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Keeping the Physics in Biophysics and Vice Versa

PHILIP NELSON, University of Pennsylvania

I did my undergraduate studies, majoring in Physics, at a famous university where biophysical topics never entered the undergraduate Physics curriculum at all. And yet, once life science and physical science were regarded as inseparable–as Natural Science. Today we're entering another golden age of two-way exchange between life science, physical science, and even engineering. It's time for our education to reflect that. But we lose something if we just tell our Physics majors to take some Biochemistry courses. Instead we can introduce them to the same sort of probabilistic data analysis, real computer programming (not just black boxes), and falsifiable quantitative hypothesis testing that we want all our other Physics students to use. Even more important, we can introduce students majoring in other sciences to our methods, which are becoming ever more important in other fields. I'll give some examples of what has worked at University of Pennsylvania and elsewhere.