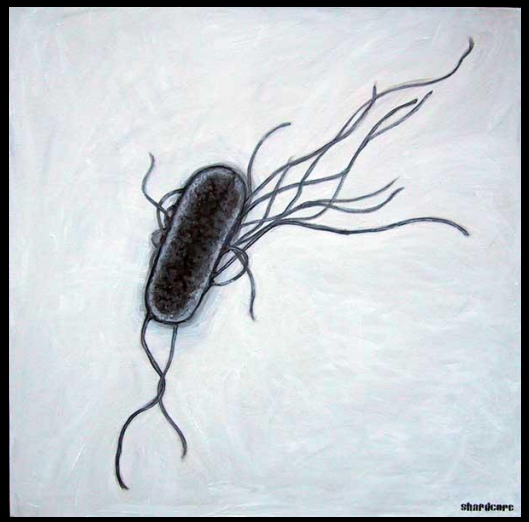
Wi-Fi Colli, v 0.2



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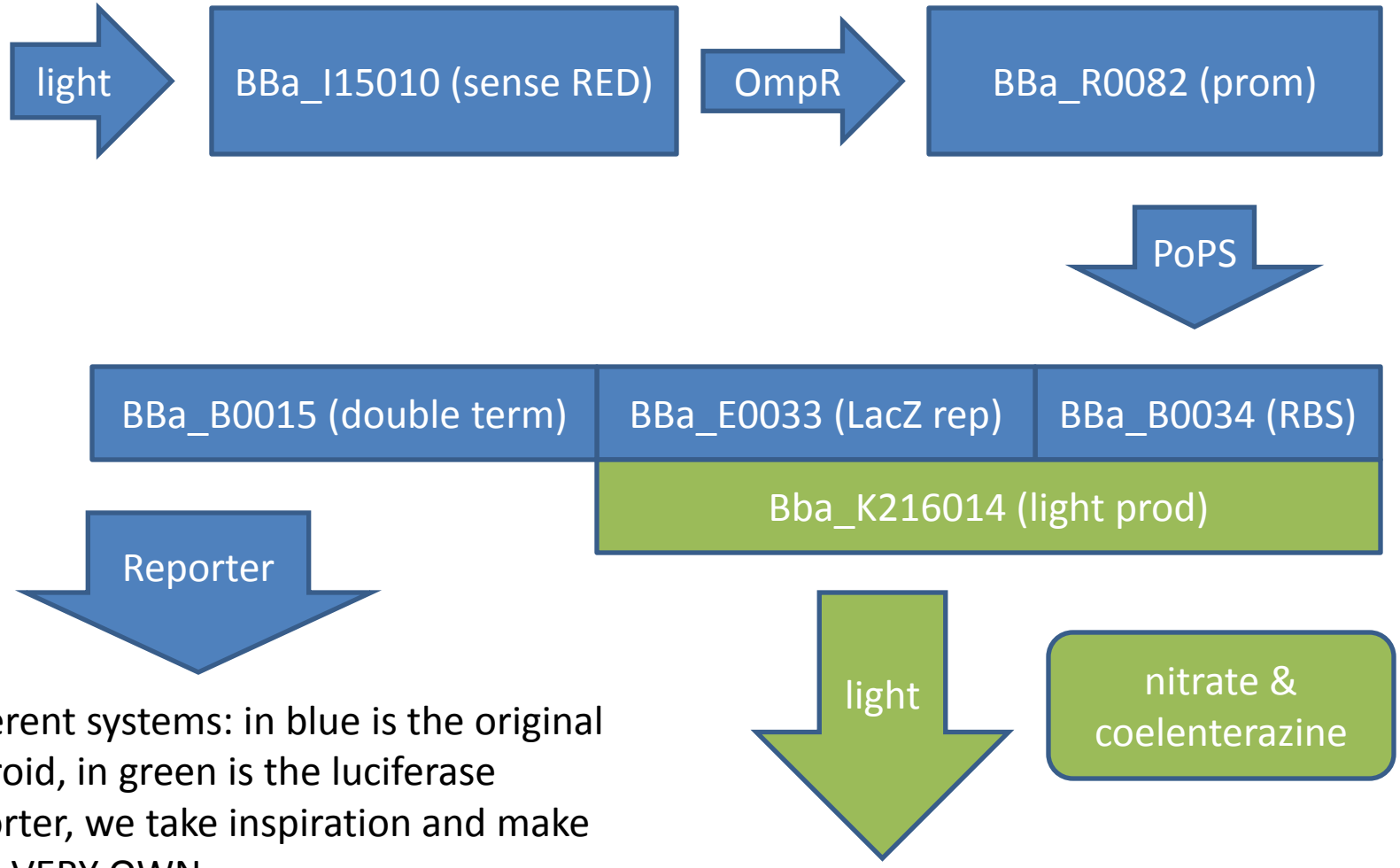
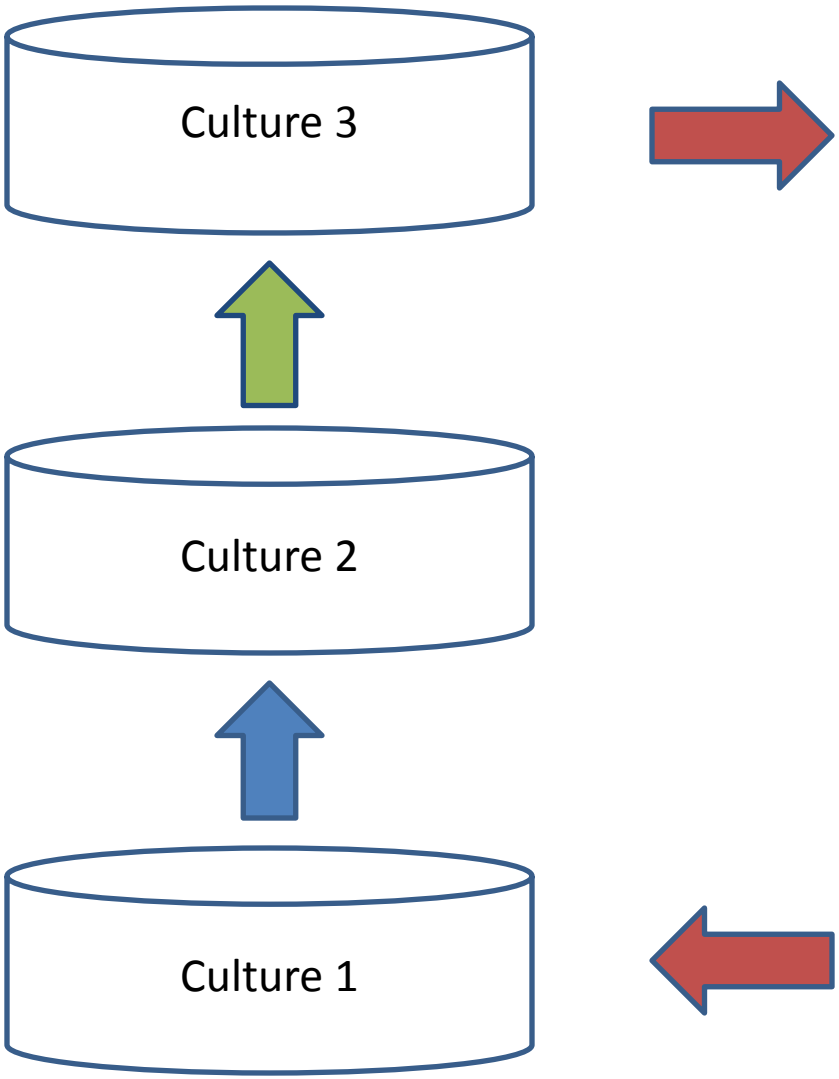
Parts (Available Bricks)



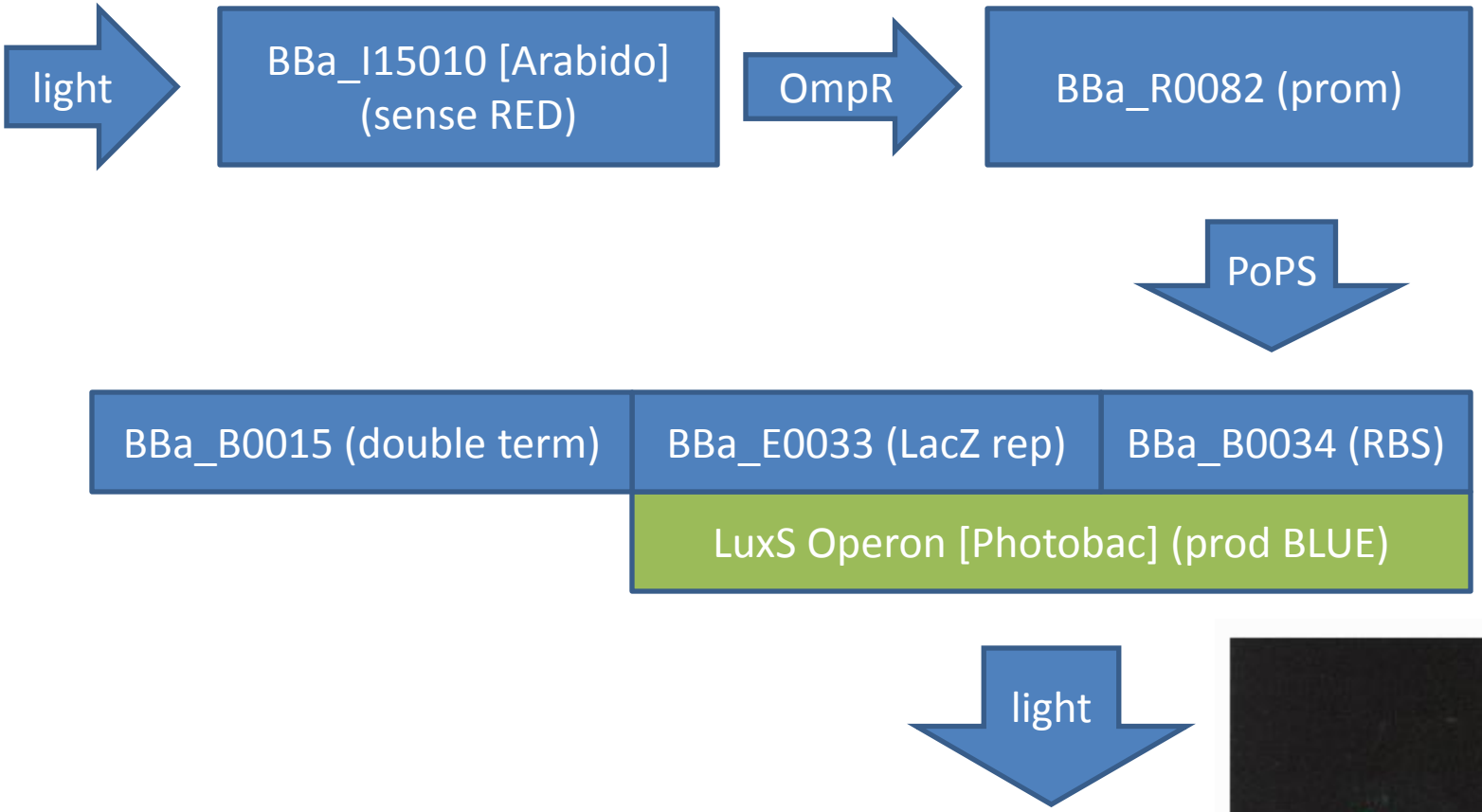
Different systems: in blue is the original Coliroid, in green is the luciferase reporter, we take inspiration and make OUR VERY OWN.

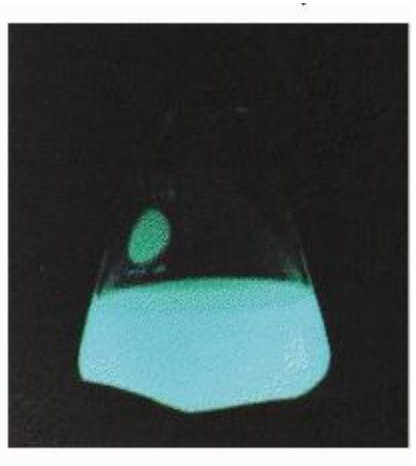
Overview



Telecommunication with bacteria! Information would be passed from one medium to another (indirectly) with no physical contact involved whatsoever; this is impossible with conventional (molecule based) signaling.

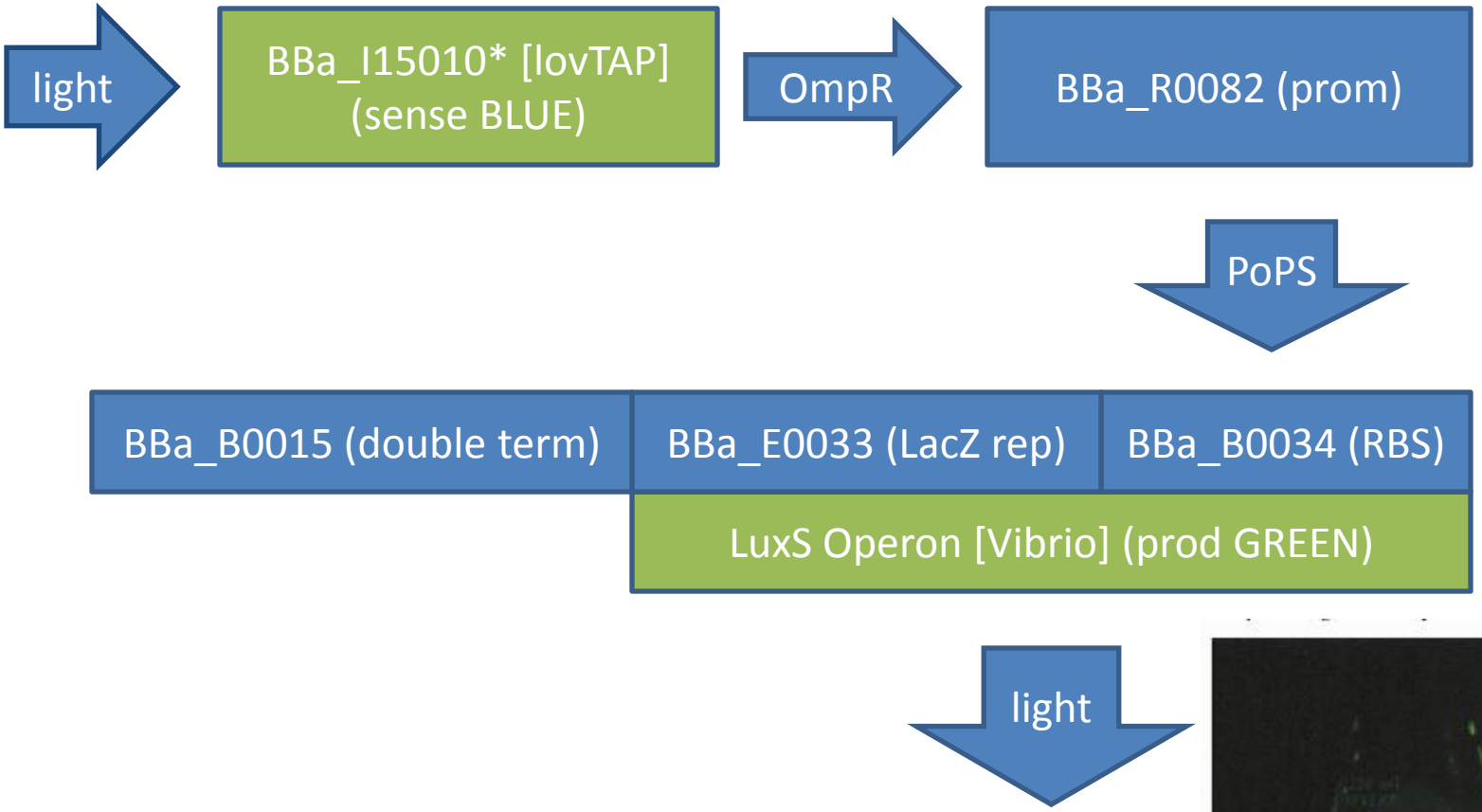
Culture 1

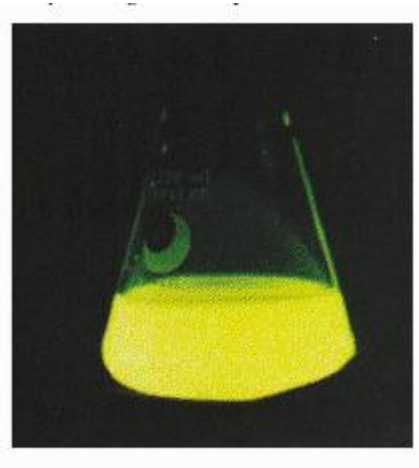




Legend:
Boxes in blue are parts already done
Boxes in green are parts that may (or not) exist but must be altered in some way

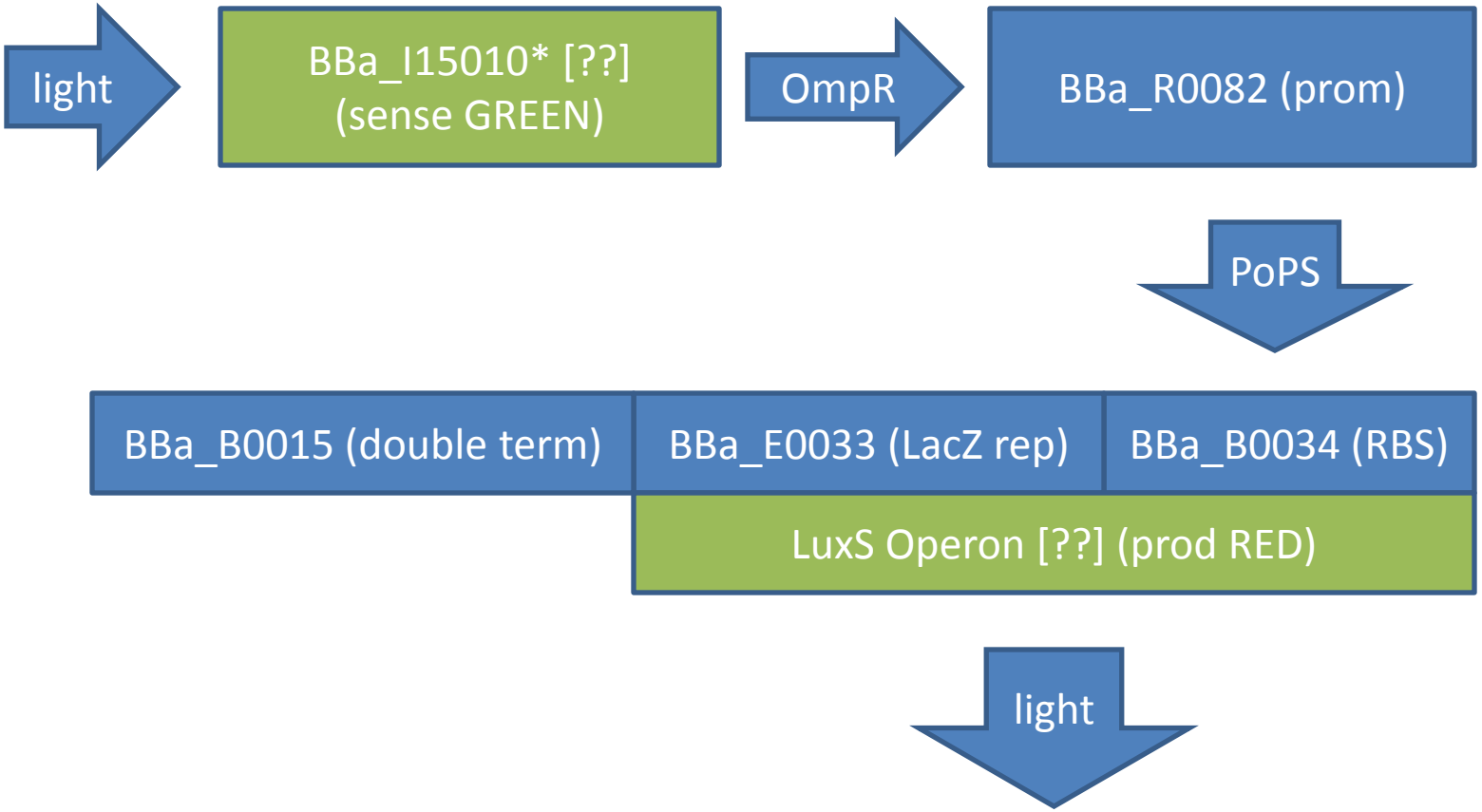
Culture 2





Legend:
Boxes in blue are parts already done
Boxes in green are parts that may (or not) exist but must be altered in some way

Culture 3



Legend:
Boxes in blue are parts already done
Boxes in green are parts that may (or not) exist but must be altered in some way

Tips & Tricks

- BBa_K216014 contains Luciferase, with GFP via FRET we can produce GREEN
- LuxS Operon contains several genes, two for luciferase-like production, some for **color** selection [Vibrio fisheri & Photobacterium phosphoreus]
- BBa_I15010 contains a chromophore, it should be alterable…

Tips & Tricks

- Chromophores are modular units: bricks to be replaced
- lovTAP form Lausanne team
- Couple directly chromophore to promoter reconn (Harvard)
- Use modular assembly for luciferase-like with PhyB (Phytochrome B [or A?]) and PIF3 (Phytochrome Interacting Factor 3 [works also with PhyB]): have uberfast response

Tips & Tricks

- Part BBa_K222000 can create luminescence via coelenterozine (?) in with an influx of Ca2+ which is an easier translational signal.