Postdoctoral position to produce durable rust-resistant wheat

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Background: Rusts are the most devastating diseases of wheat capable of whipping out entire crops. Along the history, rust resistance genes have been used to combat rust diseases, however many of the genes have lost efficacy and new epidemics threaten global wheat production. Therefore, new sources of rust resistance are needed to augment the wheat rust resistance gene pool.

We have used AgRenSeq (http://dx.doi.org/10.1101/248146), a novel associated genetics approach, to identify a suit of new rust resistance genes in a panel of wheat ancestral diploid plants. The post doc position is aimed at cloning and validating the function of these gene, verify the spectrum of resistance, and generation of durable rust resistant wheat lines using multiple gene arrays.

Successful candidate MUST have strong background in plant molecular biology and specific experience in gene cloning and construction of transformation vectors. Previous experience in plant transformation and in transcript analysis, and good background in wheat genetics and genomics are highly desirable.

It is a great opportunity for a postdoctoral associate to join an active and experienced research group and to take part in a high impact research. The project offers multiple opportunities for development of cutting edge research using advanced genomic and biotechnological approaches.

Tel-Aviv University campus is located near the center of Tel-Aviv. There is a large international community of students and post docs on campus, offering a range of social and academic opportunities.

Terms of position: A post doc fellowship is secured for three years.

Application: Please send cv and letter of interest to amirsh@ex.tau.ac.il