

## Developing Novel Rust Disease Resistance Approaches in Wheat

**Objective:** Host-induced gene silencing technology for combating cereal rust diseases by targeting pathogenicity-associated factors in rust pathogens

**Outputs thus far:** Wheat was genetically transformed for enhanced tolerance to rust pathogens using expressed rust gene fragments as an effective disease control strategy

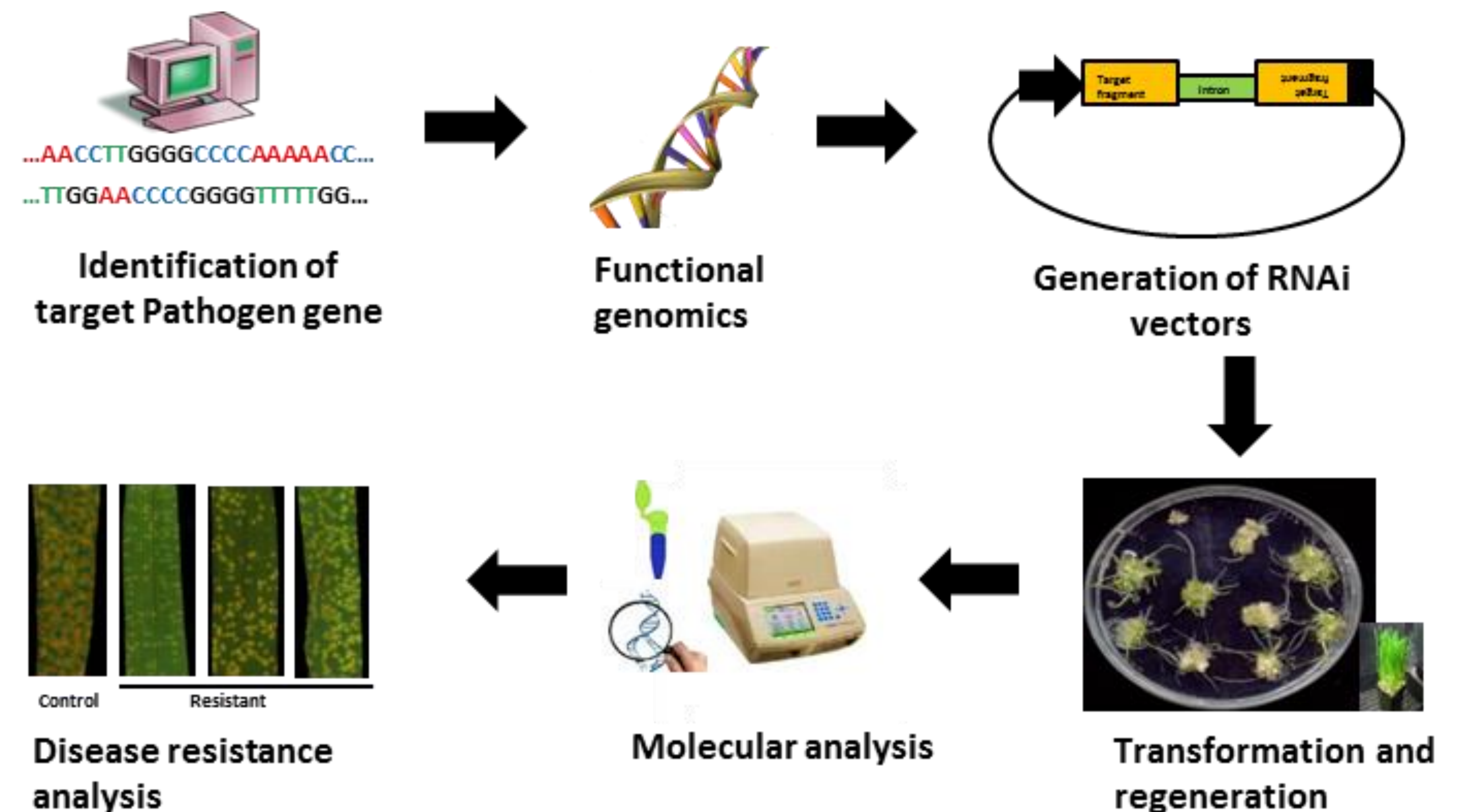
**Impact:** Increased variability and durability of resistance in cereal crops

Potential to reduce fungicide costs and their detrimental environmental impacts

**Deployment path:** Method training of personnel between the CWA and consortium partners

**Delivery date:** 2016-2017

**Resources committed:** ~\$500K over 4 years



**Opportunity for collaboration:** Development of marker-free wheat plants with durable rust disease resistance using the technology platform.

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