Chow’s Team
Petri Net Models – discrete event stochastic models
(set fixed time interval updates)

Outputs Include:
Operation times
Plate location & time
Plate characteristics
Machine/process states

Virtual Supervisory Control Interface: based on SAMI NX/EX Line Simulation
≠ develop Java prototype that highlights each machine during process events
≠ other indicators based on current simulation would include: errors, schedule optimization, and event times

CELISCA: collection of physiology data based on NCSU prototype Output1

Real-time visualizations of the plate image via color-coding.
≠ User defined colors (e.g. red, white) based on “low”, “medium”, and “high” plate contents

GOMSL Model to Represent Monitoring Task:
≠ Monitoring consists of watching data to see that it is valid
≠ Workload measured in terms of visual operations and WM use (Output1 comparison)

Guidelines from GOMSL analysis of SAMI Method Editor

Redesign of Virtual Supervisory Control Interface:
≠ Create new GOMSL model to show reduced monitoring load
≠ Workload of new interface in terms of visual operations and WM use (Output 2 comparison)

CELISCA: collection of physiology data based on New NCSU prototype Output2