

I Want to Be a Scientist Like



JOANNE
SIMPSON

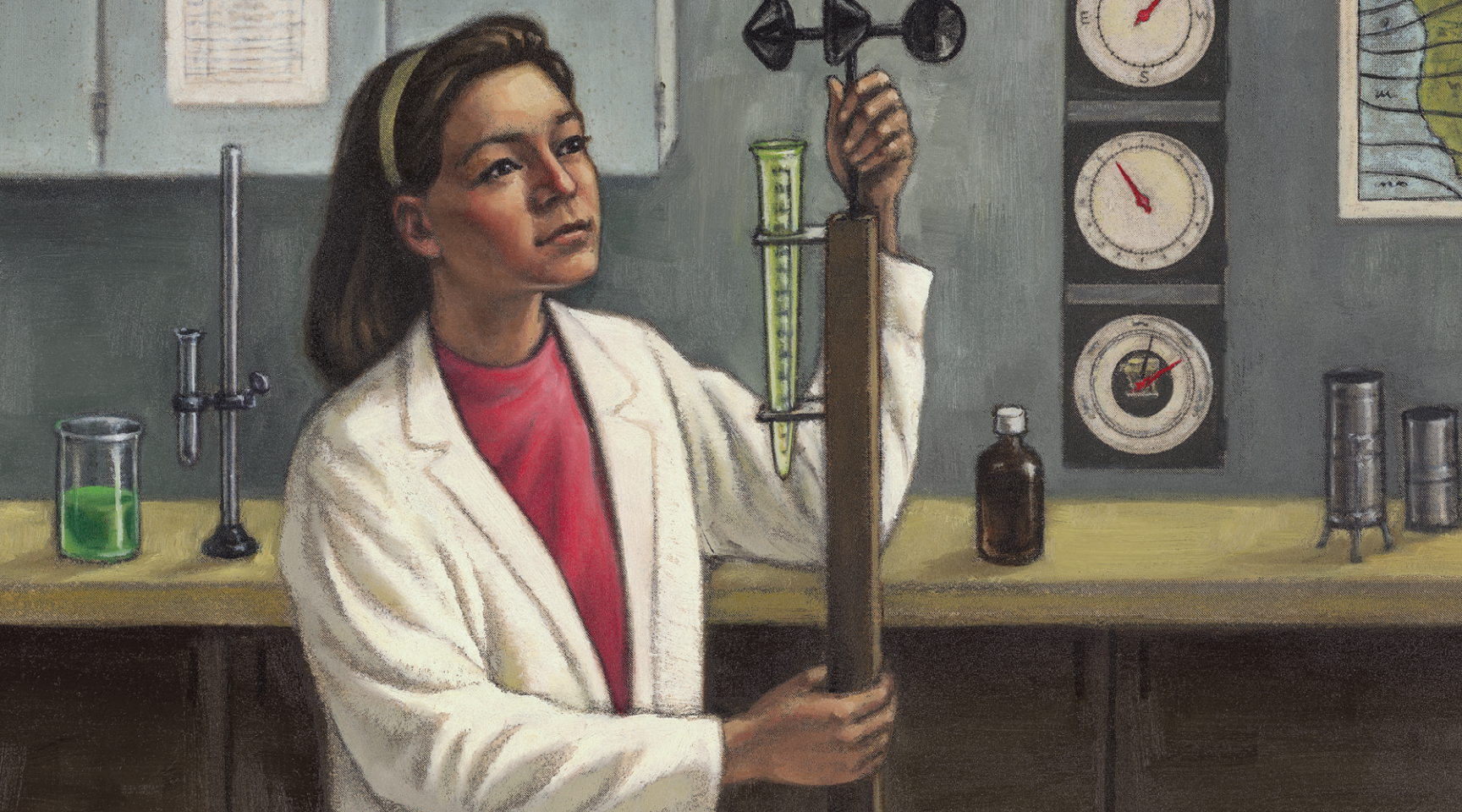
WRITTEN BY ELISA BLACK
ILLUSTRATED BY BRUCE MARTIN



Joanne Simpson loved to fly. She took her first airplane ride when she was 6 years old. When she was 16, she learned to fly an airplane by herself.



To become an airplane pilot, Joanne had to take classes about the weather. She learned about clouds, air, water, and the sun's heat.



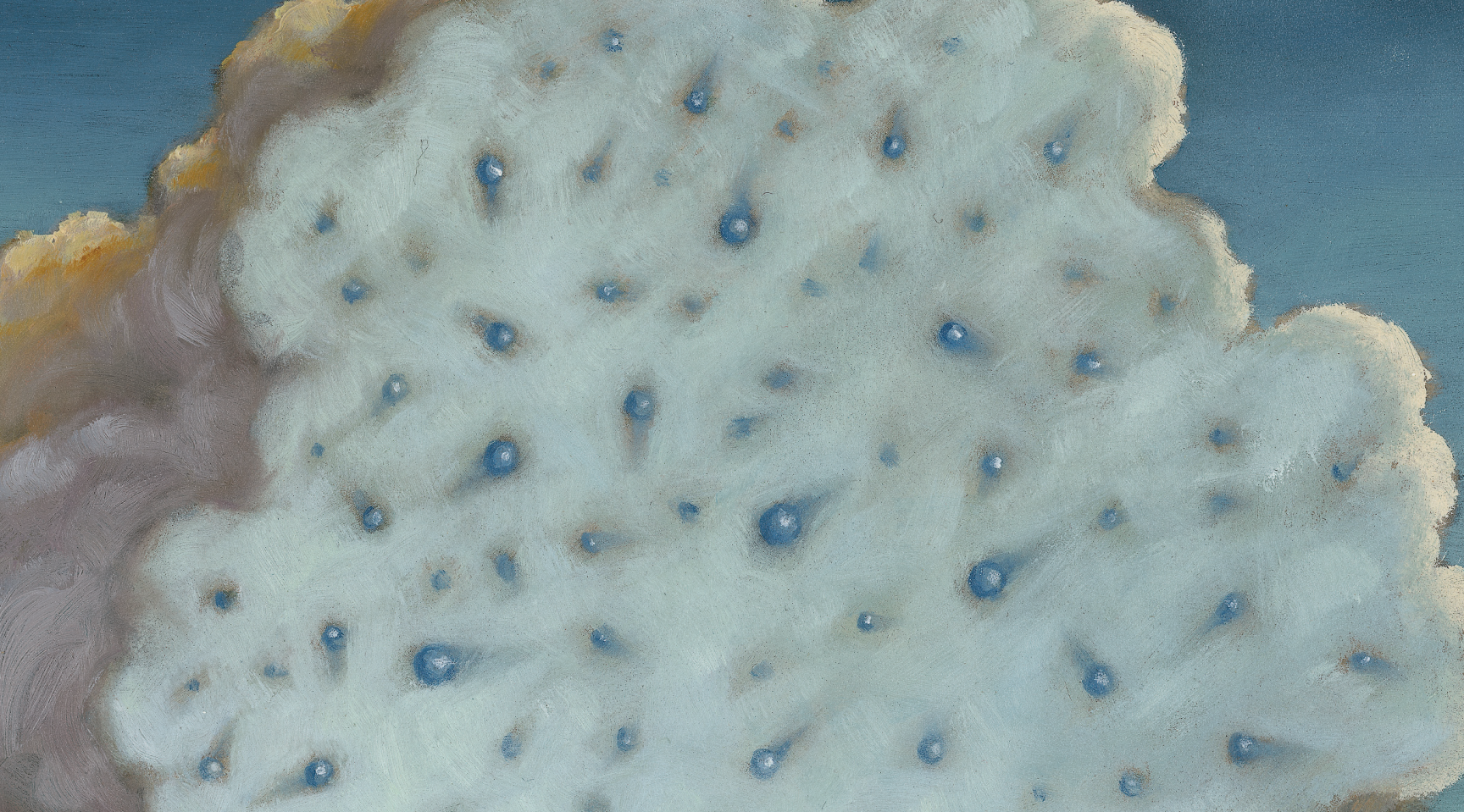
Joanne loved to study the weather. She went to a university to learn more and become a meteorologist—a scientist who studies the weather.



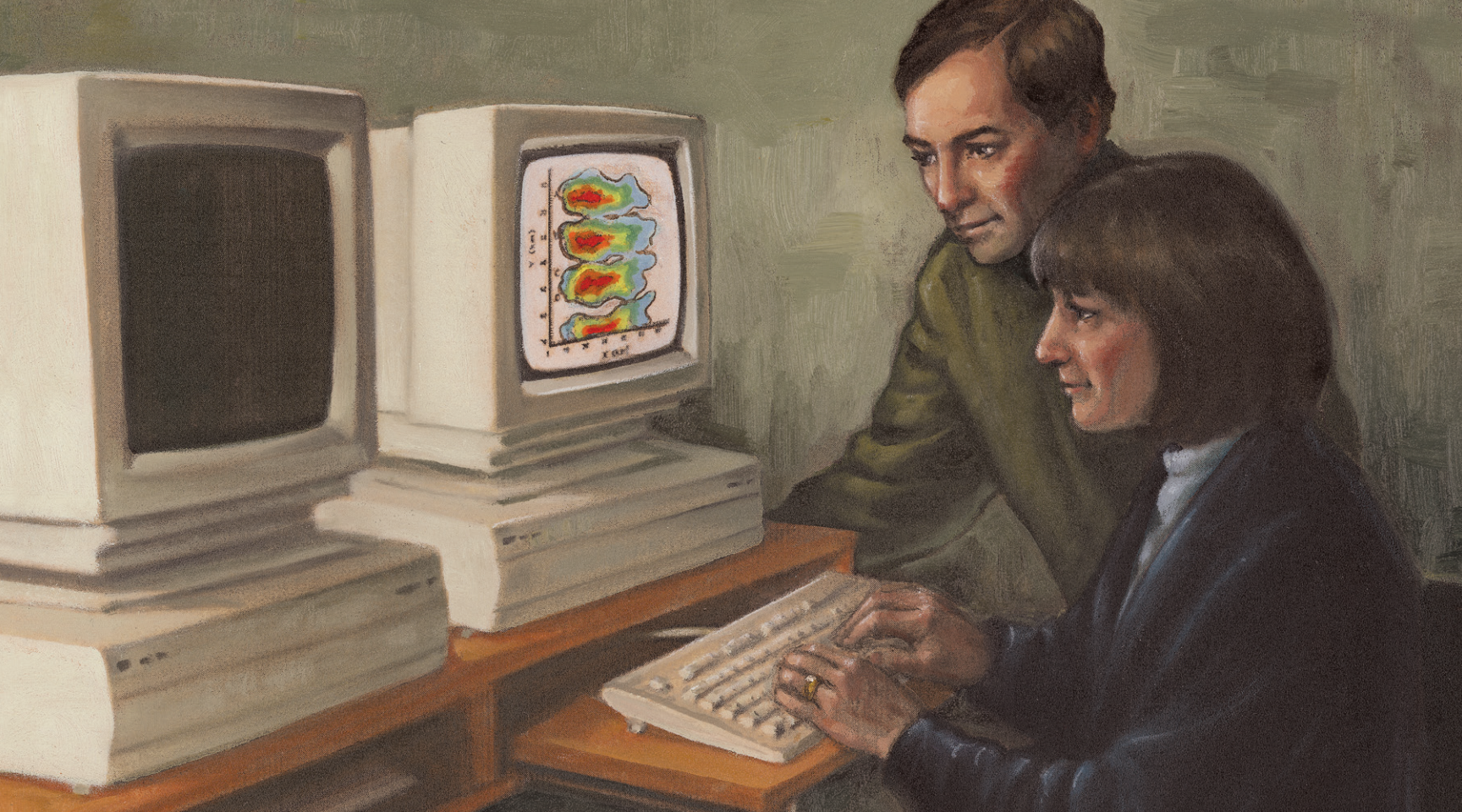
As a scientist, Joanne wanted to help people. She knew that people need rain to help crops grow. Joanne decided she would learn how to make clouds produce rain.



Scientists had tried to make rain before. They had flown up in airplanes and shot silver iodide smoke into the clouds using fireworks.



Scientists learned that raindrops form when millions of tiny water droplets gather around each tiny bit of smoke. When the raindrop was big enough, it would fall.



But scientists had not been able to make very much rain. What could Joanne do? She made models of clouds and studied them.



She discovered that when clouds get very big, they float up very high. Clouds that float up high are very cold. When the clouds get big and cold, they produce rain.



Joanne realized that she had to make the clouds bigger and colder. Then they would make rain.



She decided to shoot so much smoke into the clouds that they would grow tall and float up very high where it was cold. The water in those big, high clouds would fall to the earth as rain.



Joanne and her team went up in their plane. They shot silver iodide smoke into 14 clouds, making them grow taller and float higher. These clouds rained twice as much as the others. She had succeeded!



Joanne earned a gold medal for her work. She became the chief weather scientist at NASA. NASA even named their fastest supercomputer, *Jsimpson*, after Joanne.



Like all scientists, Joanne wrote all her hypotheses, experiments, and conclusions in notebooks.



Joanne Simpson shared her interest in weather with her grandchildren. She never stopped studying the clouds.

For Teachers and Parents

JOANNE SIMPSON

1923 – 2010

Joanne Simpson said, “I was told early in my career, always write down your observations and ideas. That way you won’t make the same mistake twice.”

Accomplishments

Joanne Simpson was the first woman to earn a Ph.D. in the field of meteorology at the University of Chicago.

She expanded the field of meteorology and opened the door for many female scientists interested in this field.

Awards

Gold Medal Award from the U.S. Department of Commerce Carl-Gustav Rossby Research Medal



Honors

A compilation of Joanne Simpson’s notes and papers has been donated to a library at Radcliffe College.

Math & Science

Scientist

Copyright © Waterford Institute, Inc.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher.

**Published and distributed by Waterford Institute, Inc.,
Sandy, Utah.**

Waterford.org seeks to blend the best aspects of learning science, mentoring relationships, and innovative technologies to form community, school, and home programs that deliver excellence and equity for all learners.

Printed in the United States of America.

ISBN 978-1-4256-0311-3

Waterford™, Waterford Institute™, Waterford A Nonprofit Research Center™, Waterford.org™, Light Atom logo®, Rusty and Rosy®, Waterford Early Learning®, Waterford Early Learning logo™, Waterford Reading Academy™, Waterford Early Reading Program®, Waterford Early Reading Program logo®, Waterford Early Math and Science™, Waterford Early Math & Science logo™, Waterford Early Learning: Reading™, Waterford Early Learning: Math & Science™, Waterford Early Learning: Classroom Advantage™, Waterford Early Learning: SmartStart™, Waterford UPSTART™, WACS™, Camp Consonant®, and Curriculet™ are trademarks of Waterford Institute, Inc. in the United States and other countries and are used pursuant to a license with Waterford Institute, Inc.

