



UPPSALA  
UNIVERSITET

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# IEG News

October edition

## News from the administration

### Vacation

Information about vacation

- At least 20 days of vacation must be taken during the calendar year according to the Vacation Act. Those who have less than 20 vacation days must take out all their days.
- If you begin your employment on September 1 or later, you are entitled to save the year's qualifying vacation days to the following year. The same applies to those who have had a 100% leave of absence during January - September, according to a local collective agreement.
- Those who are employed from 1 August and are normally covered by a standard holiday must apply for their days themselves this year.
- According to a change to the Collective agreement (Villkorsavtalet) that came into effect in October 2017, you may not have more than 30 saved vacation days from 2018. The possibility to save vacation days has thus changed from 35 days to 30 days. Transitional regulations state that employees who have more than 30 saved days on January 1, 2018 may use the overshooting days within a five-year period. This means that on December 31, 2022, no one will have more than 30 saved days.
- Those who have been 100% on parental leave/leave of absence during the summer must apply for at least 20 vacation days during another period.

## New publications

Sher Afzal Khan and colleagues have published an article "The  $\beta_2$ Tubulin, Rad50-ATPase and enolase *cis*-regulatory regions mediate male germline expression in *Tribolium castaneum*". In the article you can read about how genetics-based pest management processes, including the sterile insect technique, are an effective method for the control of some pest insects. However, current SIT methods are not directly transferable to many important pest insect species due to the lack of genetic sexing strains. Genome editing is revolutionizing the way we conduct genetics in insects, including in *Tribolium castaneum*, an important genetic model and agricultural pest. We identified orthologues of  $\beta_2$ Tubulin, Rad50-ATPase and enolase in *T. castaneum*. Using RT-PCR, we confirmed that these genes are predominantly expressed in the testis. *PiggyBac*-based transformation of *T. castaneum cis*-regulatory regions derived from *Tc- $\beta_2t$* , *Tc-rad50* or *Tc-eno* resulted in EGFP expression specifically in the *T. castaneum* testis. Additionally, we determined that each of these regulatory regions regulates EGFP expression in different cell types of the male gonad. *Cis*-regulatory regions from *Tc- $\beta_2t$*  produced EGFP expression throughout spermatogenesis and also in mature sperms; *Tc-rad50* resulted in expression only in the haploid spermatid, while *Tc-eno* expressed EGFP in late spermatogenesis. In summary, the regulatory *cis*-regions characterized in this study are not only suited to study male gonadal function but could be used for development of transgenic sexing strains that produce one sex in pest control strategies.

## Upcoming PhD defenses

Jorrit Mesman: Thursday the 21<sup>st</sup> of October at 13:00 local time (CEST), in room “Aquarium-001” at Rue des Maraîchers 13, Genève, Switzerland.

Titel: Assessing future effects on lake ecosystem resilience using data analysis and dynamic modeling

Online defense:

<https://unige.zoom.us/j/62750943535?pwd=amtrTSszb3dpZWxBZzMrS096YjUvZz09>

- Meeting ID: 627 5094 3535
- Passcode: 114160

Javier Edo Varg: Friday the 22<sup>nd</sup> of October at 10:00 in Zootissalen

Titel: The effects of exposure to microplastics and pollutants on the arthropod microbiome

Opponent: Prof. Jarone Pinhassi, from Linnaeus University

Online defense: <https://uu-se.zoom.us/j/65146680565>

## EBC mushroom hunt

The annual EBC mushroom hunt and identification event will take place on Wednesday, Oct 13th, starting at 14:30.

Mycologists and fungal enthusiasts at EBC and beyond, will gather outside the entrance of Norbyvägen 18D at 14:30. We'll walk in groups to Stadsskogen and forage for mushrooms. We plan to meet up again around 16 on the lawn outside EBC for outdoor fungal identification. We'll have tables to work from (and maybe a tent for shelter if the weather is horrible).

Possibly, we will be frying and eating mushrooms together this year. Of course, we will follow the recommendations to prevent spread of virus, whatever these are on that day.

We will keep you posted on the specific plans!



Photo by: Anna Rosling

## Congratulations

To Zuzana Sekajová who successfully defended her dissertation on Thursday 23 Sept with Lesley Lancaster, Aberdeen as opponent.

To Matilda Andersson who successfully defended her dissertation on Friday 1 Oct with Brian Hayden, University of New Brunswick as opponent.