

## Video: Beehive study highlights how leaderless complex systems manage to get things done

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When we refer to someone as the "queen bee," we are suggesting the individual might be in charge of the situation. But, in fact, actual queen bees are not in charge of anything. Their job is to lay eggs, not to rule the hive.

With support from the National Science Foundation (NSF), entomologist Gene Robinson and mechanical engineer Harry Dankowicz at the University of Illinois, Urbana-Champaign have teamed up with psychologist Whitney Tabor at the University of Connecticut to study how coordination emerges in leaderless complex societies, such as a bee hive.

The researchers have also designed controlled situations to study how groups of humans manage to coordinate efforts and get things done, even in challenging situations in which there is no leader.

Ultimately, the research may contribute to solving challenges, such as the collapse of pollinating <u>bee colonies</u> or <u>destructive behavior</u> among groups of humans.

## Provided by National Science Foundation

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