

# Department of Plant and Microbial Biology

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Plants are critical for sustaining life on Earth, from microscopic algae to giant sequoia trees. Through the fundamental study of these organisms, plant biologists play a major role in providing us with more and better foods, in helping to characterize and preserve the quality of our environment, and in learning more about the many ways plants can be used.

The Department of Plant and Microbial Biology offers the only plant biology undergraduate degree in the state of North Carolina and houses world-class teaching and research programs that prepare our students for advanced training and careers in a number of life science and agricultural areas. Undergraduate majors have course options that span the breadth of the discipline, from plant physiology and molecular biology to floristics and plant ecology, as well as ethnobotany. Students apply what they learn through research and hands-on experiences in lab and field courses.

Selected faculty in Plant and Microbial Biology also work with the Biological Sciences faculty in the College of Sciences to offer the B.S. degree in Microbiology (<https://bio.sciences.ncsu.edu/undergraduate/degree-programs/microbiology/>).

## Plant Biology Undergraduate Program Highlights

- The undergraduate major is flexible, enabling students to pursue plant biology and elective courses that align with their career goals and interests.
- The department is home to the University Certificate in Field Botany, which students may complete en route to their degree.
- Many Plant Biology courses include laboratory or field components that provide students with hands-on experiences.
- A substantive research, teaching, or internship experience in the plant sciences is required of all students in the major to prepare and help qualify them for post-graduate education or employment in plant biology and the applied plant sciences, health professions, and education. Students work closely with departmental faculty and their academic advisor to identify training and career opportunities that are consistent with their goals.
- Undergraduate students interested in getting involved in plant biology may join the Botany Club (<https://cals.ncsu.edu/plant-and-microbial-biology/students/clubs-programs/>) at NC State, which has regular meetings during the academic year.

For more information about our department, including contact information, visit our PMB department website (<https://cals.ncsu.edu/plant-and-microbial-biology/>).

## Contact Information

**Department of Plant and Microbial Biology**  
NC State University  
Campus Box 7612  
Raleigh, NC 27695-7612  
Website (<https://pmb.cals.ncsu.edu>)

**Dr. Bob Franks**

Professor and Department Head  
NC State University  
2115 Gardner Hall, Box 7612  
Raleigh, NC 27695-7612  
Phone : 919.515.3807  
[rgfranks@ncsu.edu](mailto:rgfranks@ncsu.edu)

## Department Head

Robert G. Franks

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## Associate Department Head

Marcela Rojas-Pierce

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## Directors

Chad V. Jordan, *Director of Plant Biology Undergraduate Programs*

Richard L. Blanton, *Director of Plant Biology Graduate Programs*

Susan D. Carson, *Director of the Master of Microbial Biotechnology Program*

Christine V. Hawkes, *Director of Microbiology Graduate Programs*

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## University Research Professor

William F. Thompson

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## Alumni Distinguished Undergraduate Professor

Chad V. Jordan

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## William Neal Reynolds Distinguished Professors

Jose M. Alonso

Joann M. Burkholder

Amy M. Grunden

Linda K. Hanley-Bowdoin

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## Professors

Jose M. Alonso

Richard L. Blanton

Jose M. Bruno-Bàrcena

Joann M. Burkholder

Susan D. Carson

Robert G. Franks

Amy M. Grunden

Candace H. Haigler

Linda K. Hanley-Bowdoin

Christine V. Hawkes

William A. Hoffmann

Tzung-Fu Hsieh

Michael R. Hyman

Alexander Krings

Anna Stepanova

Xu (Sirius) Li

Terri A. Long

Adrian Percy, *Executive Director of the North Carolina Plant Sciences Initiative*

Marcela Rojas-Pierce

Heike I.A. Sederoff

Ross Sozzani

William F. Thompson

Cranos M. Williams

Deyu Xie

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## Professors Emeriti

Nina S. Allen

Udo Blum

Wendy F. Boss

Rebecca S. Boston

Margaret E. Daub

Eric Davies

Paul T. Hamilton

Geraldine Luginbuhl

James E. Mickle

Eric S. Miller

Leo W. Parks

Niki Robertson

Jon M. Stucky

C. Gerald Van Dyke

Thomas R. Wentworth

Qiuyun (Jenny) Xiang

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## Research Professor

Imara Y. Perera

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## Teaching Professor

Chad V. Jordan

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## Associate Professors

Manuel Kleiner

Seema N. Sheth

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## Associate Research Professor

Carole Saravitz, *Phytotron Director*

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## Associate Teaching Professor

Jillian M. De Gezelle

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## Assistant Professors

Orlando Arguello-Miranda

Mallory Choudoir

Zhe Lyu

William Petry

Kasie T. Raymann

Debjani Sihi

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## Associate Members of the Faculty

Peter Balint-Kurti, *Entomology and Plant Pathology*

Kent Burkey, *Crop and Soil Sciences*

Francis de los Reyes, *Civil, Construction, and Environmental Engineering*

Ralph Dewey, *Crop and Soil Sciences*

Colleen Doherty, *Molecular and Structural Biochemistry*

Joseph Gage, *Crop and Soil Sciences*

Sophia Kathariou, *Food, Bioprocessing, and Nutrition Sciences*

Slavko Komarnytsky, *Food, Bioprocessing, and Nutrition Sciences*

David Muddiman, *Chemistry*

Jean Ristaino, *Entomology and Plant Pathology*

Tom Rufty, Jr. , *Crop and Soil Sciences*

Ron Sederoff, *Forestry and Environmental Resources*

Jack Wang, *Forestry and Environmental Resources*

Ross Whetten, *Forestry and Environmental Resources*

- Biotechnology (Minor) (<http://catalog.ncsu.edu/undergraduate/agriculture-life-sciences/plant-microbial-biology/biotechnology-minor/>)
- Field Botany (Certificate) (<http://catalog.ncsu.edu/undergraduate/agriculture-life-sciences/plant-microbial-biology/field-botany-certificate/>)
- Plant Biology (BS) (<http://catalog.ncsu.edu/undergraduate/agriculture-life-sciences/plant-microbial-biology/plant-biology-bs/>)
- Plant Biology (Minor) (<http://catalog.ncsu.edu/undergraduate/agriculture-life-sciences/plant-microbial-biology/plant-biology-minor/>)