From the Guest Editor

Michael Fleming

President, Delaware BioScience Association

Earlier this month, two area researchers were awarded the Nobel Prize for their pioneering discoveries in mRNA. The "groundbreaking findings" of these University of Pennsylvania scientists, Katalin Karikó and Drew Weissman, were instrumental in the development of mRNA vaccines against COVID-19.¹

It is remarkable to consider such world-altering efforts took place in our backyard – and perhaps even more striking that it took a Nobel Prize for most people to learn of it. Serious researchers are typically not inclined to toot their own horn and even if they are, their institutions are often challenged to effectively communicate the importance and relevance of their work.

Yet stories such as Professor Karikó's and Professor Weissman's are all around us, certainly in abundance across our region and state.

I know this as the leader of the organization charged with growing and promoting the innovation and impact of Delaware's life science sector, including both academic and private sector research and product and technology development. And I can also confidently say as a board member of the national group representing state bioscience associations that most of my peers from across the country are doing everything they can to replicate what we have.

We are incredibly fortunate to sit in an epicenter of the life sciences at a time when advances are accelerating through the application of new technologies like machine learning and AI, transforming human health and our economy in the process.

This special edition of the Delaware Journal of Public Health offers a perfect testimonial to support that proposition. Here you will read of one new company's exciting efforts to develop a vaccine platform to prevent infections caused by anti-microbial resistance; another firm is advancing a novel approach to treating severe atopic allergic diseases that are increasingly prevalent; and an industry leader writes of a strategy to advance biopharmaceutical manufacturing by fostering collaboration among biopharma, lab informatics, healthcare systems, and academia.

Beyond this cutting edge research, we learn in this edition about strategic investments and programs to grow our STEM talent workforce in Delaware, including a targeted effort to engage underrepresented populations in the immense career opportunities in life science manufacturing and design and programmatic rollout of the creative CRISPR in a Box education kit that teaches high school students how to perform a gene transformation with CRISPR in a short three-hour experiment.

Each day, thousands of Delaware BioScience community members head to work inspired by a passion for science and a commitment to help people live happier, healthier and more productive lives. There is no industry that simultaneously does more to impact public health and our economic fortunes and possibilities. We are grateful to the Delaware Academy of Medicine and the Delaware Public Health Association for this opportunity to share a small example of the extraordinary work of our dedicated companies, researchers and partners that demonstrates the promise and critical value the life sciences bring to our state and indeed, world.

Mr. Fleming may be contacted at Michael.fleming@delawarebio.org.

References

1. The Nobel Assembly at Karolinska Institutet. (2023, Oct 2). Press release. Retrieved from https://www.nobelprize.org/prizes/medicine/2023/press-release/

Copyright (c) 2023 Delaware Academy of Medicine / Delaware Public Health Association.

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (https://creativecommons.org/licenses/by-nc-nd/4.0/) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.