Deans discuss advances at UCSB in drug delivery, imaging, therapeutics, diagnostics, and the environment.

This issue of Convergence continues our biomedical research series with an article on drug delivery, a field which is changing more rapidly than just about any other in medicine. Materials research and nano- and micro-device engineering, fields in which UC Santa Barbara is an acknowledged leader, are making possible advances in both therapeutics and diagnostics that were inconceivable ten years ago.

Imaging is a field in which we’ve led major advances in the past, developing new modalities that have led to greater understanding of our world at the atomic and molecular levels, and one in which we continue to break ground. Our article on imaging in this issue covers just two of the many imaging modalities in which our scientists and engineers are providing better “pictures” of our world. We’ll cover some of the others in a future article.

In our Q&A, we chat with Sumita Pennathur, an assistant professor of mechanical engineering, about how she manages to pack so much into her busy life, both in the lab and classroom and outside of work.

We’ve also included features on undersea hydrocarbon seeps, which our location on the Santa Barbara Channel gives us unparalleled opportunities to study and understand, and on species extinction and survival, a complex subject impacted at least in part by human activity. Finally, we take a look at how technologies make their way from the laboratory to the marketplace—a process in which our Office of Technology & Industry Alliances plays midwife.

Today’s media world is changing very rapidly, with publication staffs and their printed products shrinking and not infrequently disappearing altogether, as more and more of our news and entertainment move from “traditional” media to the online world. Convergence is part of that world. We take pride in the editorial quality and look and feel
of our printed magazine, and we believe the Convergence website (Convergence.UCSB.edu) does a good job of presenting it online. The website also lets us keep the content current—as news happens in engineering and the sciences, we can post it to the website without waiting for the next issue of the magazine to be printed. Recognizing the budgetary realities of the UC environment, we’re scaling back our print output from three issues a year to two, while we keep current content moving to you by getting it up on the website as it happens.

More and more publications are also offering electronic delivery as an alternative to paper?hard copy?electronic delivery is far more economical than printing and mailing printed copies, and has the added advantages of speed, the ability to embed video and audio, and conserving resources and reducing the publication’s carbon footprint. We’re exploring electronic delivery options, and would like your input. We won’t be abandoning the print edition for the foreseeable future, but, if we can shift a substantial portion of our circulation to electronic delivery, we’ll be able to put the savings to good use in continuing to develop Convergence for you. Toward the back of this issue, you’ll find information on an online survey about some of these changes. We hope you’ll participate.

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