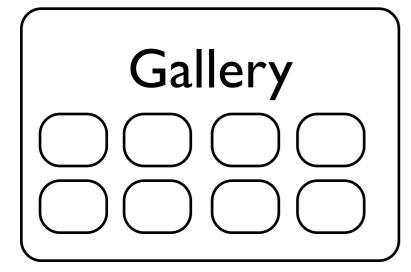
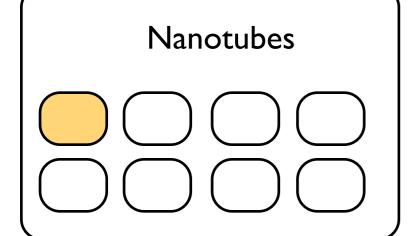


Screencasts

caDNAno

Maya animations





Cages Machines 2D & 3D crystals

#### **DNA** nanotube

Design

upload / edit

**Animations** 

upload / edit

protocols used

Data / Gels

upload / edit

**EM** 

upload / edit

designs will be uploaded in XML format clicking here will take you to a Flash-based viewer of the design, where you can zoom around, create new animations, clone to make a new design,

Other Links

Publications
Articles
References

# Screencasts

intro

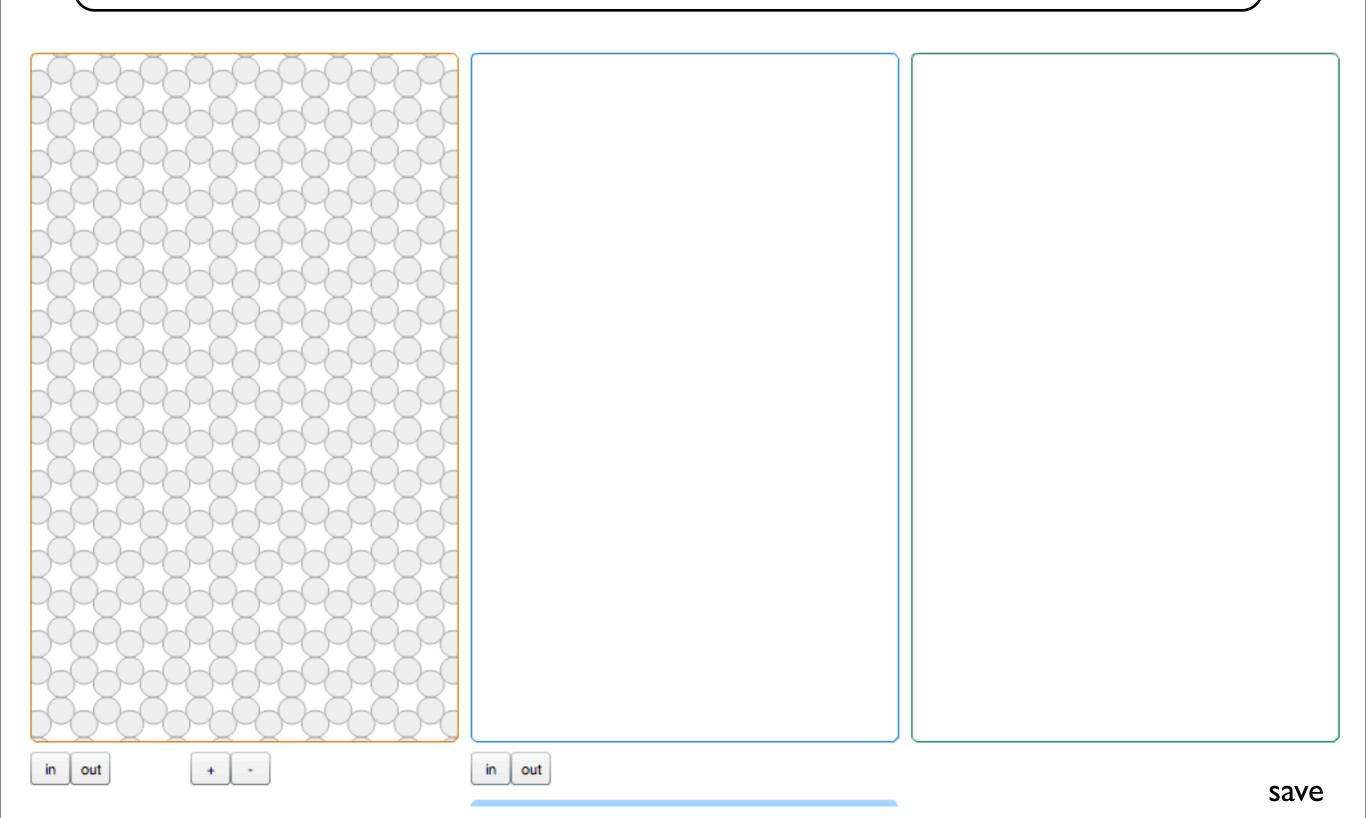
walkthrough: nanotube design

composite structures

caDNAno interface

create animation

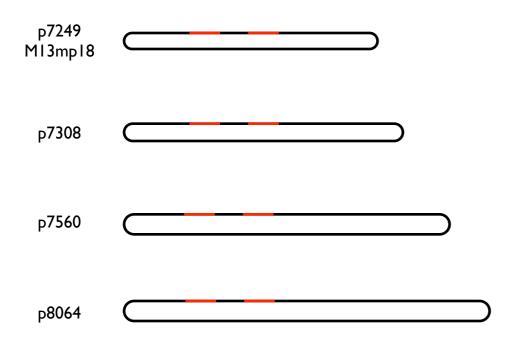
# caDNAno



#### I. choose a scaffold

or

## Add new



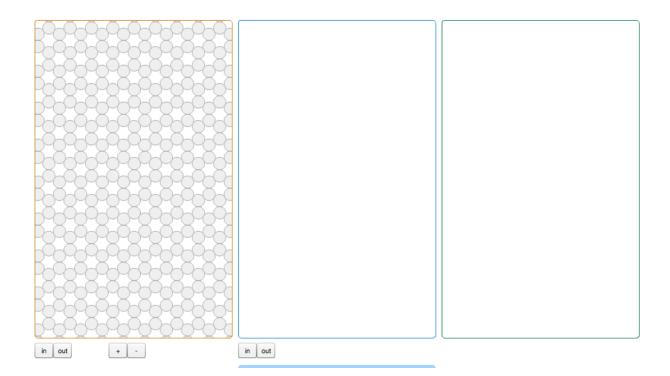
paste sequence

ATCCGTT....

annotate sequence

paste in a subsequence and choose a color (and possibly a name, e.g. "hairpin")
- good for hairpins,
built in ssDNA structures,
restriction sites, etc.

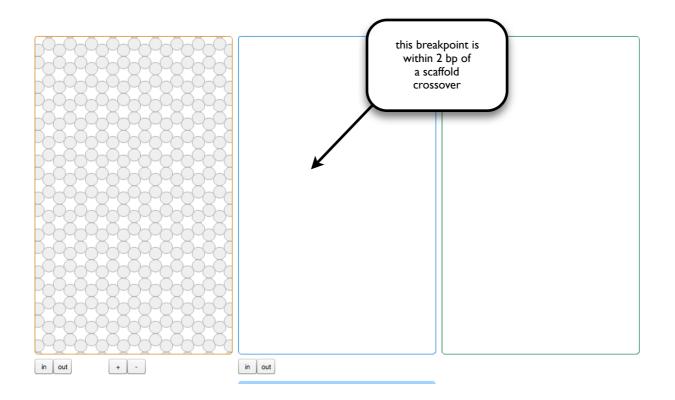
# 2. Design



- a) scaffold arrangement
- b) staple arrangement, breakpoints
- c) caps, loops, etc.

describe how to do this in screencasts

# 3. Validation & "finalize"



check for scaffold or staple violations (non-continuous scaffold, spacing errors), etc

click a "validate" button, redraw structure with additional annotations (tooltip windows, etc).

# 4. Oligo sorting and output

selection tools

groups:

core head-cap tail-cap [add group] click on a group to get a selection tool for that group, and then drag-select 3' ends of oligos to group

once finished, click "Done" to open a page with a complete list of oligos, sorted by group, for ordering

(calculate cost? auto-generate spreadsheet?)

# 4. Order pools

database of existing oligos

compare list of new oligos against list of oligos that you already have ordered

generate list of oligos that have not previously been purchased, and sort into pools.

output pipetting instructions default suggested protocol etc.

## **Features**