VP of Planning, Design and Construction, Atrium Health

Terri Slick, Healthcare VP of Operations Messer Construction

Kent Hodson, President CEO Pivotek

Jason Dodd, Regional Account Manager Alfred Williams Construction Services

Julie Casper, Clinical Manager - Healthcare Herman Miller

Power Electronics Microgrids

Len White - NC State University

Understand the challenges and state of art solutions when deploying and effectively managing microgrids.

The integration of distributed generation, load balancing and energy storage form the model of a microgrid. Applications include large scale data centers, electric ships and commercial/ industrial buildings, bringing the benefits of high efficiency, power quality, flexibility, stability, and reliability. Power Electronics (PE) have become an important part of modern microgrids. Not only are many storage and distributed generation systems connected to the microgrid via PE converters, many of the modern loads use some sort of power conversion to ensure high-efficiency and high-performance operation.

Dr. White is a Research Professor at FREEDM with a specialty in power systems. His area of specialization is power quality with emphasis on mitigation of flicker phenomena and harmonics as caused by Electric Arc Furnaces (EAFs) and similar equipment.

Dr. White is one of the founding partners and former Senior Principal of Stanford White, Inc., a mid-sized engineering firm based in Raleigh, NC that specializes in engineering services for the construction industry with an emphasis on mission critical and health care facilities. He is a Senior Member of IEEE, a registered Professional Engineer in eight states, a Registered Communications Distribution Designer, a member of the NC Board of Examiners of Electrical Contractors, and serves on the NFPA-99 hospital electrical systems committee.

Optimize Facilities Operations by Going Mobile

Todd Moore - ARC

Innovations in software and apps are driving the facilities teams of tomorrow. And yet, many teams are still not digital, not in the cloud and not mobile. Facilities teams face increasing responsibilities and a "do more with less" environment. They also tackle emergencies regularly, whether it's a broken pipe, a fire, a gas explosion or a broken escalator. Without instant access to facilities information, teams cannot collaborate, respond or recover efficiently. How can teams make the transition to being mobile and having fast access to the information they need? Join this session to hear steps on how to become a mobile team to improve productivity, reduce costs and risks, and accelerate emergency response and recovery.

- Find out the value of becoming mobile, and rethink existing facilities management
- Learn steps to making the transition to a becoming a mobile team and optimize facilities operations
- Hear about industry peer successes from being mobile to address operational gaps

Todd Moore, National Director of Facilities Moore has presented at numerous industry-related events with a focus on helping organizations better manage their facility information. Todd shares Facility best practices in Healthcare, Municipalities, K-12 School Districts, Universities, Federal Agencies, Manufacturing, Retail and Private Owner Groups while providing key take-aways that can be put into practice in your industry vertical.

Design for Combatting (HAI) Healthcare Associated Infections

Deborah Ruriani - Sales Training Manager Construction Specialties

This course will educate the attendee about hospital-acquired infections, the contributing actors and address the social and financial impact associated with this deadly pandemic. The course will review preventions and solutions to HAI's and discuss case studies where best practices have proven to lessen the impact of HAI's.

- Understand the definition of hospital acquired infections (HAI)
- Identify contributing factors to HAI's
- Have awareness of the mortality rate associated with HAI's
- Have awareness of the financial impact HAI's have on the community & our healthcare system.
- Understanding preventions and solutions that can lessen the impact of HAI's.

Deborah Ruriani is the Sales Training Manager for Construction Specialties, tasked with creating a CS University and planned sales and product training for the global sales team. She spent the last year as East Coast Territory Sales Manager for CS Cubicle Curtains - focusing on building relationships within the architectural interior design community and working with end users in the healthcare and senior living markets to identify needs and provide design solutions.



DR. LEN WHITE



TODD MOORE



DEBORAH RURIANI



SCOTT WHIPP



BRET MARTIN

A Comprehensive, Defensible and Operational Water Management Program

Scott Whipp - Phigenics

Optimizing water use in the built environment is a dynamic process that includes stakeholders with varying water management objectives. Infection control and EH&S professionals are tasked with ensuring water safety. This is important as 4,000 people in the U.S. die annually from exposure to Legionella in building water systems and is extremely costly to treat and defend. Every case of disease or injury from dangerous microorganisms in building water is the result of exposure to a poorly managed building water system.

Engineering, facilities, and maintenance professionals are tasked with reducing water use and ensuring uninterrupted heating and cooling. There are growing demands as the cost of water and sewer increases, and as the mandate for corporations to be water stewards intensifies. Furthermore, each facility has a unique infrastructure and some best practices for ensuring safe water, such as periodic flushing, conflict with the goal to reduce water use

Scott Whipp is an Army combat veteran with extensive water management experience. He had 21 years' experience with Nalco Chemical Company, including 14 years in the Global Business Unit, Environmental Hygiene which helped clients in numerous markets, manage and reduce risk. With Phigenics, Scott specializes in helping clients develop and implement comprehensive and defensible water management programs that achieve regulatory compliance (CMS 17-30 and ASHRAE Standard 188), prevent disease and injury from Legionella, improve water and energy efficiency, optimizing total cost, and ensuring the program is operational.

Healing the Healthcare Environment

Casey Johnson - Forbo

From the moment you enter a healthcare facility you are in contact with flooring. Whether you are seeking treatment, visiting family and friends, or on your way to work you interface with the floor. Flooring can have either a positive or negative impact on the facility, patient outcomes, and staff satisfaction.

Recent studies have shown that the healthcare environment affects clinical outcomes. Given its impact on patients, visitors, and staff. A person entering a healthcare facility seeking to maintain or restore health and to have a positive experience will not achieve this if the environment does not promote health.

- Examine the impacts (+/-) that Design and Material Selection have on the Healing Environment
- Understand the influences that Acoustics, Light, and Color have on Patient Healing and Staff Satisfaction
- Identify Key tools for measuring Patient satisfaction and the benefits to Healthcare system & facilities
- Learn what can be done to achieve a healthy, safe and satisfying work environment for Nurses and Hospital Staff.

Casey Johnson, Director of Sustainability and Marmoleum Business Development Manager for North America, Forbo Flooring Systems, has more than 40 years in the flooring industry. He has been with Forbo Flooring Systems for over 25 years and has been actively involved with the United States Green Building Council (USGBC), and the Health Product Declaration Collaborative serving as team lead for Forbo. During that time, Mr. Johnson has presented and lectured on several key issues relating to sustainable building, EPD (environmental product declaration and HPD (health product declaration), Environmental manufacturing, Sustainable Product Standards, Life Cycle Assessments, and Product Transparency.

Selecting the Right Fire Extinguisher for Operating Rooms

Bret M. Martin, PE, CSP, CFPS, CHFM, CHSP, CHE, CLSS-HC - CNA Insurance

It is estimated that there are between 200 and 300 operating room fires per year in the United States. So it stands to reason that there will be a greater focus on fire prevention and extinguishment in the OR setting. There has been a significant amount of debate on the best use and selection of fire extinguishers in ORs within the health care environment. This presentation provides background on the basic operating characteristics of each class of fire extinguishers and which application is most effective in the OR environment.

Bret M. Martin is currently the Assistant Vice President of Property Risk Control at CNA Insurance. Prior to that, Bret served as Director of Fire, Life Safety & Utilities for Corporate Operations for Atrium Health. He has worked over 30 years in the field of Fire Protection, Risk Management, Loss Control, and Safety consulting industry, with over 25 years as a Healthcare Specialist providing specialized consultative services for facility management, property protection, environment of care, general liability, worker's compensation, and regulatory compliance. Bret is a registered Fire Protection Professional Engineer in the States of North Carolina, South Carolina, and Mississippi and holds Certified Safety Professional (CSP), Certified Fire Protection Specialist (CFPS), Certified Healthcare Facility Manager (CHFM), Certified Healthcare Safety Professional (CHSP), Certified Healthcare Engineer (CHE), and Certified Life Safety Specialist for Healthcare Facilities (CLSS-HC) designations.

REGISTER

EXISTING MEMBERS
Full Healthcare & Associate
 Full Education Conference Attendance

REGISTER ONLINE www.nchea.com

EARLY BIRD June 3 - June 17, 2019	REGULAR Starts June 18, 2019	LATE Starts July 23, 2019
\$265.00	\$315.00	\$365.00

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June 3, 2019 - August 10, 2019

\$600.00

ONE-DAY ATTENDANCE

June 3, 2019 - August 10, 2019

\$225.00

- Available for Wednesday, Thursday, and Friday
- Admittance to all events on day selected except Banquet Reception/Banquet on Thursday night

PAYMENT OPTIONS

Preferred payment is online at www.nchea.com

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 If you need to mail in check for registration:

Make check out to **NCHEA**
 Mail to: Mike Cooke
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FULL Conference Attendance includes:

- NCHEA Yearly Membership Dues
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- Admittance to the Vendor Show featuring 137 booths
- Vendor Show Luncheons on Wednesday and Thursday
- One spouse/guest event ticket
- Annual banquet tickets and Reception
- Friday Morning Business Meeting with buffet breakfast

JOIN NCHEA TODAY!
\$75.00 Year membership

EARLY BIRD DISCOUNT

All current Full Healthcare and Associate Members are eligible for Early Bird Discount. You must be logged in and your membership must be up to date to see the option for the discount.

If the Early Bird Rate is "greyed" out, you are either not logged in or your membership is not current. Contact Jeff Forsyth for assistance.

If you need assistance with your PAYMENT, please contact Mike Cooke, NCHEA Treasurer :

nchea.treasurer@gmail.com

QUESTIONS?

Please visit www.nchea.com for updated information



MIKE COOKE
 CONE HEALTH
 NCHEA 2019 Treasurer

If you need assistance with PAYMENT contact Mike Cooke, nchea.treasurer@gmail.com



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Group code "NCH" or use the direct link on our website: www.nchea.com

ALL EDUCATION EVENTS are located at the OMNI Grove Park Inn Resort.



SPECIAL EVENTS

GOLF

SPORTING CLAYS

SPORTING CLAYS
 Tuesday, July 30, 2019
 8:00 AM Registration
YOU MUST PRE-REGISTER FOR THIS EVENT
LIMITED SPACE AVAILABLE.

Test your shotgun skills on our 5-Stand or Sporting Clays course for experienced clay shooters. Clay targets are thrown from strategically placed traps in various combinations while you shoot from our 5-Stand range or our Sporting Clays course. Includes 50 shells, a high-quality Orvis shotgun, and other equipment.

This event includes admission to the famous Biltmore Estate Home. After completing the sporting clays course, and lunch at the Deer Park Restaurant, stay and explore the Biltmore Estate on your own.

Full HEALTHCARE Member: NO FEE
 (employed by a Healthcare Facility)

Full ASSOCIATE Member's allowed if space becomes available. Sponsors & Full Healthcare Members sign up firsts.

GUEST

GUEST EVENT
 Wednesday, July 31, 2019
 3:00 PM
 The Pavilion, OMNI GPI
LIMITED to 60

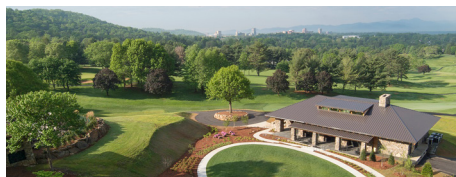
"There are few hours in life more agreeable than the hour dedicated to the ceremony known as afternoon tea."

Henry James

Join us for High Tea in one of the OMNI Grove Park Inn's newest facilities, The Pavilion, a beautiful facility with an amazing mountain view.

You will also make a fun "tea" craft to bring home along with yummy treats, hot tea, wine, and great '44 fellowship! Make sure you are pre-registered at the Education Registration desk.

Full Conference Educational Attendee Guest NO FEE - Educational Attendee will register guest
Guest of sponsors or exhibitors, \$40.00 fee.



NCHEA GOLF TOURNAMENT
OMNI Grove Park Inn GOLF COURSE
 Tuesday, July 30, 2019 8:00 AM
LIMITED to 120

NEW this year: TEAM only registrations.

Plan your team and then register.

Let us know if you need assistance with needing players.

Both Full Healthcare and Associate Members will register if they wish to play. The Golf Chair will locate teams that need players.

Full HEALTHCARE Member: NO FEE (employed by a Healthcare Facility)

ASSOCIATE Member: \$700 per TEAM

Includes snacks, swag bag, lunch and FUN!

GOLF Planning Team:
 Rick Holmes NCHEA GOLF CHAIR
 Wilma Joyner, Nancy Padgett, Todd Tainter
nchea.golfchair@gmail.com

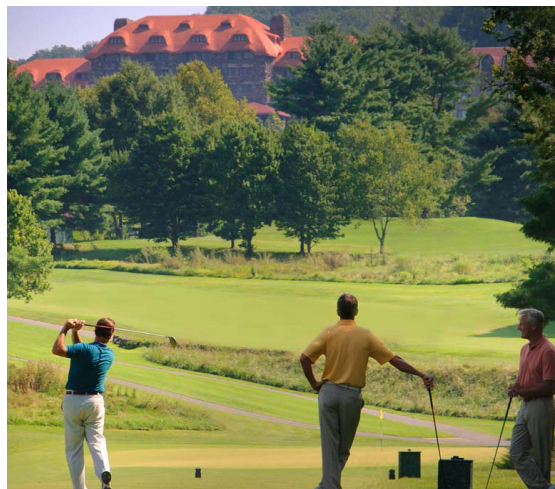
GOLF Sponsorship Opportunities

Breakfast, Lunch, Beer, Hole and Special Hole Sponsorships available.

Check website for more details:

www.nchea.com

nchea.golf@gmail.com



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nc healthcare engineers association

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