

IGEM PROJECT – temporary detailed description

| In vivo | Modeling | |
|--|---|---|
| <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">To find</div> <ul style="list-style-type: none"> - Plasmid/sequence of the functional LovTAP protein. <p>Ask Bart/Seb how to do to obtain it (Basile). If not possible (cf. next square)</p> | <ul style="list-style-type: none"> - Domain LOV - TrpR protein <p>=> both directly usable on modeling programs (PDB files)</p> | <ul style="list-style-type: none"> - Domain LOV - Domain of another DNA binding protein (Tú, Basile, Christian, Nicolas, Gab, & Nath=>find ideas till Thursday (or Tuesday next week or Bart/Sebastian are interested on one particular)) <p>=> both directly usable on modeling programs (PDB files)</p> |
| <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">To do</div> <p>If DNA sequence not available: (first than...)</p> <ul style="list-style-type: none"> - Take sequence of both domains (LOV & TrpR) on the web. - Fuse DNA sequence at the right place. (cf. article) - Assay (DNA protection assays) to assess the in vitro functionality of the fusion protein. <p>If DNA sequence is directly available:</p> <ul style="list-style-type: none"> - (...)Express it in E.Coli. - Define a genetic circuit to switch on/off genes and implement it (also to be expressed in E.Coli)(Gab). - Characterize the whole system: Amount of light to have a perceptible output Reaction kinetic | <p>E-mail to Matteo Dal Peraro (Nico): See if an assistant can help us (Matteo Thomas Degiacomi ?)</p> <ul style="list-style-type: none"> - Begin modeling => as done in the article first of all, than improvement (?) | <ul style="list-style-type: none"> - Model it the same manner as it will be done with LovTAP |