

From the Editor

D. Keith Wilson



A Transition in Editors

With this issue, *Acoustics Today* (*AT*) bids a fond farewell to its long-time editor, Arthur N. Popper. Art was the magazine's second editor, serving for ten years from 2014 to 2024. Prior to Art, Richard Stern served as editor from *AT*'s founding in 2005 through 2013. The Acoustical Society of America's (ASA) Editor-in-Chief at the time, Allan D. Pierce, provided a bridge for two issues between the tenures of Dick and Art.

This is my first column as the new editor of *AT*. Clearly, I have some big shoes to fill! If you wish to learn more about my research career in acoustics, it happens that the last issue of *AT*, on "Serendipity in Acoustics," has an essay on that very topic (bit.ly/3POSSpp). And several years ago I was interviewed for the "Ask an Acoustician" series (bit.ly/40tOZb). So I will simply mention here that my main interests are sound propagation outdoors, computational acoustics, and porous media acoustics. However, I'm very excited by this opportunity to continue to learn about the entire, broad spectrum of acoustical topics!

My own journey with ASA publications began in 2002 when I became the Associate Editor (AE) of *The Journal of the Acoustical Society of America* (*JASA*) for papers on noise control and engineering. As there was usually just one AE per subject area back then, I handled a great many papers, all in print and by postal mail. It was right around this time that the publishing world began its rapid evolution towards electronic communications.

Just a few years later, in 2005, Allan Pierce asked if I would serve as editor for the launch of *JASA Express Letters*, which was an outgrowth of *Acoustics Research Letters Online* (*ARLO*). *ARLO* was originally founded by Robert E. Apfel, who had a timely vision for an online, rapid-publication journal. My role was to develop *ARLO* into an ASA-branded publication, while growing the editorial staff and number of letters and transitioning to a new online system for electronically handling

manuscripts. I continued as editor of *JASA Express Letters* until 2009.

Following *JASA Express Letters*, I served on the ASA Committee on Publication Policy for eight years, including six as the chairperson. More recently, I got around to an initiative I had long wanted to pursue, namely forming a new ASA Technical Committee (TC) on Computational Acoustics. This effort launched in 2018 when Amanda Hanford and I collected enough signatures to create a new Technical Specialty Group (TSG) (bit.ly/3PUgyIZ). After four years, the TSG membership increased sufficiently for conversion to a full TC.

About *AT*

From its founding, *AT* has prospered and become a cornerstone of the ASA's identity, thanks to the remarkable dedication, depth of knowledge, and editorial skills of my predecessors. My primary goal in the short term is to keep this momentum going through the change in editorship. I, like most ASA members (as evident from survey data, bit.ly/405IWhg) value the highly readable articles on a variety of acoustical topics, essays in the Sound Perspectives section, columns on ASA affairs, and other features.

The popular print magazine format of *AT* will continue to be mailed to ASA members and other targeted audiences, so you can still enjoy reading it while on the go or relaxing without your electronic devices. *AT* will also continue to appear online at acousticstoday.org with free access. One change that has already been implemented is that the number of issues has been reduced from four to two (spring and fall) per year. Of course, longer term, *AT*, like other scientific publications, must adapt to the modern media environment. But, the foundation of *AT* — namely its engaging, well-written articles — will continue.

Besides the change in editors, ASA Editorial Associate Kat Setzer's many duties have now expanded to include copyediting *AT*. She takes over for Helen Popper, who had long worked behind the scenes to apply a fine polish

to *AT*'s articles. Like Helen, Kat brings great enthusiasm and editing expertise to the job, and the ASA is very fortunate to have her in this position.

This Issue

The present issue took shape primarily during Art's tenure, as I served a sort of apprenticeship while endeavoring to absorb Art's formulas for success. The issue opens with a column by ASA President Barbara Shinn-Cunningham, who provides an update on the ASA Strategic Plan and opportunities for engagement by the membership. Get involved now, while the planning is still in its early stages!

The issue includes six particularly interesting and diverse regular articles. First, Brian K. Branstetter, Alyssa W. Accomando, and Benjamin R. Colbert discuss hearing conservation for marine mammals. The rapid increase in anthropogenic ocean noise threatens many mammalian species dependent upon sound for finding food, detecting predators, navigating, and mating. The authors describe the challenges of assessing noise impacts on hearing loss and formulating policy in a manner guided by sound science.

As adults, we often fail to recognize the challenges faced by children in comprehending speech and other auditory information. Erika L. Exton and Rochelle S. Newman provide a sympathetic discussion of these challenges and their underlying causes. The article will benefit parents, educators, and caregivers who must consider this reality when evaluating noise levels and their impacts.

Next is an article that, like the one by Branstetter et al., deals with the timely topic of the impacts of man-made sounds on life in the ocean. Youenn Jézéquel, Julien Bonnel, Laurent Chauvaud, and T. Aran Mooney discuss the easily overlooked and surprisingly complex world of production and sensing of sound by marine invertebrates. As man-made sounds increasingly encroach on the acoustic environments of these creatures, much more understanding is needed on their sensitivities.

In the fourth article, Jennifer J. Lentz explores the fascinating possibilities of restoring and preventing hearing loss using translational pharmacology treatments such as antisense, gene replacement, and gene editing therapies.

We are provided with a glimpse into a future where these therapies could help restore hearing and the quality of life for millions.

In the fifth article, Luca Menozzi and Junjie Yao follow with an introduction to photoacoustic imaging and its rapidly growing arsenal of techniques and biomedical applications. The process involves illuminating objects with short bursts of laser energy, which then produce sound waves. Systems are now capable of producing astounding resolution, as seen with this issue's amazing cover illustration!

For the final article, Ingo R. Titze next approaches the following question: Why do our sound vocalization systems expend more energy than appears to be necessary for communication? Did evolution lead to a sub-optimal outcome, or does the extra energy serve an important purpose? Most intriguingly, could some of the sound power help to stimulate and heal our bodies?

In addition to the regular research articles, this issue continues *AT*'s "Conversations with a Colleague" series, edited by former *AT* Associate Editor Micheal Dent. Tatiana Khokhlova tells us about her inspiring path to joining the faculty at the University of Washington School of Medicine, where she investigates novel applications of high-intensity ultrasound to break up tumors, as an alternative to biopsies.

This issue also includes four other Sound Perspectives essays. First, Kent L. Gee discusses the rapidly expanding problem of rocket noise. Will rocket noise become a serious societal and environmental concern, like aircraft and urban noise? What should be ASA's role in addressing it? Please read the essay and contribute to the discussion!

Next, Jennifer L. Miksis-Olds summarizes outcomes from a recent study by the United States Office of Naval Research (ONR) to assess the current and future education and workforce landscape with regard to ocean acoustics. The essay raises a broader set of issues about STEM education in specialized fields such as acoustics.

Following is a second essay involving education by Kimberly Riegel and Daniel A. Russell. The essay describes the long history of the Administrative

Committee for Education in Acoustics (EDComm) in the ASA and the recent formation of the Technical Specialty Group on Education in Acoustics, which deepens the ASA's efforts to support educators training the next generation of acousticians.

In the final Sound Perspectives essay, Sarah G. Weiss and Michael J. Weise discuss historical, current, and future United States Navy research programs on marine mammal

acoustics. These programs have evolved to include an impressively broad array of topics in passive acoustic monitoring, behavioral studies, and whale hearing.

Thank you, reader. I hope this is the first of many issues we will be able to share together! As always, please reach out to me (keithwilson.asa@gmail.com) if you have ideas for articles or essays or to share your thoughts on how *AT* might be improved.

Serendipity in Acoustics

“Cultivating serendipity is first and foremost about looking at the world with open eyes and seeing opportunities others don't. It's not just about being in the right place at the right time and having something happen to us (blind luck), but rather a process in which we can be actively involved.” (Busch, C. 2020, *The serendipity mindset: The art and science of creating good luck*. Penguin, New York City).

The winter 2024 issue of *Acoustics Today* featured essays about how serendipity has impacted the scholarly careers of over 20 members of the Acoustical Society of America (ASA). The response by readers to that issue has been great, and many other members have their own stories of how serendipity has shaped their careers and lives and would like to share those stories.

This response sparked the idea of inviting *all* ASA members to share their serendipity stories. These will be posted on the *Acoustics Today* (*AT*) website and, perhaps, at some later point, compiled into a special issue of *AT* (we make no promises!).

Virtually all of us have experienced serendipity during our careers — events that shaped our careers and, very likely, turned us in new, productive, and exciting directions. Indeed, many of us have had multiple serendipitous events, and these events may have included both scholarly and personal lives (but for this essay, we focus on scholarly).

We invite ASA members to think about their careers and submit an essay for posting on the *AT* page.

Essays may be a maximum of 750 words, and you may include one photo to illustrate your points (you must own copyright or permission to use it; include credit lines where necessary). This means that your essay should perhaps give a bit of background, focus on the serendipitous event, and then discuss how the event altered your work. Please also include a photo (headshot) of yourself, your affiliation, and your email address.

Essays should be submitted in Word format to *both of us*. We will do limited editing for clarity, and you will have final approval of any suggested changes before the essay is posted online. We do suggest only a few (or even no) citations, which must be in *AT* format (see bit.ly/AT-authors).

Please send your questions by email to *both of us*. We will reply to you within about 14 days with any comments.

We look forward to receiving your essay.

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