Farmers Market
The developer of Vulkan explained that Farmers Market needed space for arranging their market during spring and summer seasons. The space around the OFL complex should be flexible enough to fit the activity of this event.

Farmers Market: 30-35 tents (tent size: 3m x 3m) There should be 4m space between the tent rows/clusters.

Molecular gastronomy
Molecular gastronomy is the chemistry and physics behind the preparation of any dish: for example, why a mayonnaise becomes firm or why a soufflé swells.

If we are able to use the knowledge gained on food preparation, we might find new ways to make healthy food more attractive, we might persuade more people to cook better food and, last but not least, we might convince society to regard eating as a pleasure, rather than a necessity.

And what does molecular gastronomy hold for chefs? For them, the scientific exploration of cooking is even more important. Science is the basis for technology and new innovations, so this field helps them to create exciting new dishes and inventions.

To make experiments and molecular gastronomy a part of OFL, the laboratory was added to the program.

Facility program
Recepcion area/foyer 74,3 m²
Auditorium (min. 0,5 m²/person) 142,7 m²
Kitchens 248,53 m²
Class rooms 156,1 m²
Bar / lounge 112,8 m²
Admisistration 58,7 m²
Storage etc. 196,15 m²
Rest Rooms 90,2 m²
Showers 22 m²
Laboratory 123,8 m²
Herb- & vegetable garden 118 m²
Wine cellar 156,3 m²
Café 171,3 m²
Total 1698 m²

Bike parking underneath service delivery 261,5 m²
Store 143 sqm

SECTIONS
OSLO FOOD LAB
"Food Lab" is a concept for a cooking school and a restaurant joined together into one bigger complex, stressing a fusion between the academic (the school and the students), the professional (the restaurant and the chefs) and the public (the visitors).

The design process was focused on working with "flux", a word describing the constant changing of people and activities within the building complex. Oslo Food Lab has been designed with the students, the top chefs and the visiting public mass in mind, trying to figure out a way for all of them to enjoy their stay at the food lab. It's to be pointed out that the building tries to serve the traditional needs of a culinary academy (such as storage, good kitchen areas etc.) as well as more experimental areas.

PROGRAM
The large program of activities in Oslo Food Lab has been a challenge and an inspiration for the design. Some facilities have been added such as the laboratory, and some... for the chefs has been removed from the program due to the many of-fers of hotels and apartments in the nearby area. Different visits to schools, restaurants etc. have caused Oslo Food Lab to change a little, and facilities in demand such as a place to hold Farmers Market has been included in the program. In total, the building area has increased due to realizing the real needs of such a complex.

Polluted ground
The ground at Nedre Foss is polluted by arsenic, lead and zinc. Therefore, changes should not be made to existing constructions beneath the ground (old basements etc.) to prevent the pollution leaking into the river. Due to this I decided to plant a belt of herbs having a positive effect on polluted grounds by over time cleaning out the pollution (bioremediation). This is a slow process but along the river this could have an instant effect on the local environment. Furthermore putting a lid on the polluted surface, such as an asphalt slab will enclose the pollution and make it even more difficult for it to leak into the river. Asphalt reduces the direct contact between humans and the polluted ground and prevent the rain water to wash out the pollution into the river.
The matrix visualizes the possibilities for different activities during different times of the day and makes it easier to understand when a space is free to be used by another activity than its usual one. One of the decisions made from looking at the matrix was to place the auditorium in the big open commonspace as it is not used that often or for such long periods at a time. When the auditorium is not used it can be a place to sit down and have lunch or a snack.
The expression of the facade originates from a desire to have a certain transparency throughout the building. This is important because of the huge level difference at the site. Pots for cultivation are casted on the outside wall where a lift running around the building makes sure that it's possible to reach all the plants. These pots are watered with recovered rainwater through waterpipes inside the wall. The final facade look is a combination between the two experiments seen below.

- The pots casted with spacing creates a different expression in the facade.
- Several pots casted in a row creates a wave-like relief in the wall. The pattern and relief possibilities are varied.

**Facade / Materials / Expression**

- South elevation 1:100
- West elevation 1:100
Facade decorated with potted plants in Greece. http://www.ourfuturehouse.org/?cat=1

Cultivation on the pavement in Copenhagen, Denmark.


3rd floor: informal/lounge
1st floor: experimental
roof: cultivation

waste/compost
service/delivery
lounge terrace
bar
café
administration
classroom/event
wine cellar
picnic area
kitchen
wc
storage
auditorium
laboratory
classroom/event
bike parking
cultivation
storage
kitchen
shower
wc
library
cultivation/green house
garden
rainwater collector
viewpoint


Above: Axonometric diagram showing the activities and identities of each floor.
Below: Illustration of the ground floor entrance situation.

wall section 1:20
1 _ 170mm concrete
2 _ 200mm insulation
3 _ 100mm concrete
4 _ water pipes
5 _ rail for lift (to handle the plants in the facade pots)
6 _ 100mm concrete
7 _ 20mm roof shingles
8 _ 5mm waterproof membrane
9 _ sand
10 _ 1050mm plant soil
11 _ 30mm concrete paved
12 _ +5.0
13 _ +7.7
14 _ +18.0
Main directions through the site causes a natural placement of a square. Inclination of 13.0 meters from lower point to upper point - the project as the connection between the two points. Meatphor: The Amphi Theatre. The building enhances and connects to the visual axis across the site. Creating a street that leads people through the project and over the pedestrian bridge. Connecting Vulkan with OFL.

The project placed next to the visual axis. Liberated space for farmers market, events and cultivation.

OSLO FOOD LAB culinary institute and restaurant

Project Info:
Planned area: about 17 000 sqm
Building footprint: 852  sqm café 171,3 sqm
Floors: 4 (+ roof terrace)
Total area (building): 2324,3 sqm
Additional sqm: store  143 sqm
Sqm cultivation area: outside  2754,9 sqm  inside 118 sqm

Aker Church
Olaf Ryes
Plass
Vulkan
the site
Below: The neighbours of OFL at Nedre Foss.