50 YEARS OF CLEMSON ARCHITECTURE + HEALTH

Reunion Celebration
In conjunction with the
2018 AIA/AAH SAR Architecture for Health Conference
Looking Forward and Back Fifty Years

Clemson School of Architecture, Lee Hall, Clemson, SC
August 23rd - Keynote Speaker | August 24th - AIA/AAH SAR Conference and Reception | August 25th - Alumni Gathering and Gala
George Means goes to Washington
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Current Statistics

• Avg. 8 M.Arch. students per admitting class [soon to be 10-12]:
  
  *Currently 21 M.Arch and 6 PhD students enrolled*

• 32 AIA AAH Fellowships since 1968

• 11 International or Professional Fellowships

• 28 National or International Design Awards since 2000

• Two NCARB Awards for integration with practice since 2007

• Graduates recruited aggressively nationally

  *Recognized ability to enter the workforce at higher levels and a steep learning curve*

• Graduates become leaders in their firms and the profession:

  *13 to date on AIA/AAH | AAHF | ACHA national board appointments*
M.Arch Alumni Footprint

50
YEARS CLEMSON’S ARCH+HEALTH PROGRAM HAS BEEN IN EXISTENCE (1968-2018)

242
NUMBER OF CLEMSON ARCH+HEALTH GRADUATES
4.8 graduates per year avg. (now 7-8)

34
NUMBER OF CLEMSON ARCH+HEALTH ALUMNI AWARDED WITH THE AIA / AAH FELLOWSHIP
1 of 7 students

WHERE ARE OUR CLEMSON A+H ALUMNI NOW?

alumni # employed

HKS
Perkins and Will
HDR
McMillan Pazdan Smith
LS3P
EYP, Stanley Beaman & Sears
SmithGroup
ZGF Architects
NBBJ
Earl Swensson & Associates
Clemson University
Batson Associates
Novus Architects
HGA
KMD Architects
Design Strategies, LLC
Leo A Daly
Earl Architects
Goodwyn Mills Cawood
Payette
Gresham, Smith and Partners


- W/ THE AIA / AAH FELLOWSHIP AWARDED STUDENTS
Where our alumni go
Dina Bathido | Ph.D
Associate Professor
Graduate Studies in Architecture + Health
Clemson University

Ardali Joseph | Ph.D, EDAC
Spartanburg Regional Healthcare System
Endowed Chair in Architecture + Health
Clemson University

David Allison | FAIA, FACHA
Alumni Distinguished Professor
Director of Graduate Studies in Architecture + Health
Clemson University

Byron Edwards | FAIA, ACHA, EDAC, LEED AP
Professor of Practice
Graduate Studies in Architecture + Health
Clemson University

Deborah Wingler | Ph.D, MSc-PHE, EDAC
Research Assistant Professor
Graduate Studies in Architecture + Health
Clemson University
Generalist | Specialist
Comprehensive & Consistent
Architecture + Health Studios [3] 18 Credits
Research Methods 3 Credits
Architectural Programming 3 Credits
HC Architecture History and Theory 3 Credits
Health Policy, Planning, & Admin. 3 Credits
Health Facility Planning & Design 3 Credits
Health Facility Internship 1-3 Credits
Healthcare Architecture Internship 0 Credits
A+H Comprehensive Project 6 Credits
or
A+H Thesis Research 3 Credits
A+H Thesis Manuscript 3 Credits
A+H Thesis Design Project 6 Credits

Min. A+H concentration credit hours 40 Credits
Health Facility and Site Visits
A + H STUDY ABROAD
SUMMER 2017
MAY 21 - JUNE 11 (3 WEEKS)
ARCH 490D/8900: DIRECTED STUDIES IN ARCHITECTURE + HEALTH

(available for 4 credit hours to undergraduates or graduates)
Contact David Allison, dadall@clemson.edu for more details

Genoa | Milan | Venice | Florence | Basel | Berlin | Eindhoven | Rotterdam
Art + Science

[Multi-valence]
Emphasis on Design Excellence and Innovation

Student proposal for a Hospice Facility: Minglu Lin
OPTIMIZE CIRCULATION SPACE

When we visit the existing nursing home, I found most elders like to hang out in the corridor and talk to each other. According to that evidence, I designed the corridor wider than normal size and provided seating along it. Also, the single loaded corridor allow one side open to the central garden. The circulation space is improved as a social space with nature view and daylight.
**ECOhealth +**

**Primary Care Clinic** | Holistic Health | Biodiversity | Ecological Restoration | Habitat Facade | Ecological Succession

**PREMISE**

The health of our species is ultimately dependent on the health of our local and global ecosystems.

**OBJECTIVES**

- **Biomass Increase**: The total mass of organisms in a given area.
- **Ecological Awareness**: A building that teaches empathy to people.

**Community**

An interacting population of various kinds of individuals (as species) in a common location.

**Health**

- Crisis: Human population growth and degradation from prey/predator imbalance.
- Recognition: The problems we are facing are slowly being realised.

**Reaction**

Who will you be?
Transcend the roles of Designer | Medical Planner | Technician
Communities
Buildings
Landsapes
Spaces
Details
Key Moves

01 Iconic Landmark
02 Active Axis Continuum
03 Mediation b/t Pedestrians & Vehicles
04 Diverse Modes of Access
05 Implementation of Green Strategies
06 Incorporation of Services & the Community

Emily McGowan, Xiang Zhao, Shirui Lin | design principles & strategies - Building as Healing
Patient Room Prototype

SRHS/NXT GRANT

DOD GRANTS

2003
Patient Room Prototype
Lee Hall, Clemson

2006
Patient Room Prototype
Edwards Hall, Clemson

2007
Patient Room Prototype
SRHS Renfam Lab

2009
Patient Room Prototype
Edwards Hall, Clemson

2012
Patient Room Prototype
Edwards Hall, Clemson

2013-2014
Acuity Lighting Upgrade (left)
Edwards Hall, Clemson

Trumpf Headwall Development (right)
Edwards Hall, Clemson

NXT Development of Patient Room 2020

2010
Clemson 2020 Concept
Patient Room
Clemson University

2014
NXT 2020 Concept
Patient Room
DuPont Design Center, NYC
Clemson | NXT Patient Room on Campus
Communicating with and Serving Diverse Constituencies
The graduate program in Architecture + Health at Clemson University is seeking public input on the future of development in Clemson along College Ave. Three public forums will form a critical part of a semester long service project on healthy, community planning and design for downtown Clemson. The total project will involve three distinct phases including: 1) research and analysis of Clemson, its comprehensive plan, zoning ordinance and other regulating documents along with a literature and best practice research on healthy and livable community design practices, 2) urban design proposals exploring alternative futures for the College Avenue Corridor and downtown, and 3) conceptual proposals for how development might occur in sensitive areas. Our intent is to first help all impacted constituencies in Clemson visualize what current zoning and regulating documents permit in three dimensions, and ultimately envision the potential, possibilities and physical implications of healthy community planning and design practices that are more sensitive to the unique conditions and issues facing our community.

**MCMT, SEPT. 18**
7:30 PM - 9:30 PM
Clemson City Hall Community Room

**THURSDAY, OCT. 16**
6:00 PM - 8:00 PM
Clemson City Hall Community Room

**MONDAY, DEC. 08**
TBA
Clemson City Hall Community Room
WELLNESS DISTRICT
BOONE, NORTH CAROLINA

Graduate Studies Architecture + Health
Clemson University School of Architecture

ARCH 8960 | A+H Studio

WATAUGA MEDICAL CENTER MASTER PLAN
BOONE, NORTH CAROLINA

Graduate Studies Architecture + Health
Clemson University School of Architecture

ARCH 8950 & 8970 | A+H Studio | David Allison & Byron Edwards

Working In [and Leading] Multidisciplinary Teams
AMBULATORY CARE FOR THE MEDICALLY UNDERSERVED

graduate studies architecture + health
clemson university school of architecture

ARCH 8960 Design Studio
ARCH 8920 Design Studio
ARCH 6880 Programming

SPONSOR: 2015 NCARB GRANT
REALIZING IMPROVED PATIENT CARE THROUGH HUMAN-CENTERED DESIGN IN THE OPERATING ROOM

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VOLUME 1 | 2015-2016
Integrate Learning with Theory | Research | Service | Practice
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PREMISE
The health of our (human) species is ultimately dependent on the health of our local and global ecosystems.

OBJECTIVES
- BIODIVERSITY: an increase in the total mass of organisms in a given area.
- ECOLOGICAL AWARENESS: a building that teaches empathy to people and nature.

THINKING COMMUNITY
An interacting population of various kinds of individuals (as species) in a common location.

Facing a Global Crisis of rapidly growing human population growth, habitat and biodiversity loss, we are faced with a question: What can we as architects do to help? How can we rethink our current way of living, building, and designing? Can we rethink what it means to be healthy? Can healthcare consider more than just human health? Can a building become an asset to ecological health rather than a detriment?

MY PROJECT explores the notion of responsible, healthy, ecological design.

TYLER MCELROY
HUMAN NATURE | the problem
solution: a shift in thought

Changing the way we think of health and built environment
The same way the human species has triggered a major change
in the global environment, we must now recognize and reverse
this damage. As designers of the built environment, we have a
powerful responsibility to steer our clients in the right direction.

HEALTH
Nature and ecosystems were once prosperous.

CRISIS
Rapid population growth threatens biodiversity.

RECOGNITION
Problems we face are slowly being recognized.

RECOVERY
How can we fix this?

1. Existing Site
Consists of multiple parcels separately zoned for urban
and suburban conditions.

2. Human Observation
Recognizing current drainage
easement, existing bus stop,
and parking utility residents.

3. Natural Observation
Current site vegetation
includes two mature groves
of Live Oaks and a ridge of
young Southern Magnolias.

4. Respect Site
In attempt to maintain existing
vegetation, buffer zones
created to protect sensitive
nests during construction.

Node Realization
Where vegetation buffers
intersect important nodes are
realized for site access.

5. Buildable Area
Based on analysis, a maximum
attainable building area is
discovered.
SITE PLAN [preservation]
clinically functional + naturally driven

URBAN CONTEXT:
[ref]Utilizing the Hard, Impervious, Gray-Scape.
The Charleston Peninsular was one of the first places of
development in the U.S. and is now densely inhabited by humans. This development has pushed out virtually all
remnants of the salt marsh ecology populations that once
lived here.

+ PROGRESS [ref]think what progress really means.
+ EQUALITY: achieve balance between all organisms.
+ SHIFT: contribute to a healthy, productive ecosystem.
Advance the Discipline & Industry

- Create new knowledge about relationships between architecture & health
- Translate research knowledge into usable formats for design/practice
- Disseminate knowledge through publication/presentation
- Serve as a national/international locus for the study of architecture + health
Post Occupancy Evaluation (POE) Examples
Collaborations with the Defense Health Agency and the Military Health System

Collaborators:

**Clemson University / NXT:**
Dina Battisto (PI), Deborah Franqui, Mason Couvillion, Sonya Albury Crandall, Salley Whitman, Justin Miller and Dianah Katzenberger

**Health Affairs / TRICARE Management Activity / Portfolio Planning Management Division:**
Michael Bouchard

**Joint Task Force Capital Region (JTF Cap Med)**
Lt Col Weidman and Patricia Haley

**USA Health Facility Planning Agency:**
Trillis Birdseye, Pamela Ferguson, and Brenda McDermott

**US Army Corps of Engineers**
Anthony Travia and Gary Spivey

**Community Hospital at Fort Belvoir**
LTC Gantt – POE Champion and Lead Site Investigator
Second POE Pilot for MHS
POE 8 STEP PROCESS & TIMELINE

1. Project Planning
   - Site Selection
   - Requested Facility Data
   - Quality Improvement Approval

2. Approvals
   - Commander Approval
   - Resource Impact Statement Sign-off Sheet Complete
   - Received Fort Belvoir Drawings Through WC Website

3. Archival Data & Analysis
   - Online Staff Survey Launch

4. Site Visit Prep w/POE Champions
   - POE 5 Day Onsite Visit
   - Draft Reports Reviewed

5. Survey Data Collection & Analysis
   - *POE Tool-kit Completed

6. Site Visit & Data Collection
   - *Commander Approval and Resource Impact Statement Sign-off Sheet Complete
   - *Received Fort Belvoir Drawings Through WC Website

7. Data Compilation & Analysis
   - *POE 5 Day Onsite Visit
   - *Draft Reports Reviewed

8. Final Report & Presentation

*Blue asterisks show POE milestones
REALIZING IMPROVED PATIENT CARE THROUGH HUMAN-CENTERED DESIGN IN THE OPERATING ROOM

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VOLUME 1 | 2015-2016
SAR Architecture for Health Inaugural Conference
A Chautauqua on Regional Healthcare Architecture
21 May 2010 | Maddren Conference Center | Clemson, South Carolina

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Architects, Designers, Planners, Owners, Clinicians, Engineers and Human Factors Engineers

Save the Date! Aug. 14-17, 2019

Clemson University’s School of Nursing hosts the Inaugural International Nursing Conference for Excellence in Healthcare Design: History, Design and Innovation in beautiful Greenville, SC.

Tracks:
- Measuring Outcomes.
- Patient Experience for Safety and Quality.
- Healthy Work Environment.
- Innovation and Healthcare Design.

Keynote Speakers:
- Lynn McDonald, Ph.D.; Member of the Order of Canada, Professor emeritus at the University of Guelph, Ontario, director of the Collected Works of Florence Nightingale and former member of Parliament.
- Jaynelle Stichler, DNS, RN, NEA-BCR, EDAC, FACHE, FAAN; Professor emeritus at SDSU, co-editor of HERD Journal, and research consultant for the Center of Nursing Excellence, Sharp HealthCare.
- Emily Patterson, Ph.D.; Associate professor in the Division of Health Information Management and Systems, School of Health and Rehabilitation Sciences, College of Medicine at The Ohio State University.

Conference location: Clemson University Nursing
605 Grove Road • Greenville, SC 29605

Visit www.clemson.edu/cbshs/departments/nursing/research for more information
Vision + People + Place + Program