From the Editor

Arthur N. Popper



This issue of *Acoustics Today* (*AT*) has interesting and diverse material. The first article is by a non-ASA member, Bruce A. Carlson, who has a great acoustics-related story about elec-

tric fishes. Electric fish are truly fascinating animals that communicate using electric signals, but many of the characteristics of this communication are parallel to acoustic communication. If you are not familiar with electric fish or maybe you have some as pets, you will find that communication in these animals is fascinating and, in many ways, very familiar to you.

By coincidence, the second article is also by a non-ASA member, Delilah E. A. Gates, who has another different, and very interesting, story. Delilah is a physicist working on black holes, and one of the things that she is most interested in are the sounds produced by these astronomical phenomena. Of course, there is much more to black holes, and Delilah shares a good deal of interesting information.

The third article is by Sheri L. Martinelli, D. Keith Wilson, Andrew S. Wixom, and Chris L. Pettit. Sheri and her colleagues share thoughts about using computational models in acoustics (see <u>bit.ly/ATCollections-Computational</u> for other articles on computational acoustics). Using the Lloyd's mirror effect as an example, they share how models can enhance our understanding of acoustic issues in every discipline covered by ASA members and beyond.

In the fourth article, Kha Nguyen, Lei Zhang, and James Friend talk about an area that was totally new to me, acoustofluidics. For those, like me, who do not know anything about acoustofluidics, it is the physical effect of a passing acoustic wave on a fluid and particles suspended within it. Kha and colleagues discuss the history of the field and then show how acoustofluidics can be used in a variety of ways, particularly in medical diagnostics.

In the fifth article, Marina Salorio-Corbetto and Brian C. J. Moore discuss hearing aids and how they deal (and do not deal) with noisy environments. Of course, this is a topic of considerable interest to any ASA member, and the article is particularly relevant because it talks about what hearing aids can and cannot do to help hearing, especially in noisy environments. (Other articles on hearing health are at <u>bit.ly/AT-Health</u>)

As a New Yorker (at least for the first 25 years of my life), I have always been fascinated by tall buildings. But since my youth, buildings have gotten even taller and much thinner. This results in interesting acoustic issues for these very tall and very thin buildings and for their occupants. In the final article, Bonnie Schnitta and Sean Harkin share some of the fascinating ways that are used to test and then control the sounds in the buildings so that they can be occupied without having sounds that annoy occupants, particularly on windy days. (See <u>bit.ly/Schnitta</u> for an earlier article by Schnitta on residential quietude.)

As usual, this issue of *AT* has several "Sound Perspectives" essays on diverse topics. The "Conversation with a Colleague" series (see <u>bit.ly/ATC-CWC</u>) features Jordan Cheer, whose broad work focuses on the reduction of unwanted noise and vibration or finding ways to enhance and manipulate sound.

This is followed by an essay by Megan S. Anderson of the ASA Student Council. Megan features stories from a number of more senior ASA student members who share insights into their research. (Other Student Council articles are at <u>bit.ly/ATC-Students</u>.)

The third essay is by University of Texas (Austin) graduate student AJ Lawrence. Although AJ's research is on other aspects of acoustics, he got fascinated learning about the late Alan Lomax, a pioneering ethnomusicologist who was very focal in raising awareness of the immense breadth of folk music in the United States and worldwide. One of Lomax's most important "discoveries" was a folk singer (and jail resident) now known as Lead Belly. Having grown up at the height of interest in folk music in the United States and a great admirer of both Lomax and Lead Belly, I encourage every member not only to read this essay but to also listen to the amazing music.

Our last essay is by our 2022 *AT* intern Erik Alan Peterson. Erik is very interested in the experiences of acousticians who complete some portion of their training abroad. His first essay (see <u>tinyurl.com/2t8recs3</u>) discussed US students who travel abroad for study. The essay in this issue discusses the experiences of foreign students who come to the United States.

Let me end by again encouraging all ASA members to consider writing for *AT*. Even if you just have an idea, I would value exploring it with you. It may be a topic that will help educate and inform many thousands of readers in the ASA and beyond.

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