# SBOL in Action "Wetware Studio + Eugene"

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Autodesk

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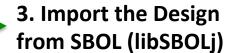
CIDAR Lab

**Boston University** 

#### **FLOW**

1. Draw the Design in Wetware Studio

2. Export the Design to SBOL (libSBOLc)



- 4. Load/Specify Parts
- 5. Generate Devices

7. Import Devices from SBOL (libSBOLc)

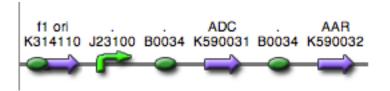


6. Export Devices to SBOL (libSBOLj)

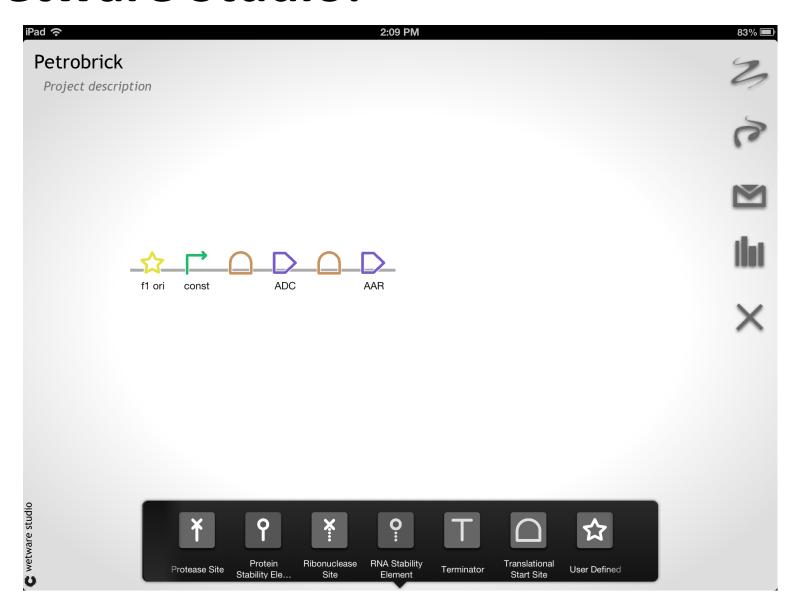
8. Visualize Devices

#### CASE STUDY

- iGEM 2011
  - Petrobrick by UW (BBa\_K590025)



### **Wetware Studio:**



## **Eugene:**

```
// Import from SBOL
Collection col = SBOL.import("petrobrick.xml");
// Define Device
Device d = col.get("WWS 26") + col.get("WWS 1");
// Specify/Import Parts
Promoter prom00(.name("prom00"), ...);
CDS k590000 = Genbank.import(CDS, "K590000");
// Rules
Rule r02(
  d[2] NOTEQUALS d[4] AND d[4] NOTEQUALS d[6] AND
  d[6] NOTEQUALS d[12] AND d[12] NOTEQUALS d[17]);
Rule r (Promoter MORETHAN 1 AND
  NOT Promoter MORETHAN 3);
// Device Generation
Device[] lst = product(d, strict);
// Export to SBOL
SBOL.export(lst, "./eugene-petrobrick.xml");
```