

elisabetta.bergantino@unipd.it

Dipartimento di Biologia
Complesso Vallisneri, 4° piano sud

Produzione e caratterizzazione di enzimi ricombinanti per la **BIOCATALISI**

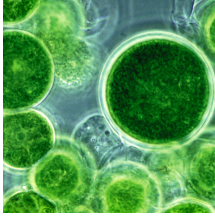
INGEGNERIZZAZIONE di proteine

Ingegnerizzazione di **CYANOBATTERI** come **CELL-FACTORIES**

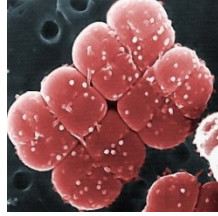
BIOCATALISI

Identificazione di enzimi da differenti organismi

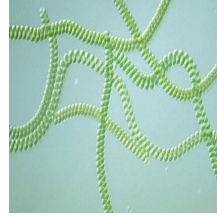
ALGHE



BATTERI
ESTREMOFILI



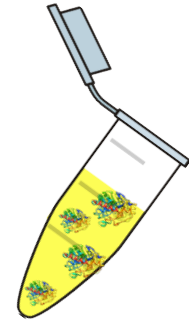
CIANOBATTERI



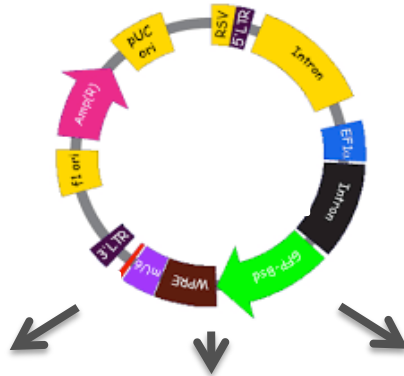
FUNGI



Purificazione



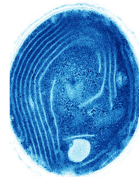
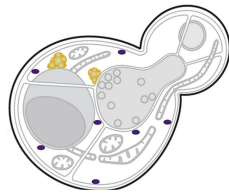
Produzione in diversi sistemi di espressione



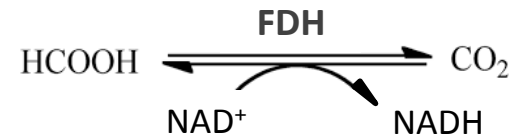
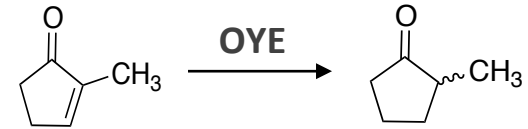
E. coli

P. pastoris

Cianobatteri



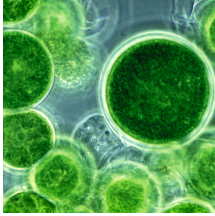
Caratterizzazione Biocatalitica



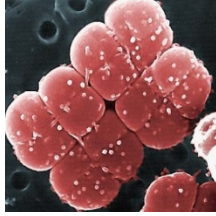
BIOCATALISI

Identificazione di enzimi da differenti organismi

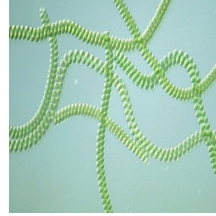
ALGHE



BATTERI
ESTREMOFILI



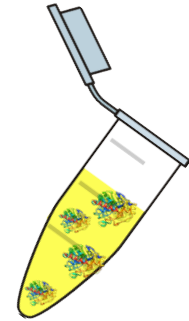
CIANOBBATTERI



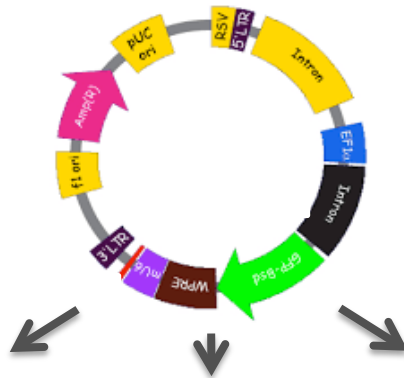
FUNGI



Purificazione



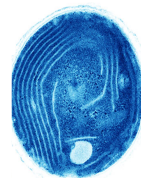
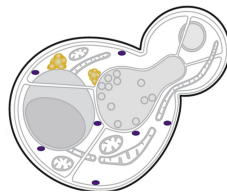
Produzione in diversi sistemi di espressione



E. coli

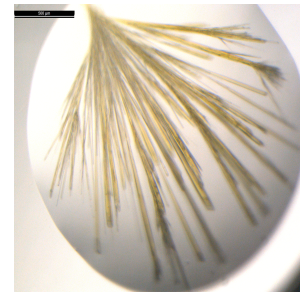
P. pastoris

Cianobatteri

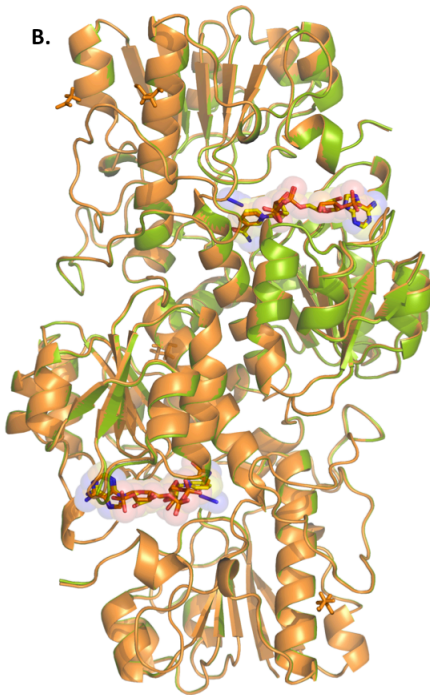


Caratterizzazione
Biocatalitica

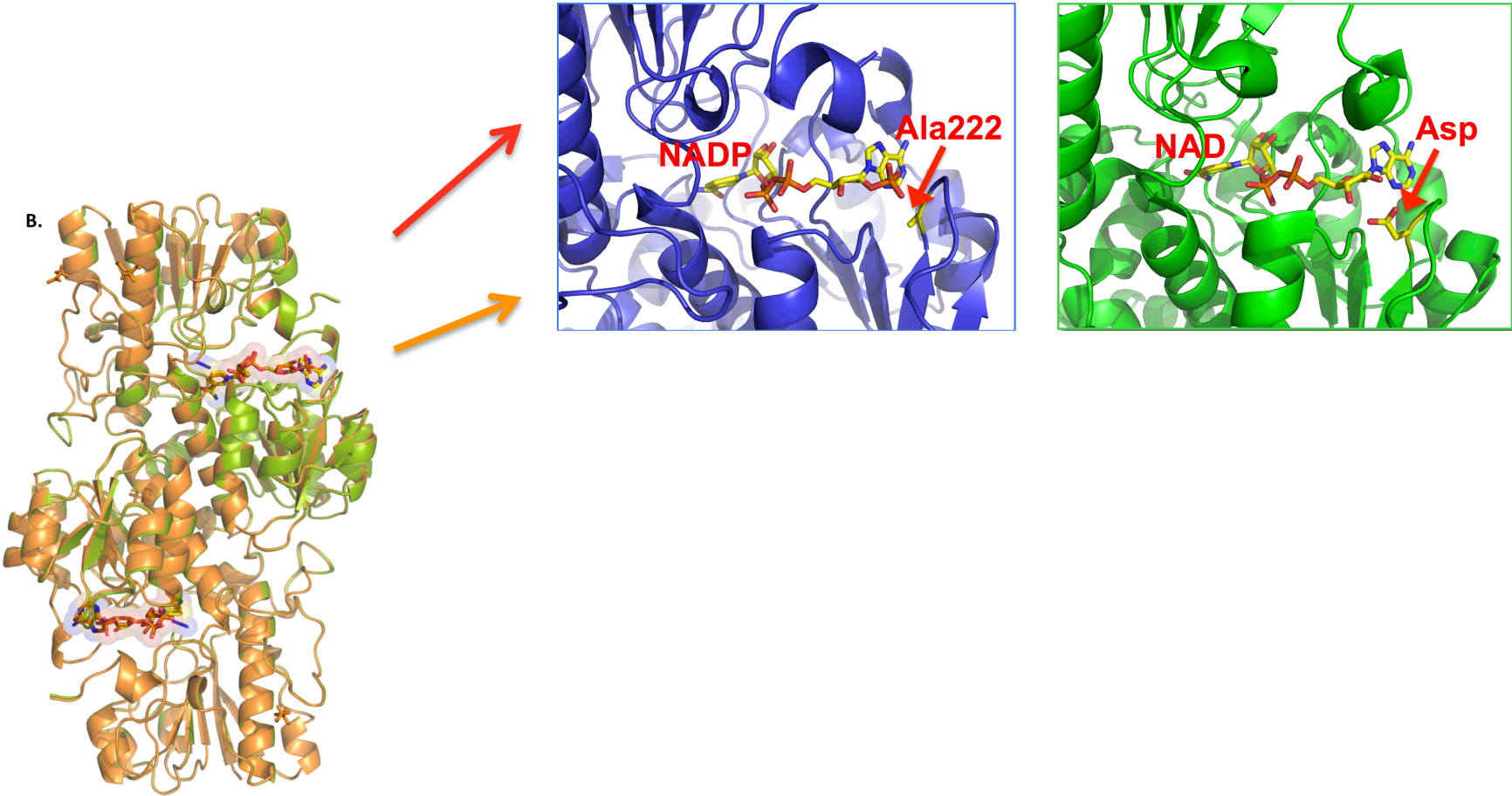
Caratterizzazione
Biochimica e Biofisica

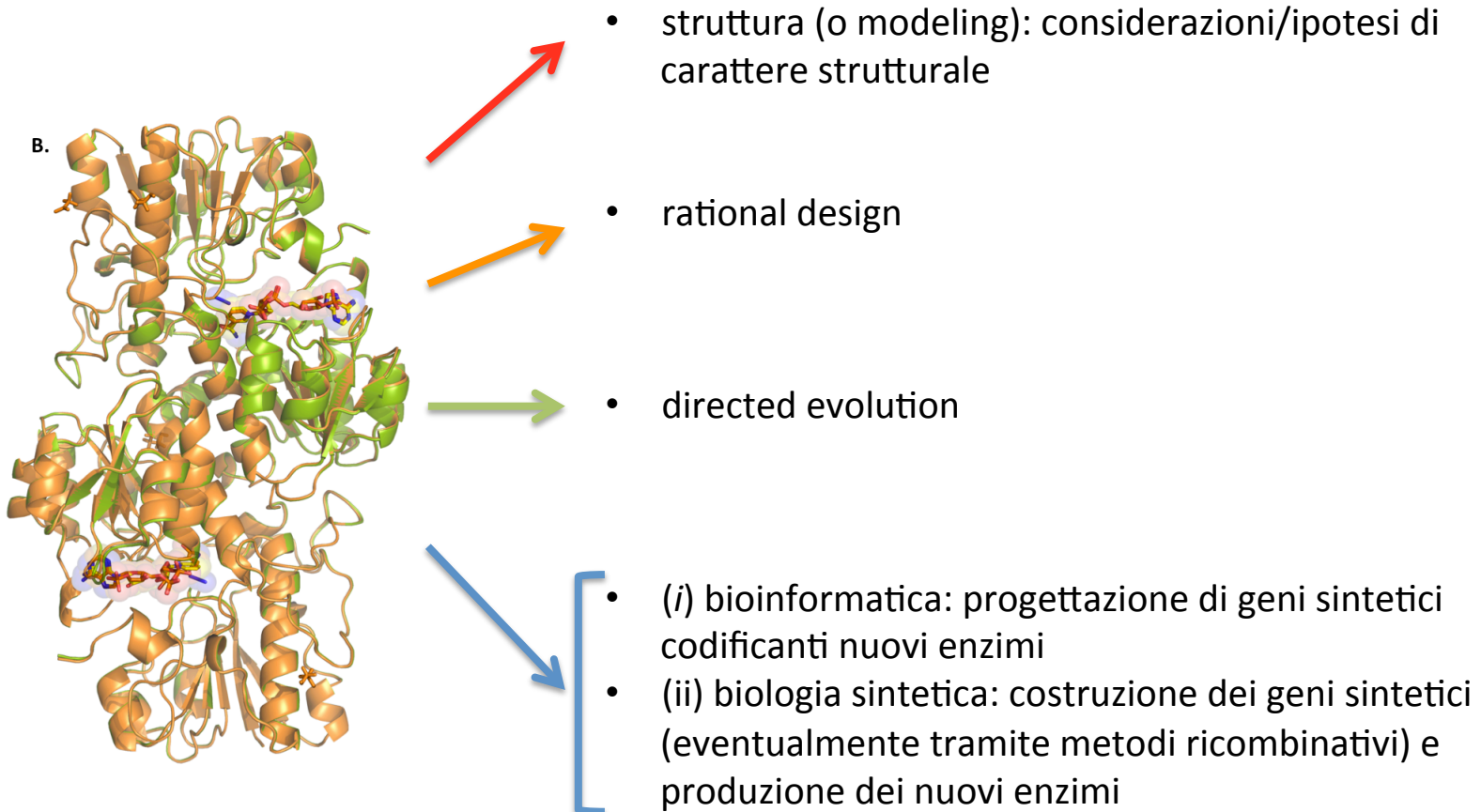


In collaborazione con
Laura Cendron
(Dipartimento di Biologia)

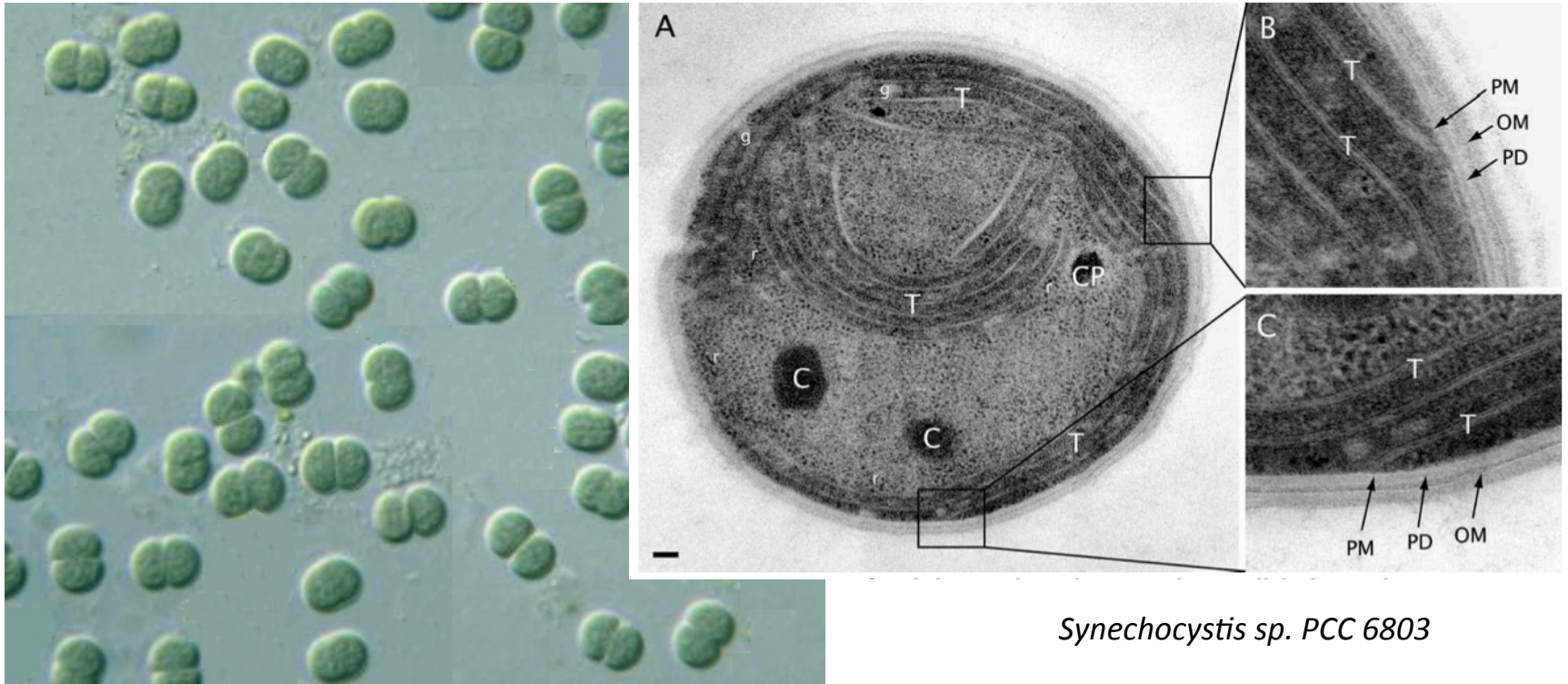


- struttura (o modeling): considerazioni/ipotesi di carattere strutturale
- rational design





CELL-FACTORIES CIANOBATTERICHE

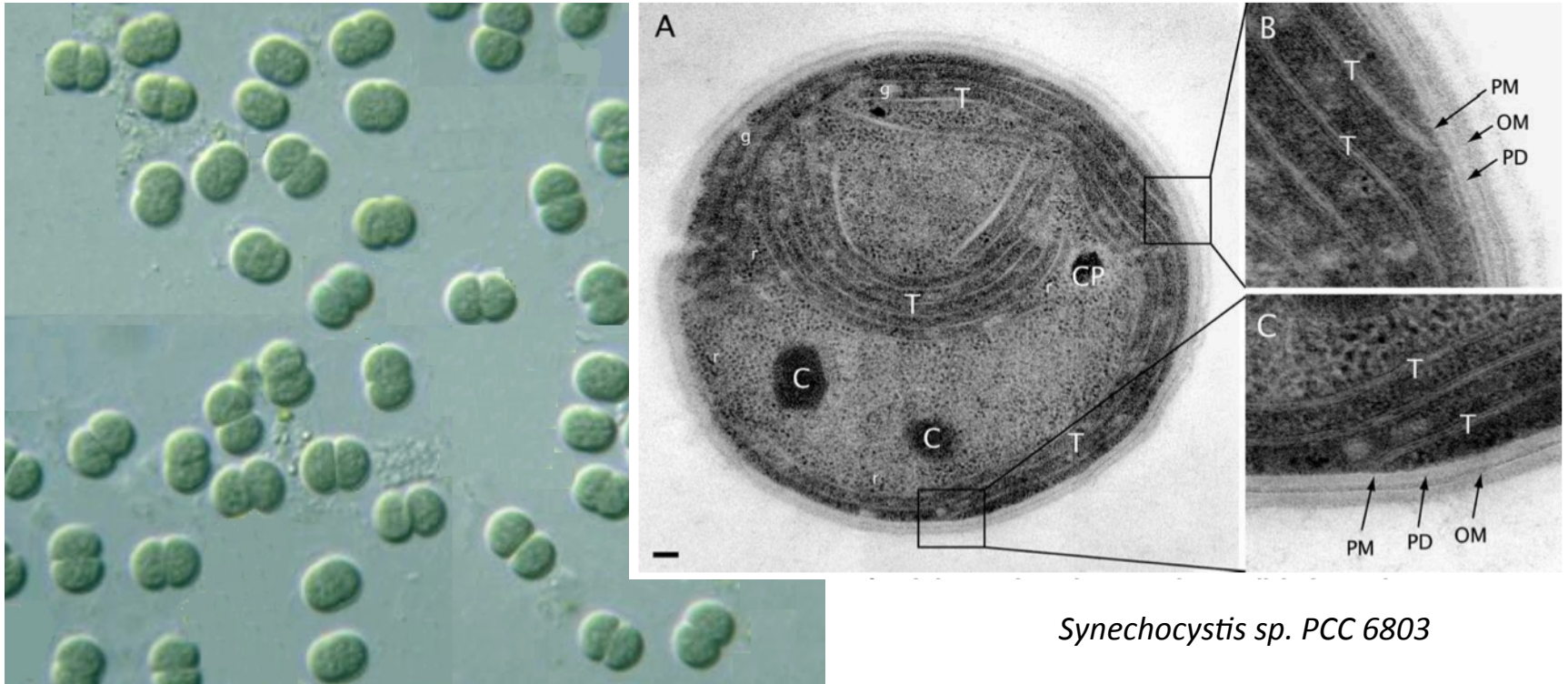


Synechocystis sp. PCC 6803

- Biologia sintetica
- identificazione / analisi di elementi genetici utili, nativi o eterologhi (promotori, RBS, terminatori, ecc.), per l'espressione di proteine ricombinanti
 - enzimi per la biocatalisi e *bioremediation* / trasformazioni in configurazione *whole-cell*

In collaborazione con
Eleonora Sforza
(Dipartimento di Ingegneria Industriale)

CELL-FACTORIES CIANOBATTERICHE



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 - proteine di membrana

In collaborazione con
Bruno Miroux e Francesca Zito
(*Institute de Biologie Physico-Chimique - Paris*)