

# ASTRONAUT BIOGRAPHY



National Aeronautics and Space Administration

Lyndon B. Johnson Space Center  
Houston, Texas 77058

January 2025



## Chris Birch

(Ph.D.) NASA Astronaut

### Summary:

Chris (Christina) Birch was selected by NASA to join the 2021 Astronaut Candidate Class and reported for duty in January 2022. The Arizona native graduated from the University of Arizona, Tucson, with degrees in mathematics and biochemistry and molecular biophysics. After earning a doctorate in biological engineering from the Massachusetts Institute of Technology, Cambridge, Massachusetts, she taught bioengineering at the University of California, Riverside, and scientific writing and communication at the California Institute of Technology, Pasadena. She subsequently left academia to become a decorated track cyclist on the U.S. National Team.

### Personal Data:

Born in Mesa, Arizona, she considers Gilbert, Arizona, to be her hometown. Her husband, Ashton Lambie, is a World Champion cyclist. Her parents are William Birch of Gilbert and Moore, Montana, and Joanne Birch (deceased). She enjoys cycling, white water rafting, backpacking and spending time with her sister while working on her family's cattle ranch in Montana.

### Education:

Graduated Gilbert High School in 2004. Earned a bachelor's degree in mathematics and a bachelor's degree in biochemistry and molecular biophysics from the University of Arizona in 2008, where she also minored in Spanish studying at the Universidad de Belgrano, Argentina. She earned a doctorate in biological engineering from MIT in 2015, conducting original research at the intersection of synthetic biology, microfluidics, and infectious disease.

### Experience:

After graduating from MIT, Birch joined the Bioengineering faculty at the University of California, Riverside, in 2015 and 2016, before moving to Caltech where she taught scientific writing and communication from 2016 to 2018. She left Caltech to race as a track cyclist on the U.S. National Team and qualify for the Olympics, based out of the Olympic Training Center in Colorado Springs, Colorado. Alongside professional cycling, Birch worked as a scientific consultant for start-ups in various technology sectors from robotics to vaccine development. During her cycling tenure, she earned eleven National Championships, three World Cup medals in the team pursuit and Madison races, and twice participated in the World Championships. At the time of her selection, Birch was training with the U.S. National Team in the lead-up to the Tokyo Olympics.

### NASA Experience:

Birch was selected as a NASA astronaut candidate in December 2021 and reported for duty in January 2022 to complete two years of initial astronaut training.

### Awards/Honors:

University of Arizona, magna cum laude and Phi Beta Kappa; National Science Foundation Graduate Research Fellowship; MIT \$100k Accelerate Entrepreneurship finalist. Pan-American Games Gold Medalist in Team Pursuit and Madison.

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**Chris Birch**

**Organizations:**

MIT Biological Engineering; Tokyo 2020 Olympic Long Team member for Track Cycling.