



Board of Regents Facilities Committee
Biomedical Discovery District / Biomedical Facilities Program Update
March 10, 2011

Aaron Friedman, M.D. , Vice President for Health Sciences, Medical School Dean
Richard Johnson, Director, Biomedical Facilities Program

Biomedical Science Research Facilities Program Overview

- Approved by the MN Legislature in 2008
- The purpose of the program is to...
“...further the investment in biomedical science research facilities in Minnesota to benefit the state's economy, advance the biomedical technology industry, benefit human health, and facilitate research collaboration between the University of Minnesota and other private and public institutions in this state.”
- The program is to fund projects totaling \$292 million.
- The State of Minnesota pays 75% of the capital costs.

Biomedical Science Research Facilities Program Goals

- Advance Minnesota's leadership in biomedical science by:
 - ✓ finding new cures and treatments
 - ✓ recruiting and retaining top research faculty
 - ✓ capturing a greater share of research funding,
 - ✓ fueling partnerships with the public and private sector
- Enhance AHC research capability and productivity by:
 - ✓ expanding research space for attracting new recruits and retaining existing talent
 - ✓ clustering faculty, support staff, laboratories and equipment from high priority programs to compliment research strengths
- Expand competitive jobs for Minnesota's economy by:
 - ✓ creating short term construction jobs for Minnesotans (~ 5,000+)
 - ✓ creating longer term jobs for Minnesotans in the biomedical industry
(Business Activity Multiplier ~ 2.23 for every additional NIH dollar)



Biomedical Discovery District



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Winston and Maxine Wallin Medical Biosciences Building (WMBB)

Wallin Medical Biosciences Building (WMBB)

- Provides laboratory space for the following research programs:
 - N. Bud Grossman Center for Memory Research
 - Institute for Translational Neuroscience
 - Center for Immunology
 - Biocontainment Research Facility and BSL-3 Program



Wallin Medical Biosciences Building (WMBB) Research Program

- Karen Ashe – N. Bud Grossman Center for Memory Research and Care
- Matt Mescher – Center for Immunology
- Marc Jenkins – Department of Microbiology and the Center for Immunology
- Harry Orr – Institute for Translational Neuroscience



Center for Magnetic Resonance Research (CMRR) Expansion



- CMRR is a great example of how the Biomedical Discovery District is being designed to foster collaboration among researchers across the campus
- CMRR has a unique public/private partnership using a cyclotron for isotope production, which is essential for metabolic studies and the development of new imaging techniques

Center for Magnetic Resonance Research (CMRR) Research Program

- The expansion of CMRR has opened the doors for new research
 - Led by Dr. Kamil Ugurbil, the Human Connectome Project (\$30M grant) will map every connection of the human brain through advanced brain imaging
 - By studying the functional brain mapping humans, CMRR researchers are opening new insight into a range of diseases and conditions, including:
 - Diabetes
 - Obesity
 - Tumors
 - Cystic Fibrosis
 - Psychiatric Disorders
- Researchers will be able to use a new 10.5T magnet, the largest and most powerful in the world for human imaging



Cardiovascular Research in the Cancer / Cardiovascular Building

- Upon completion, the Lillehei Heart Institute and the Department of Integrative Biology and Physiology will relocate 20-25 investigators to the new space. Research examples include the following areas:
 - Cardiac Regeneration
 - Cardiac Development
 - Muscular Dystrophy
 - Congenital Heart Medicine
 - Genomics



Cancer Research in the Cancer/Cardiovascular Building

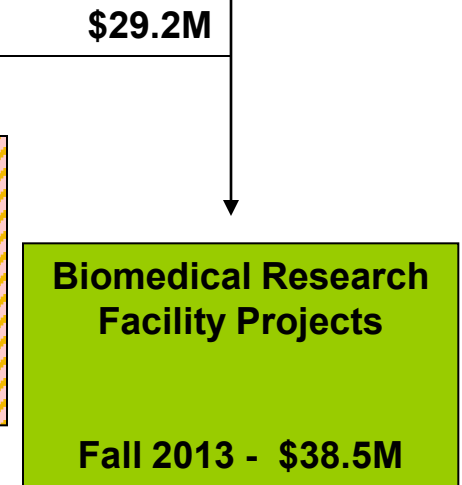
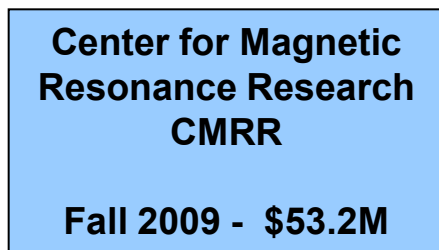
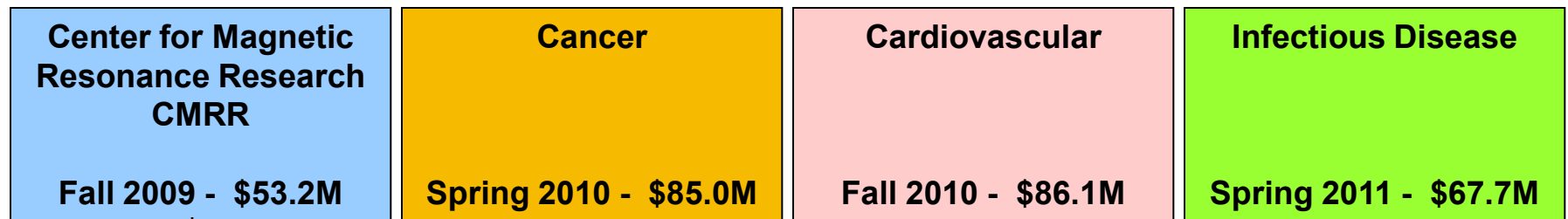
- The Masonic Cancer Center planned its use of the Cancer/Cardio Building to focus on two specific groups of investigators:
 - Chemical Biology – Eight existing faculty and up to five new faculty with a focus on studying chemical carcinogens as a cause of cancer.
 - New Models to Fight Cancer – Seven existing faculty and up to five new faculty will study novel new therapeutic strategies to fight cancer– building on collaborations underway with researchers in WMBB and CMRR



Biomedical Science Research Facilities Program

\$292.0M Project Plan

Original Concept & Schedule



Revised Concept & Schedule

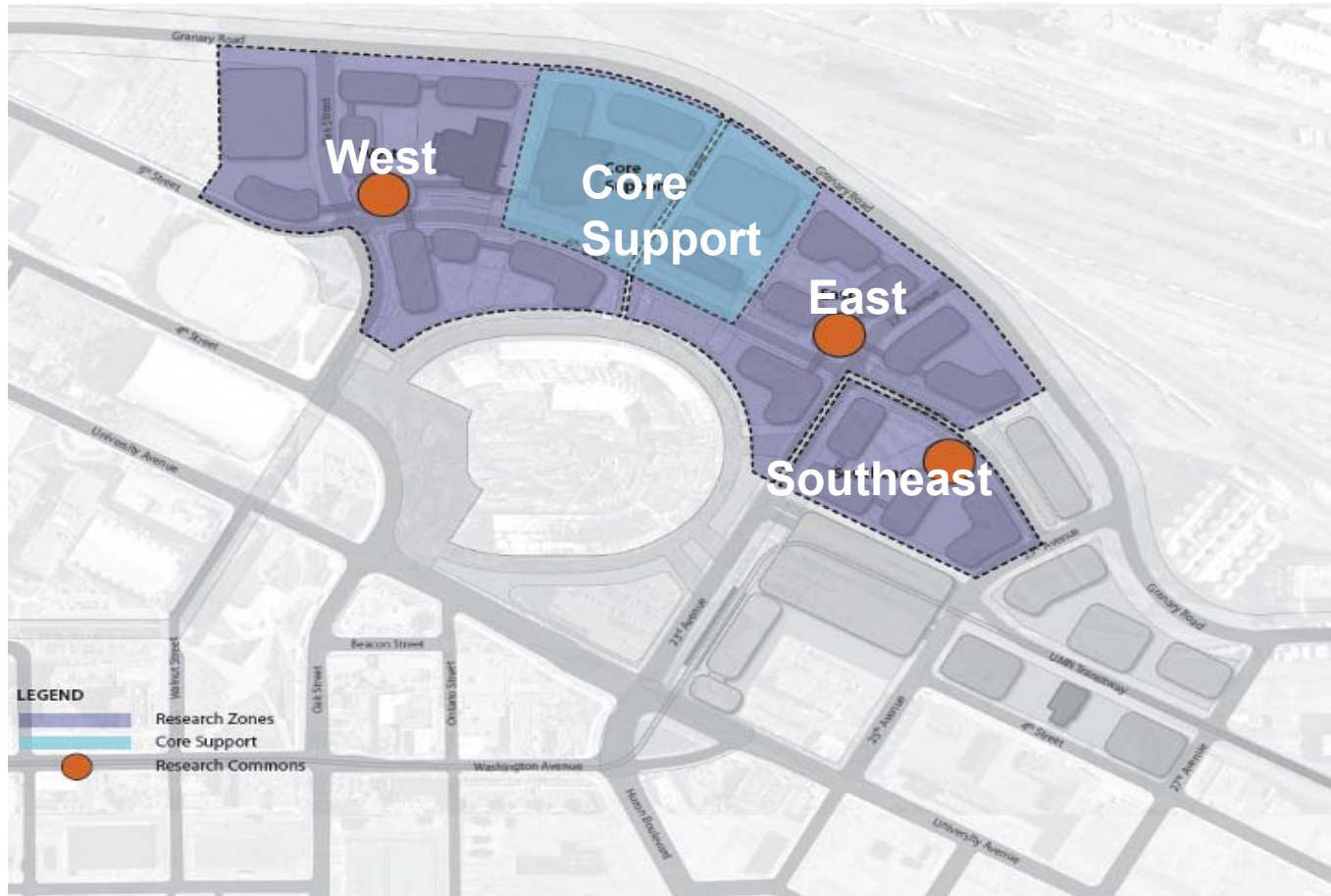
Biomedical Discovery District



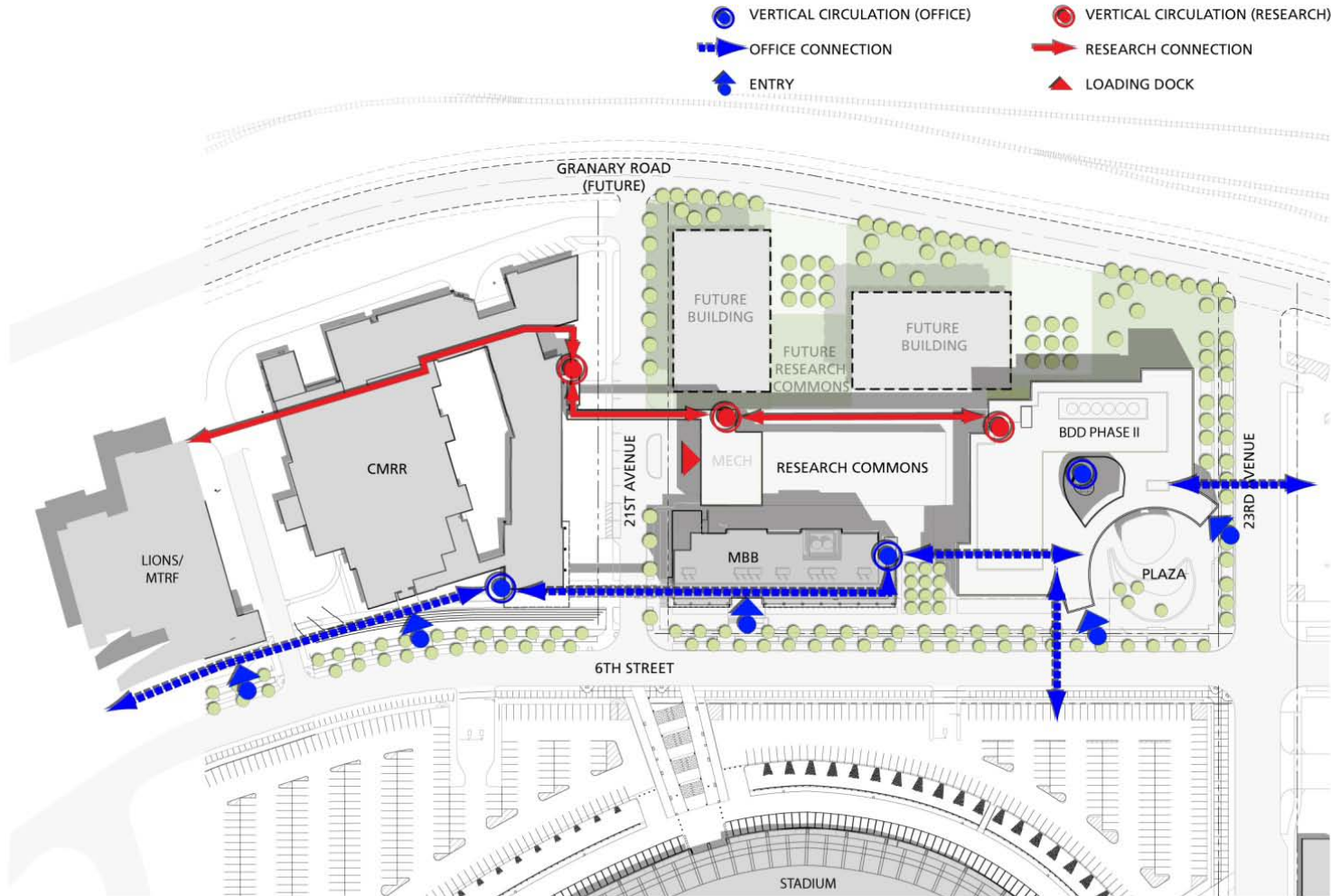
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East Gateway District Master Plan

Research Neighborhoods



Biomedical Discovery District Site Organization



Cancer / Cardiovascular Building

1st Floor Plan



P-Color LEVEL 1 PLAN

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Biomedical Discovery District Phase II | Design Development Workshop 3

ARCHITECTURAL ALLIANCE
ZIMMER GUNSUL FRASCA ARCHITECTS
JACOBS CONSULTANCY
DAMON FARBER ASSOCIATES

November 17, 2010



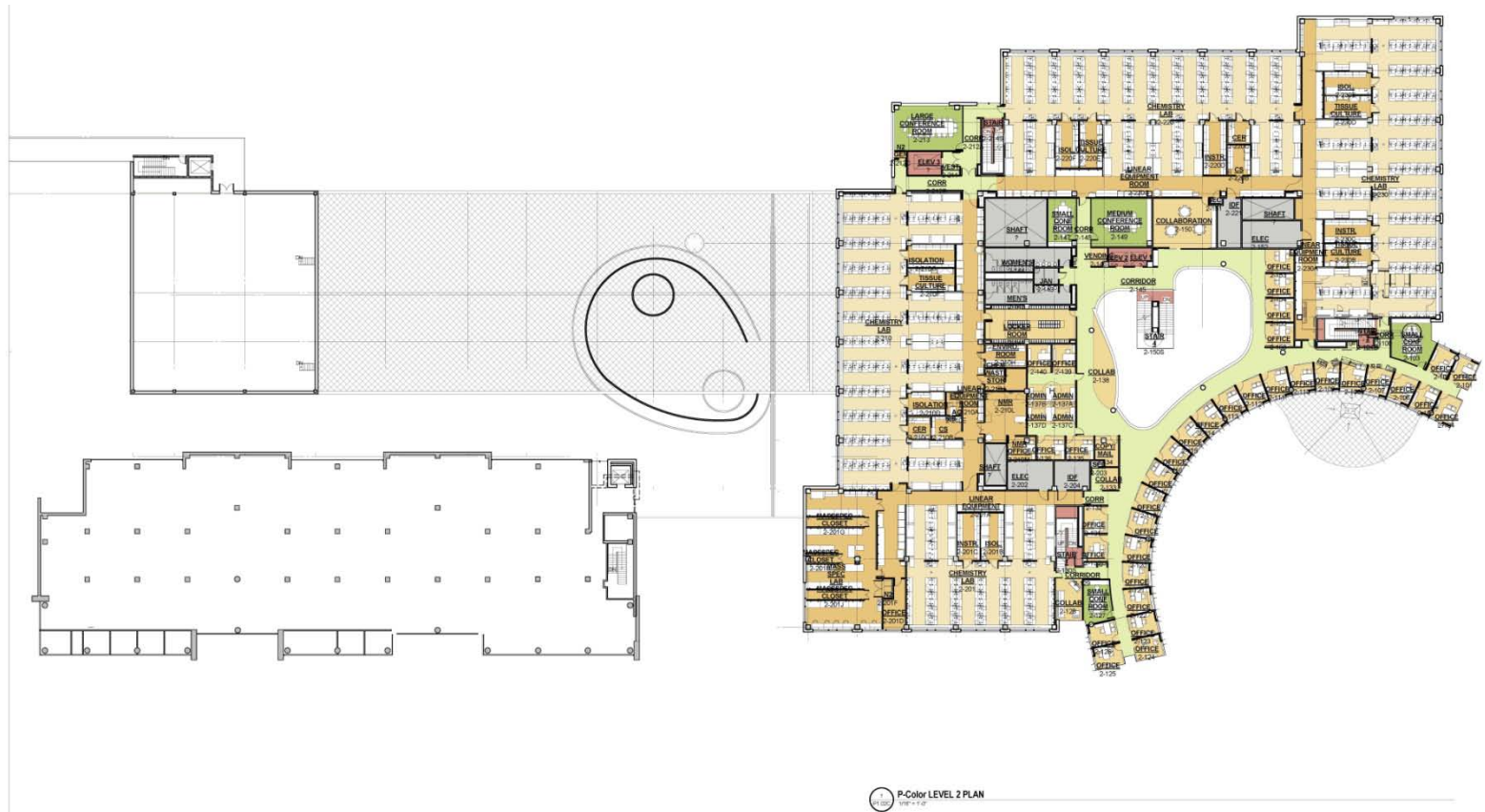
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Cancer / Cardiovascular Building Lobby Image



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Cancer / Cardiovascular Building 2nd Floor Plan



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Cancer / Cardiovascular Building Site Plan



University of Minnesota
Biomedical Discovery District

ARCHITECTURAL ALLIANCE
INNER PRACTICE ARCHITECTS
HKS CONSULTANTS
SAMPA FARRER BISHOPFF
October 10, 2011



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View of the Cancer / Cardiovascular Building Southeast Side



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View of the Cancer / Cardiovascular Building North Side



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View of the Cancer / Cardiovascular Building North Side - continued



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Cancer / Cardiovascular Building Schedule

- Site Preparation March – Apr 2011
- Foundations – Structure May 2011 – Mar 2012
- Enclosure Nov 2011 – May 2012
- MEP, Interiors Jan 2012 – Feb 2013
- Commissioning Spring 2013
- Occupancy Summer 2013



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