

# Who Works with the Rovers?

So what does it take to be part of a team that studies Mars? The Mars Exploration Rover team is made up of men and women who have a range of different skills, interests, and paths that led them to their jobs. On this page you can read a little bit more about four of the many scientists

and engineers who got to study Mars on the recent Spirit and Opportunity Mars rover mission. Then you will take some time to explore what some other people you know do for work before investigating some career interests of your own.

## Cindy Oda *Software Engineer, Mars Exploration Rover*

Cindy helped develop some of the rover's software. The code she wrote was used to allow the rover to communicate with Earth.



Upon entering college, Cindy wanted to pursue either business or engineering. When she started taking computer science courses, she found she enjoyed the mentally challenging aspects of programming as well as the creative aspects of designing well-written code.

Cindy thinks it's important to try to get experience in areas that interest you while you are still going to school. She notes: "It's important while you're still in the deciding process to take the time to try different things to see whether that's what you want to do."

## Steve Squyres *Scientist, Mars Exploration Rover*

Steve was in charge of the rovers' science payload, which means all the science instruments on board. His science goal was to find out whether Mars ever had an environment suitable for life.

While a geology major, Steve took a course on the Mars Viking mission results. The course made him realize that he wanted to be involved in space science, which he has focused on ever since.



Steve gives this advice to young scientists or engineers: "There is no substitute for persistence. You must get all the training you need, and you must do well at it . . . that's a given. But in order to succeed in this business, the most important thing is to not let setbacks stop you."

## Stephen Gorevan *Engineer, Rock Abrasion Tool*

Stephen was in charge of the design for the Rock Abrasion Tool, or RAT, that was used on Mars to sample inside martian rocks to look for signs of past life.



Initially, Stephen was interested in studying music. Over time, however, he became more interested in the instrument he played—the piano. "Instead of being interested in playing the piano, I found myself becoming more interested in how the piano worked!" he says.

Stephen thinks that having an engineering degree from college may be the best way to become involved in the space program. "I understood (finally) that I loved understanding how machines worked and that it was logical for me to become an engineer and actually design machines."

## Tracy Neilson *Engineer, Fault Protection Team*

Tracy worked on designing the fault protection system, which helps put the rovers in safe mode when things go wrong.

After high school Tracy worked as a secretary in a real estate and property management company. She decided to pursue accounting in college, but because all the accounting classes were filled up she ended up in an engineering drawing class. "I really liked it," she says, "and the engineering classes were always available, so I stuck with it."



Tracy points out that it's not just engineers and scientists who work for NASA. "We are teachers, accountants, lawyers, secretaries, public outreach experts, camera operators, managers, students, physicists, and more," she notes. "And everyone contributes to the success of a mission. If you are enthusiastic about being a space explorer, we need you."

### Sources:

Meet the Men and Women of NASA  
[quest.arc.nasa.gov/people](http://quest.arc.nasa.gov/people)

NASA Zip Code Mars  
[zipcodemars.jpl.nasa.gov/](http://zipcodemars.jpl.nasa.gov/)

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