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## Inventory of secreted proteins

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Jonathan B Weitzman

Email: jonathanweitzman@hotmail.com

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The pathogenicity of *Pseudomonas syringae* pv *tomato* DC3000 depends on effector proteins that are injected into the host plant cell by the Hrp (hypersensitivity response and pathogenicity) type III protein secretion system. In the May 28 [Proceedings of the National Academy of Sciences](#), Petnicki-Ocwieja *et al.* report an analysis of the [DC3000 genome](#) to identify new Hrp-dependent proteins (*Proc Natl Acad Sci USA* 2002, **99**:7652-7657). They found homologs of avirulence (Avr) proteins and potential effector candidates by mining the DC3000 genome for genes downstream of Hrp promoter sequences. Many of these proved to be secreted by the DC3000 Hrp system. In addition, comparative sequence analysis allowed them to predict Hrp-secreted proteins on the basis of export signal motifs. These two approaches led Petnicki-Ocwieja *et al.* to identify a number of novel Hops (Hrp-dependent outer proteins) that may be linked to pathogenicity.

## References

1. *Proceedings of the National Academy of Sciences*, [<http://www.pnas.org>]
2. TIGR Microbial Database, [<http://www.tigr.org/tdb/mdb/mdbinprogress.html>]