

**Title: Knit Stitches Squared**

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**Measurements: Bust: 34 Waist 28 hip 39**

Through the past few years my design scholarship has been focused around the knit stitch. I have looked at the form from different perspectives and been inspired by its shape, form and function in designs. In this dress the aim was to look at how I could use the knit technology of the Stoll knitting machine and the M1Plus software to develop a knitted design with shape and surface appeal that both utilized the stitch as a way to create the garment yet also showed the stitch in the surface design. I have been inspired by seeing the amazing designs developed by scholars focusing on knitwear and its possibilities such as Traci Lamar who consistently presents designs utilizing the technology in order to develop interesting jacquard patterns in her knitwear designs an example of this is “Real Mom” presented at the Annual Conference in 2015. Learning from others and listening to presentations about the knitwear technology led me to believe not only that this was something I was interested in, but also that although challenging it is important for us as educators to get up to speed with the technology in this area. Through this design I was able to apply my years of knit studies to the software and technology of the Stoll CMS-3 Multi Gauge knitting machine recently acquired by my department.

What was important in this process was to create a garment that fully utilized the shaping possibilities in knitwear not available through typical cut and sew applications. I also was intent on using the stitch in the surface to reach a different level of interpretation of the stitch through an abstracted knit stitch design. This dotted stitch was initially developed as a print design for digital printing. However, through applications of the software (M1Plus) and understanding of how the stitch could appear with a smaller number of colors it was manipulated to work with the knit approach as well. Initially the design of the jacquard was a 1x1 rib stitch on the surface but as I completed the muslin I realize that it would be difficult to determine what was going due to the fullness of the design so I decided to go a jersey stitch instead.

The Design process started with extensive sampling in order to find yarns that would work well together as well as the best type back for the 3 colored jacquard design. The sampling resulted in the choice of a 3 colored net/ tubular back to the jacquard. Then the mapping of the design started to take shape making sure the repeat of the design would flow around the body with the knit stitch appearing to continue around. To create the gathered look multistep narrowing was used in order to narrow the piece in only a few rows and get the appearance of a gather without applying a seam into the garment. This was a challenge in many ways as the machine would have to overlap stitches throughout the width of the bed then knit them together in the following row. This technique is found both in the sleeves and at the empire waist of the dress. Additional shaping around neck and armhole was created through traditional fully fashioning. Finally the dress was pieced together by hand. For potential future production this could be

done by a linker but at this time that is not something the department owns and therefore I was limited to creating handstitched seams. However this helped me control the seams and make the garment appear almost seamless at the side where the pattern carries over the seam.

This kind of exploration in knitwear is a way to see how we as scholars can create garments that pushes the limits of knit technology yet creates garments that are able to be re-produced for the market. Often in my design I find I push and challenge the pieces so much but I am actually creating designs that cannot easily be reproduced thus not helping in the same way to push the industry forward in this field I believe our design expertise can do both through the design which is a challenge I am to continue to explore in future designs.

**Lamar, Traci.** 2015. Celebrating the Unique, International Textile & Apparel Association Conference, Santa Fe, New Mexico. Nov. 2015. *Real Mom*. Catalog and Abstract available online: [www.itaonline.org](http://www.itaonline.org).