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## Nest - caring for the caregiver

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Ashley Whitehead MFA Thesis Project May 2016 VCUarts Interior Design



A thesis submitted in partial fulfillment of the requirements for the degree of Master of Fine Arts at Virginia Commonwealth University.

Ashley Whitehead

B.S. Marketing Management Virginia Polytechnic Institute and State University, 2003

M.F.A. Interior Environments Virginia Commonwealth University, 2016



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To the teachers who inspired and guided me |

Chris Arias, Eleanor Barton, Jillian Chapin, Christiana Lafazani, Rab McClure, Shari Perago, Sara Reed, Erin Richardson, David Shields, Emily Smith, Rob Smith, Annie Thompson, Roberto Ventura, and Camden Whitehead

To those who accompanied me on this journey |

Leah Embrey, Thomas Kennedy, Nilufar Makhamatova, Merian O'Neil, Jessie Walton, Eline Warren, and Sarah Webb

To my family and friends who provided endless love and support

and

To all caregivers who give tirelessly of themselves. May you find hope, strength and peace.



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manifesto

## I believe



in the simplicity of design.	Beautiful architecture is a result of a quiet simplicity. The power of the architecture lies in the simple elements it is made up of - lines, planes, voids and masses.
in the beauty of the process.	I have uncovered the wonder in the design process. There is growth to be found in everyday actions, in the repetitive motions.
in the healing power of design.	There is a link between our consciousness and the built environments that we occupy. How we experience these environments affects us mentally, physically, and emotionally. Therefore, as a designer, I have the ability (and responsibility) to design and affect the consciousness of all who occupy these environments

## introduction

### abstract

Today, more than ever, there exists an overlap between hospitality and healthcare industries; with the impact being felt in the way hospital interiors are designed. This influence impacts the patient's experience but focuses very little on the experience of the caregiver. Caring for a sick child takes an emotional, mental, and physical toll on a family (Gulwadi, 2009). It is especially challenging to care for a sick family member when away from the comfort and security of the family's private home. This project explores that challenge through the interior design of a space that, for both patient and family, is restorative, healing, and encouraging. It is a space that assists a family in caring for their loved one.

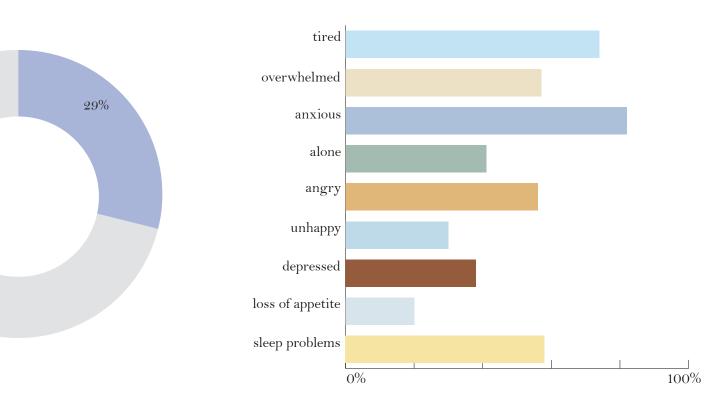
The VCU Medical System continues to expand. With this comes an even greater need to provide a place of healing for families to stay while their children/siblings are in long-term care. From 2010 to 2012 Children's Hospital of Richmond at VCU increased its pediatric specialist by 20 percent. In 2010 VCU opened a new pediatric emergency room opened, the only one in Central Virginia to offer 24-hour access to all pediatric specialists (Children's Hospital of Richmond, 2015). As of March 2016 the newly renovated 640,000 square foot Children's Pavillion opened its doors.

Creating the optimal environment for emotional and mental healing has its challenges. A multi-prong approach is needed; one where psychology and design work together to create an optimal space of healing.

Precedents such as the Ronald McDonald House of Richmond and British Columbia, support what is needed in terms of pyschological support. A literature review of healing spaces, the merging of healthcare and hospitality architecture and design, caregiving psychological and emotional needs, and facilities in urban environments, will establish what is needed in order to provide s space where caregivers are permitted to heal.







% of U.S. adult population providing care to someone who is ill, disabled or aged

symptoms of psychological distress + health consequences where the child is the primary care receiver

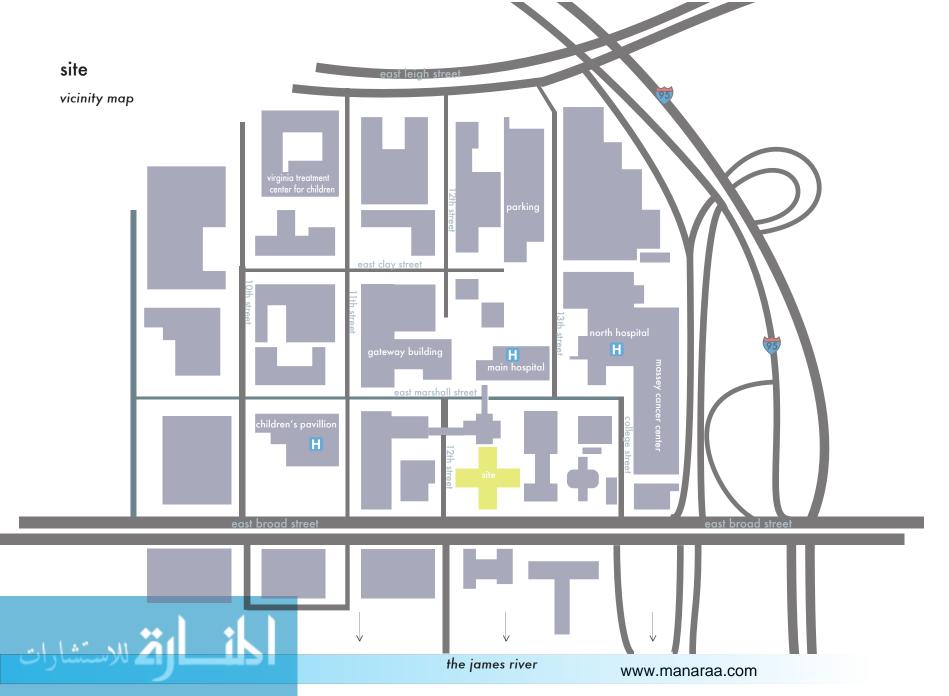
"architecture is bound to a certain situation. and i feel like the site is a metaphysical link, a poetic link, to what a building can be."

stephen holl



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## site





The Medical College of Virginia has steep ties to the Richmond area. Founded in 1838 as the Medical Department of Hampden-Sydney College, 46 students enrolled in the first class lasting from November 5, 1838 – April 4, 1839. Students paid \$20 to the professors for each of the six courses (VCU Medical Center, 2015). Since then VCU / MCV has become a leading educational instituion.

VCU has expanded its research programs significantly over the past decade and has over \$255 million in sponsored research (VCU Medical Center, 2015). The medical campus is situated on the edge of the downtown area and Shockoe Bottom. Downtown Richmond is host to government agencies, numerous businesses, including several Fortune 500 companies such as Dominion Resouces, MeadWestvaco and Universal. There are a plentiful amount of restuarants, bars and nightclubs, in addition to housing for VCU

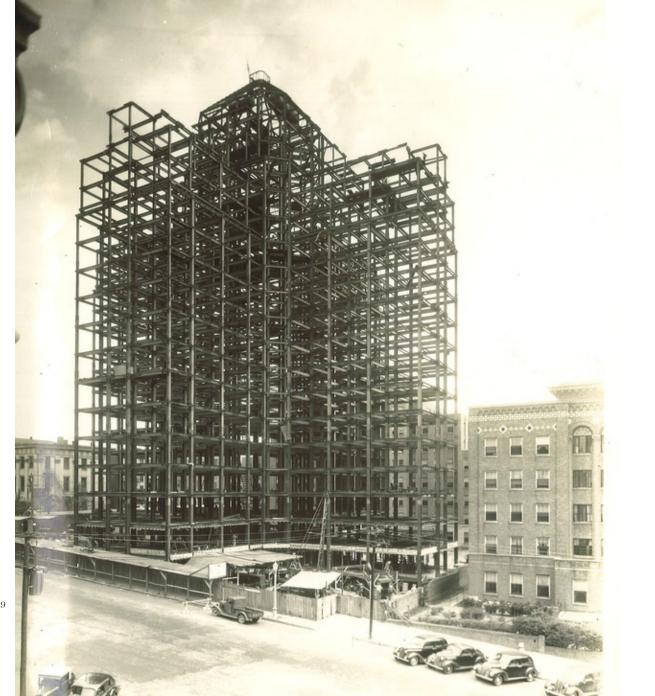
view of the MCV medical campus from Shockoe Bottom

The grand state capital, in its classical revival architectural style, is situated directly across from medical campus. Down the hill, continuing along Broad Street, is Shockoe Bottom. Shockoe Bottom has recently benefited from urban renewal and now features farmers markets, various housing options and restaurants. site building

لألم للاستشارات

Address | 2001 E Broad Street Current Use | VCU West Hospital Year Built | 1941 Architect | Baskervill & Son Buiding Type | IIA Occupancy | "B" Business Total Number of Floors | 18 Total Square Feet | 300,000 sq. ft. (gross)

steel framing during construction circa 1939



The VCU West Hospital was commissioned by the Public Works Administration in 1941 for \$2.5 million (In the Tradition of MCV, 2015). Initially the hospital housed 600 beds and served as a beacon for the MCV medical community. Cruciform in shape, the building distinguishes itself from the others surrounding and rather any building in downtown Richmond. It serves as an abutment between the MCV campus and the plunge downhill to Shockoe Bottom. The rich red brick exterior dominates, however carefully placed decorative touches add greater appeal. The Art Deco inspired bronze entrance door grills feature scenes from major milestones in medical history. Surrounding the doorways is a soft sandstone.

The building currently houses various clinical, administrative and support servies of the VCU Medical Center.







exterior stone



exterior brick detail



broad street exit doors



bronze door detail



bronze entrance doors



bronze grill door detail

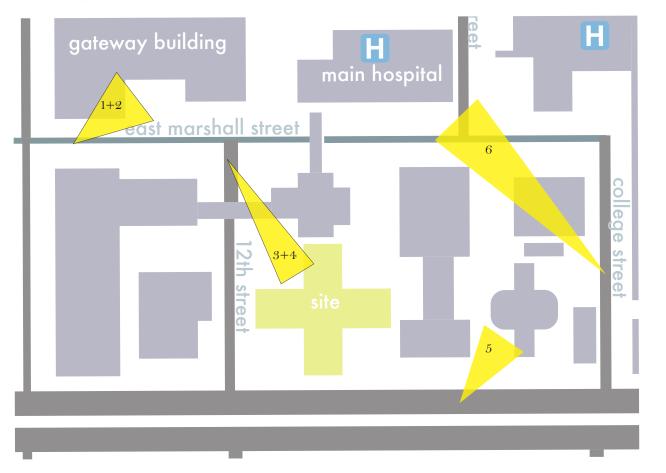


central lobby area / elevator bank

## site

views in the immediate vicinity

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1 gateway building exterior



2 gateway building walkway to mcglothin medical center

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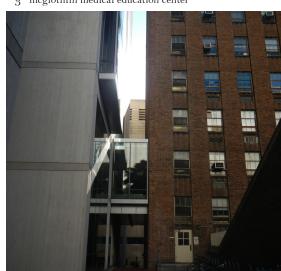


3 mcglothlin medical education center



5 monument church





4 connection between mcglothin medical center + west hospital



6 egyptian building with main hospital behind

"it's not the beauty of the building you should look at; it's the construction of the foundation that will stand the test of time."

david allen coe



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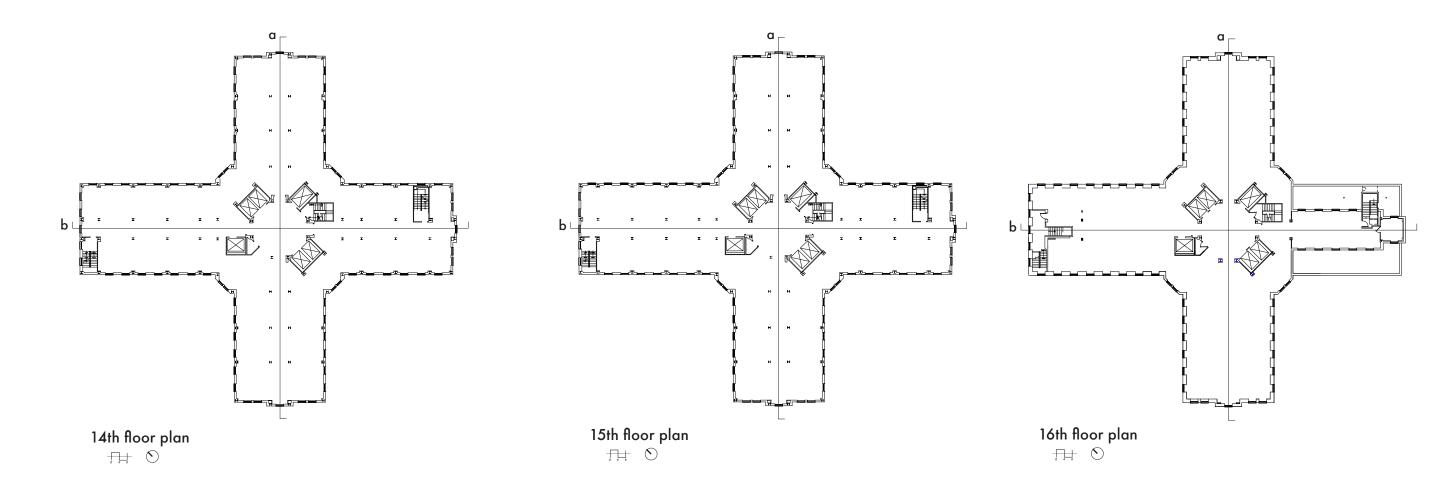
# building analysis

## building analysis

## floor plan

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The building is comprised of 18 floors, totaling approximately 300,00 square feet (gross), however this program utilizes only floors 14 through 16, approximately 48,000 square feet (gross). With windows that run along the perimeter of the building, facing all directions, these upper floors not only offer spectacular views, but are conducive to a program that focuses on natural light.



## building analysis

section

a | north / south section

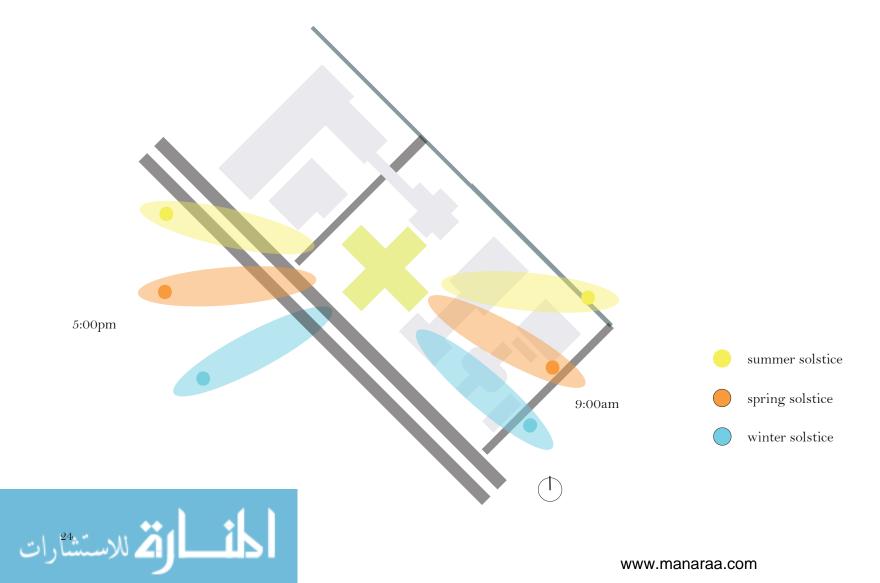


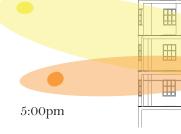
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b | east / west section

## building analysis

sun study

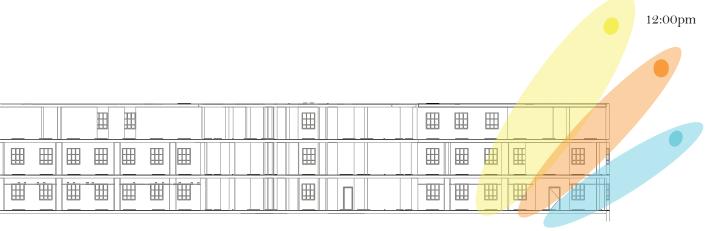






9:00am

east / west section



north / south section

"the beginning is the most important part of the work."

plato



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## program

## program

space	description	ff+e	users	sq ft. per person (net)	max occupant load	total area (sq. ft)	occupancy type
main lobby	serves as guest check-in, impromptu social gatherings, wi-fi access throughout	reception desk, sofas, lounge chairs	parents, siblings, patient, instructors, clinical staff	20	50	1000	A3
(6) standard guest room w/ private bath	king bedroom, amenities with relaxation in mind	bed (king), desk, chair, tv, credenza, drawers	parents, siblings, patient	300 (total)	4	1800	R2
(12) suite w/ private bath	two bedroom suite with seperate living space and kitchenette	king bed, bunk bed, desk, chair, tv, credenza, drawers, sofa, lounge chairs, kitchenette (sink, full size refridgerator, stove, dishwasher)	parents, siblings, patient	650 (total)	6	7800	R2
(2) community kitchen	prepare meals with other families, social spot	(2) stoves, (2) refridgerators, dual sink, cabinets, island unit, bar stools, dining table, dining chairs, lounge furniture	parents, siblings, patient	15	20 (per floor)	1800	A2
eating + gathering hall	dining hall with flexible seating, social hub, connection zone	dining tables (various sizes), dining chairs, sofas, lounge chairs, coffee tables	parents, siblings, patient, instructors, clinical staff	25	60	1800	A2
kitchen	food preperation	sink, counters, storage, ovens	general staff (kitchen)	13 (sq. ft. per seat)	10	700	A2
exercise	work out space	treadmills, ellipticals, weights, stationary bikes	parents, siblings, instructors	30	20	760	A3
yoga	space for mind, body, and soul connection	storage units	parents, instructors	30	20	900	В
reflection space	space for reflection and contemplation	bench seating	parents, siblings, patients, instructors, general staff, clinical staff	30	60	1500	A3
arts + crafts	space for expression and creativity	craft tables (mix of high and low), chairs, storage, sink	parents, siblings, instructors	15	28	600	A <i>3</i>
(4) clinical advising (individual)	private one-on-one room	table, chairs, lounge chair(s)	parents, siblings, clinical staff	50	3	600	В
(1) group counseling	education and peer support	chairs, long table	parents, siblings, clinical staff	20	15	300	В
staff office	private space for staff to unwind	table, chairs, kitchenette (sink, full size refrigerator, dishwasher)	instructors, general staff, clinical staff	10	30	350	В
•• .]	•1 )						
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#### adjacency matrix

program user profile

parent(s) of patient

whether as a couple, single parent or a parent traveling without spouse

general staff front desk, housekeeping, culinary, etc.

sibling(s) of patient

range in age but most likely under 18

instructors yoga, general exercise, mindfulness, etc.

specialized medical staff

child receiving treatment through the VCU medical system (occasional visit)

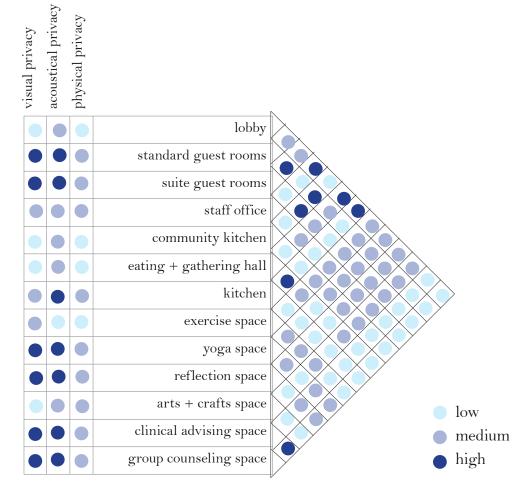
patient

psychologist, dietitian, etc.

Important adjacencies are considered in order to make space plan decisions. These adjacencies analyze how to use proximity to create emphasis, as well as consider visual, acoustical and physical privacy.

This matrix shows the importance of privacy in the advising/support areas, as well as guest rooms and other quieter spaces such as yoga and the reflection space. Important adjacencies such as the proximity of the guest rooms to community spaces is shown.

المتقارات



"whatever great things we build, end up building us."

jim rohn



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# precedents

## precedents

maggie's centre west london



#### architect: rogers stirk harbour + partners location: london, england year built: 2008

"Architecture and art do not themselves save The exterior of the West London centre is cancer patients, but they can amplify and painted a bright brick red. The kitchen is the heart of the building with a long table ethos of an institution in a positive direction" (Domus, 2015). These are the wise words of for cancer patients and loved ones to share their experiences. The roof is a metal slab Charles Jencks. His wife, Maggie Keswick Jencks, died of breast cancer in 1995. Before perforated by wide skylights which allow she died, Maggie and Charles founded natural light to penetrate into the heart of the building, its inner paths and communal spaces Maggie's Centre; an information and support center for those living with cancer and (Domus, 2015). Sunlight is a welcome relief to the harsh flourescent lighting of the hospital. their care-givers. Located in various cities throughout the UK, Maggie's Centres are a There is a strong indoor/outdoor connection place to meet experts, consult the internet and via various courtyards throughout the space. libraries or attend group therapy. This precedent illustrates the importance

Maggie's Centres are typically located adjacent to a hospital and within an urban context. The West London Maggie's Centre is directly adjacent to the Charing Cross Hospital, for example. The centre's interior and exterior counter-balance the cold, austere architecture of the nearby hospital by using the concept of a welcoming home to drive the design.

facade of building looking into dining area

that design, specifically as it relates to natural light, has on physical, emotional and mental well being of those under stressful circumstances. Connection to those around you, as well as to place, is established through the design.



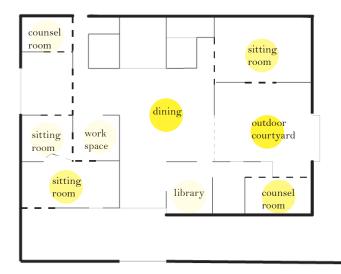
exterior view



dining area

## precedents

maggie's centre west london





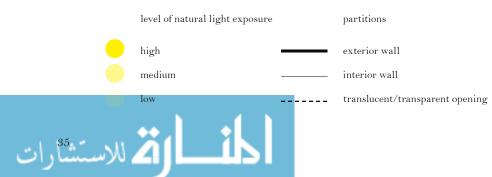
roof plan





#### sitting room

## deconstructed plan



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dining area

sliding doors offer flexible space



outdoor space



#### architect: unknown location: richmond, va year established: 1980

The Ronald McDonald House serves as a place to stay for families with hospitalized children who are receiving treatment. Guests are encouraged to make a nominal nightly donation, however no family is ever turned away for inability to pay. Currently there are 322 Ronald McDonald's Houses in 57 countries and regions (Ronald McDonald House Charities, 2015).

Situated on historic Monument Avenue, in the heart of Richmond, is the city's Ronald McDonald House. The basement level features a play space/den, staff office, and laundry room. Reception, living space and an expansive kitchen are on the main level. 9 bedrooms with shared bathrooms occupy the 2nd level. The 3rd level feautures a small common area. The average stay is 14 days, with some staying as short as one night, others 6 to 8 weeks, and some as long as one year. Families must be referred by the hospital in order to stay at the home.

exterior of house

As Executive Director of RMC Richmond, Kerry Blumberg, adds "the hospitals are our care partners..working together to provide the best possible care for the patient and their family" (personal interview). The highly rated MCV/VCU medical system not only means many east coast region families to the Richmond House, but also international families.

The House offers various programs to bring families together such as birthday celebrations, pet therapy, movie night, board games, and arts and crafts. There are no televisions in the individual guest rooms. Connection is an important component of the House program.

The House plays an important role in establishing the program of Nest. Understanding of the profile and needs of those families who stay in the Richmond Ronald McDonald House is paramount.



guestroom



kitchen/dining



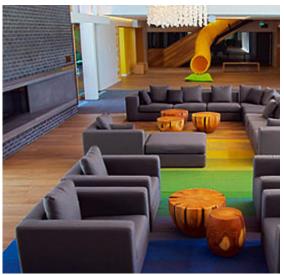
### architect: michael green architecture location: vancouver, british columbia year built: 2014

Similar in program to the Ronald McDonald The house is divided into four pavillions House of Richmond, the Ronald McDonald (Forest, Beach, Mountain and River) with House of British Columbia boasts a bit adjoining common spaces. Each pavillion has a shared professionally equipped kitchen for more additions not only in rooms, but in individual families to make meals. There are amenities as well. Able to accomodate up to 73 families, the house is one of the top 10 also two dining rooms to encourage families Ronald McDonald Houses in the world in to interact with one another. terms of size. "It's on the world stage for the The healing power of play is stressed in uniqueness of its construction, the uniqueness various areas of the house; one being a of its function and the amenities to families" slide from the second to first floor. An arts said Richard Pass, Ronald McDonald House and crafts room is featured as well. An chief executive officer (Zacharias, 2015). indoor fitness center reminds parents of the importance to be active, especially during stressful times. Secure wi-fi zones and computer stations are stiationed throughout Hospital. Families were interviewed during the house.

While the previous house was not near the hospital, the new home is located on the grounds of the British Columbia Children's the intial process of finding an alternate location and the top priority was proximity to the hospital. This provides an easier opportunity for families to rest when able.

facade of building looking into living space

The Ronald McDonald House of British Columbia serves as an important precedent as it relates to the program of Nest. Amenities such as shared kitchens on guest room floors, arts and crafts space, indoor fitness center and wi-fi zones will all be important features in Nest.



living area



dining

## precedents

ronald mcdonald house of british columbia



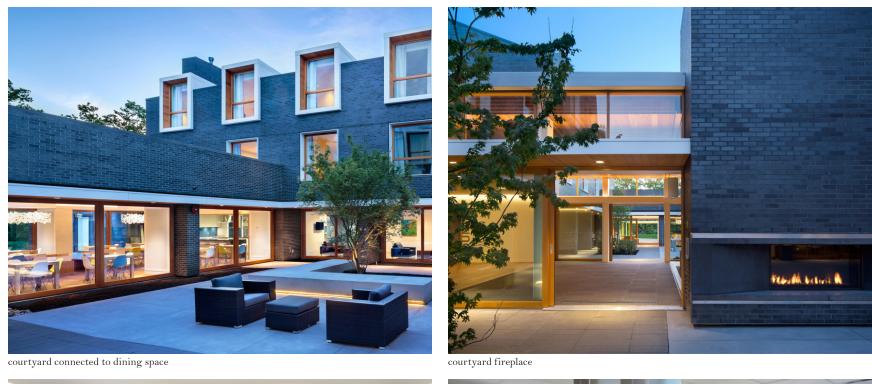
model illustrating four housing pavillions with courtyard connection



courtyard



exterior





play zone





community kitchen

"the process i go through in the art, and the architecture, i actually want it to be almost childlike. sometimes i think it's magical."

maya lin



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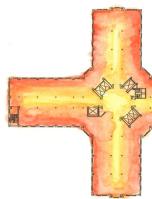
# exploration

## exploration

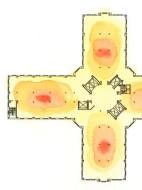
### initial concept studies

## exploration

watercolor / ink and vellum studies



consistent high energy on perimeter less energy radiating inwards



(4) equal zones with high energy ring in center less energy radiating outwards



strength

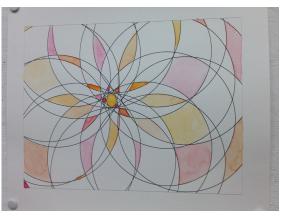


connection

embrace

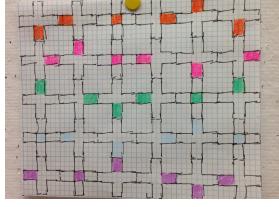


envelop



flow





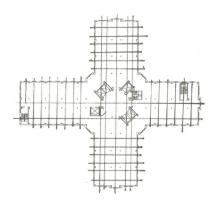
repetition



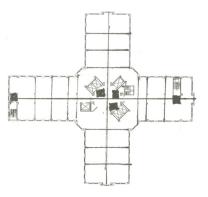




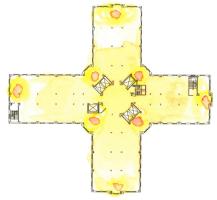




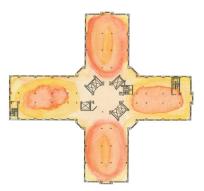
fenestration parti



column + central axis parti



high energy points in "end" zones and in center "corners"



high energy ring in center of east + west zone high energy ring along exterior of north + south zone

## exploration

wants, needs + desires

#### users

seeks social interaction with others experiencing similar feelings needs to taks time for self reflection wants to feel that the space is a refuge has the desire to have control over their environment desires to be nourished - mind, heart, body and soul wishes to be in a restorative environment

#### building

to provide light and warmth to its occupants through its expansive stretches of windows desires to be connected to the medical buildings surrounding desires to be a prominent fixture on broad street brick exterior desires to communicate strength and support cruciform shape communicates a central axis the interior of the building desires to come alive, to be open + accessible wants to showcase its spectacular views of the urban and natural

landscape

#### program

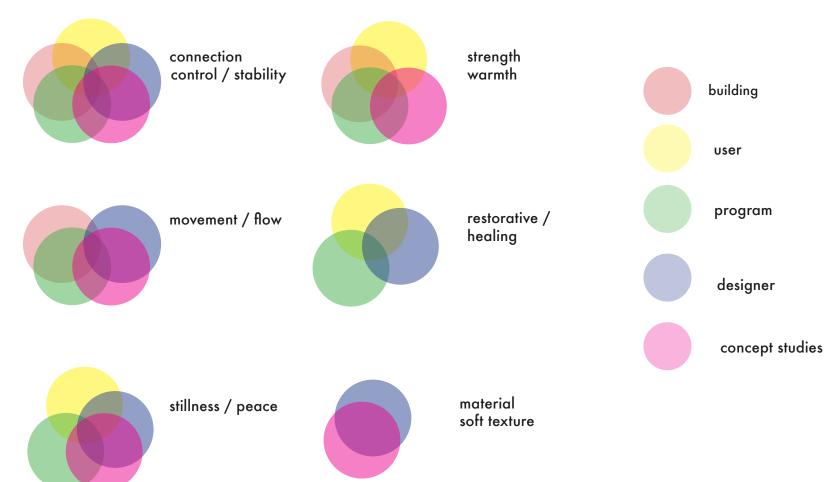
desires to embrace connection + community should have flexible spaces should provide creative outlets for users should promote healing in more ways than one should inspire play should promote movement should promote tranquility

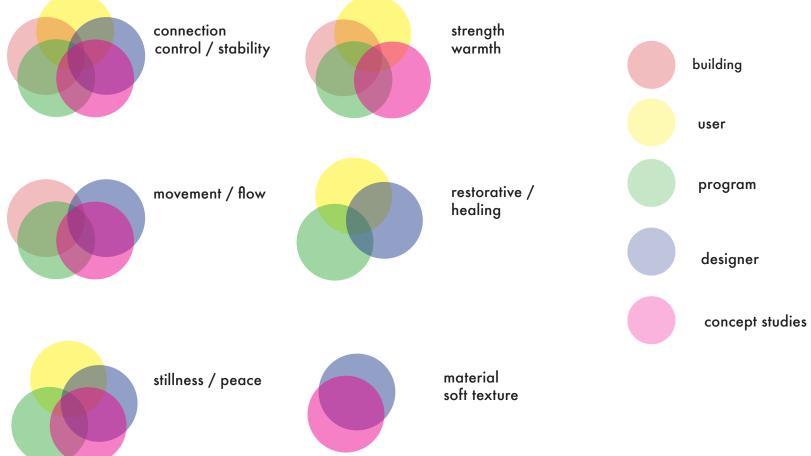
#### designer

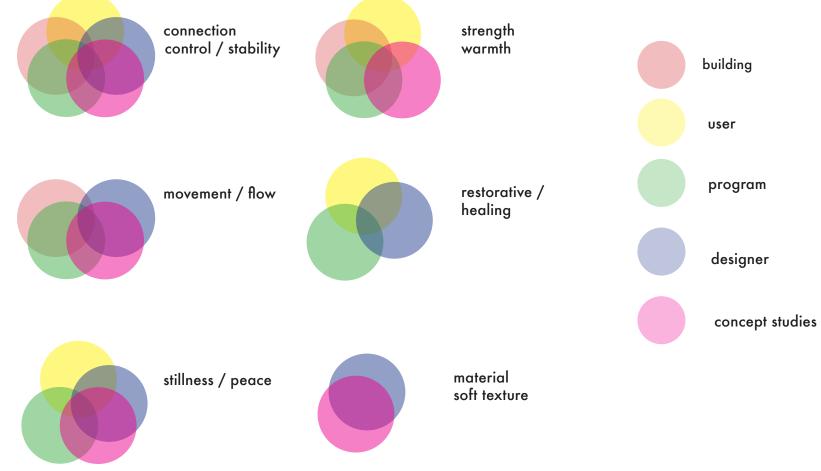
seeks to create healing spaces seeks to utilize a variety of materials with various textures seeks to create a haven for users seeks to provide spaces that encourage connection amoung users seeks to embrace the central axis of the building seeks to experiment with expand and contract seeks to create a space that invites ownership by the user

## exploration

overlaps









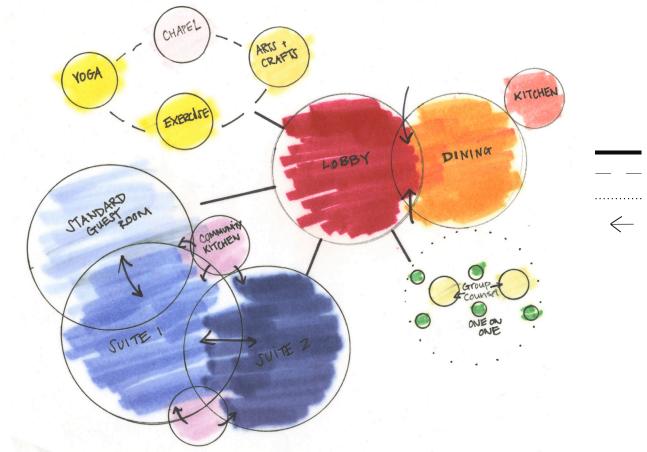
## exploration

### bubble diagram

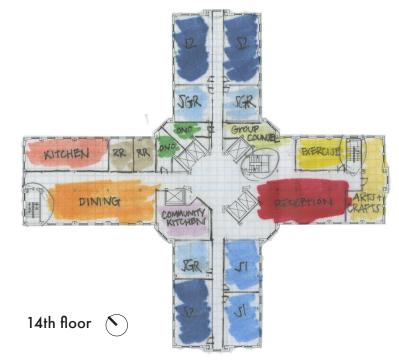
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## exploration

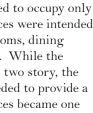
### preliminary block planning

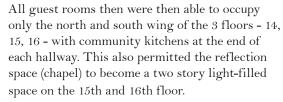


- strong connection medium connection ..... private
  - overlap



Initially the program was intended to occupy only 2 floors - 14 and 16. Certain spaces were intended to be double height - the guest rooms, dining space, and main lobby (reception). While the dining space ultimately remained two story, the guests rooms and main lobby needed to provide a more intimate feel, thus both spaces became one story.





The kitchen and restrooms moved to the center of the west wing with seating circling around. This allowed for as much light as possible to fill one of the main connection spaces. The glass-walled exercise room was stacked on top of the kitchen to allow connection to those below. Above the exercise room moved yoga and all counseling rooms, creating an entire wellness wing.



"architecture is the learned game, correct and magnificent, of forms assembled in the light."

le corbusier



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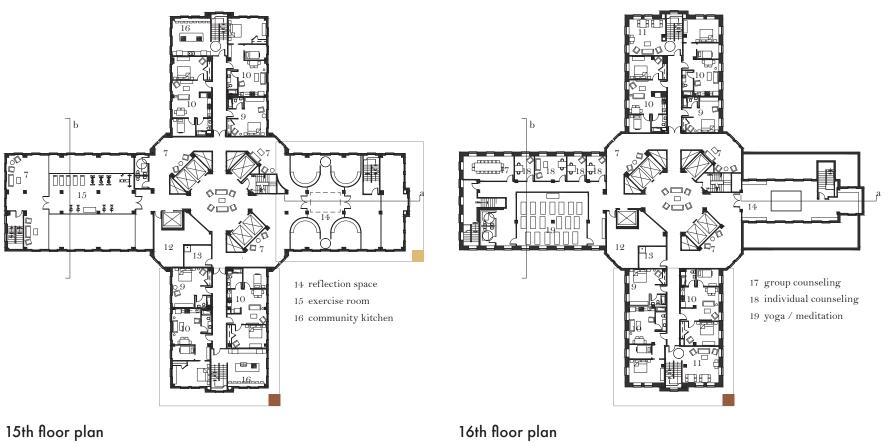
# discovery

## discovery final floor plans

#### concept

this project celebrates the stength of the collective. how one comes together to form many. it explores how the individual and the whole are seperate and yet how they play together. the space reflects a consideration for the flexibility and control that is needed by the individual components of the project - the users, the building, the site, the program - and how ultimately by providing a balance between both flexibility and control, ideal support of the collective is achieved. this is done through a consideration for repetition, scale and exposure.







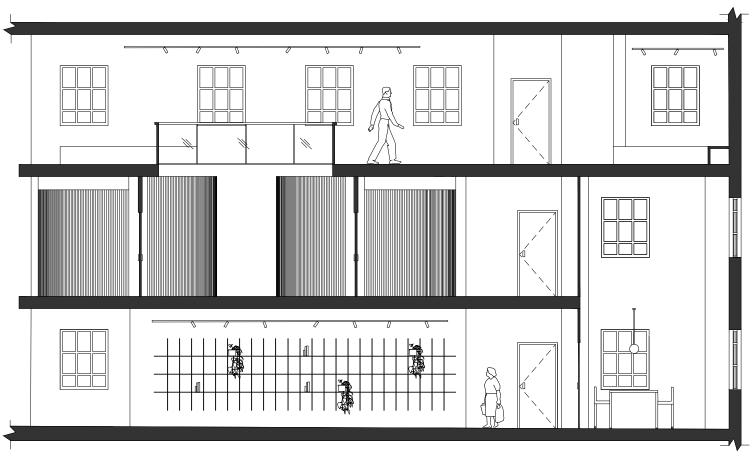




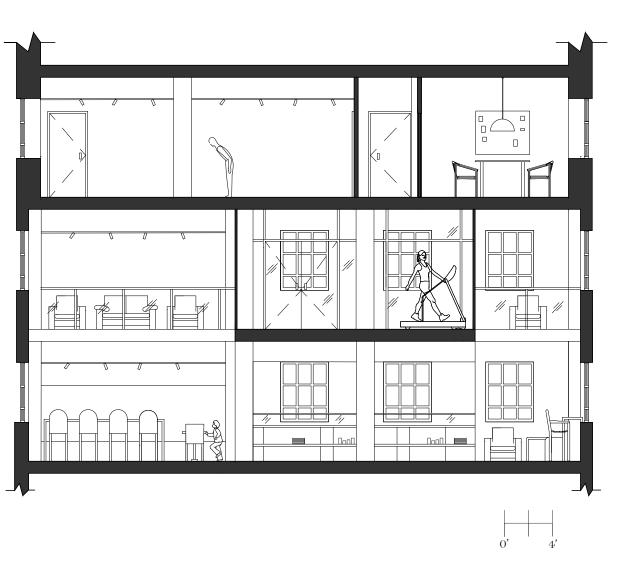
### section a

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The main lobby serves as guest check-in, as well as a gathering spot before departing for the day, or heading out in the evening with fellow Nest families. Guests are greeted with warm wood accents, comfortable furniture showcasing bold colors and patterns. A large shelving wall houses plants and books, as well as small momentos that individuals leave behind as an offer of support of others. It serves as a place of connection and collection.

### ff+e selections



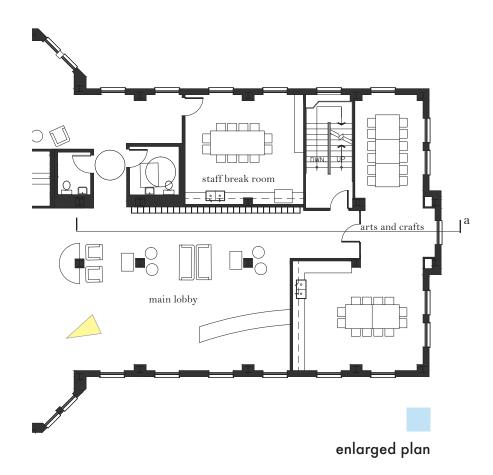
custom walnut front desk



mark product bosco sofa



mark product bosco chair



edge lighting vega round suspension

manuel canovas champs-elysees | emeraude



maharam bright angle | cyan

58

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eating and gathering hall



Perched on the 14th floor of the building, the Eating and Gathering Hall serves as a place for enjoying a family meal or a quick snack with that friend made during yoga. It is a social zone that encourages connection with other families through community tables, as well as lounge style seating on both the first and second story. With windows running two stories along the perimeter of the space, both the urban and natural views of the surrounding area can be enjoyed at almost any point. Additionally, the flood of natural light offers a welcome relief from the stark flourescent lighting of the nearby hospital. Guests are encouraged to place photos of their loved one residing in the hospital on the entrance wall.

## ff+e selections



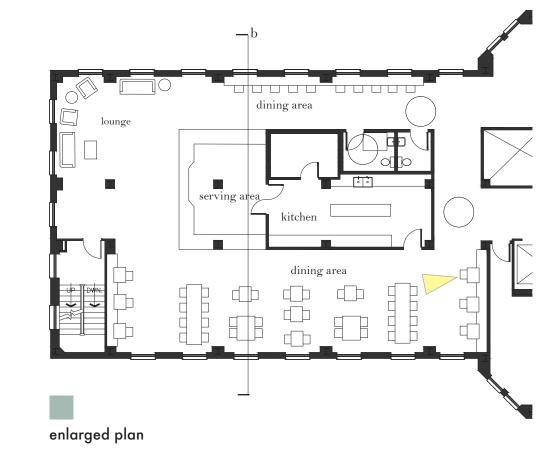
artek alvar alto | chair 611



artek alvar alto | chair 65



artek alvar alto | high chair K65





maharam alloy | lapis

louis poulsen lc shutters lamp

custum oak

dining tables

60

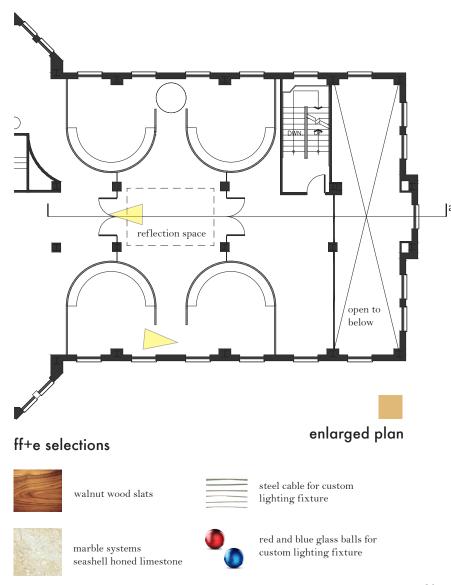


The Reflection Space is that of quiet contemplation. It is a place to offer a prayer, or a hope, for your loved one in the hospital. It is a place to be still. It is a place to be alone with your thoughts and feelings.

The guest is initially greeted by rich walnut wood slats on the exterior of both the east and west side. Soft cove lighting above the wood slats guides the guest towards the main entrance doors. Approaching the glass doors you are able to discern wood slats on the interior that are slightly spaced to absorb light from the two story atrium, as well as provide light to the atrium from the perimeter windows. Once inside, you discover the custom red and blue glass lighting feature situated between floors. Guests are then able to decide which of the four circular "pods" to sit and reflect in. They may be alone or with company.



المنسط **المخ**للاستش<sup>10</sup>رات



### community kitchen

ا كُلُسارات الاستشارات



Community Kitchens are located on the 15th floor of both the north and south side of the building. The Community Kitchen is a space for individuals and families to prepare meals together. It is a space to share stories, along with recipes. A community lounge on both the 14th and 16th floors, connects to the Community Kitchens via a central stairwell. The lounge space offers comfortable seating and dining tables.



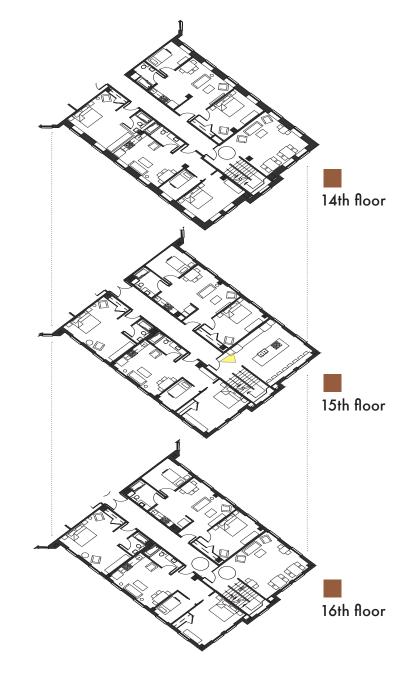
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poplar flooring

custom walnut island

topcu grey marble



### standard guest room





The Standard Guest Rooms features warm wood accents in the form of a solid oak wood bed, and dresser. Pops of color come into play on the blue stripe ccent wall, as well as the classic red Saarinen Womb Chair. Shadow boxes offer an opportunity for guests to place family photos or drawings made in Nests' Arts and Crafts space.

### ff+e selections



custom oak platform bed

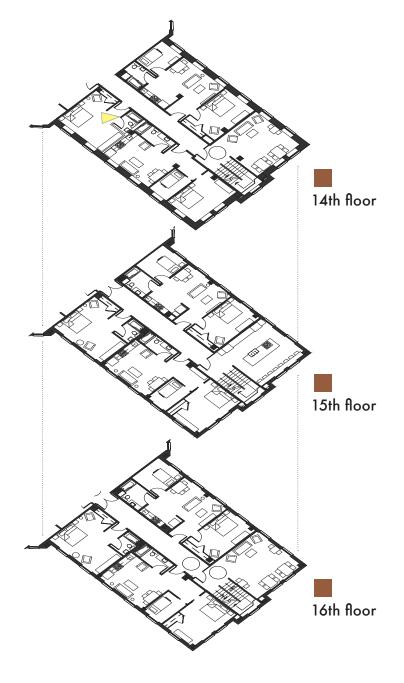


sorrentino marriani mccormick | dresser desk combo



knoll eero saarinen womb chair

www.manaraa.com





poplar flooring

y lighting adjustable swing arm wall sconce



The Suites offer a bit more space for larger famlilies or those staying for an extended period of time. In addition to the king bedroom, a bunk room offers playful sleeping quarters for children. The Suite features a kitchenette with full size refridgerator, stove, as well as disher and sink. Shadow boxes adorn the living room walls.

## ff+e selections

blu dot mono sleeper sofa



artek armchair 531



mark product shaper coffee table

www.manaraa.com



maharam pin | flamingo



louis poulsen lp circle surface

louis poulsen tolbod pendant



"every worthwhile accomplishment, big or little, has it's stages of drudgery and triumph; a beginning, a struggle, and a victory."

mahatma gandhi



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## realization

## realization

لاستشارات

the show

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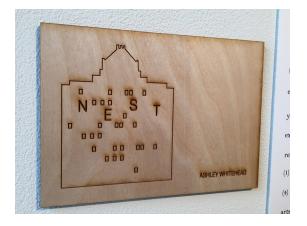
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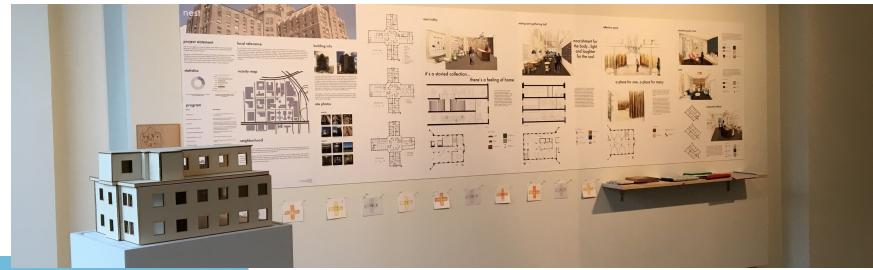
## realization

the show

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#### images

Children's Health in Richmond Virginia., 2015, retrieved from http://www.chrichmond.org/ Images/SitePage/Resource%20PDFs/Original\_CH\_Timeline\_2013\_NEW.pdf

Crisp, B. (1998). Human spaces : Life-enhancing designs for healing, working, and living. Gloucester, MA: Cincinnati, OH: Gloucester, MA: Rockport Pub.; Cincinnati, OH Distributed to the Book trade and art trade in the U.S. by North Light Books.

Fehrman, K. (2004). Color : The secret influence (2nd ed., ed.). Upper Saddle River, NJ: Upper Saddle River, NJ : Prentice Hall.

Gowri Betrabet Gulwadi. (2009). Restorative home environments for family caregivers. Journal of Aging Studies, 23, 197.

Henk Staatsa, T. H. (2004). Alone or with a friend: A social context for psychological restoration and environmental preferences. Journal of Environmental Psychology, 24, 199.

In the tradition of MCV., 2015, retrieved rom http://www.medschool.vcu.edu/about/history/

Kristin D. Zeit. Children's Hospice Creates Normalcy through Family-Friendly Design., 2015, retrieved from http://www.healthcaredesignmagazine.com/article/children-s-hospice-createsnormalcy-through-family-friendly-design

Lapid, M. I., Atherton, P. J., Kung, S., Sloan, J. A., Shahi, V., Clark, M. M., et al. (Sep 11, 2015). Cancer caregiver quality of life: Need for targeted intervention. Psycho-Oncology

Laura Bossi, (2008), Maggie's Centre London, Domus, November, 44.

Michael Green Architecture., 2015, retrieved from http://mg-architecture.ca

Murray, C. (2011). Green Lantern, Retrieved from http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,url,cookie,uid&db=aft&AN=527586471&site=ehost-live&scope=site

Renzi, J. (2001). Healing properties Retrieved from http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip.url.cookie.uid&db=aft&AN=504917258&site=ehost-live&scope=site

Ronald McDonald House Charities., 2015, retrieved from https://en.wikipedia.org/wiki/Ronald\_McDonald\_House\_Charities

Ronald McDonald House Charities British Columbia & Yukon., 2015, retrieved from http:// rmhbc.ca/new-house/

Toby Israel. Maggie's by Design: A blueprint for cancer care centers., 2015, retrieved from https://www.psychologytoday.com/blog/design-my-mind/201403/maggies-design-blueprint-cancer-care-centers

VCU Medical Center., 2015, retrieved from https://en.wikipedia.org/wiki/VCU\_Medical\_Center

Ying, C. (2008). Healing Home retrieved from http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,url,cookie,uid&db=aft&AN=505343960&site=ehost-live&scope=site

Yvonne Zacharias. New Home for Ronald McDonald House meets fresh demands., 2015. retrieved WWfrom http://www.vancouversun.com/home+Ronald+McDonald+House+meets+fresh+demands/9422968/story.html? lsa=cac7-3e2c

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http://madorrepotagerbio.esy.es/2016/02/attirer-oiseaux-potager.html

#### site

http://www.skynoirphotography.com/keyword/Skyline/ http://education.escubes.com/2015/10/vcu-medical-center-virginia-medical-college/ http://www.sahp.vcu.edu/departments/pt/about-us/facilities/

#### precedents

#### maggie's centre

http://www.e-architect.co.uk/london/maggies-london http://www.rsh-p.com/projects/maggies-london/ http://ecola-award.eu/en/project/nb/maggies-centre

ronald mcdonald house

http://www.rmhc-richmond.org/what-we-do/ronald-mcdonald-house/

#### ronald mcdonald house british columbia

http://mg-architecture.ca/work/ronald-mcdonald-house-bc/ https://www.reminetwork.com/articles/2nd-largest-ronald-mcdonald-house-opens-in-bc/ http://crunchycarpets.com/2013/08/02/ronald-mcdonald-house-british/



#### www.manaraa.com

http://www.archdaily.com/498519/the-story-of-maggie-s-centres-how-17-architects-came-to-tackle-cancer-care

http://www.bdonline.co.uk/rogers-stirk-harbour's-maggie's-centre-at-charing-cross-hospital-is-a-place-like-home/3112980.article