

Sensing System

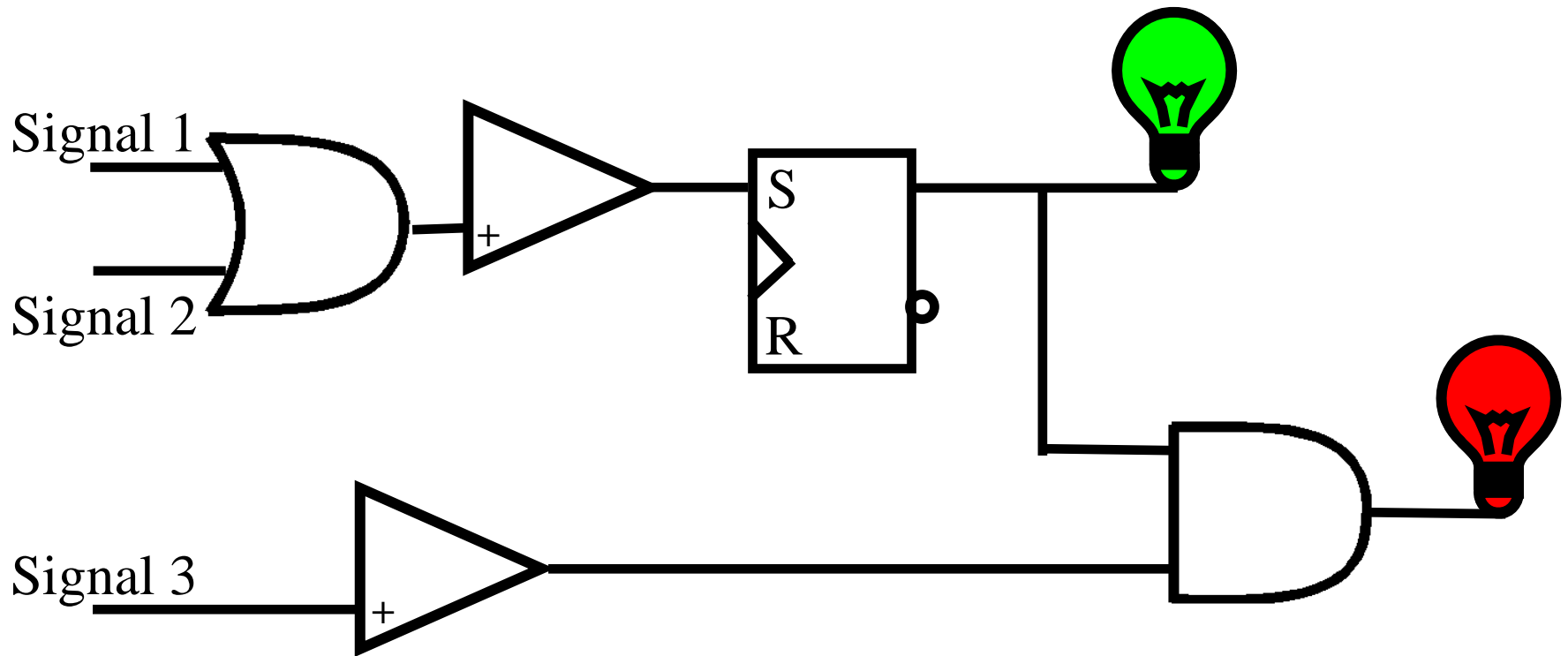
iGEM Meeting August 3, 2006



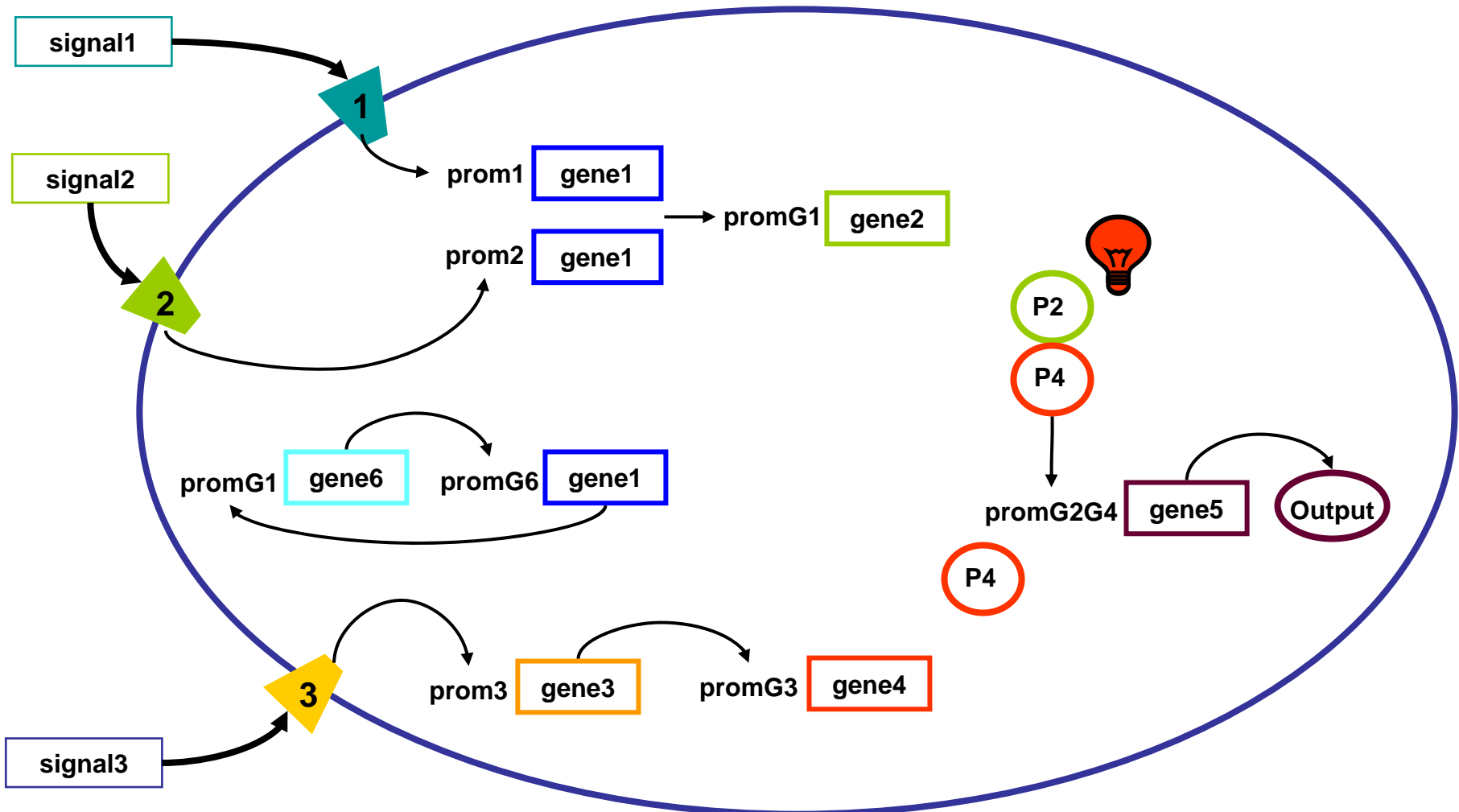
General Sensing System

- 2-step warning system
- Warning – Dewarning
- Dewarning – Dewarning
- Synergy

System: Engineering View

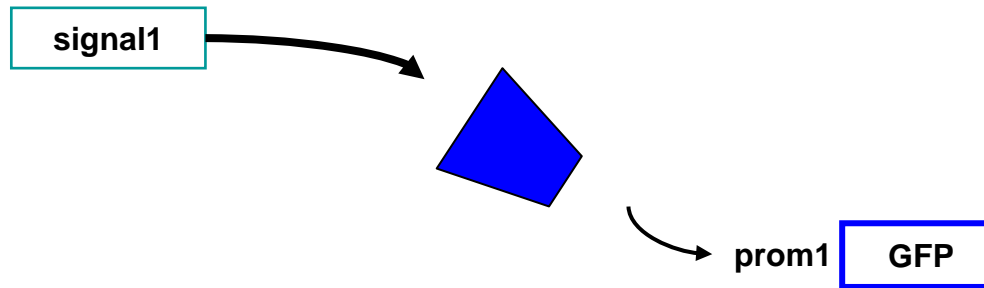


System: Biological View



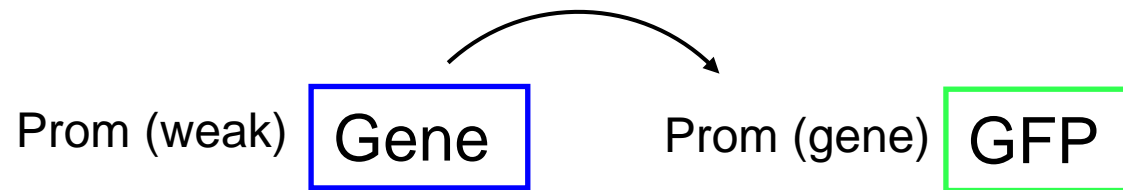
Experiments - Part I

- Testing of Signal Inputs



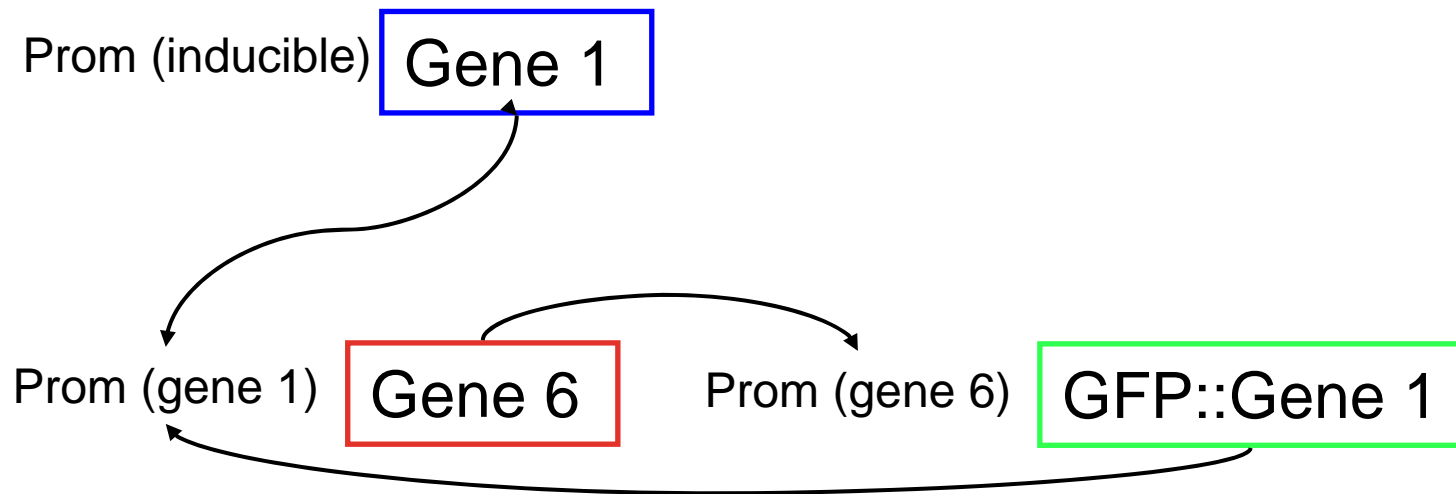
Experiments - Part II

- Testing of Amplifier



Experiments - Part III

■ Testing of Feedback Loop



Experiments - Part IV

- AND Gate

Prom ID-FRET1-Bait

Prom ID-FRET2-Target



Pros & Cons

- Conceptually simple
- 4 Devices thereof 2 gates
- The auto regulation is separated from gene 1
- Redundancy
- FRET or Split-GFP has coolness
- The signals and their sensing are still not defined
- Auto regulation is not well defined (needs fine-tuning)
- No new ideas

Meat Monitor in the Petri Dish

