

Color the Scientists

WOMEN IN STEM IN UPSTATE SOUTH CAROLINA

Initiated by Ana C. Alba-Rubio | Illustrated by Pooja Kumar | Funded by the National Science Foundation



**To every child that
dreams of changing
the world,**

This work was supported by the
National Science Foundation
under Grant No. 2154386.

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Editor's Note

Welcome to this extraordinary coloring book celebrating the remarkable women scientists and engineers of Clemson University! We are thrilled to present this unique project, which was initiated by the visionary Dr. Ana C. Alba-Rubio, designed and illustrated by Pooja Venkatachalam Kumar, and generously funded by the National Science Foundation (NSF).

Within these pages, you will embark on an inspiring journey through the world of science, guided by the stories and achievements of the brilliant women who have made invaluable contributions to their respective fields. These scientists, with their dedication, passion, and unwavering commitment to discovery, have left an indelible mark on the scientific community and serve as role models for aspiring young scientists everywhere.

From biology to chemistry, physics to engineering, these pages showcase the diversity of scientific disciplines that thrive at Clemson University, where innovation and excellence know no bounds. Through vibrant illustrations and captivating stories, this coloring book invites children to explore the fascinating world of science and learn about the trailblazing women who have played pivotal roles in shaping it.

We hope that this coloring book not only inspires creativity and curiosity but also serves as a tribute to the dedication and resilience of women in science. Dr. Ana C. Alba-Rubio's vision and the support of the National Science Foundation have made this project possible, emphasizing the importance of fostering diversity and inclusion in STEM fields.

As young minds immerse themselves in the stories and illustrations, we hope they find inspiration to pursue their own scientific dreams. May this coloring book serve as a reminder that there are no boundaries to what they can achieve, and that, like the incredible women scientists featured here, they too can leave an indelible mark on the world.

Thank you for joining us on this exciting journey. We hope you enjoy coloring these pages as much as we have enjoyed bringing them to life. Together, let us celebrate the power of curiosity, determination, and the limitless possibilities of science.

Happy coloring!

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Spain

Dr. Ana C. Alba-Rubio

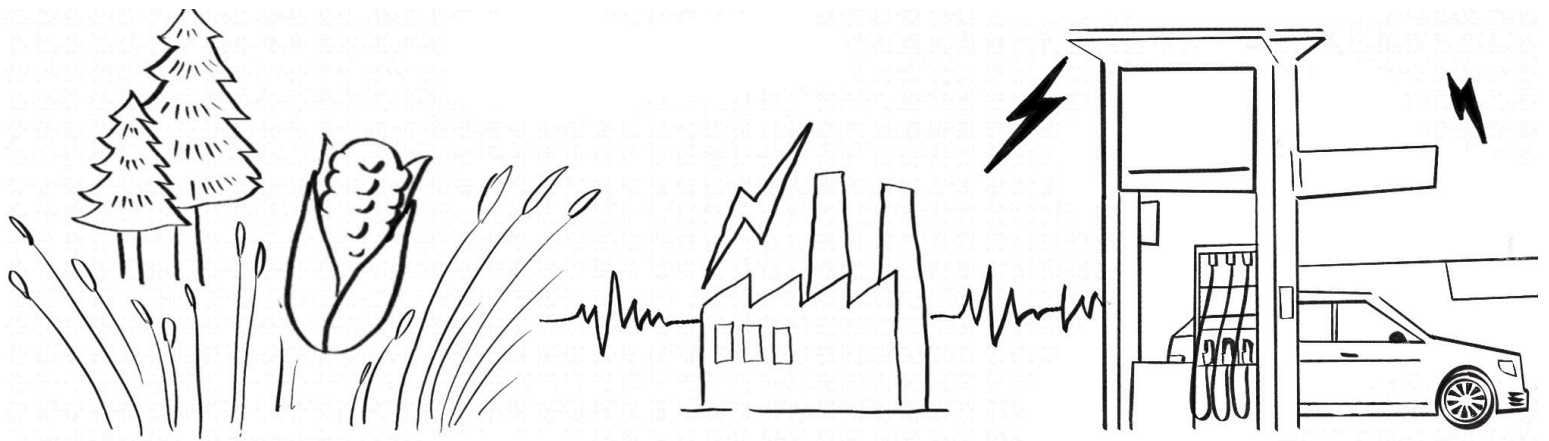
Associate Professor
 Chemical and Biomolecular Engineering
 Clemson University, SC

COLORS TO BE USED
 FOR THE SCIENTIST

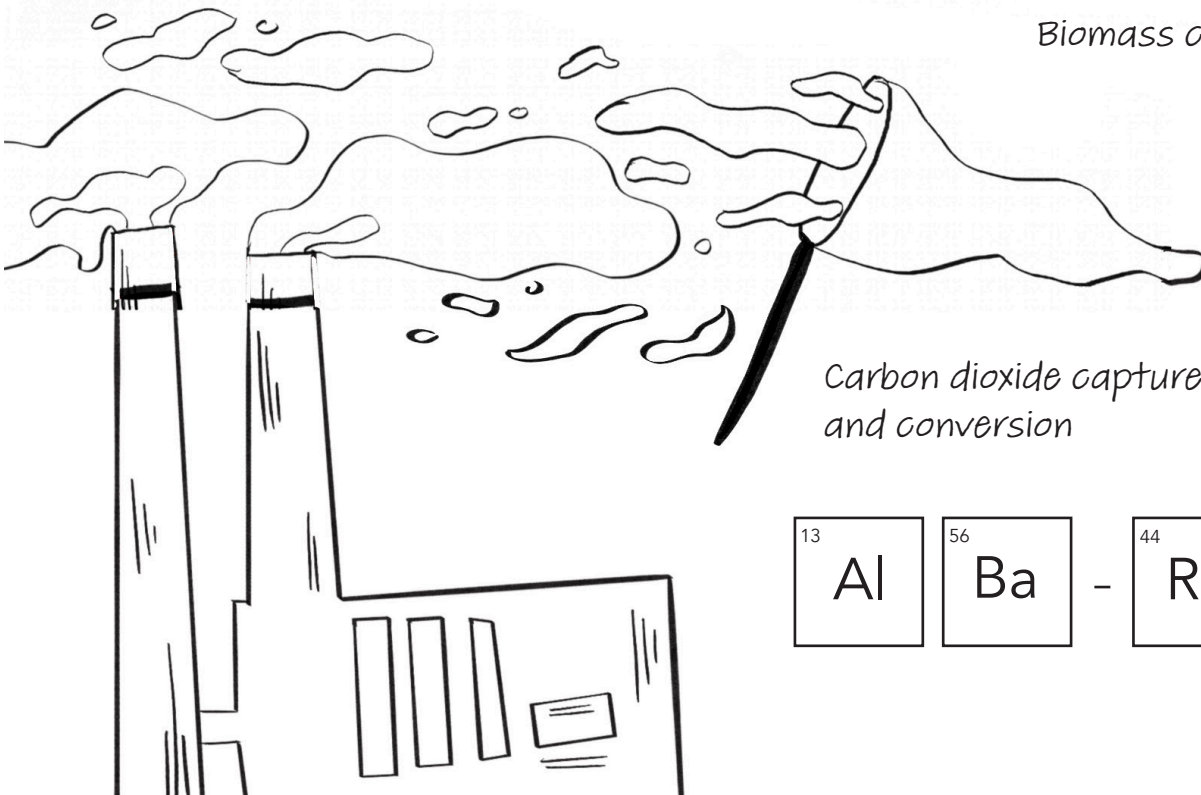
- Hair - Brown
- Skin - Light almond
- Favorite Color - Blue

Dr. Ana C. Alba-Rubio is a chemical engineer. She is from Spain and teaches at Clemson University. Dr. Ana also enjoys nature and spends time hiking and swimming in the lake with her spouse. She has a big family of pets, including three dogs and three cats! In her lab, Dr. Ana

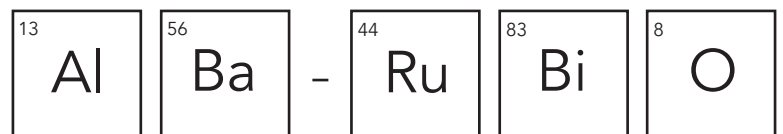
works on cool science projects to help our planet by turning carbon dioxide and biomass into fuels. She also finds new ways to recycle plastics. Plus, she's passionate about encouraging girls to love science & engineering.



Biomass conversion



Carbon dioxide capture and conversion





Dr. Julia Brumaghim

Professor
Chemistry
Clemson University, SC

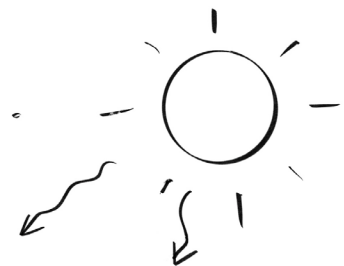
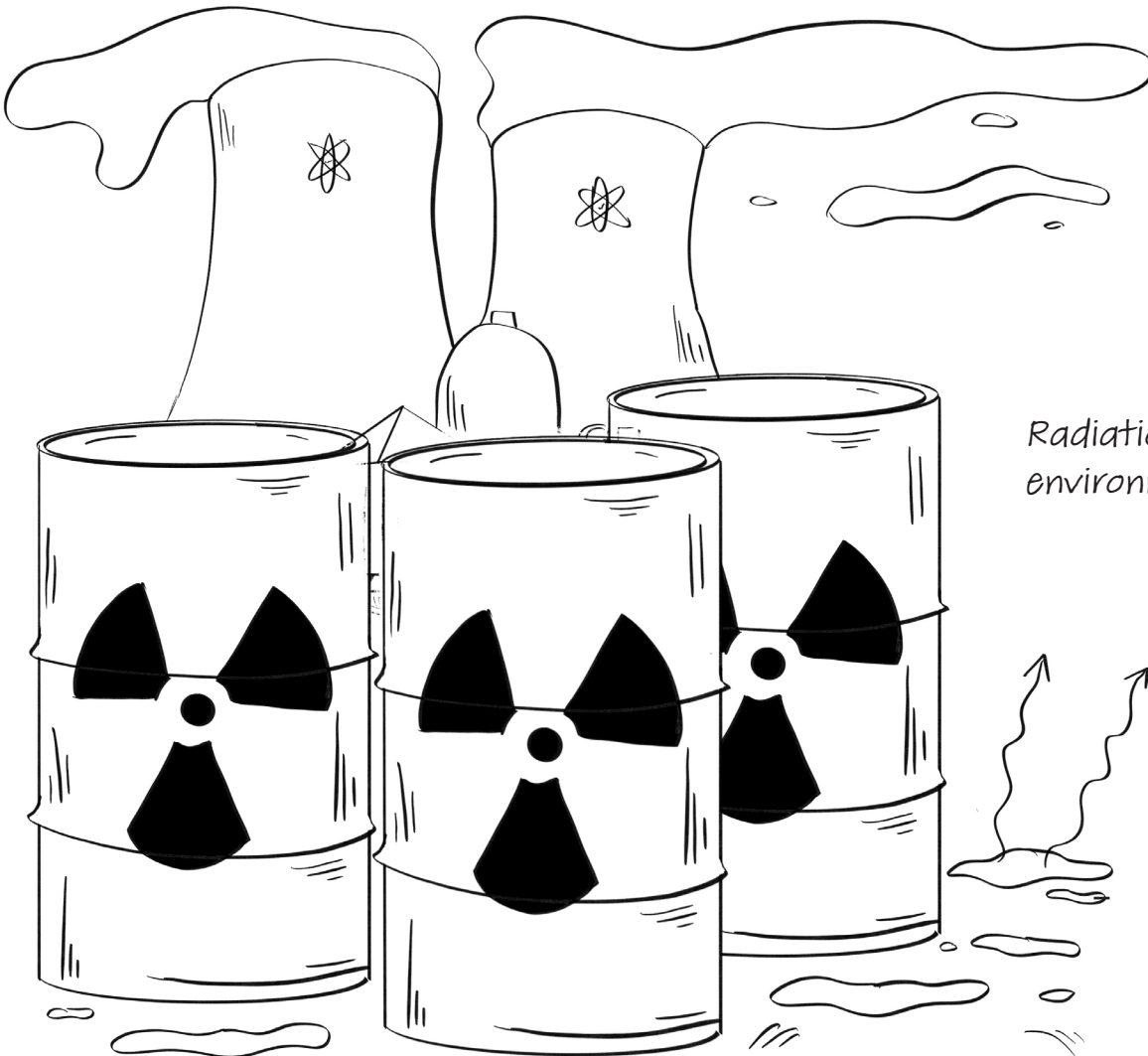
COLORS TO BE USED
FOR THE SCIENTIST
Hair - Brown + White
Skin - Very light golden
Favorite Color - All colors!

Dr. Julia Brumaghim became interested in chemistry when she was a student, just like you! She worked in different laboratories and learned a lot about chemicals. Now, she's a chemistry professor at Clemson University and studies how certain antioxidants can protect

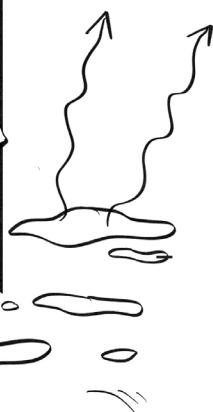
our DNA. When she's not doing science, she's busy taking care of her family, reading science fiction books, and swimming whenever she can.

Main
Research
Areas

Treating radiation



Radiation from
environment



Work on
DNA



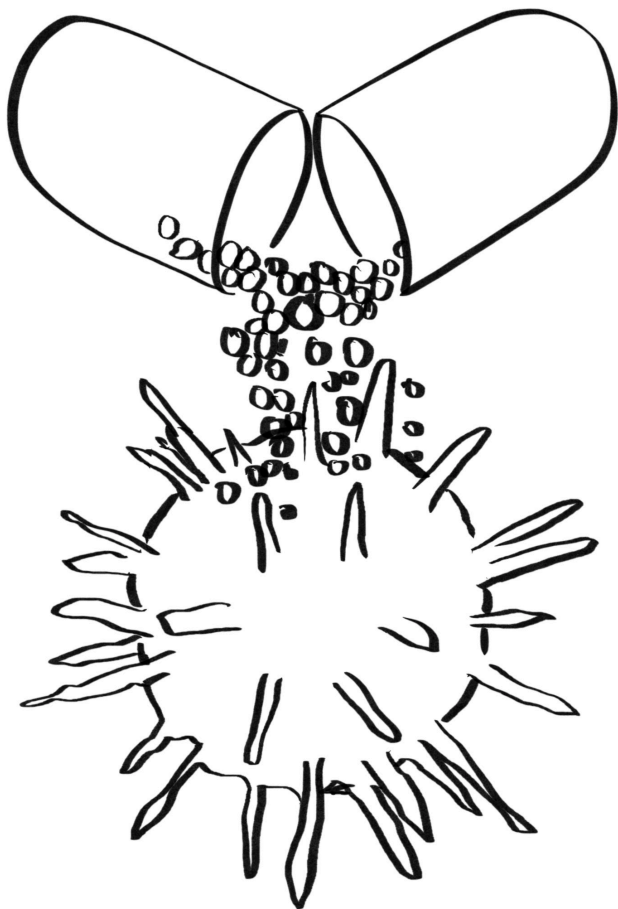
Dr. Jessica Larsen

Associate Professor
 Chemical and Biomolecular Engineering
 Clemson University, SC

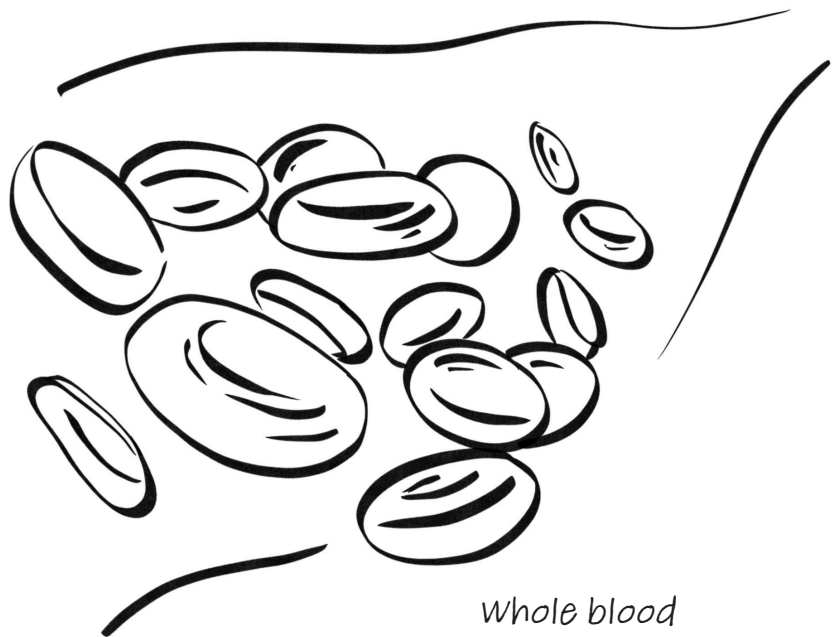
COLORS TO BE USED
 FOR THE SCIENTIST
 Hair - Brown
 Skin - Light medium golden
 Favorite Color - Red violet +
 Carnation pink

In the Larsen Lab, Dr. Jessica Larsen and her team are like modern-day magicians with science! They use cool things like nanotechnology and special materials to create new ways to deliver medicine. One of their main goals is to develop tiny carriers that can go through barriers in our body, like the one protecting our brain, to deliver medicine exactly where it's needed.

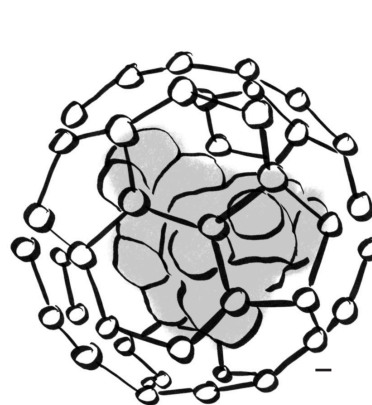
Main
 Research
 Areas



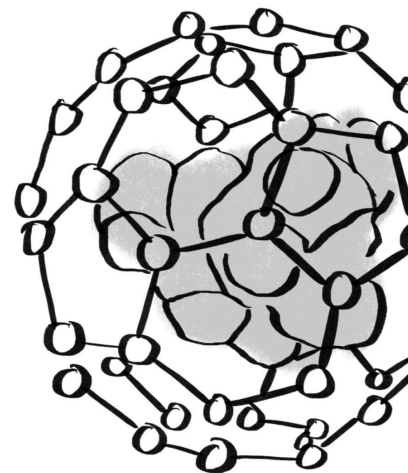
Drug delivery



Whole blood



Nanoparticles





Dr. Leah Casabianca

Associate Professor
Chemistry
Clemson University, SC

COLORS TO BE USED
FOR THE SCIENTIST

Hair - Black + Brown + White

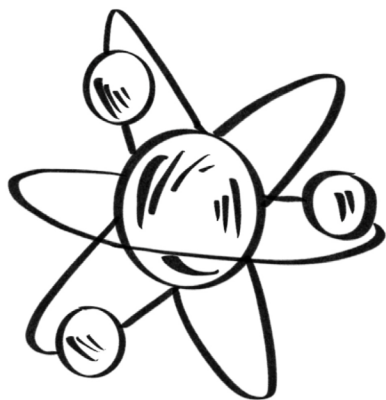
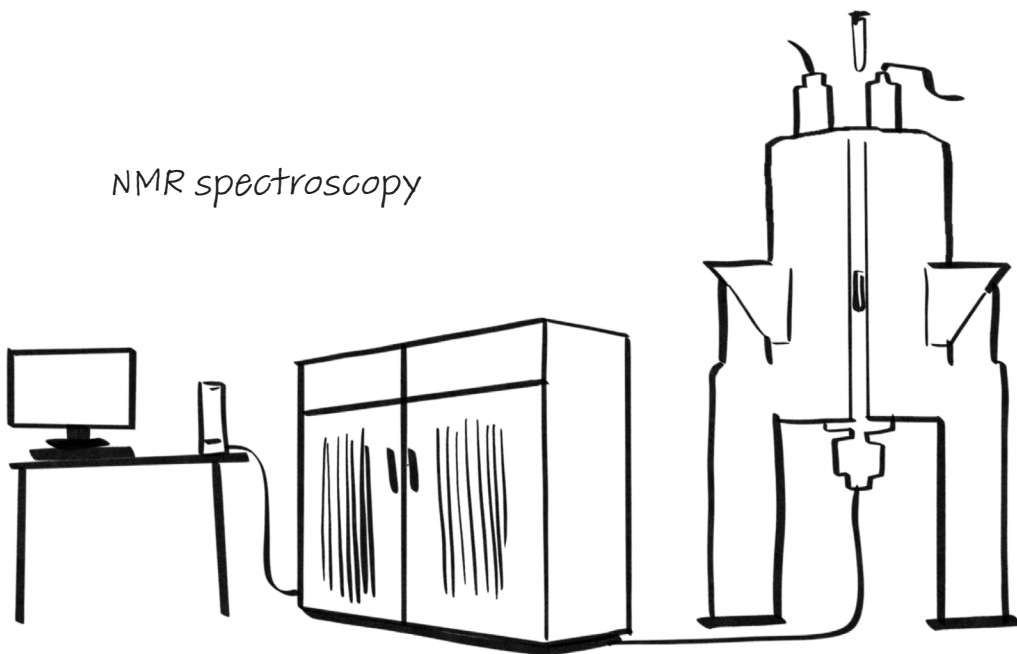
Skin - Very light golden

Favorite Color - Blue violet

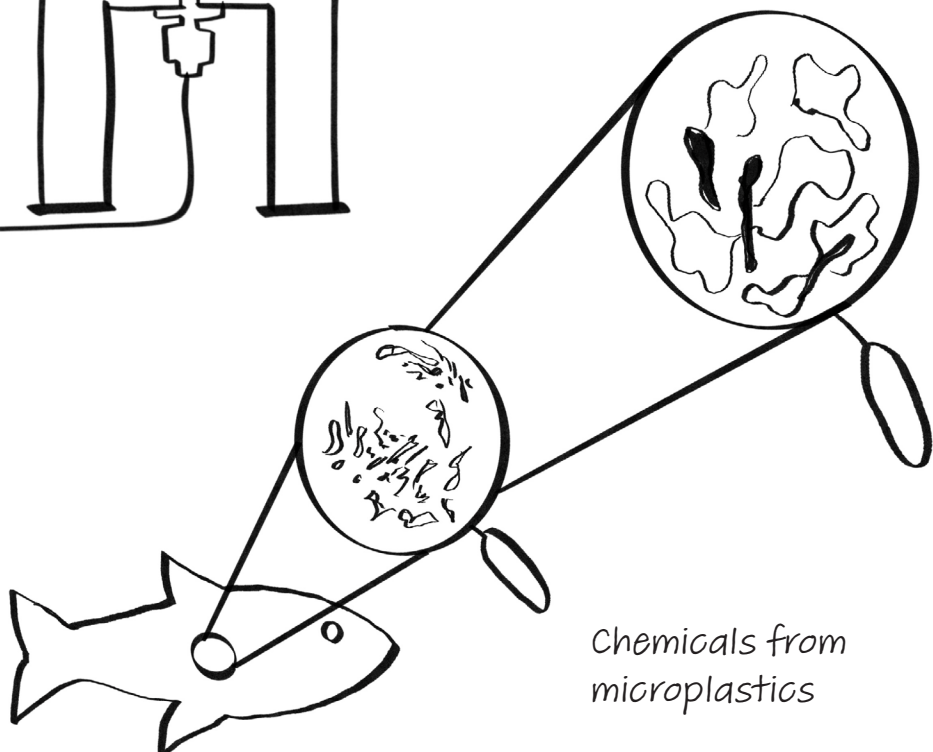
Dr. Leah Casabianca is a chemistry expert who studied at different universities. She works at Clemson University and loves exploring the tiny parts of materials using a special tool called Nuclear Magnetic Resonance (NMR). It's a big magnet that helps her see things we can't normally see!

Main
Research
Areas

NMR spectroscopy



Structure imaging



*Chemicals from
microplastics*



Dr. Shunyu Liu

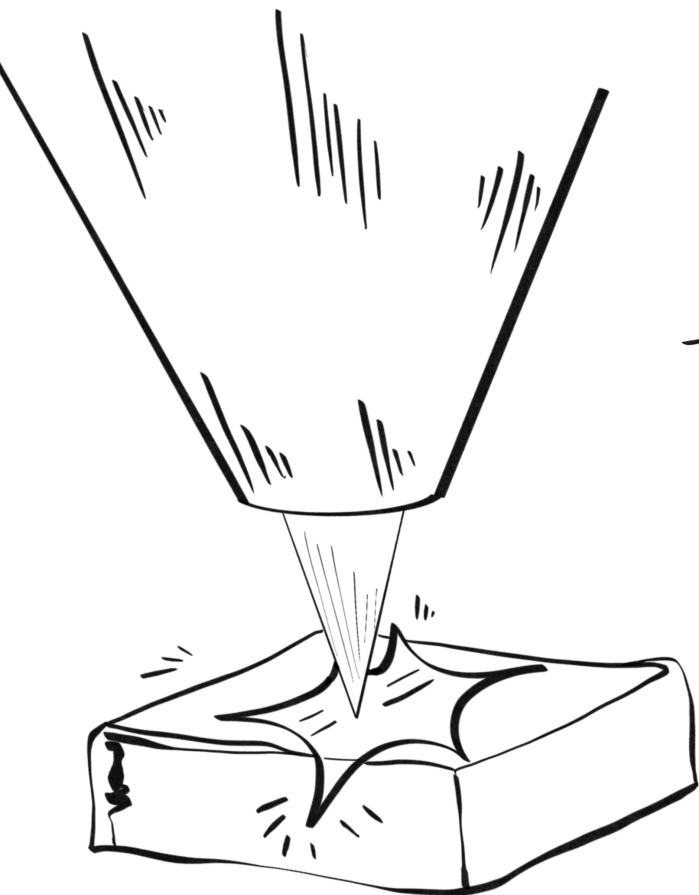
Assistant Professor
Automotive Engineering
Clemson University, SC

COLORS TO BE USED
FOR THE SCIENTIST
Hair - Black
Skin - Light medium golden
Favorite Color - Yellow orange

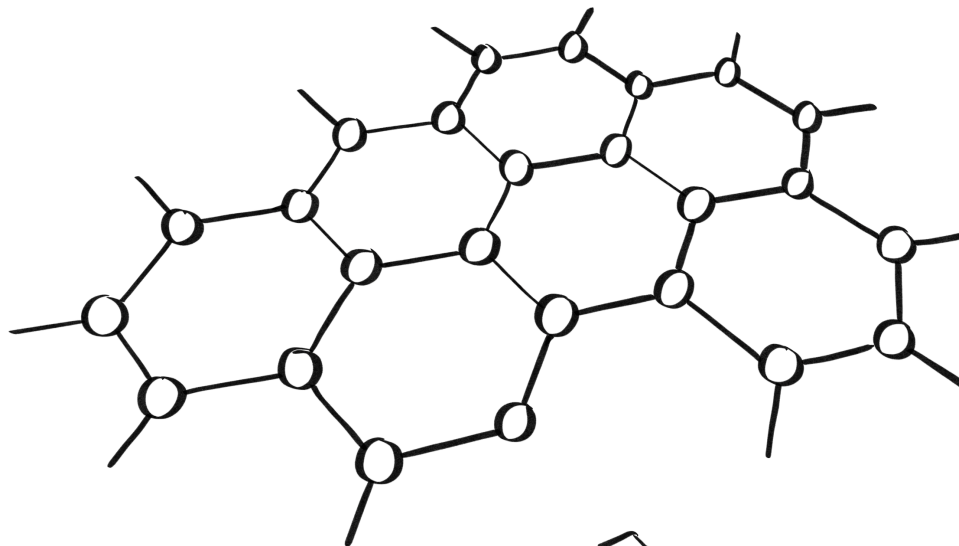
Dr. Shunyu Liu is a professor who works with materials and manufacturing. She joined Clemson University recently and has a special lab where she uses lasers to create new materials. She loves teaching about this and works on projects to help students learn better. In her

free time, she enjoys being with her two cats and looking for wild foods like mushrooms and seafood.

Main
Research
Areas



Laser additive manufacturing





Dr. Marian Kennedy

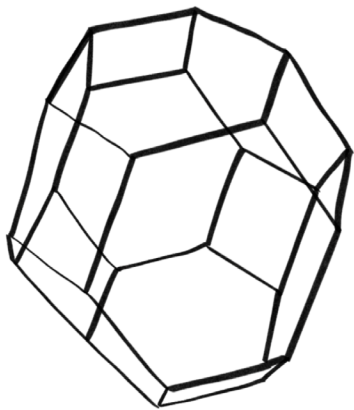
Associate Professor
Materials Science and Engineering
Clemson University, SC

COLORS TO BE USED
FOR THE SCIENTIST
Hair - Brown + Black + White
Skin - Light rose + Freckles
Favorite Color - Blue

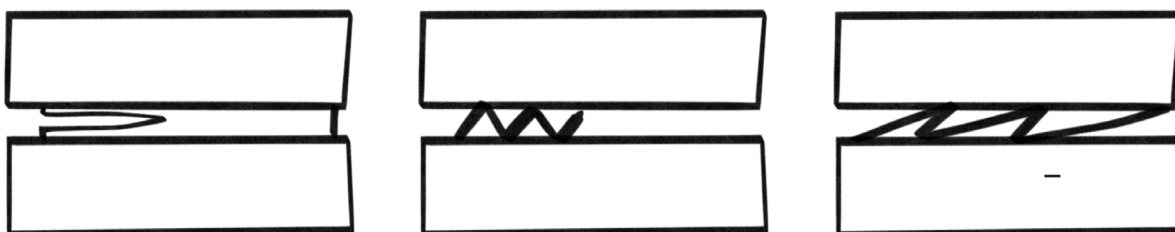
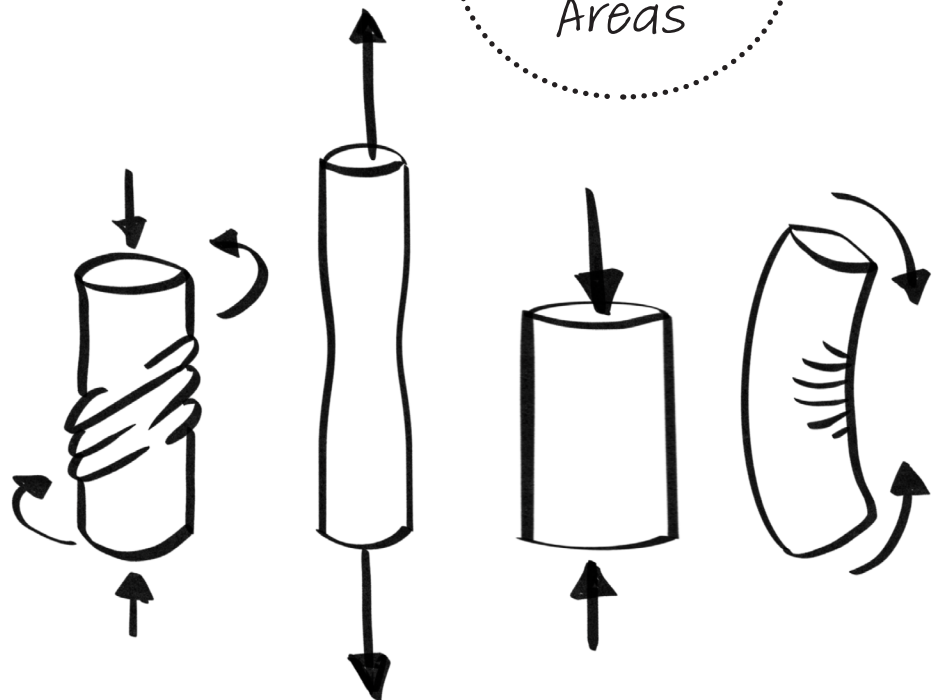
Dr. Marian Kennedy is a professor who studies how metal deform and fracture. She and her team share their findings with other scientists so that they can build reliable structures. She also mentors students who want to become researchers. Marian enjoys spending time with

her children as they play at the parks and going to church with her spouse.

Main
Research
Areas



Loads on solids



Adhesion & fracture



Dr. Sruthi Narayanan

Associate Professor
Plant and Environmental Sciences
Clemson University, SC

COLORS TO BE USED
FOR THE SCIENTIST
Hair - Black
Skin - Light golden
Favorite Color - Yellow orange

Dr. Sruthi Narayanan is a professor who studies how plants grow under tough conditions like heat and drought. She wants to help farmers grow crops even when the weather is chal-

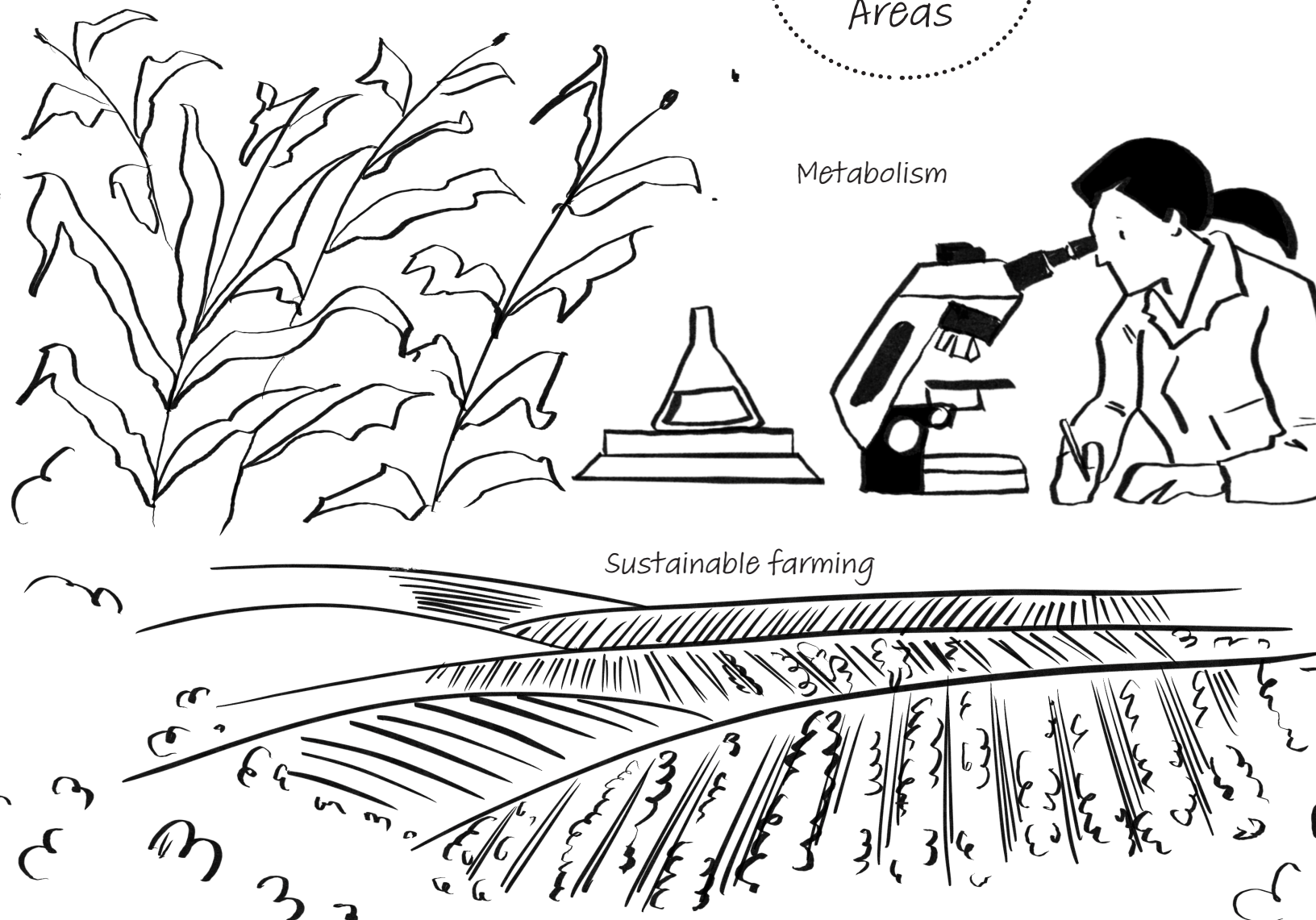
lenging. She teaches students about plants and loves spending time with her family, enjoying nature, reading, and listening to music.

Main
Research
Areas

Plant physiology

Metabolism

Sustainable farming





Dr. Keisha Cook

Assistant Professor
 Mathematical and Statistical Sciences
 Clemson University, SC

COLORS TO BE USED
 FOR THE SCIENTIST
 Hair - Brown + Black
 Skin - Deep golden
 Favorite Color - Carnation pink

Meet Dr. Keisha Cook, a Mathematics Professor at Clemson University. She grew up in Marietta, GA, and loved math because it's like a puzzle that helps us understand the world. She originally wanted to be a math teacher, but then

became a university professor. Outside of math, she loves trying new foods in different cities and enjoys cooking. She shows that cooking can be a tasty way to use math!

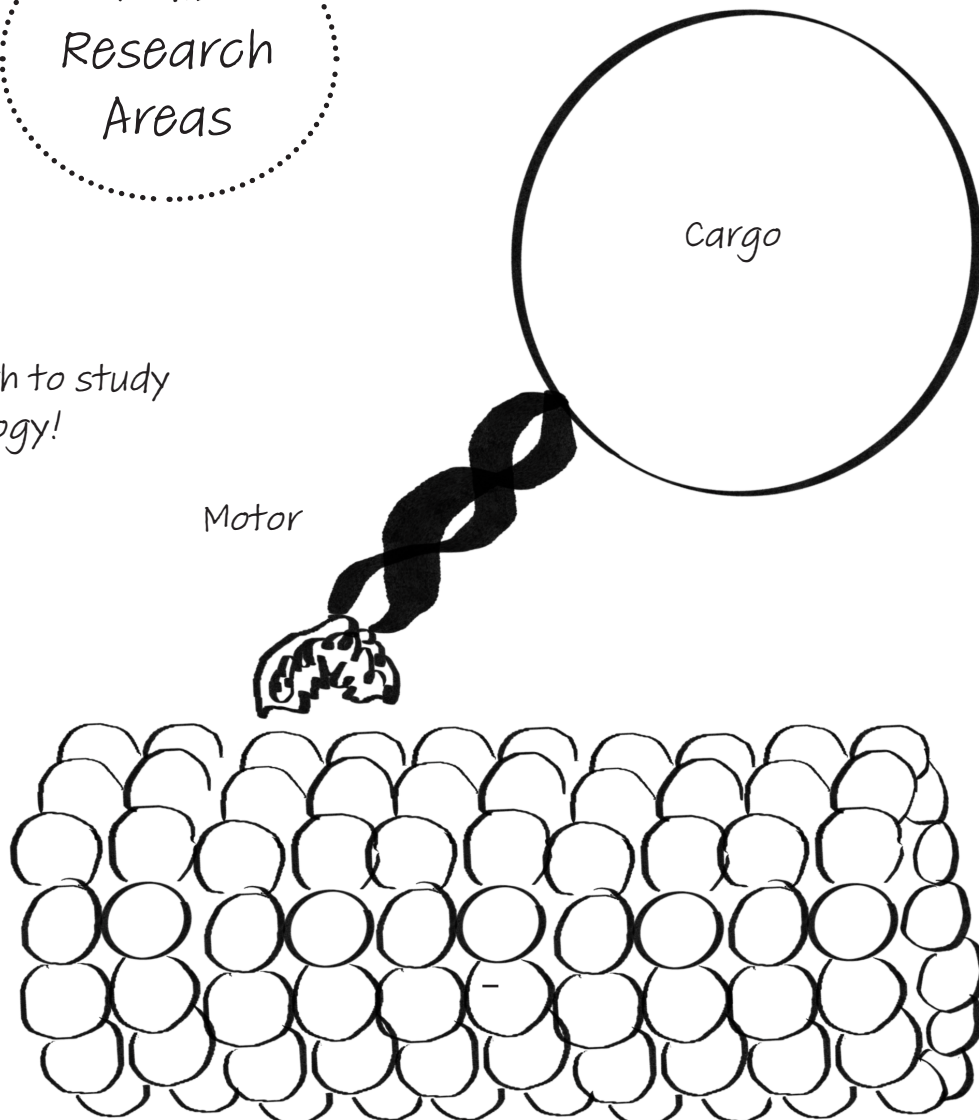
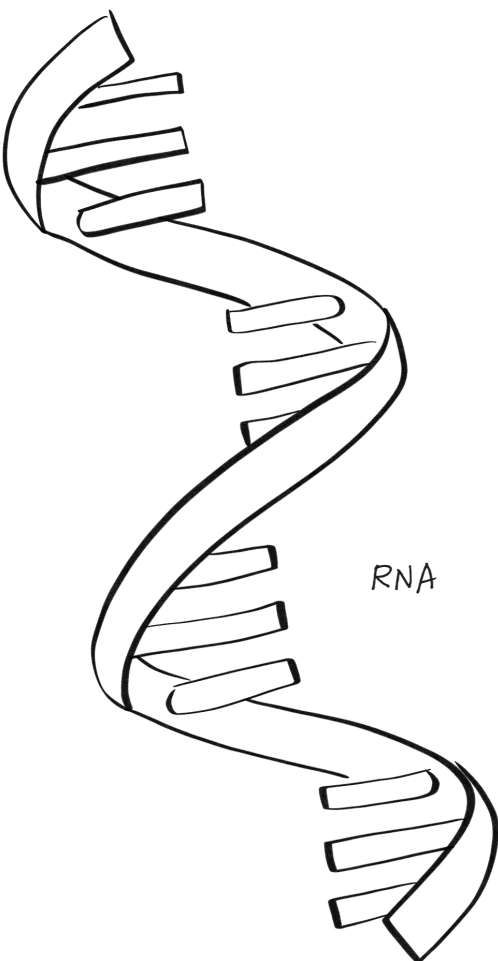
Main
 Research
 Areas

Math to study
 biology!

Motor

Cargo

RNA





Dr. Samantha Price

Assistant Professor
Biological Sciences
Clemson University, SC

COLORS TO BE USED
FOR THE SCIENTIST
Hair - Brown
Skin - Very light golden
Favorite Color - Green + Blue green

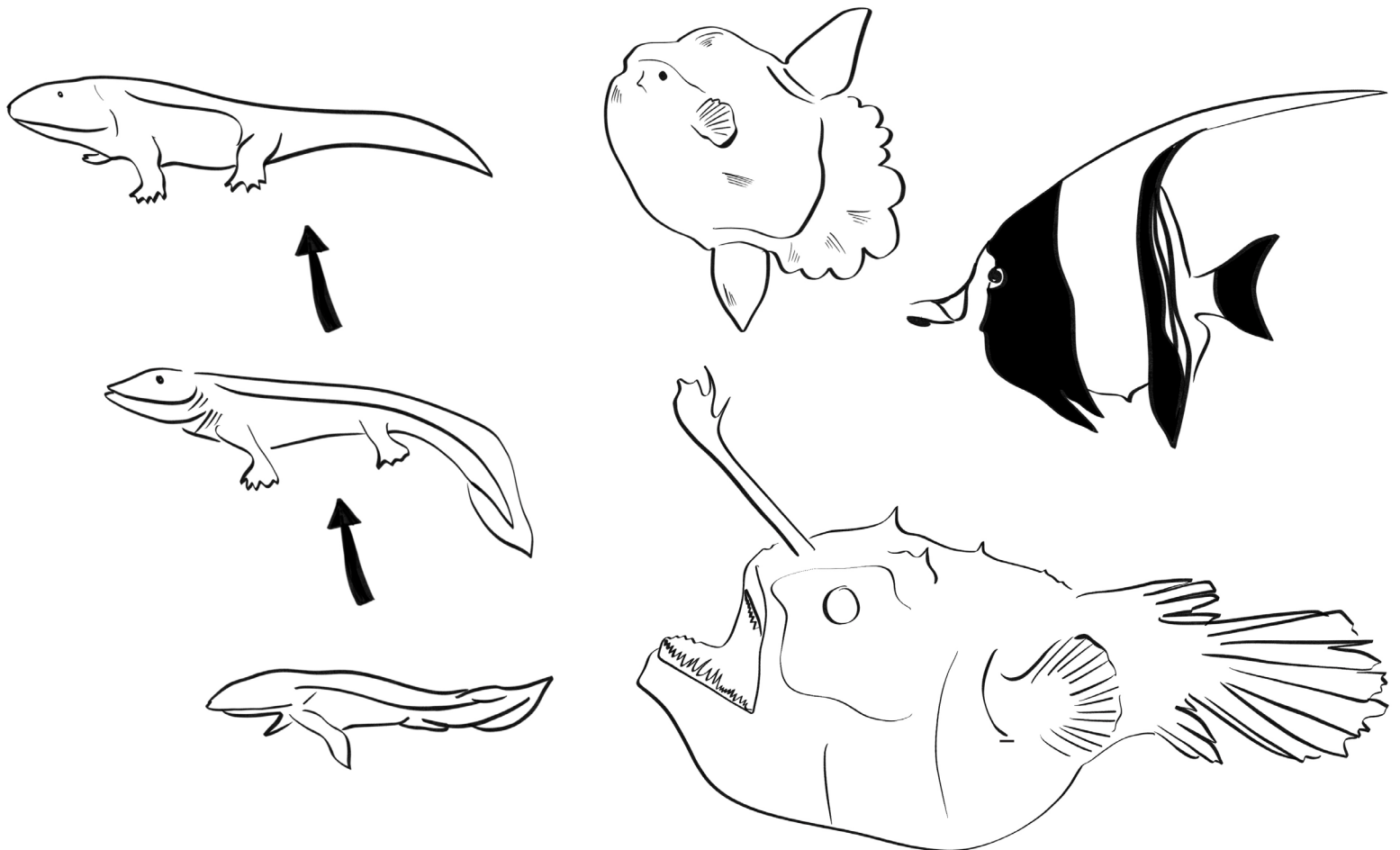
Dr. Samantha Price is a scientist who studies the amazing variety of fishes in our oceans and rivers. She looks at fishes in museums and tries to understand how their shapes have changed because of where they live and what they eat.

When not studying fishes, she enjoys hiking, kayaking, and cooking delicious foods like bread, cakes, and jams.

Main
Research
Areas

Evolution of four-legged
land animals from fish

Some fishes that
she studies!





Dr. Melissa Smith

Professor
Electrical and Computer Engineering
Clemson University, SC

COLORS TO BE USED
FOR THE SCIENTIST

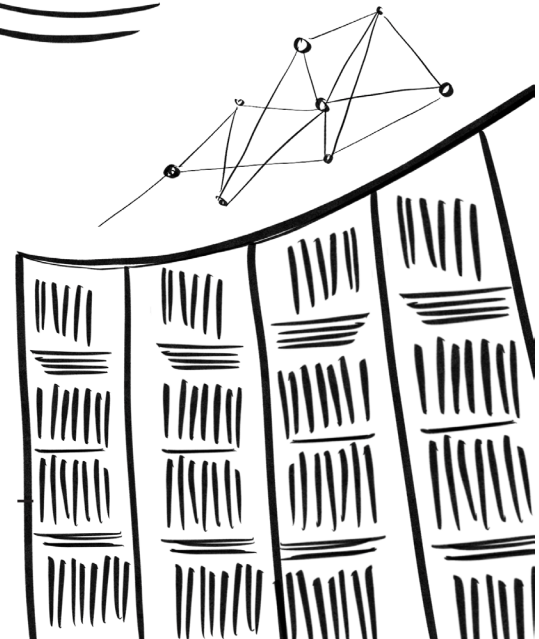
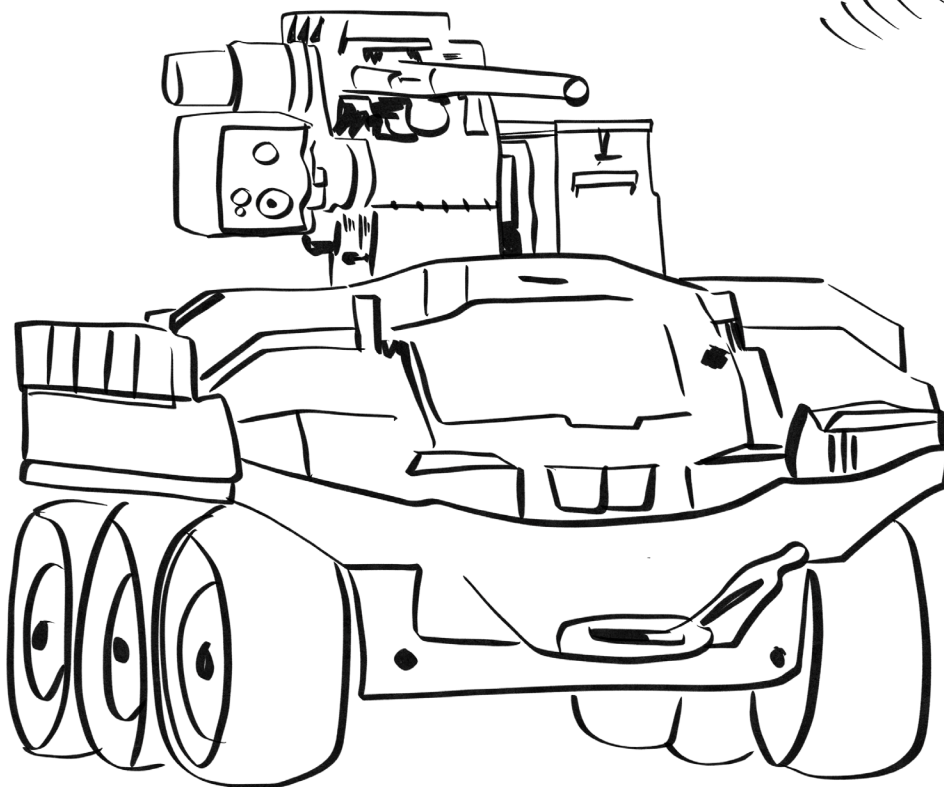
- Hair - Yellow + White
- Skin - Very light golden
- Favorite Color - Red violet

Dr. Melissa Smith is a professor and a big boss in her college at Clemson University. She's an expert in computer engineering and has worked on many interesting projects, like making computers faster and smarter. She's won several awards for her work and enjoys run-

ning marathons. She also has a pilot license and flies to see her daughters' dance and sporting events.

Using sensors and artificial intelligence for vehicles

Main
Research
Areas





Dr. Kelly Lazar

Assistant Professor
Engineering & Science Education and
Environmental Engineering & Earth Sciences
Clemson University, SC

COLORS TO BE USED
FOR THE SCIENTIST

Hair - Brown

Skin - Very light golden

Favorite Color - Carnation pink

Dr. Kelly Lazar is a geologist, which means she studies our planet, Earth. She's especially interested in how the coastlines change over time. To find out, she examines sand and mud under a microscope. She loves sharing her knowledge about Earth with students and believes

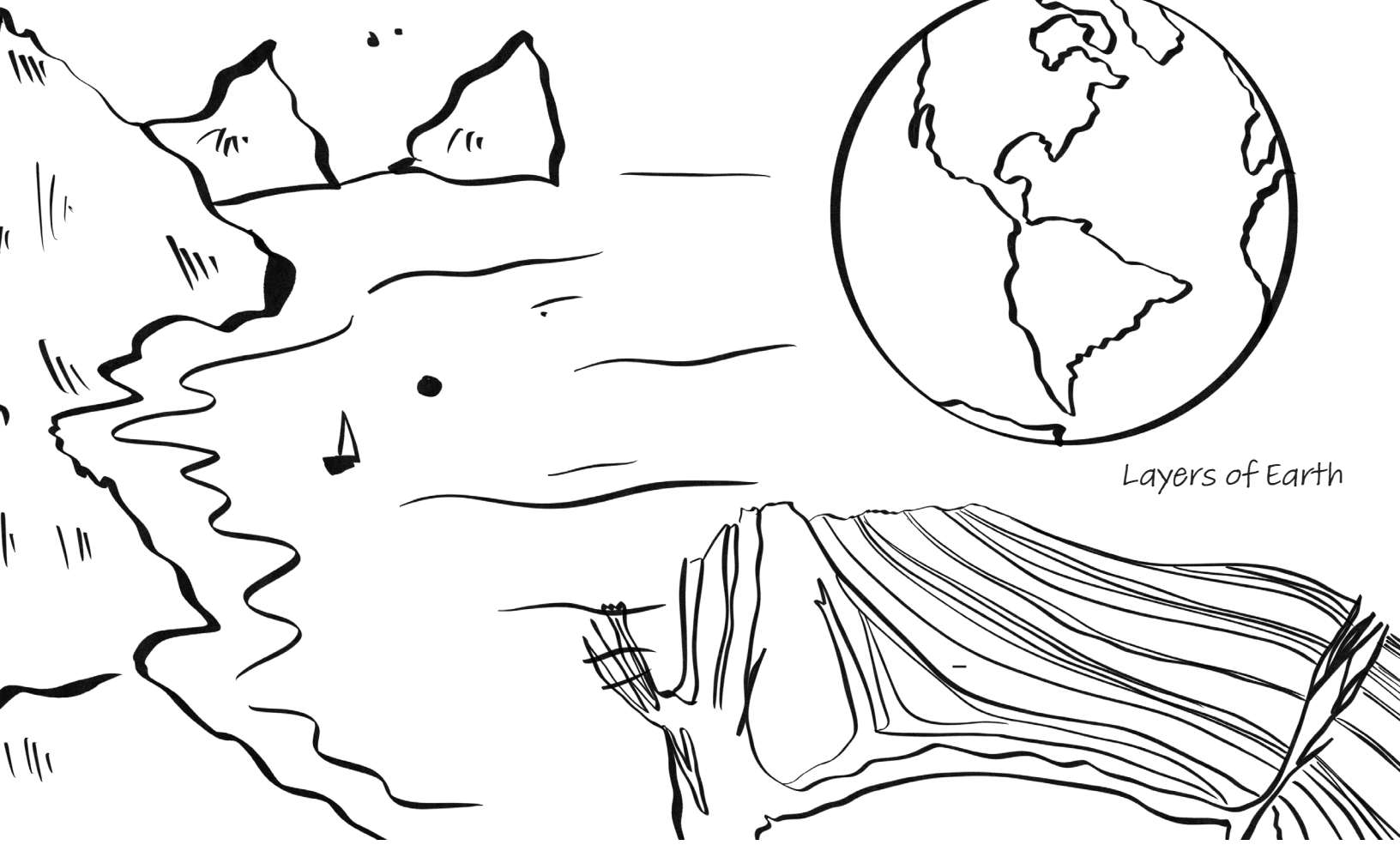
you could be a geologist too! When she's not working, she enjoys watching sports, playing games, and watching movies with her spouse and three cats.

*Coastlines and
its geology*

Main
Research
Areas



Layers of Earth





Pooja V. Kumar

Master of Fine Arts in Illustration Practice
Maryland Institute College of Art
Baltimore, MD

COLORS TO BE USED
FOR THE SCIENTIST

Hair - Black

Skin - Medium almond

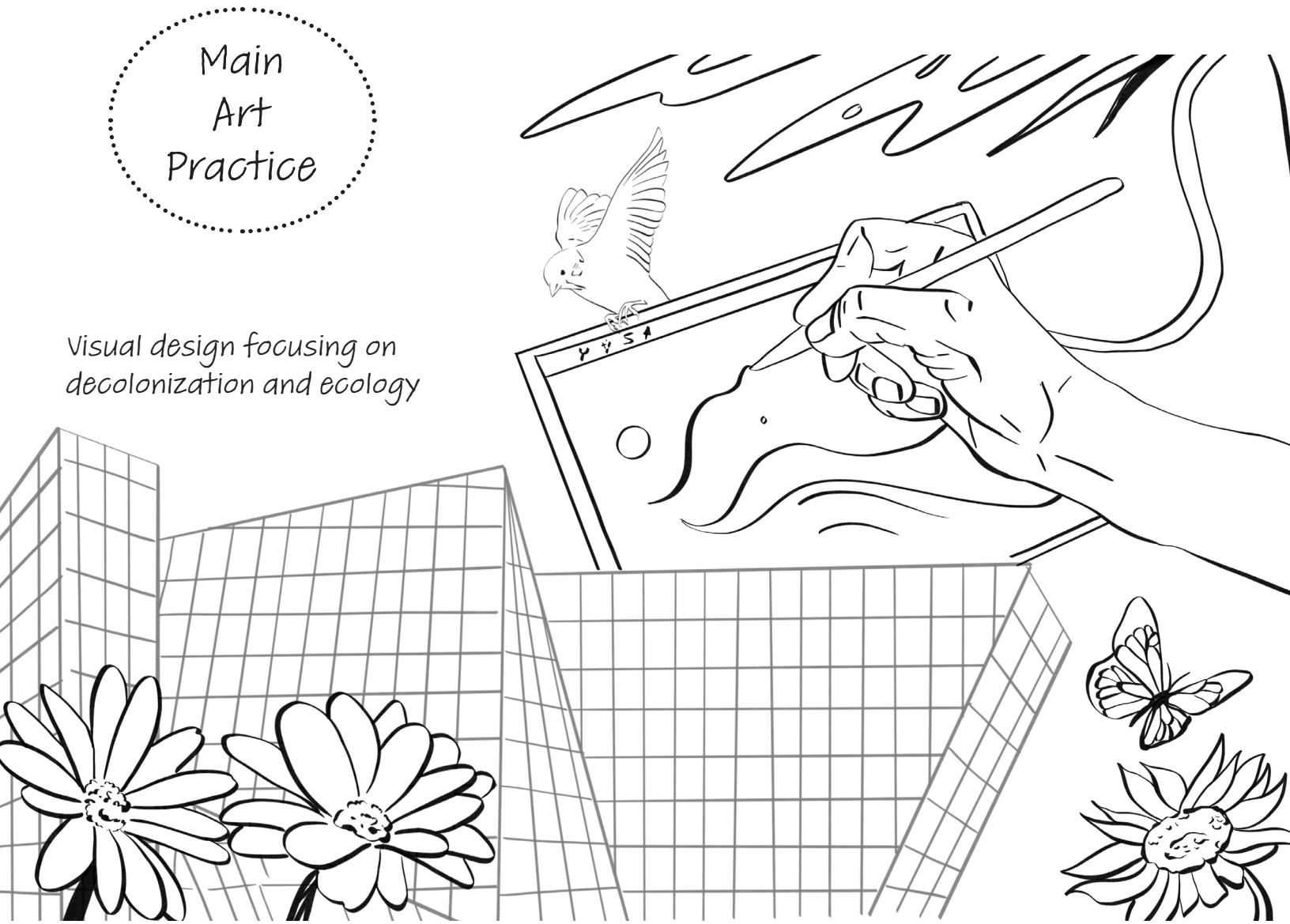
Favorite Color - Blue green

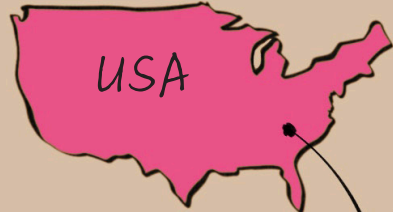
Pooja Kumar is a super talented artist who used to be a chemical engineer. Now, she's studying at the Maryland Institute College of Art, a really famous school for learning about art and design. Pooja's art is special because it's all about mixing science with art. She believes that by using art, she can help people understand science better.

Her main goal is to close the gap between tricky science stuff and what we all know. Pooja wants to make science fun and easy for everyone to get. She thinks that when you add cool pictures and real science facts together, it's not just easier to understand, but it also makes people more curious and excited about learning.

Main
Art
Practice

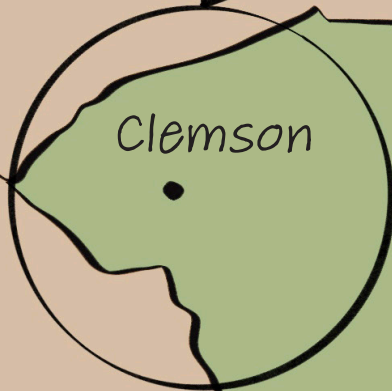
*Visual design focusing on
decolonization and ecology*





USA

North Carolina



Clemson

SOUTH CAROLINA

Georgia

Atlantic Ocean