CHROMOSOME PAINTING Edition II 1-X

Jacquard dye and dye sublimation, printed on ultra sheer and sheer silk

Panels, 12 x 112"

The selection for this show:

CHROMOSOME 1. Prostate Cancer 2. Ovarian Cancer 3. Colon Cancer 4. Leukemia 5. Gastric Cancer 6. Ovarian

Cancer 7. Colon Cancer 8. Hepatocellular Cancer 11. Bladder Cancer 12. Oral Cancer

13. Pancreatic Cancer 14. Lymphoma 15. Hodgkin's Lymphoma 17. Breast Cancer

19. Leukemia T-cell Acute 20. Colin Cancer 21. Breast Cancer 22. Leukemia X. Testicular Cancer

INHERITANCE, Robin Bennett, Senior Genetic Counselor

Genetics touches all of us. We all take pride in our heritage, and we may boast about characteristics that "run in the family." Conversely, concerns about family diseases that may be inherited can also lead to feelings of anxiety, guilt, fear of the unknown, or even relief if we discover that a particular disease is not strongly inheritable or we feel empowered to take preventive actions against a disease. The collaboration between myself, Ondrizek, and the University of Washington medical genetics physicians and researchers shows the beauty in our DNA and brings this art and genetic science to the public. This work provides an opportunity for dialogue between geneticists and the public to help allay fears and misconceptions related to genetics. Information about family history in conjunction with genetic testing can provide important information at many times throughout the lifespan: in planning pregnancies, in newborns and children, throughout adolescence and in adulthood. For families where DNA testing may not be as informative yet, the option of banking DNA (from blood or saliva) can be a gift to future generations.

CHROMOSOME PAINTING Edition II 2015. Geraldine Ondrizek

Chromosome Paintings is based on the image of a synteny map, a colorful, striped array that compares gene sequences and chromosomes between species. The long silk panels, each printed with human chromosome maps are arresting displays of fluorescent color arranged to stunningly depict chromosomal comparisons. Fuchsia neighbors chartreuse, purple sidles up to orange, soft grays mingle with blues. These juxtapositions spur the eye to dart between various color combinations and arrangements.

The origins of the word 'chromosome' comes from Greek khroma 'color' + soma 'body.' These panels, literally made up of different color combinations, physically manifest the 'color bodies' (or chromosomes). Chromosome paintings as representations of scientific data are optically stunning and will generate dialogues about vibrancy, complements, contrasts and tonal ranges of the color combinations, which parallel genetic variance, anomalies and similarities. The technique of chromosome painting, also known as "fluorescence in situ hybridization" can detect chromosomal abnormalities like translocations and structural alterations that are associated with various diseases. For example, chromosome 19 carries a gene implicated in leukemia. With these disease associations in mind, each panel is labeled with a type of cancer correlated with a genetic marker present on the chromosome.

Chromosome Painting, Figure 5 Jarllon, Aury, Petit, Thorman Copyright Clearance, Nature Publishing Group July 25, 2011.