Design Thinking Meets Regulatory Rigor: Relocation of a Histocompatibility Laboratory in the Context of New Facility Construction

ALBERTA PRECISION LABORATORIES
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UNIVERSITY OF CALGARY
CUMMING SCHOOL OF MEDICINE

The use of design thinking process allows for building a hospital and a clinical laboratory that stands as a testament to the integration of compassionate care, sustainable practices, innovative design, operational needs, and regulatory compliance.

INTRODUCTION: Application of the design thinking process to creation of new healthcare environments combines functionality, efficiency, and empathy for patients and staff. Here, we describe how our team successfully executed this process and outline replicable strategies for other laboratories undergoing similar transitions.

METHODS: This methodology includes five iterative stages—Empathize, Define, Ideate, Prototype, and Test—and prioritizes understanding user experiences to inform design decisions. Through interviews and observations with end users, designers can identify pain points in the healthcare experience.

RESULTS: Laboratory design principles, examples, and challenges in the creation of efficient, safe, and adaptable laboratory environments (Figure 1 A-D)

CONCLUSION: The use of design thinking process allowed our health region to build a hospital and a clinical laboratory that stands as a testament to the integration of compassionate care, sustainable practices, innovative design, operational needs, and regulatory compliance. This case offers a practical roadmap for other transplant laboratories planning similar transitions.

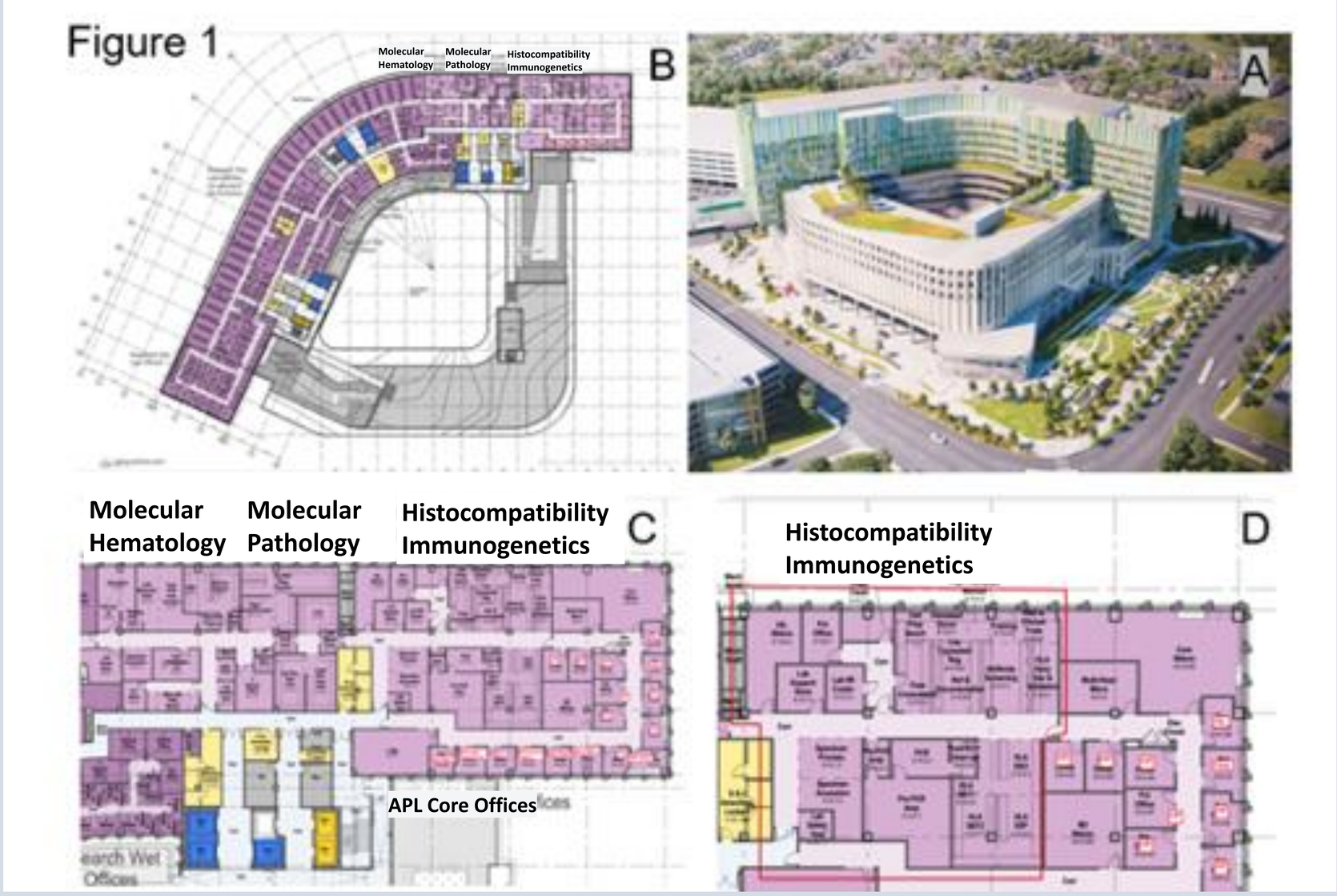

Figure1 A-D: Finished Histocompatibility Laboratory within the new Cancer Center. Note: ASHI laboratory requirements for relocation of a new laboratory can be found at the Accreditation Review Program Operations Manual.

Noureddine Berka[1,2], Qian (Nancy) Hu[1], Iwona Galaszkiewicz[1], Caitlyn Burns[1], Faisal Khan[1,2]
[1]Transplant Lab South, Alberta Precision Labs, Calgary AB, Canada.
[2]DPLM, University of Calgary, AB, Canada