"Workbenches": Means to prepare the future light source research community?

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The fundamental idea behind the "workbench" concept at the Center for Biomolecular Structure at the National Synchrotron Light Source II is to provide members of the community hands-on experience at the structural biology beam lines. Ideally the workbench would be in person and extend over three days addressing basic concepts on synchrotron radiation and methods in structural biology. During the workshop data collection protocols are reviewed while most of the time is spent on data collection. Increased beam line automation and remote access have lead researchers to prefer to do their measurements from the comfort of their home Institutions. Pushed by the SARS-CoV-2 pandemic workshops also became remote with the result that a whole new generation of researchers have not seen a light source from the inside. Ever brighter beam lines call for differentiated data collection protocols that reduce data collection to a couple of seconds or less and data analysis pipelines increasingly permit the refinement of molecular structures in no time. This change in paradigm will be discuss vis a vis the role and impact of short focused courses, "workbenches" on current and future light source user communities.

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