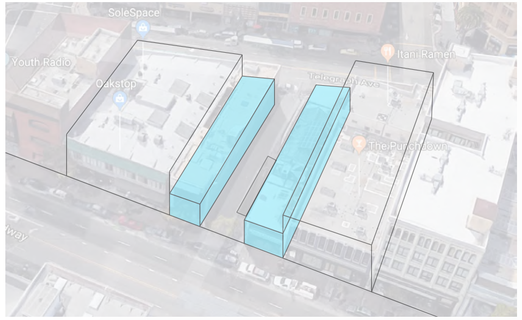


MASH UP

INSTITUTIONAL PROJECT - 1725-1733 BROADWAY, OAKLAND

MASH-UP is a technology school located in 1725-1733 Broadway, Oakland. It's education field bases on futuristic digital fabrication for a high-tech device which uses the technology – Brainternet. The school program contributes to providing access and opportunities to under-represented students and the interior design focuses on promoting the collaboration between students. The concept of the project is oscillation, which is inspired by the form of brainwave. The spacial quality of the design transform from the most active space to the quiet workplace.

BRAINTERNET

A team of researchers at Wits University in Johannesburg, South Africa have made a major breakthrough in the field of biomedical engineering. For the first time ever, researchers have **devised a way of connecting the human brain to the internet in real time.** Brainternet works by converting electroencephalogram (EEG) signals (brain waves) in an open source brain live stream.

KAPOR CENTER

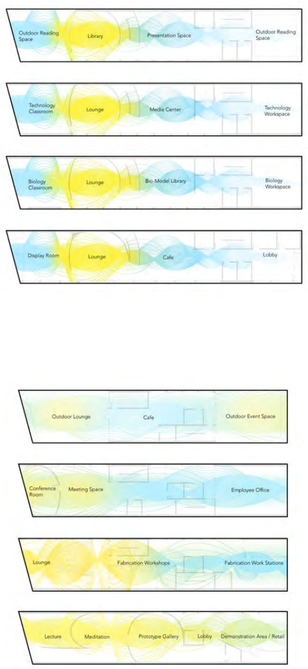
The Kapor Center operates at the intersection of technology and racial and social justice. Their Community Engagement efforts strive for Oakland to have a thriving ecosystem with equitable access to the tech sector. Research at Kapor Center For Social Impact examines inequity in access and opportunity across K-12, higher education, and workplace contexts in order to improve the outcomes for **under-represented students** in the fields of Science, Technology, Engineering, and Mathematics (STEM).

RENDERING - CLASSROOM

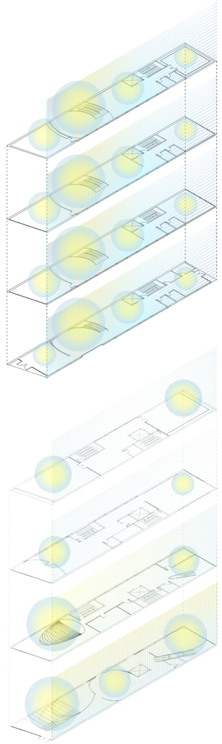
ACTIVE – CALM

OSCILLATION

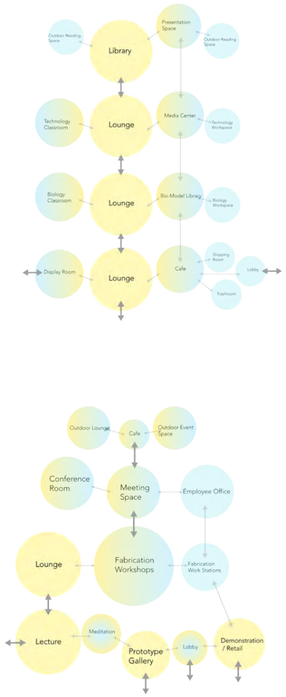
Inspired by brainwave, the concept of this project is Oscillation. There are basically two kinds of oscillation movement, one is the movement goes back and forth at a regular speed, and another one is regular variation in magnitude or position around a central point, like a radio wave. This concept is applied to the transition from the active space such as students lounge where students communicate and collaborate most, to more quiet space life head-down workspace.



Concept Diagrams

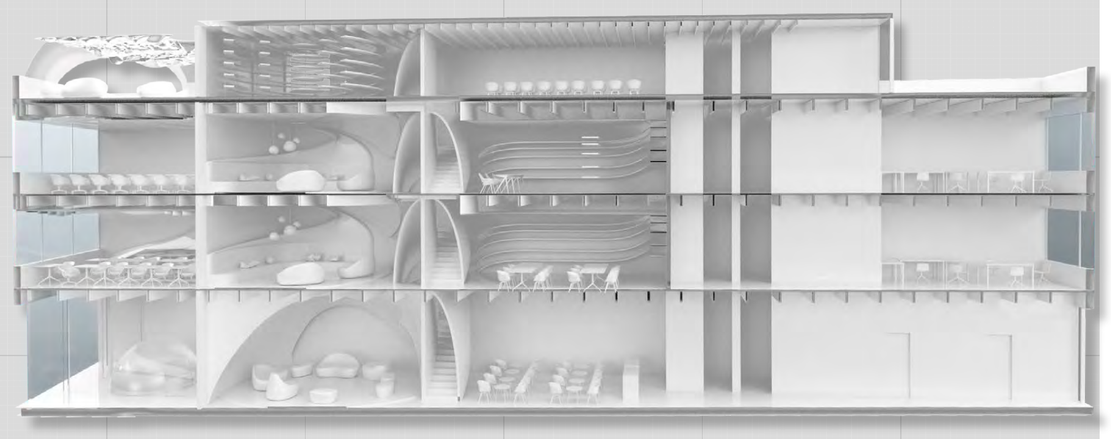


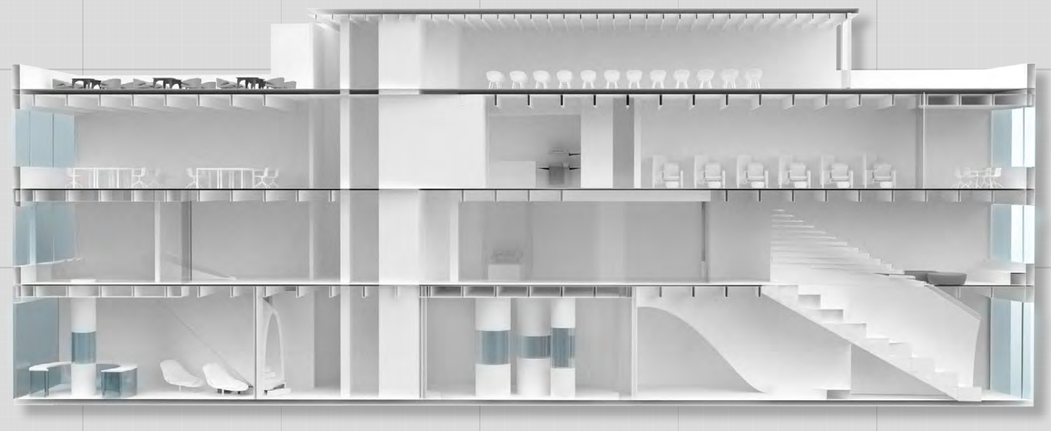
Hub Diagrams



Bubble Diagrams

As there are two builidings, the two kinds of oscillation movements are applied to each one. In the bigger building, there is a hub on each level and is transform to more quiet space towards the end of the building, referring to the movement that around a central point, and it also works as a vertical connection in the building. In the smaller building, The active space occurs back and forth as moving up the levels.





RENDERING - STUDENT HUB

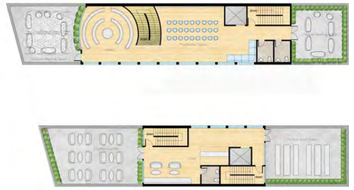
DEMONSTRATION/RETAIL

A demonstration area where people can experience and try on the brainternet device. The whole back wall is LED screen to show the digital information of the brainternet product.

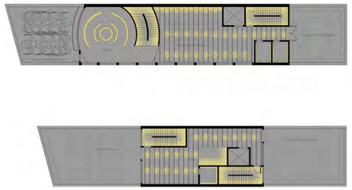
RENDERING - DEMONSTRATION/RETAIL

Active ---------- Calm

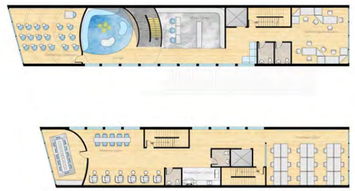
The materiality and atmosphere also transform from the active space to quiet space. There is a subtle transition from more vibrant colors, to neutral colors, and then to monochromatic colors. The material selections convey a feeling of inviting, welcoming and cozy. The theme of the color palettes is yellow and blue. Yellow indicates creativity, activity, and inspiration, while blue relates to technology.



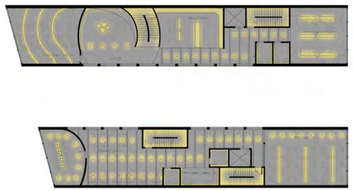
FOURTH LEVEL FLOOR PLAN



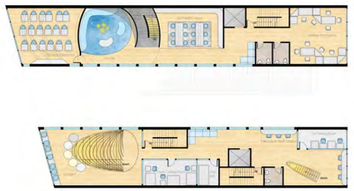
FOURTH LEVEL RCP



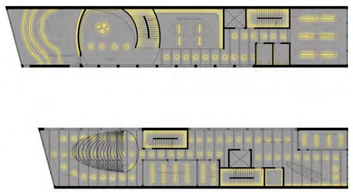
THIRD LEVEL FLOOR PLAN



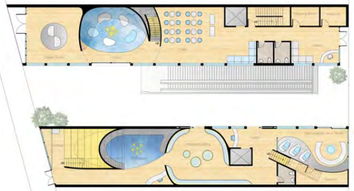
THIRD LEVEL RCP



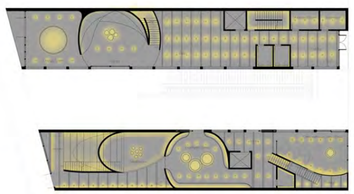
SECOND LEVEL FLOOR PLAN



SECOND LEVEL RCP



FIRST LEVEL FLOOR PLAN



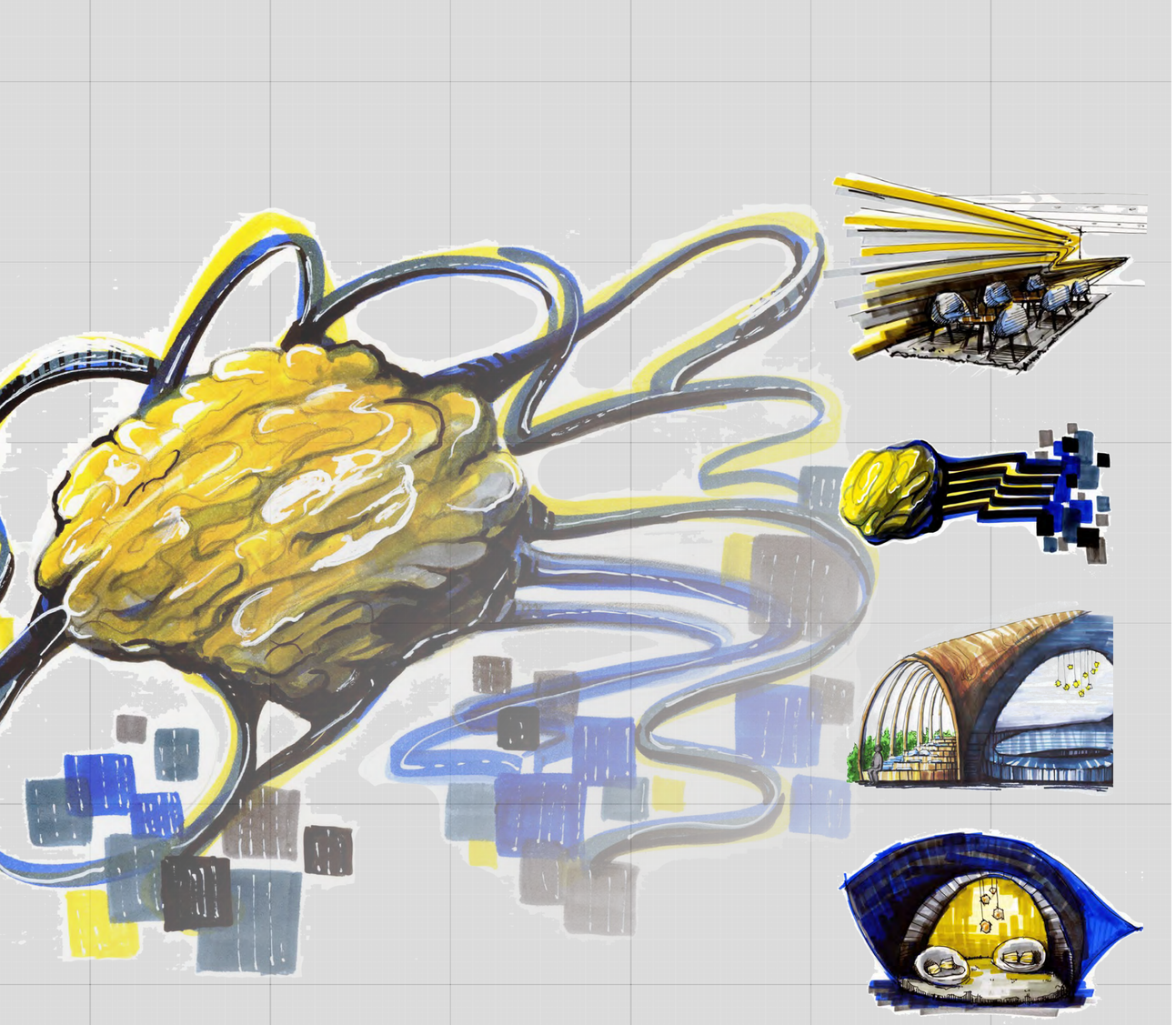
FIRST LEVEL RCP

RENDERING - BIOLOGY MODEL LIBRARY

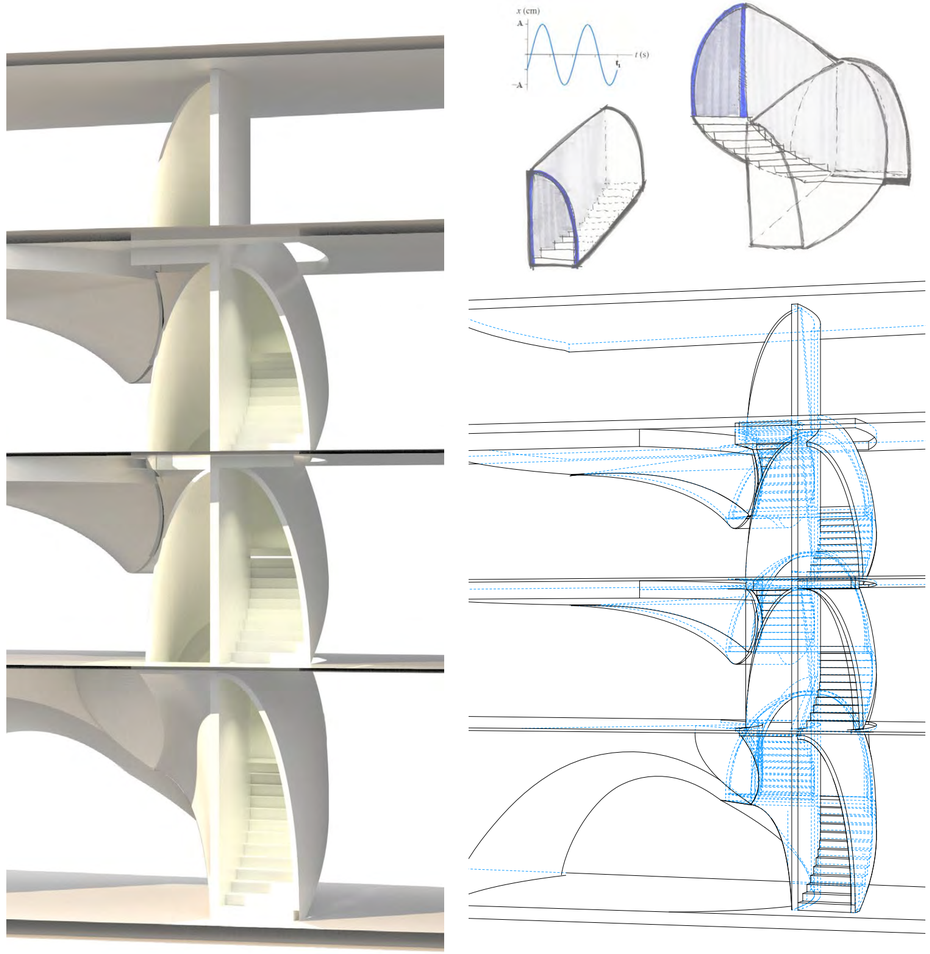
RENDERING - STUDENT LOUNGE

RENDERING - READING AREA/ROOFTOP

RENDERING - LECTURE STAIRCASE



Sketches



Featured Staircase Design