



Lorissa Keller MacAllister, BSW, AIA, NCARB, LEED

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Education

Georgia Institute of Technology, PhD Student in Architecture, Present (Presidential and George Fellow)

University of Michigan, Masters in Architecture, 1999

Harvard Graduate School of Design Career Discovery Program

University of Vermont, Bachelor of Science, Social Work, 1995

Registration and Certifications

Registered Architect – MI

LEED 2.0 Accredited Professional

NCARB

EDAC

Awards Recognitions

University of Michigan, **Athena Award**, 2014

AIA Michigan, **Young Architect of the Year**, 2012

AIA Grand Valley, **Young Architect of the Year**, 2011

Business Review West Michigan, **Thought Leader in Healthcare**, 2011

Grand Rapids Business Journal, **40 Under Forty**, 2007, 2010, 2011

University of Vermont Outstanding Community Service Award, 1995

United Way Top Ten Volunteer in the Nation, 1990

249th Point of Light, Thousand Point of Light Appointed by President George H.W. Bush, 1990

Research Work Experience

2012- PRESENT SAMUELI INSTITUTE, WASHINGTON DC

Healing Spaces Specialist

The Samuelli Institute is a non-profit organization that has its roots in science. The foundation has been focused in particular in the human response and engagement to healing through the developing science of

the eight concepts which has formed the framework of Optimum Healing Environment (OHE): developing healing intentions, experiencing personal wholeness, cultivating healing relationships, creating healing organizations, practicing healthy lifestyles, applying collaborative healthcare, building healing spaces, and fostering ecological sustainability. As the Built Environment Specialist, Optimal Healing Environments provides significant content expertise and strategic planning contributions to the mission and goals of the Samueli Institute's knowledge translational services (KTS) and Optimal Healing Environment (OHE) activities.

Developing the Business Case for the Optimal Healing Environment

- Conducting a mixed methods study to define the monetary benefit to implementing the Optimal Healing Environments Framework. This study includes 3 sites with a series of interviews and survey's.

AMSUS Health Futures Group- WHY Health

- Worked with a team of experts to develop a series of papers to begin to develop a dialogue to transform the health system. The area of focus was to use Army Surgeon General Lieutenant General Patricia Horoho definition of Life space and translate that vision into informed design concepts that will support this vision. This document is awaiting publication.

Defining Healing Space and Environmental Sustainability

- Using a systematic interview method of architects and industry leaders to identified a universal definition and method of healing space.

Concept Analysis: Healing space

- Define, Operationalize, Measure, and Evaluate) project designed to ground the OHE framework in a firm scientific foundation by defining, operationalizing, measuring, and evaluating healing spaces

Post Occupancy Evaluation of Optimum Healing Environments (OHE)

- The purpose of this project is to identify best practices and the attributes of the physical environment that enable individual's innate ability to heal through support and stimulation of the social, psychological, physical, spiritual and behavioral components of health and human flourishing. The intent of this study is to take the mapping to the next level of system understanding through the integration of the patient experience and the engagement with the built environment.

2011-PRESENT GEORGIA INSTITUTE OF TECHNOLOGY, ATLANTA, GEORGIA

Graduate Research Assistant

SimTigrate Design Lab Business Planning and Strategy Development

- The SimTigrate Design Lab at Georgia Tech supports better healthcare at lower cost through innovative design. We develop tools, processes, data sets and evidence that allow simultaneous

design of the built environment, health IT and equipment. We build these capabilities for students, professionals and organizations, which allow us to predict and optimize outcomes, and substantially decrease the cost and risk of innovation.

Impact on Patient Satisfaction and Nursing Space Layout.

- Emory Hospital retrospective study of Press Ganey patient satisfaction scores and their relations to physical space layout. The sample size taken over 5 years period is 3,692 from two units patient units were analyzed. A quasi-empirical study was done to show relationship between the physical environment components and the satisfaction outcome using multiple linear regression and ANOVA. Two correlations of were found that supported the hypothesis that physical layout can impact the satisfaction scores of the patient. This finding provides that there is a clear correlation between room/unit layout linked to a care process of behavior and patient satisfaction. Further work can be done to identify what are the critical environmental behavioral factors “organizational environment” that can further impact satisfaction.

Army Medicine G9 Facilities Corporate Concept of Operations (CONOPS) Project

- Georgia Tech’s SimTigrate Design Lab partnered with Martin, Blanck and Associates to create for the US Army Medical Command (MEDCOM) a high-level guidance document for facility design. This document was entitled a Concept of Operations (CONOPS) which links the operational standard of care identified by MEDCOM to the needs of the physical environment identified by research and best practices. The United States Army Health Facilities Planning Agency (HFPA) G9 will use these CONOPS in their upcoming projects in the areas of Safe patient Handling and Mobility (SPHaM) and Patient Centered Medical Home (PCMH). Guidance and a template were also created for future development of additional CONOPS. The year long project was completed in April 2013. The primary objectives of this project were to create a constant high quality care and facility experience at all facilities regardless of staff and leadership turnover, availability for input and local standard variations.

Architectural Work Experience

2010 – PRESENT ENVIAH, GRAND RAPIDS, MI

President and Founder

Enviah is a design firm grounded in research and leading edge indicators that have proven results to take an organization to its next level. Lorissa is developing a new way of planning. This includes integrating operational understanding in a more preliminary planning process. Operations include clinical process/ protocols, business revenue/ reimbursable models, evidence based design and green design. This integrated planning process will help to create a guide on how businesses can strategically improve their outcomes, whether regulatory, cultural, process or financial and how space may inform them.

CORE Tool Development

- The CORE™ is a research-based, 100 metric tool Enviah uses to assess your organization's culture, operations, responsibility, and environment in order to inform change. The CORE™ Report is a snapshot in time of an organization – a tool that can be used to measure and envision the optimal environment for your workforce and empower your people to work most effectively.
 - o Our cutting edge CORE™ tool measures areas that most analytical tools ignore
 - o The CORE™ is an all-in-one tool which measures systems that inherently work together but are rarely investigated holistically
 - o Enviah provides research-backed suggestions for positive change
 - o The CORE™ Report findings are linked to satisfaction scores and HCAHPS scores. They can help reduce staff turnover, improve the patient experience, and ultimately impact your bottom line
 - o Enviah's CORE™ Report directly links metrics with positive outcomes, creating a snapshot in time and a benchmark for change that your facility can use for years to come.

North Ottawa Community Hospital, Grand Haven, Michigan

- Lead planner and Designer for the new Emergency Department at the community hospital. This 18,000 visit Emergency room is the front door to the hospital and will be designed to help improve the overall health of the community population. Looking at an embedded PCMH model of care patients the environment will be support healing and health. Total project cost is estimated at \$7 million.

Mary Free Bed Rehabilitation Hospital, Grand Rapids, Michigan

- Owner's representative and lead planner for a full facility master plan and expansion of the main campus. The LEED certified project incorporates integrated care delivery for 25 services lines with the goal of improving overall care delivery and providing smooth transitions to full rehabilitation. The 80 bed inpatient rehabilitation hospital provides full outpatient services and on-site lodging for out-of-town residents. The expansion to 80 private patient rooms and integrated service delivery is key to the success of the project, and the operational planning work was aligned with the internal quality improvement team to have full integration. Using Evidence based design principles tied directly to business outcome that were clear quantitative. These measures were identified at the beginning of the project and tracked through out and anticipated to be measured until at least a year after occupancy. Total project cost is \$68 million.

DOW Health Services Headquarters, Midland and Global, Michigan

- Lead designer and architect of a new, integrated medical-home model clinic. Worked with the team to create the optimal healing and service space for the employees of the company, integrating an evidenced-based design model and working to improve the employee's health, and the health and wellness of their families, with the intention of reducing time away from work. This project is estimated at approximately \$8 million and includes clinical exam spaces and an urgent care facility.

North Ottawa Community Hospital, Grand Haven, Michigan

- Lead consultant on planning and designing a model of a community hospital system through research funded from the Robert Wood Johnson “Aligning Forces for Quality.” Working as an owner’s representative and advocate to develop new services and growth of existing services through the alignment of operations and further development of staff and relationships. Working as an owner’s representative in the design and construction of a 120 bed Long term care facility.

Cascade Engineering LEED Recertification, Grand Rapids, Michigan

- Leading the coordination and documentation of the recertification of the LEED Platinum Office building. This assemblage also identifies areas where the rest of the nine campus buildings can begin to implement further sustainability measures.

Achieve Health Transformation, State of Michigan

- Lead Designer and developer of a tool to help track improvements of physician practice transformation toward meaningful use (CMS) and technology integration. This tool will track, problem solve, provide a road map, ongoing coaching and training for its members. Partners working on this project include Alliance for Health: Aligning Forces for Quality and Improving Performance in Practice - both funded by Robert Wood Johnson Foundation - CJ Systems, AIAG and Futures Health. This integrated team had developed a comprehensive approach to track and ultimately transform practices to improve outcomes and reduce cost.

Children’s Hospital Research, National

- Lead researcher to conduct a national scan of new children’s hospitals being constructed in the Midwest. Creating a bench marked comparison of key architectural, sustainable and operational components.

Healthier Hospital Initiative, National

- Lead Designer of the national toolkit for the tier one campaign to create healthier hospitals. Working to create the elements included in the kit to move the Nation toward operating healthier hospitals through sustainability and safety. Partners working on this project include: The Center for Health Design, Practice Green Health, Healthcare Without Harm, along with leading healthcare sponsoring organizations Advocate Health Care, Catholic Healthcare West, Hospital Corporation of America (HCA, Inc.), Kaiser Permanente, MedStar Health, and Partners Healthcare.

2003-2010 PROGRESSIVE AE, GRAND RAPIDS, MI

Healthcare Strategic Business Unit Leader

For 6 years, Lorissa built a healthcare practice in a regional full service 120 person architectural firm. The 20 person dedicated healthcare staff completed about 4 to 6 million dollars annually in design fees in the last year. The most notable project is a 34 million dollar multi-story addition to Spectrum Health Blodgett Hospital’s patient unit, ICU, and Surgery. Lorissa worked to establish key relationships with regional

facilities to provide services on an ongoing basis to facilities and the hospital executives through planning. As a result, eight of these facilities have master agreements with Progressive AE for ongoing work. Lorissa worked to create a differential process within the healthcare practice through the creation of evidence based design standards, which impact ergonomics, productivity and healing environments. There have been proven results that redesign has an impact on outcomes. Lorissa's key roles at Progressive AE included Business Development, Staffing, Key Sales, Planner, Project Manager, and Principal in Charge of all strategic relationships.

Chelsea Community Hospital, Chelsea, MI

- Project manager and planner working in collaboration with HOK of Chicago to develop a master plan to create a fully private bed facility and combine spaces to create opportunities to more fully utilize the facility and accommodate greater volumes. Total project cost defined as approximately \$80 million over five years. The expansion includes a new acuity adaptable patient units, cardiology, therapy, new emergency department and radiology.

Eaglecrest Medical Office Building, Grand Rapids, MI

- Project manager, planner and programmer. Project included renovation of the first floor of an existing 20,000-square-foot medical office building to be divided into a 12,100-square-foot In Vitro Fertilization Clinic tenant and a 7,900-square-foot Infusion Clinic Tenant. The In Vitro Fertilization Clinic included six exam spaces, one procedure room, four consultation rooms, one in vitro procedure room with six recovery bays, andrology lab, and IVF lab with required support spaces. The Infusion Clinic included 10 to 12 open infusion bays, five private infusion rooms, two patient exam rooms, and a pharmacy with IV Prep. Renovations also included upgrades to the mechanical systems in order to accommodate the higher acuity of procedure, lab, and pharmacy spaces.

Furniture Manufacturers, MI

- Recruited by executives from top furniture manufacturers to gain insight to the healthcare industry, working as a consultant on new products and research initiatives. Also worked to review promotional information to make it appropriate to the healthcare market.

Lakewood Family Medicine, Holland, MI

- Project manager and planner for a 7,000 square foot expansion project of a 10-year-old medical office building. Spaces include radiology room, small procedure rooms, endoscopy suite, exam spaces, and staff support spaces. The facility is using the latest technology to become a completely paperless office. The addition and renovations were phased into six phases to allow operations to continue while construction was occurring. The project required an orchestrated plan and well-defined documentation of the required moves. Total project cost: \$1.1 million.

McKenzie Memorial Hospital, Sandusky, MI

- CT Scan Replacement – Project manager to help modify existing CT scanner room with new equipment.
- Master plan – Project manager and planner for a facility master plan of the existing facility. This critical

care facility has 25 licensed beds with a full ER, radiology, obstetrics, surgery, cardiopulmonary, and physician office suites.

- Acute Care Support Space Renovation – Project manager and planner for 2,000 SF space relocation. With the change of the facility to a Critical Care Hospital, it no longer needed to have a Critical Care Unit ward. The beds in the ward are now used in a semi-private room setting. The remaining spaces will be converted to a handicap-accessible shower room, staff break room, office, patient waiting area, and clean storage.

Mercy Health Partners, Muskegon, MI

- Project manager and planner for ongoing design services for the campus consolidation of Mercy Health Partners and three Muskegon-based acute care facilities and surrounding medical office facilities, including but not limited to, mammography change out, and medical office relocation.
- Project manager and planner working in collaboration with HOK of Chicago to develop a master plan to consolidate three campuses. We defined a total project cost of approximately \$300 million over five years. The expansion includes a new patient tower, surgery suite expansion, and interventional radiology.
- OR Consolidation – Project manager and planner. The Mercy OR Consolidation Project is in support of the plan to close the General Campus. The project will add five PACU bays and an upgraded Nurse Station. Surgical Care Services (SCS) provides pre- and post-operative recovery (Phase 2). This portion of the project will provide improved patient flow by creating a check-in and waiting room for all outpatient surgical patients (current check-in is in a corridor at a nurse station). SCS will add eight (8) pre- and post-surgical bays, adequate medication areas, clean utilities, medical gases, and emergency power for all bays. The project will require five (5) phases to keep the existing SCS area operational. The work will be completed in late 2010.
- OB Consolidation – Project manager and planner. This project was to consolidate OB services from the Muskegon General Campus to the Hackley Campus. 43,000 square feet of existing space was renovated to relocate one C-section operating room. Also included was the renovation of the existing Labor and Delivery Unit for an additional C-section operating room and additional labor rooms. Other renovated spaces included administrative spaces, education rooms, OB service areas, and storage. There was also a new Post-Partum Unit with new nurseries and supporting spaces, education room, nurse station, nourishment rooms, and administrative space. The project was completed in three phases in order to keep the Labor and Delivery Unit operational during the renovation.

North Ottawa Community Hospital, Grand Haven, MI

- CT Scan Renovation – Project manager for a renovation involved upgrading an existing 16 Slice CT Scanner to a new 64-Slice. These upgrades included changes to the interior finishes, mechanical, and electrical systems. Renovation required the coordination of providing a temporary CT Mobile Unit in order to continue procedures during the renovation of the room. Total Construction Cost of \$131,000.
- Med/Surgical Renovation – Ongoing project management. Project involves upgrades to second floor med/surg patient rooms. Upgrades will include removal of existing hydronic and fan systems and

installing new all air system. Other improvements include upgrades to finishes and lighting systems in the unit. Total project cost estimated at \$2,400,000.

Northern Michigan Hospital, Petoskey, MI

- Master facility plan – Planner and consultant for a master facility plan update for 211-bed facility. Worked to prioritize two-phase master plan, creating guiding principles to create a community. Planning was for a new oncology center and front entry; expansion was for surgery and a bed tower. Other focus was how to expand into the other facility. Phase I implementation was \$3.8 million.
- Way-finding implementation plan – Planner for assisting in creating a vision for the facility. Included new image and branding. Created concepts for floors which follow through to the signage and way-finding of the entire facility.
- Oncology Process Improvement Event – Planner and facilitator to identify the unit's value stream and create a future state process with a supported floor plan that will embrace the new process. Approximately 14,000 SF were affected. Unit includes infusion, clinic, phlebotomy, and pharmacy. The space was redesigned and reduced by 3,000 square feet while increasing volume by 4,000 visits annually.

Radiation Oncology Associates, Lansing, MI

- Planner, designer, client principal for additions for a linear accelerator/control room, CT simulator, and shell area for a future Brachytherapy suite, with a renovation to accommodate doctors' workroom, consultation, dietary and social services, and billing/supplies spaces. Overall project cost estimated to be \$5.2 million.

Saint Mary's Health Care, Grand Rapids, MI

- Planner and facilitator of developing integrated criteria for Saint Mary's Community Campus Vision with their downtown campus of 26 acres; focused on working with the community, identifying opportunities to create a unified vision for the outlying area while integrating and enhancing the community resources
- Nuclear Medicine/PET – Project manager and planner of 2-story addition including PET scanner room, hot lab, patient prep area, patient holding, waiting, and relocation of nuclear medicine scan rooms and associated functions. Working with taking two separate department and define one shared floor for patients. This has increased satisfaction for the patients by 50% and has also improved productivity by 20%. Patients are also walking about 70% less to get the same treatment. Total project cost: \$4,000,000.
- Outpatient Pharmacy – project manager and planner for a relocation of 21,000-square-foot pharmacy. Identifying 11 flows of packaging for long term care, home infusion and a retail pharmacy. Staff now walks 70% less to do the same work. Overall square footage was decreased by 25% while increasing productivity by 30% and decreasing staff. And overall satisfaction of the staff in the in the new space is 88%. Total project cost: \$750,000.

Spectrum Health Hospitals, MI

- Blodgett Campus, East Grand Rapids, MI – Planner, programmer, and project manager for a multi-story building addition; renovation and addition of operating rooms; renovation of existing nursing units; renovation of patient care areas. Total project cost estimated at \$34,000,000 over three years.
- Spectrum West Pavilion and Urgent Care, Grandville, MI – Project manager and planner for 53,000 SF medical office building. This sustainable medical office facility has an urgent care, full service radiology suite with MRI and CT and general radiology rooms, physical therapy, physician office suite, and phlebotomy lab. This project is a Green Guide for Health Care pilot project. Total project cost is \$5M.
- A.B. Swanson Orthopedic Museum, Grand Rapids, MI – Project manager and planner for redesigned and newly-commissioned orthopedic museum. Worked with physicians and staff to update the museum and tell the story of the physician's accomplishments in the field of joint replacements. Total project cost \$100,000.
- Patient Floor 7N, Butterworth Campus, Grand Rapids, MI – Project manager and planner of an entire floor was renovated to accommodate two patient populations. There are 41 licensed beds in this medical surgery and pediatric unit. The schedule was one and a half months to complete design and construction documents with a \$2 M project cost.
- Patient Floors 2S and 4N, Butterworth Campus, Grand Rapids, MI – Project manager and planner for the orthopedic population is expanding at the campus and the 2S and 4N projects include a complete remodel of both units totaling 79 licensed beds and 53 rooms. Both units will have full rehabilitation spaces and the necessary support spaces required by code to deliver the best care possible. There is also a radiology room in one unit that will accommodate a standard DR machine. The total project cost is approximately \$6 M.
- Surgery Suite 2N, Butterworth Campus, Grand Rapids, MI – Planner, This is the renovation of approximately 5,000 square feet of sub-sterile storage and work area, including four autoclaves, radiology reading room, nurses' station, and anesthesiology workroom. Also included are the fit-out of three OR rooms and two specialty orthopedic rooms. The total project cost is approximately \$3 M. This project's phasing will include phases to not interrupt services.
- Outpatient Registration 2W, Butterworth Campus, Grand Rapids, MI – Project manager and planner. This project is the renovation of the outpatient registration area and support rooms. There were multiple phases, one that was the registration desk, large waiting room, and offices for the staff. This project was also on a tight timeline that needed to be met to accommodate the redirection of the patient flow.
- Vestibule, Butterworth Campus, Grand Rapids, MI – Project manager and planner. This project was a small renovation to the new entry to the outpatient services which would serve as the "front door" to the facility. There was a waiting vestibule added and aesthetic enhancements to have the space be more welcoming, while offering a cost-effective solution.
- Nephrology Unit, Blodgett Campus, Grand Rapids, MI – Project manager and planner for a 4-bed inpatient treatment area. Approximately 1,500 SF. Spaces include treatment area and support spaces.
- Total Joints, Blodgett Campus, Grand Rapids, MI – Project manager and planner for a 66-bed, two-unit renovation and consolidation of services. The new unit includes physical therapy and occupational therapy rooms, casting, and salon specialties room. The unit renovation included 25,000 square feet.

This project consolidated the total joints practice on 2 separate campuses. Total project cost: \$2.7 million.

- Women's Services, Butterworth Campus, Grand Rapids, MI – Project manager and planner for two renovated units. 2C unit includes the conversion of three LDR rooms to support rooms, expanding the triage beds, and consolidating the main nurse station to be more efficient. The 5W unit includes the renovation of a 34-bed unit and consolidating the nursing station to be more efficient and an expansion of the nursery area to accommodate more bassinets. Total project cost: \$2M.
- Nephrology Unit, Butterworth Campus, Grand Rapids, MI - Project manager, project architect, and planner for a redesign of Butterworth campus in-patient treatment space. Space includes treatment spaces and support spaces – approximately 2,000 square feet. Total project cost: \$120,000.

Spectrum Health Reed City Hospital, Reed City, MI

- Project manager and programmer to create a priority matrix to clarify building project direction. Proposed a new entry to the facility, expanding pre-op beds, a new emergency room waiting room, and a new 10-chair infusion therapy space. This facility is a "Plane Tree" facility and these techniques were incorporated into the new design concept. Project cost \$800,000.
- Planner and project manager for a renovation and addition to existing 2-Story "Plane Tree" Facility. Renovation includes changes to Lab, Pharmacy, Radiology (including ultrasound and stereotactic rooms), and Phlebotomy. Renovations also include major infrastructure upgrades to HVAC, Fire Protection, and Medical Gases. Upgrades also made to the finishes of the attached Medical Office Building. Building addition includes an activity room for the attached Skilled Nursing Facility. Total project cost of \$2.7 Million.

2001-2003 URS, GRAND RAPIDS, MI

Healthcare Planner

Worked as a Healthcare Planner and programmer for multi-million dollar projects ranging from \$30 Million to \$260 Million. Projects were throughout the nation and the full service firm was headquartered in Grand Rapids with over 300 people in the office. As the key planner for many of the projects, Lorissa worked at a high level with the clients to identify how capital should be spent and what the long range plan should be. URS is a 45,000 person international network of offices providing a wide range of services. The Grand Rapids Office served as the headquarters for the Healthcare Architecture work.

McKee Medical Center, Loveland, CO

- Planner and designer for conceptual design of additions and renovations to this 186-bed regional medical center. Emphasis areas include replacement of Surgery, ED/Trauma, Women's Pavilion, and Inpatient Bed (Universal Rooms). Phase I implementation: \$50 million.

Northern Michigan Hospital, Petoskey, MI

- Planner, designer, consultant for Master Facility Plan for this 142-bed regional medical center. Priority need identified for new 36,000 square foot addition accommodating a new replacement Emergency

Department and new Heart Center facility. Miscellaneous elements include Ambulatory Surgical Facility, Clinical Lab, Acute Rehab Unit, four Cath Labs, miscellaneous non-invasive diagnostics, an integrated 120-car parking deck, and Entry/Lobby. \$32 million.

Replacement Children's Hospital, MI

- Planner, programmer, and designer for concept and schematic design of a replacement facility for an existing 150-bed hospital. Eight-story tower (223,600 square feet) with integrated 350-car parking deck. \$76.6 million.

Saint Mary's Medical Center, Saginaw, MI

- Planner and designer for a comprehensive Master Facility Plan for this 268-bed urban tertiary medical center. Emphasis areas include new Heart Center, Surgery, ED/Trauma, Neuro Specialty Center (Field Institute), and 240 Inpatient Bed Replacement (Universal Rooms). Phase I Implementation: \$58 million.

Spectrum Health Outpatient Cancer Center, Grand Rapids, MI

- Planner for new comprehensive two-story cancer center. The facility will accommodate physician office and research space, in addition to the consolidated radiation and chemical therapy programs for two previously separate hospitals. 90,000SF /\$35 M

Spectrum Health Master Plan, Grand Rapids, MI

- Planner and Designer for initiative of a multi-year \$260 million strategy, allowing consolidation of acute inpatient care on one urban tertiary site for two merged hospitals. Phased strategy includes expansion and/or relocation of all major clinical, inpatient care, administrative and support facilities associated with expanding one existing campus. Phase 1: \$93M.

Spectrum Health Reed City Campus, Reed City, MI

- Planner and consultant for a comprehensive Master Facility Plan for a rural hospital. Findings/recommendations included renovation/expansion to Emergency, Specialty Clinic, Replacement Inpatient Beds (Universal Rooms), and Plant Infrastructure upgrade. Phase I: \$6 million.

University of Florida Orthopedic and Sports Medicine Institute, Gainesville, FL

- Programmer, planner, designer and senior LEED representative for a 130,000 square foot new multi-specialty facility on a Greenfield site located on the extended university medical center campus. Components include clinical orthopedics, radiology, laboratory rehabilitation, surgery, 23-hour stay unit, and specialty sports medicine. Facility is designed to LEED certified standards. \$28 million.

Zeeland Community Hospital, Master Facility Plan, Zeeland, MI

- Planner and consultant for a comprehensive Master Facility Plan. 57-bed community hospital. Emphasis areas include all new Acuity adjustable patient tower, emergency and radiology expansion, and new main lobby. Two site expansion opportunities were presented along with an entire replacement opportunity.

Zeeland Community Hospital, Replacement Facility, Zeeland, MI

- Programmer, planner and sustainable design consultant of this 140,000 SF, replacement hospital located on a Greenfield site on the border of the city limits. The facility will include 57 private patient rooms (universal rooms). Outpatient diagnostic services along with three operating rooms and a 27,000 visit ER is being planned. All departments will be replaced in the new facility. This includes all administrative functions and surgery, radiology, clinics, cardiopulmonary, pharmacy, and lab. The building and site are being developed as sustainable elements sensitive to the environment. The facility will be designed to LEED certified standards. \$36 million.

1999-2001 INTEGRATED ARCHITECTURE, GRAND RAPIDS, MI

Project Architect

Worked as a project Architect for retail malls and interior fit outs of high tech companies and a bank. Put together presentation materials of schematic work and designed furniture pieces.

1995-1996 NORTHERN ARCHITECTS, BURLINGTON, VT

Intern Architect

Assisted as an intern Architect in the programming phase of a mixed-use State Office Building and a historic addition to an existing University of Vermont Audiology Clinic.

1994 MEDICAL CENTER HOSPITAL OF VERMONT, BURLINGTON, VT

Worked as a medical social worker for three departments (emergency room, neurology and general surgery). Carried a case load of 40 patients during a 35 hour per week internship.

Presentations and Publications

Representing nationally the industry of healthcare sustainability including how hospitals are being more sustainable in their facility operation and also in design. Lorissa has also shared her insights on how the right planning in healthcare care results in positive outcomes.

Upcoming Presenter "HCAHPS: A Valuable Opportunity for the Facility Management Team"

51st ASHE Annual Conference and Technical Exhibition, Chicago, IL. 4-6 August 2014

Upcoming Presenter "Physical Environments-Impact Satisfaction with Care"

2014 Healthcare Design, San Diego, CA. 16 November 2014

Upcoming Presenter "The Intersection of Evidence-Based Design and Healing Spaces—Is There a Distinction?"

2014 Healthcare Design, San Diego, CA. 17 November 2014

“Theory Development: A Predictive Model for Creating Healing Environments”

EDRA 45, New Orleans, LA. 29-31 May 2014

“Healthcare: Translating Evidence into Design Decisions for Improved Outcomes”

Lecturer, University of Michigan College of Architecture, Ann Arbor, MI. 28 March 2014

“Experiences of Space: How Environments Promote Optimum Health”

Key Note Presenter, University of Michigan Alumni Council, Ann Arbor, MI. 29 March 2014

“Thriving in touch times: Using research and simulation in design to improve value”

Presenter, AIA Michigan Healthcare Conference, Traverse City, MI. 22 March 2014

“Does room design influence the patient’s perception of care and ultimately their satisfaction?”

Presenter, Press Ganey National Client Conference, Orlando, FL. 17 November 2013

“Care, Culture, and Environment...The Total Transformation”

Presenter, Healthcare Design 2013, Orlando, FL. 17 November 2013

“Understanding and Visualizing the Impact of Healthcare Facility Design on Patient Satisfaction”

Presenter, Healthcare Design 2013, Orlando FL. 16 November 2013

“Off to See the Wizard – The Evidence-Based Road to Financial Success”

Presenter, Environments for Aging Conference, New Orleans, LA. 9 April 2013

“Creating Healing Spaces: How Your Building Can Be Your Partner in Healing”

Webinar Presentation for the Veterans Health Administration Leaders and Clinicians, presented by the Samueli Institute, 27 September 2012

“Creating a Healing Experience: Improving Outcomes and Delivering Value through Healing Oriented Practices and Environments”

Workshop Leader at the Health Forum and the American Hospital Association Leadership Summit, San Francisco, CA. 19-21 July 2012

“Built Environment and Health”

Presenter at the Samueli Institute Optimal Healing Environments Scientific Symposium, Washington DC 10 Oct 2011

“Design that Performs and Improves Productivity”

Presenter 7th World Congress on Design and Health, Boston, MA. 6-10 July 2011

“Environment of the Senses”

Presenter at the Samueli Institute Optimal Healing Environments Scientific Symposium, Washington DC
10 May 2011

“RX to Design Results”

IIT Design Research Conference, Chicago, IL. May 2010

“Healthy Design: Construction and Operations”

Spectrum Health Hospitals, Grand Rapids, MI December 2009

“Taking the ‘LEED’ How Michigan Hospitals Are Leading the Charge in Green Buildings”

Michigan Hospital Association, Ann Arbor MI. October 2009

“Sustainable Operations”

Healthcare Design 2009, Orlando, FL

“Your Rx to Lean Design,”

NeoCon 2009, Chicago, IL June 2009

“Design Beyond Your Borders”

(Saint Mary’s Health Care Master Plan), CleanMed, Chicago, IL, May 2009

“Green Healthcare Operations,”

Teleconference Presenter, Healthcare Admin Summit, March, 2009

“How Green is Your Facility? Use of the Green Guide for Health Care for Tracking Environmental Improvement Strategies,”

Webinar Presenter, Facility Care magazine 2009

“Design Beyond Your Borders”

(Saint Mary’s Health Care Master Plan), Presenter, AMD3 Foundation, Patient and Family Centered Care, Pittsburgh, PA, May, 2008

“Green Guide for Health Care Operations Section Revisions,”

Poster Presentation, AMD3 Foundation, Patient and Family Centered Care, Pittsburgh, PA, May, 2008

“Green Guidelines for HealthCare – Operations Section,”

Presenter, 2008 Nichols Green Facilities Conference

“Version 2.2 Operations Revision,”

Presenter, Green Guide to Health Care/H2E Green Building Teleconference, February, 2008

“Sustainability: The Basics,”

Clean Design and Operations Magazine, Spring 2007

“Indoor/Outdoor Chemical Pollutants” and “Furniture and Medical Furnishings,”

Technical Briefs, Green Guide for Healthcare, 2007

“Integrated Design in Construction and Operations,”

Presenter, Green Guide to Health Care/H2E Green Building Teleconference, May 2007

“Green Guidelines for HealthCare,”

Presenter, 2007 Nichols Green Facilities Conference

“Integrated Design and Operations for Improved Environmental Performance,”

Panelist, 2006, Clean Med Conference, Seattle, WA

“The Business Case for Sustainable Healthcare,”

Presenter, 2005, Air Force Health Facilities Division National Symposium, Anaheim, California

“Benefits of Sustainable Healthcare Design.”

- Presenter, 2005 10th Annual Michigan Sustainable Business Conference – Sustainable Solutions for Business, Ann Arbor, MI
- Presenter, 2004 American Society Healthcare Engineering International Federation of Hospital Engineering Conference, Orlando, FL

“Arts as Celebration,”

Presenter, 2004 MANNA Art is Everywhere the Artist in us All, Grand Rapids, MI

“How to be Sustainable in Building and Design,”

Presenter, 2004, 9th Annual Michigan Sustainable Business Conference, Ann Arbor, Michigan

“Being Green in 25 Sustainable Steps,”

Presenter, 2003 United States Green Building Council Greenbuild, Pittsburgh, Pennsylvania

“The Color of Money: Understanding Costs Associated with LEED Standards,”

Presenter, 2003 Construction Owners Association of America, Chicago, Illinois

“Facing the Challenges of Large Multi-Phased Projects,”

Presenter, 2002, Construction Owners Association of America, Las Vegas Nevada

Juror

University of Michigan Wilike Portfolio 2014

The Center for Health Design Remodel and Renovation 2011

Clean Med Awards Review Committee 2010

AIA Grand Valley Sustainability Award

Professional and Non for Profit Affiliations

Decade, Board of Directors, 2013-Present

Green Guide for Healthcare, Steering Committee, Operations Committee Co-Chair, 2003 - 2011

- Redeveloping the operations sections of GGHC and working through the pilot portion of the project and working to establish metrics that would help to build the baseline of performance for all facilities across the world.

Nokomis Foundation, Board of Directors, 2010-Present

Grand Rapids Child Discovery Center, Board of Directors, Board Chair. 2009 - 2013

Grand Rapids Symphony, Board of Directors, 2009 - present

Amyotrophic Lateral Sclerosis (ALS) Center in Grand Rapids, Advisory Council, 2008 - present

Saint Mary's Steering Committee for the Campaign Planning Study, 2008

Alliance for Health Planning board, Member, 2007 - 2013

Aligning Forces for Quality Grant Steering committee (funded by Robert Wood Johnson Foundation)

Surge Medical Solutions, Board of Directors, 2005 – 2007

Habitat for Humanity – Green Design Standards Construction Committee 2004

Cascade Engineering, Board of Directors, 2004 – present

Gilda's Club of Grand Rapids, Board of Directors, 2003 – 2010; Steering Committee Co-Chair

ICCF "My Healthy Green Home," Committee Member, 2003

Cascade Charter Township Planning Commission, Member 2002 – 2007

Keller Foundation, Vice President, 2000 – present

Celebration of the Arts, Co-Chair, 2000 – 2010