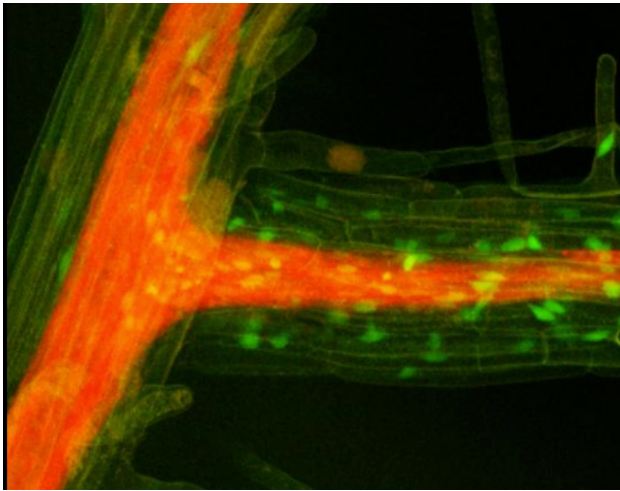

POSTDOCTORAL OR STAFF SCIENTIST POSITION IN PLANT EPIGENETICS



STUDYING NOVEL SMALL RNA PATHWAYS DURING PLANT DEFENSE

BACKGROUND

Defense mechanisms against pathogens are key for an organism's survival. Complex changes in DNA methylation, as well as reactivation of TEs, has been observed during bacterial infection. We have shown that treatment with a *Pseudomonas* virulence factor called Syringolin A (SylA) induces centromeric hypermethylation paralleled with increased transcription of defense-related genes. We have also shown that SylA induces the expression of atypical members of the RdDM pathway, namely *AGO3*, *AGO9*, and *DRM1*, all of which are normally restricted to the reproductive phase of the *Arabidopsis* life cycle. The study of this pathway during infection will enlighten us about their role during reproduction as well as might help us to establish evolutionary parallels between reproduction and defense.

YOUR QUALIFICATIONS

We are looking for motivated, and curious team players who are eager to learn, try new things and manage their own projects. You should have a Ph.D. (or possibly MSc) in plant molecular biology or related disciplines. You should have experience with *Arabidopsis* growth, genetics, and molecular biology technics, possibly with experience in imaging, FACS sorting and/or bioinformatics. You should have good communication and writing skills in English.

JOB INFORMATION

Start date: ASAP or to be agreed
Length of contract: 1-year
Activity rate: to be agreed
Workplace: IPS, University of Bern

YOUR APPLICATION

Email to pauline jullien (pauline.jullien@ips.unibe.ch) the following
a letter describing why you are interested in joining our group
a CV including a publication List and the names of 2 or 3 referees