



Photo courtesy of Martha GK Dibblee

Cheyenne S. Brindle began her research career as an undergraduate at Reed College in the laboratories of Prof. Patrick G. McDougal. Her research involved the synthesis of 10-membered carbocycles generated by oxidative ring-expansion of [6,6]-fused ring systems. This research experience inspired Cheyenne to pursue graduate studies in chemistry, initially at the California Institute of Technology in 2002 under the tutelage of Professor Peter B. Dervan. A year later, Cheyenne transferred to Stanford University in order to focus on synthetic organic chemistry, rather than chemical biology. At Stanford she studied total synthesis and asymmetric catalysis in Professor Barry M. Trost's research group, earning her doctorate in 2009. She then took a position at Harvard University as an American Cancer Society Postdoctoral Fellow, studying asymmetric catalysis using non-covalent interactions with Professor Eric N. Jacobsen.

In 2012 Cheyenne began her independent career at Trinity College, where she received tenure in 2018. At Trinity, Cheyenne studies organocatalysis using tunable trityl cations as green activators for a variety of chemical transformations, including the synthesis of antibiotic bisindolylmethanes. These antibiotics have shown activity against MRSA and fungal targets. During the course of these studies, Prof. Brindle discovered a powerful extraction technique that allows for the removal of reactive carbonyl compounds from mixtures based on their reactivity with bisulfite ion. This research was funded by a competitive grant received from the American Chemical Society Petroleum Research Fund.

Prof. Brindle is an active member of the American Chemical Society. She has served as a presider for the *New Reactions and Methodology* session at national meetings and also as a reviewer for the National Science Foundation and the American Chemical Society Petroleum Research Fund. Prof. Brindle also serves as a peer reviewer for *The Journal of Organic Chemistry*.

Prof. Brindle's main teaching accomplishments are in the restructuring of the organic chemistry lab sequence to enhance the experience of students and their safety. She has also mentored the Trinity Chemical Society, a student group dedicated to enhancing the visibility of chemistry on campus and in the community. Prof. Brindle has also created a workshop for middle school girls as part of a conference held on Trinity's campus that illustrates the utility of organic chemistry in everyday commodities by engaging students in a lab exercise for the synthesis of either aspirin or oil of wintergreen.