

## Study of bacterial biofilm

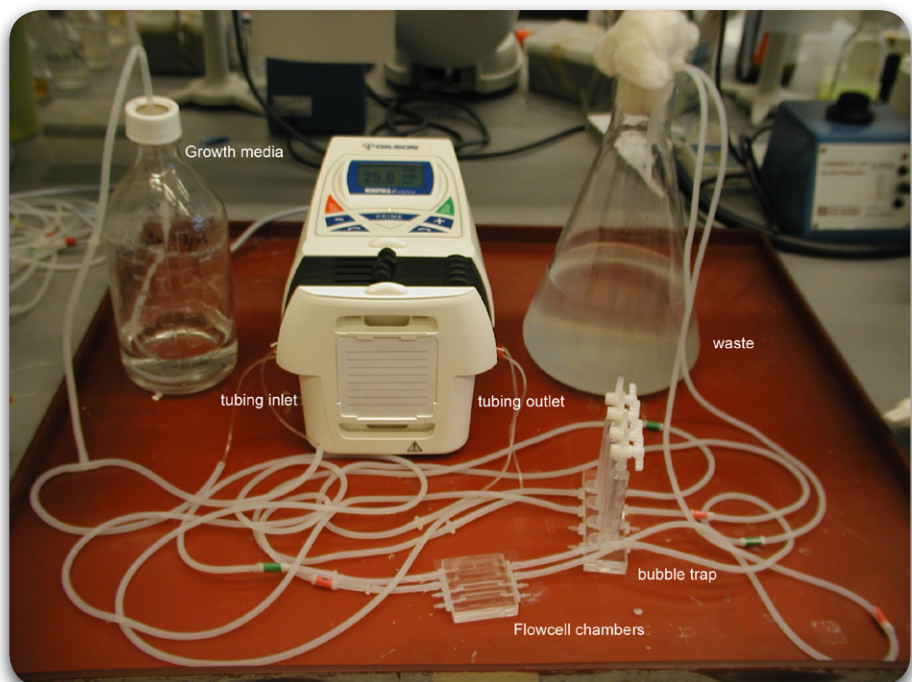


In the Institute of Biology at the Leiden University, the molecular biology team seeks to identify *Pseudomonas* (*Pseudomonas putida*) genes and traits involved in efficient competitive root colonisation in order to understand how bacteria survive, proliferate, and compete in the rhizosphere after bacterisation of seeds. The Minipuls evolution is used to study bacterial biofilms in flowcell chambers. Bacteria grow in flowcell chambers fed by an oxygenated solution and media. The Minipuls evolution is used to bring this solution to the chambers and recycle it.

The growth media was delivered at 0.125 mL/min to the flowcell system. Elen Lagendijk, technical assistant at the molecular and biology department, says that «one of the outright benefits of the Gilson Minipuls evolution peristaltic pump is that it enables the operator to replace tubing, add or remove channels while the pump is running without interrupting the flow in the other chambers...»

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Elen Lagendijk, technical assistant,  
Institute of Biology, Leiden University.



### Required Minipuls evolution products

Minipuls evolution - speed control module  
MF4 pump head  
Silicone tubing, 1.0mm internal diameter

### Reference

F110701  
F110706  
F1825112

[www.gilson.com](http://www.gilson.com) | [sales@gilson.com](mailto:sales@gilson.com) | [service@gilson.com](mailto:service@gilson.com) | [training@gilson.com](mailto:training@gilson.com)

**Gilson, Inc. World Headquarters** | 3000 Parmenter Street | P.O. Box 620027 | Middleton, WI 53562-0027 USA  
Tel: (1) 800-445-7661 or (1) 608-836-1551 | Fax: (1) 608-831-4451

**Gilson S.A.S.** | 19, avenue des Entrepreneurs | BP 145, F-95400 Villiers-le-Bel, France  
Tel: (33-1) 34 29 50 00 | Fax: (33-1) 34 29 50 20

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