

Chair of Bioprocess Engineering

Microalgal population dynamics related to changes of environmental conditions

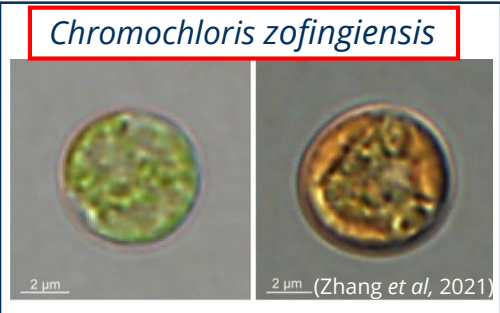
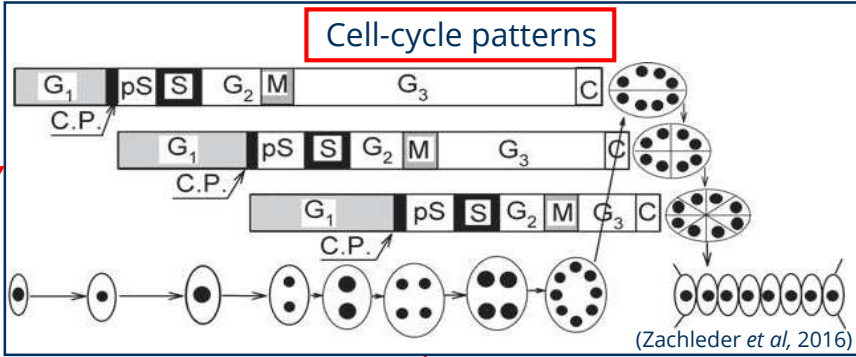
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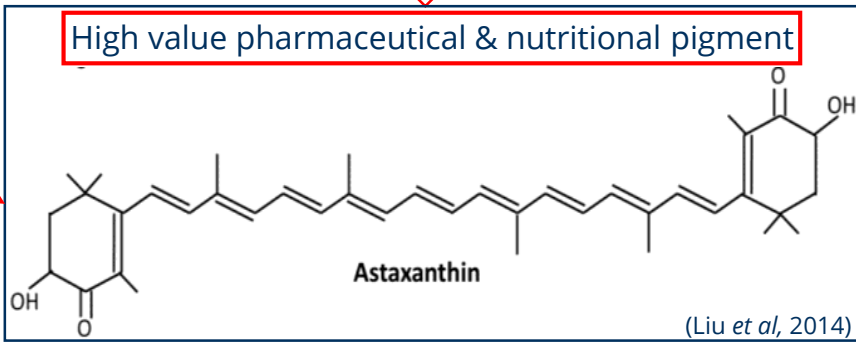
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Context and motivation

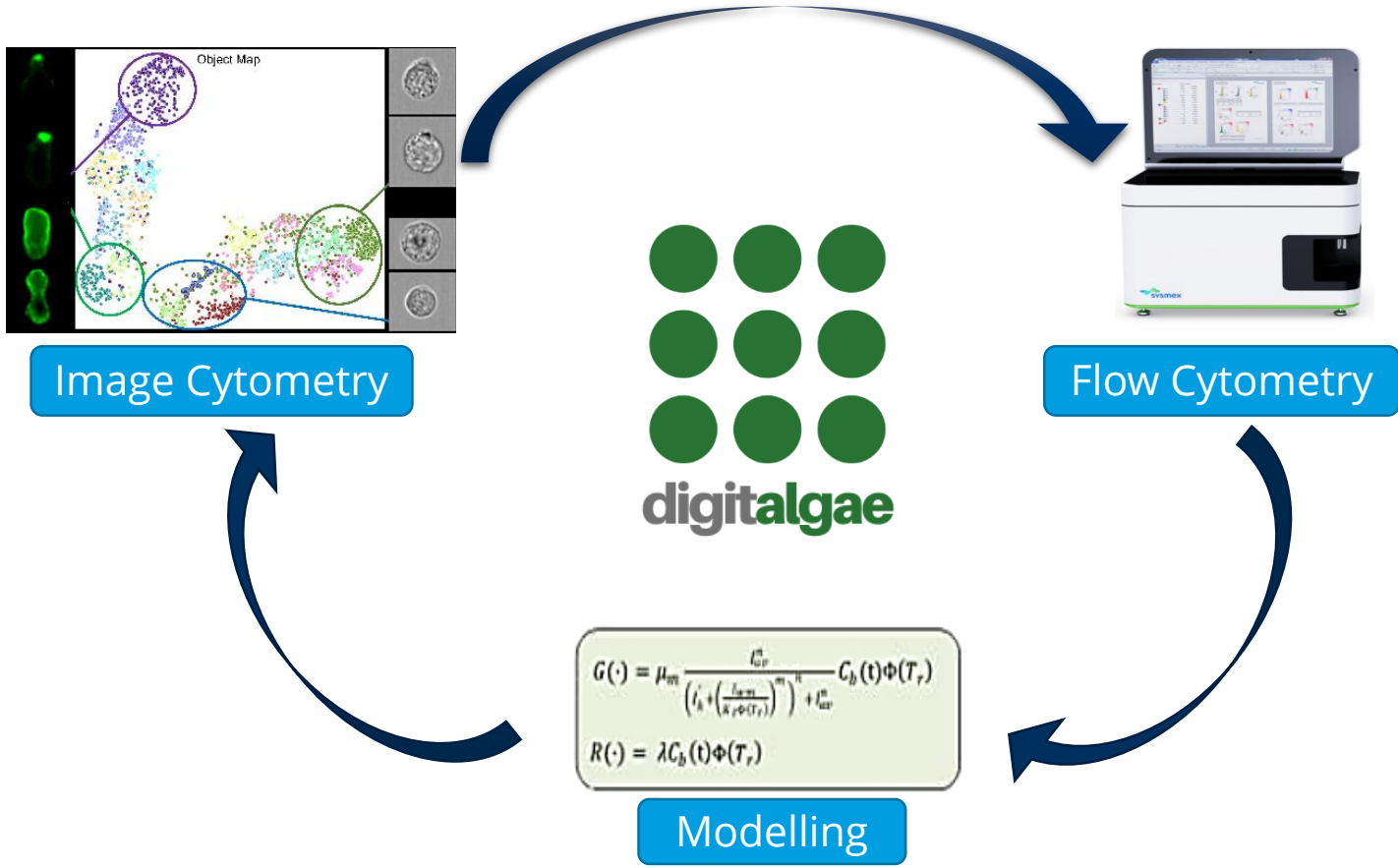


Yields are directly affected by cell cycle events



No data for a promising and efficient commercial production

Applied techniques

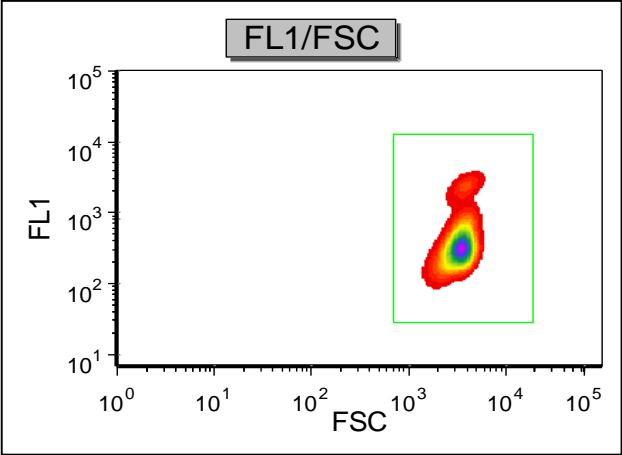


State of the project

- ▶ Optimization of microalgae DNA staining: experimental design, impacts and validation *(In preparation)*

SYTO 9

Solution Response	95% PI low	Data Mean	95% PI high
Staining efficiency	99,6	99,8	99,86



SYBR Green I

Solution Response	95% PI low	Data Mean	95% PI high
Staining efficiency	99,5	99,6	99,9

Internship opportunity

Flow cytometry

Microalgae biotechnology

Microalgae single-cell analytics

Bioprocess modelling

Innovative microalgae cultivation techniques