



Flow cytometry facility and reservation

1.1 Introduction

The cell sorter is present at the laboratory for Hematology, which is part of the Department of Laboratory Medicine. It is possible to use this sort facility under supervision of an operator. Conditions and possibilities of the cell sorters are described below.

1.2 General information

1.2.1 Aria

The Aria cell sorter is manufactured for high speed and low speed (autoclone 6-384 well plates) cell sorting and is used to purify large amounts of cells up to 99% purity. Furthermore it is suitable for the detection of 18 colors. The size of the cells determine the nozzle and the speed. Small cells up to 15µm are sorted with the 70 µm nozzle. Bigger cells with the 85µm nozzle. The Aria detects with the 70 µm nozzle 50×10^6 in an hour, ($85 \mu\text{m } 40 \times 10^6$) so you can calculate the time for your reservation. The Aria is equipped with a 365nm UV laser, 488nm, 561nm, 405nm violet laser, and a 640nm laser.

1.2.2 Cell sorting

When you make a reservation we need the following information:

1. Which fluorochromes are you going to use and which combinations.
2. The total amount of cells and the number of samples.
3. The species : human, mouse, GMO. (Lentiviral GMO sort is possible under restriction)
4. If the sort has to be sterile.

1.2.3 What to bring

1. Cell samples in (5ml) Facs tubes.
2. 1.5ml, 5 ml, 15 ml, 50 ml Greiner tubes with medium (1/6 of the tube) to collect the sorted cells.

1.2.4 Requist

1. Cell sample concentrations must be around 50×10^6 /ml.
2. Clots must be removed (filtered) from samples before handed over to the operator.

1.2.5 FCS files

In dot plots the measurement of the samples and antibody expression are visualized. The amount of sorted cells is noted down on the out print. The list mode data files (FCS-files) are saved on the hard disk of the cell sorter. The responsibility of administrating these files is ascribed to the user. The operator can copy these files when asked, on to a backup drive or disk.

Reservations

For each cell sorter an agenda and email box is established on the exchange server. The facility is named *Vz apparatuur Laboratoriumgeneeskunde LH flowcytometer Aria*. You can use the facilities in a Windows environment (outlook) and Mac environment (Outlook in OS9 or Entourage in OSX). **For working outside werkplek 2.0 use webmail.**

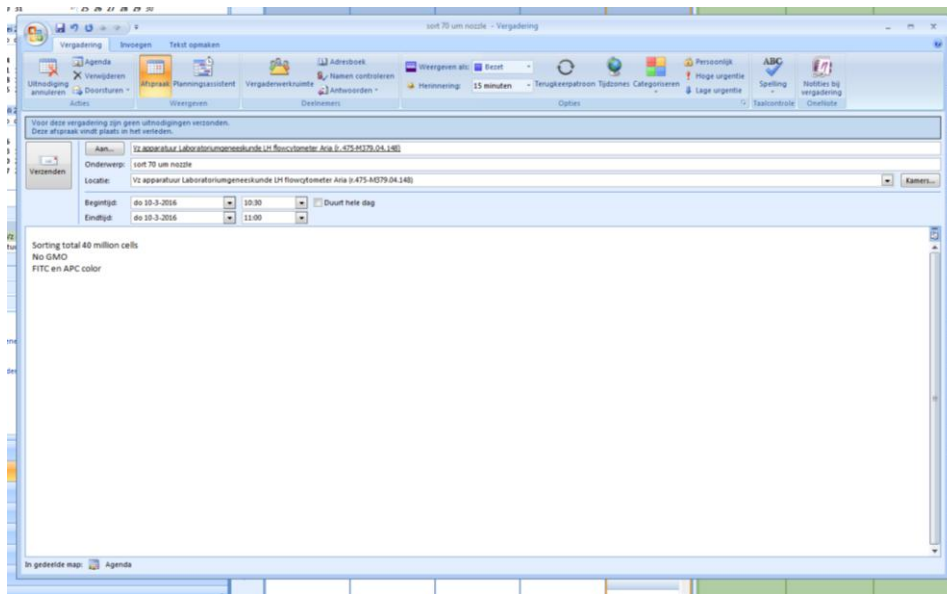
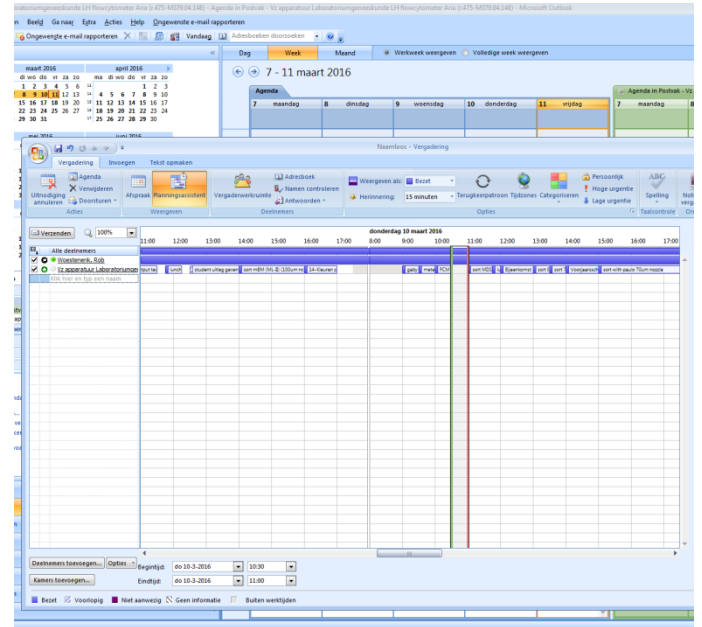
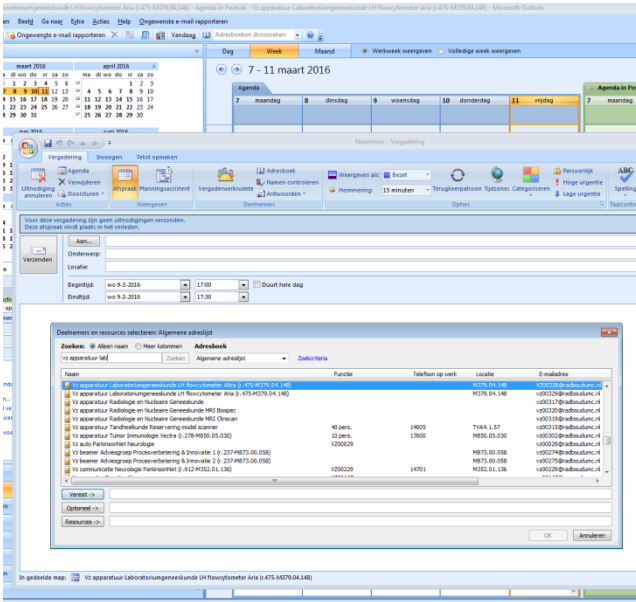
You can make a reservation request using your own agenda and invite the cell sorter.

Briefly: Select in outlook *calendar (agenda)*, select *new (nieuw)*, select guide card *invite attendees (deelnemers uitnodigen)*, select *to (aan)*. Select *Vz apparatuur Laboratoriumgeneeskunde LH flowcytometer Aria (VZ00329)* add this to *required (vereist)*. You can make this appointment. Select *scheduling (planning)*, bars indicate when the cell sorter is busy. Select the time you need to sort you samples.

Select *appointment (afspraak)*. mention your name and phone number under *subject (onderwerp)*. Select *send (verzenden)* to send your invitation.



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Your request is send the operator. The operator answer your email and your request will be accepted (or refused) and confirmed in your own and cell sorts agenda.

1.3

For questions you can contact the operators at (024 36)15232 .