

AquaHealth

Microalgae Microbiomes — A natural source for the prevention and treatment of aquaculture diseases

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Objective & Structure



Novel **bioactive compounds from microalgae** for the development of prebiotic cultures as a natural **precautionary treatment** method for a sustainable health management in **aquacultures**.

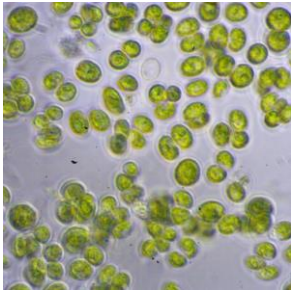


Photo: TUHH



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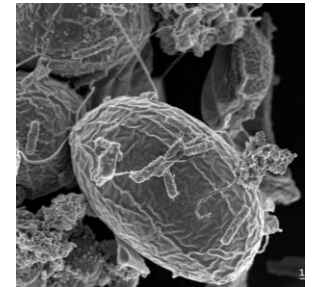
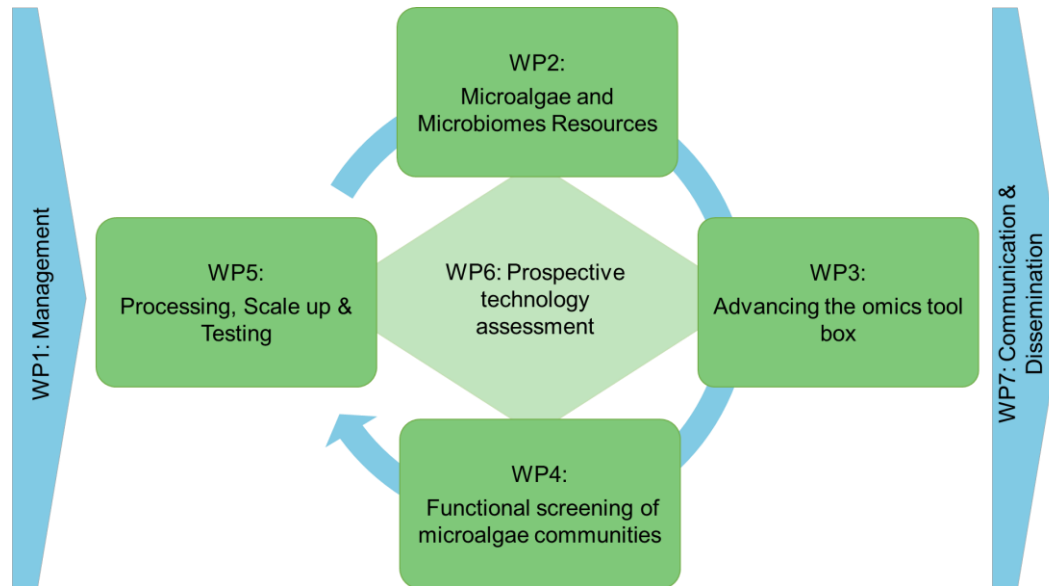


Photo: Universität Hamburg

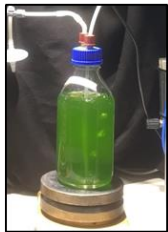


Photo: TUHH

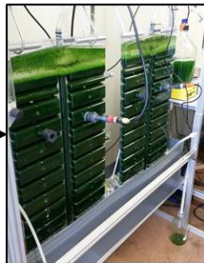
WP5: Scale up, Downstream Processing & Testing



- Scale up to pilot scale cultivation
- Development of downstream processing
- Evaluation of bioactive compounds
- Performance testing



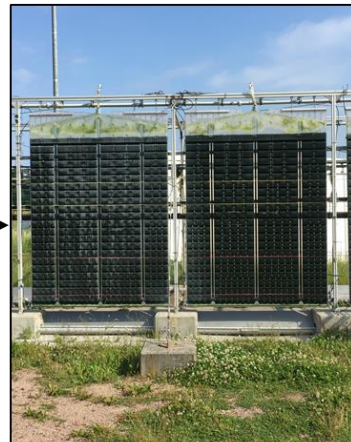
10 L Bottle
indoor



30 L Flat Panel
indoor



100 L Tubular
outdoor



180 L Flat Panel
outdoor



6000 L Open Pond
outdoor

WP5: Scale up, Downstream Processing & Testing



- Comparison of different methods for every DSP stage
- Analysis of
 - Productivity, energy consumption, ...
 - Bioactive effects
 - Microbiome composition
 - Cellular composition

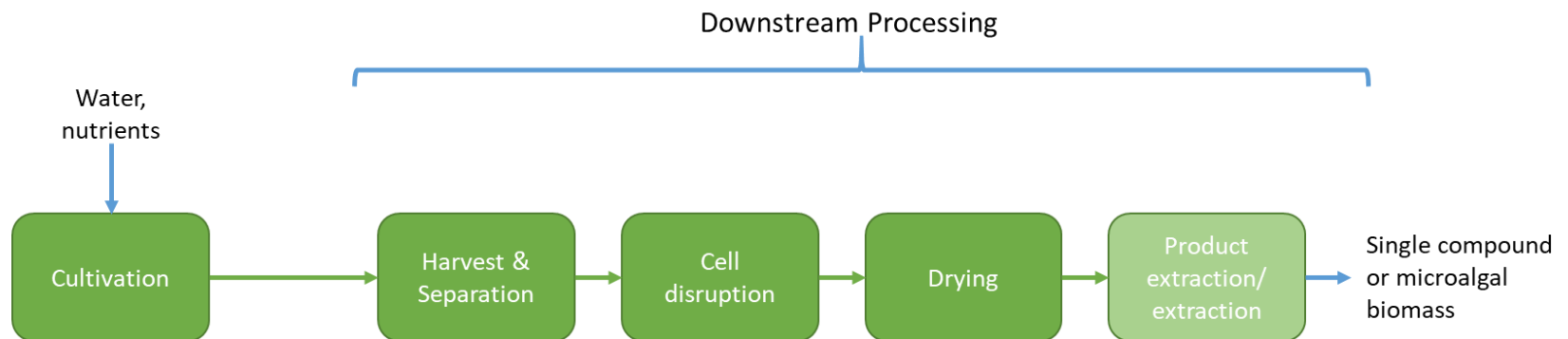


Figure: TUHH

WP6: Prospective technology assessment

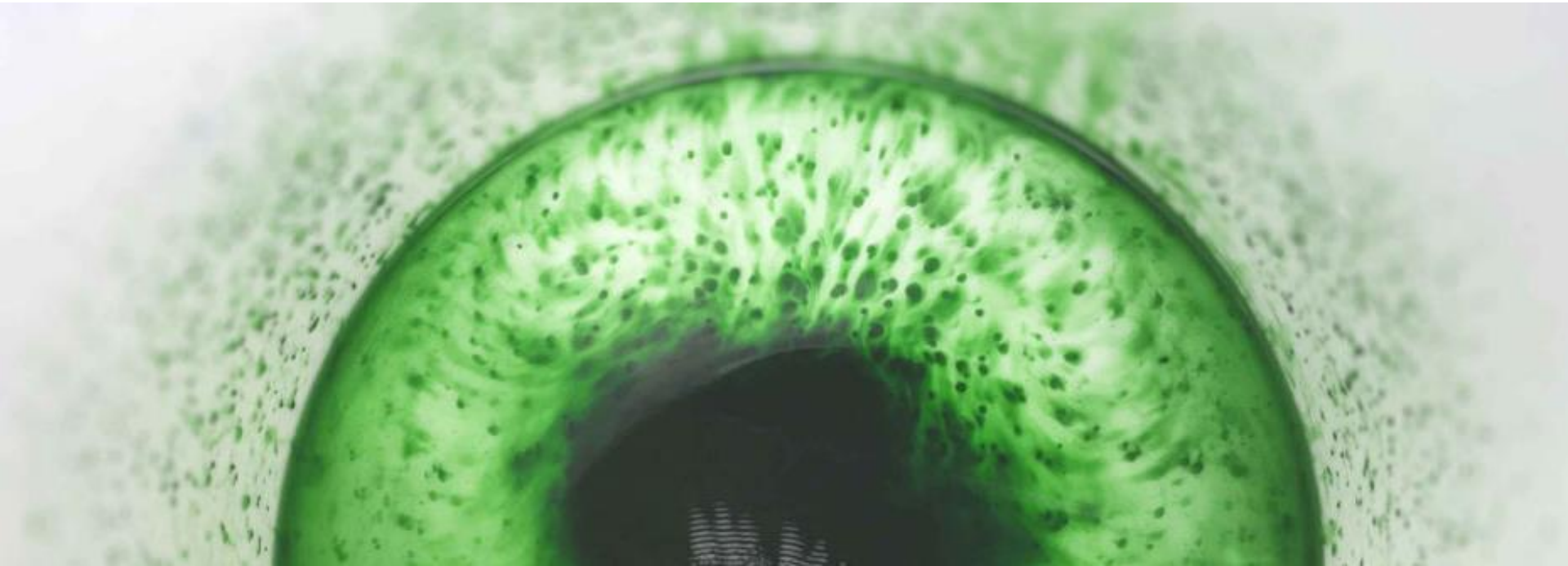


- **Scoping.** Define: type and functional properties of AquaHealth products, the competing alternative technologies, and the expected scaling-up synergies and trade-offs.
- **Comparative LCA.** Consequential approach, (marginal suppliers + co-products substitution) and uncertainty analysis (stochastic + modelling).
- **Scenarios.** Derive scenarios for upscaling to feed a prospective LCA.



AALBORG UNIVERSITY

Thank you for your attention!



<https://aquahealth-project.com/>

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