In the summer of 2015, Joanna Paidipamula was living with her family in the village of Akkireddigudem, India. She contracted an acute form of tonsillitis as a bacterial infection quickly spread throughout her body. Her condition rapidly deteriorated to the point that her heart stopped beating. She required immediate medical care and was rushed to the nearest medical clinic which was over an hour away. During the trip, she required mouth to mouth resuscitation as her conditions continued to worsen. Upon arriving to the medical center she was stabilized; however, it was too late. The bacteria had spread too far and she passed away days later. She left behind her husband Sunder and two children, Avadh and Anaya, whom I met this past October in their village.

In recent years, medical centers are being constructed within India in response to shortages across its rural land. These newly constructed spaces address the physical needs of the people, like Joanna; however, many medical centers are designed for purely functional purpose and often neglect a vital aspect of care: the patient experience.

Spaces innately have qualities that affect their occupants physically, emotionally and spiritually. Without being mindful of these effects, spaces can contribute to fractured experiences when their designs reflect the opposite of their intentions.

Medical centers near the village of Akkireddigudem, India, provide essential healthcare, yet the designs of these spaces do not create the sense of trust that their services require. Rather, these spaces often contribute to uncertainty which can lead to apprehension or distrust.

In response to the need for health facilities in rural Andhra Pradesh and the absence of considering the patient experience in the design of medical centers, the Joanna Memorial Center seeks to imbue trust through several key features. These designs are now in conversation with the medical center project coordinator and will result in the construction of the Joanna Memorial Center (JMC) in Akkireddigudem, India in the coming years.
The village of Akkiredigudem is found within the state of Andhra Pradesh, India. In order to learn about the local culture, I flew into the nearest airport in Vijayawada where Joanna’s husband, Sunder picked me up. During my visit, I met with local villagers and learned about their values, beliefs and architectural practices.

With this experience in mind, I designed the center in a way that imbues trust by weaving together local construction practices, vernacular design and nature. I would like to call attention to seven of the key design elements.

The Gridded Plan
Adjacent to the site grows a eucalyptus tree farm, spaced out on a grid. This agricultural grid produces clarity and orderliness for the farmer who cares and cultivates the land. Taking this cue from the trees, the interior of the building embodies this spatial orientation. The building is supported by a grid of columns reminiscent of the gridded eucalyptus trees. This grid provides an orderliness and clarity allowing visitors to be more at ease.

The Arugu
In Telugu, the local language, the arugu is the space where people sit and chat in the evening and is located at the main entrance of the house. The arugu acts as a transitional space mediating between the courtyard and street. At JMC, the arugu has multiple functions, such as the pharmacy pick up, the waiting space for friends and family and spot for serendipitous encounters between neighbors. These aspects allow for efficiency in terms of center operations while also encouraging the creation and strengthening of connections leading to a stronger community.

The Haven
The village and surrounding context contain no desirable space for public gatherings. There is accessible land but it’s unkempt. One space that is well kept is outside the chemical plant. Here we see a well-kept lawn with plantings, except it is inaccessible and even guarded. In response, the Haven creates a secluded space for those visiting the center. Here the garden provides shade with its tree and trellis while also giving focus to nature. People can relax in the Haven without distractions, surrounded by nature in a way that creates a calmness for visitors.

The Layered Screens
People often need to visually understand a space to feel comfortable. Fear of the unknown gives added anxiety especially to a vulnerable person. However, an unbounded space can be uncomfortable as well, as people may feel exposed and the subject of unwanted attention from those outside. The layered screen veils the haven, arugu and street in order to create a combination of privacy and visual clarity. The layered screens connect the space together while also providing a subtle welcoming through ephemeral beauty created by light dancing across the floor throughout the course of the day.
The Natural Materials
Medical facilities are intended to be sterile places to limit infection and transmission of disease. For this to occur, materials easy to routinely clean are selected. However, his ease of cleaning comes at a cost of being inauthentic and devoid of life. This alien type of material gives these spaces a foreign quality. The haven seeks to offset this harshness by giving material qualities that are authentic and true through its natural foliage.

The Shaded Roof
It is common practice within the surrounding context to build columns through the roof. This is done with the anticipation of future growth. Without this, the desire to grow means the breaking of the roof slab to extend the structure, which is fairly expensive. However, these columns and roof space are typically underutilized. By adding a transient trellis integrated with the columns, the roof turns into an outdoor terrace that can be utilized throughout the course of the day.

Passive Cooling
Most electricity in Akkireddigudem is used to power air movement and light space. Since the climate of the region is hot and humid, static air is highly uncomfortable and even dangerous due to mosquitoes carrying disease. To offset the electric demands, the jail screen system is used. This screen system is seen widely within the vernacular architecture as it provides natural ventilation while also privacy to the interior. To shield rain from entering the space, the screen then requires a chhajja.

All of these elements come together in the design of a center which seeks to imbue trust. I plan to continue working on this project until its completion and look forward to working with Joanna’s husband, Sunder, to help create a center that provides medical services while also deepening trust among its people.
ఉశాగం (TRUST)
CONTEXT

A. COUNTRY
B. STATE
C. DISTRICT
D. VILLAGE
GENERAL LAYOUT

A. SITE MODEL
B. 1ST FLOOR PLAN
C. SECTION
D. PASSIVE COOLING DIAGRAM
THE GRIDDED PLAN

A. SITE VISIT PRECEDENT
B. LOCAL CONSTRUCTION SITE VISIT
C. SITE AERIAL VIEW WITH GRID
THE ARUGU

A. ARUGU PERSPECTIVE
B. PHYSICAL MODEL PERSPECTIVE
C. PHARMACY/WAITING/CONNECTING DIAGRAM
THE HAVEN

A. HAVEN PERSPECTIVE
B. UNKEMPT ACCESSIBLE LAND
C. WELL KEPT UNACCESSIBLE LAND
D. WELL KEPT ACCESSIBLE HAVEN
THE LAYERED SCREENS

A. UNSEEN SPACE
B. NO PRIVACY
C. LAYERED SCREENS
D. PHYSICAL MODEL
THE NATURAL MATERIALS

A. GOVERNMENT CLINIC
   DHARMAJI HUDEM, INDIA

B. PRIVATE CLINIC
   RAMANAKAPETA, INDIA

C. HARASH CLINIC
   HYDERBAD, INDIA

D. CLINIC MATERIAL SWATCH

E. PHYSICAL CONCEPT MODEL SWATCH
THE SHADED ROOF

A. NO COLUMNS
B. NO SHADE
C. COLUMNS AND SHADE
D. MODEL PERSPECTIVE