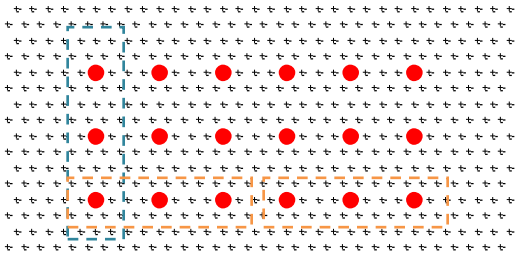
**Stimulation protocol – mouse culture stimulation experiment II**



12 sets of three electrodes.

2^3 patterns per set.

1000 repetitions per pattern.

Current amplitude2.5 or 5.0µA.

Duration between pulses 30ms.

Number of distinguish stimulating patterns = 12 * 2^3 * 2 = 192

(# sets * # patterns per set * # current)

To avoid continuous stimulations with each pattern, I divide 1000 repetition into 10 times of stimulation pattern * 100 repetition each time.

Total number of stimulating pattern = 192 * 10 = 1920

The 1920 patterns are randomly ordered into 120 movies, with 16 patterns per movie. (1920 = 120 * 16)

In the folder I have two scripts.

stimPatternGenerator: to generate the distinct stimulating patterns as a matlab structure:

pattern(i).set -> set ID (1~12)

.el -> electrode set (1*3 array)

.pattern -> state pattern ID (1~8)

.state -> state of the three electrodes (1*3 array)

.current -> current (2.5 or 5.0)

Where i = 1:192.

stimFileGenerator: takes pattern and write the information into el, pt, mv files.