What does an American Association for the Advancement of Science (AAAS) Fellow have in common with an Iowa State University (ISU) College of Liberal Arts and Sciences (LAS) Distinguished Professor? The answer is a lot if you are Diane Bassham, an ISU genetics, development and cell biology (GDCB) professor and Walter E. and Helen Parke Loomis Professor of Plant Physiology.

Bassham received both international and university-level honors this year when AAAS recognized her as an AAAS Fellow in early 2022 and LAS announced she received a Distinguished Professorship in April.

Billed on its website as the “world’s largest multidisciplinary scientific society and a leading publisher of cutting-edge research through its Science family of journals,” AAAS elects AAAS Fellows annually to recognize contributions to STEM disciplines. The ISU College of LAS awards a Distinguished Professorship to faculty based on “exemplary performance in research and/or creative activities as reflected by a national or international reputation in the nominee’s discipline.”

Bassham’s research focuses on understanding the biogenesis and functions of the plant vacuole. An article in a recent Link: Connecting LAS alumni and friends magazine, “Growing a research legacy,” provides insight on Bassham’s research and interactions with her lab members.

2021 AAAS Fellow
Bassham was elected to the AAAS cohort “for distinguished contributions to the field of plant cell biology, particularly in studying cellular mechanisms of environmental stress tolerance in plants.” She is one of six ISU researchers in the 2021 AAAS cohort. The association said the six researchers were recognized “because of their efforts to advance science applications deemed scientifically
or socially distinguished.” According to an AAAS database, 146 fellows from ISU have been elected since 1910.

Sudip Parikh, AAAS chief executive officer and executive publisher of the Science family of journals, said, “AAAS is proud to bestow the honor of AAAS Fellow to some of today’s brightest minds who are integral to forging our path into the future.”

AAAS’ purpose is stated on its website: “advancing science, engineering and innovation throughout the world for the benefit of all people.”

LAS Distinguished Professor title
“Congratulations to Professor Diane Bassham for being selected as Distinguished Professor in Liberal Arts and Sciences at Iowa State University - well deserved, Diane,” said GDCB Chair Yanhai Yin.

In notifying Bassham of the honor, ISU Associate Provost for Faculty Dawn Bratsch-Prince said, “Congratulations on this achievement.”

According to the LAS website, “A Distinguished Professorship is awarded for exemplary performance in research and/or creative activities as reflected by a national or international reputation in the nominee’s discipline.” Faculty nominated should hold the rank of professor and should have served at least five years on the ISU faculty.

Bassham joins ISU in 2001
Bassham joined the ISU faculty in 2001. She received her bachelor of science degree in biochemistry from the University of Birmingham, England, and her Ph.D. in biological sciences from the University of Warwick, England. She completed a postdoctoral appointment in the Michigan State University - Department of Energy Plant Research Laboratory in East Lansing, Mich. Bassham received the Anton Lang Memorial Research Excellence Award for postdoctoral research associates from Michigan State University in 1999, and she was chosen the first Walter E. and Helen Parke Loomis Professor of Plant Physiology in GDCB in 2013.

Yin said, “Professor Bassham has been an asset to the department and university since day one. The energy and enthusiasm she brings to her lab’s research is contagious, and she is extremely supportive as a mentor to her many students. She is definitely deserving of both the AAAS Fellow and the Distinguished Professor title. We are lucky to have her as a colleague.”

Distinguished Professor Diane Bassham inspects Arabidopsis plants in the growth room on the Iowa State University campus (left photo), and plant seedlings grow in the Bassham lab. (Photos courtesy of Alyson O’Hara/ISU)