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I have long been frustrated by dependence on individual hybridization instruments with linked denaturation and hybridization functionality. The linear addition of new instruments to meet increased test volume is limited by cost and available bench space. Suggesting to SciGene that the solution was to de-couple denaturation and hybridization with a high-capacity, high-precision incubation oven, mated to their CytoBrite hybridization instrument, quickly lead to the development of the CytoBrite Slide Oven.

The CytoBrite Slide Oven incubates up to 60 slides in 6-slide hybridization trays transferred directly from the CytoBrite instrument following denaturation. Slides can also be transferred from HyBrite and ThermoBrite instruments. This frees the denaturation instruments for additional runs. The trays fit mated heat blocks on five pull-out shelves, facilitating rapid transfer of multiple slides with negligible temperature disruption. Precision (temperature regulation to $\pm 0.2^{\circ}\text{C}$) is excellent, and the use of CytoBond Coverslip Sealant eliminates the need to humidify the oven.

The CytoBrite oven has successfully hybridized the full range of FISH testing, including standard cytogenetic interphase and metaphase preparations, FFPE specimens (breast, lung, lymphoma, sarcoma, etc.), and fixed intact cell Thin-Prep slides for bladder cancer screening. Probes from the major vendors and representing all FISH strategies (fusion, breakapart, deletion, amplification) have been successfully hybridized. Results have been excellent.