

Novartis Institutes for BioMedical Research

From Sweets to Science

July 14, 2006



Why Novartis in Cambridge?

Concerns before creating our new Facilities.

From Necco to NIBRI.

- Novartis is currently ranked #6 Worldwide in the Healthcare Industry
- \$32.2 billion in group sales, 2005
- \$20.3 billion in pharmaceutical sales, 2005
- 91,000 employees in 140 countries
- 75 projects in phase II, III and registration

Other Novartis Companies



¹ Goldman Sachs 2004 ² New Molecular Entity

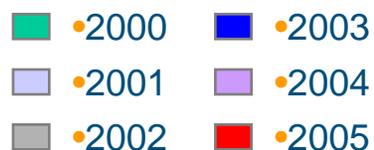
³ Biological License Application

⁴ CenterWatch 2003 tBox

Most US Approvals Across Industry

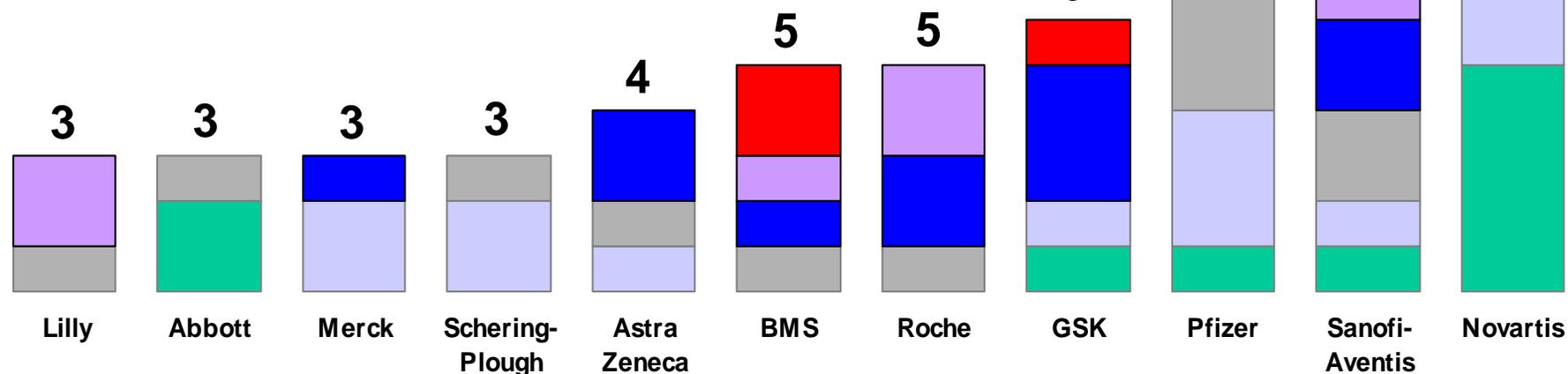
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US approvals (NMEs¹ and BLAs²) for top pharma companies since Jan 2000



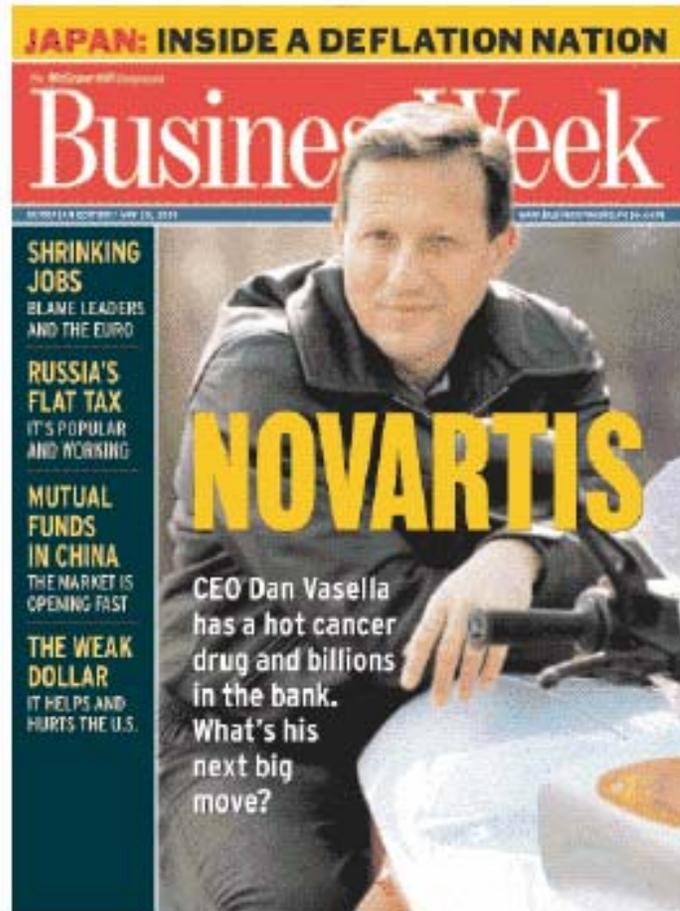
2005 Scrip Award for Best Pipeline

Myfortic[®], Xolair[®], Zelnorm[®],
 Elidel[®], Foradil[®], Glivec^{®3},
 Zometa[®], Trileptal[®],
 Visudyne[®], Exelon[®],
 Rescula[®], Starlix[®],
 Enablex[®], Exjade[®]

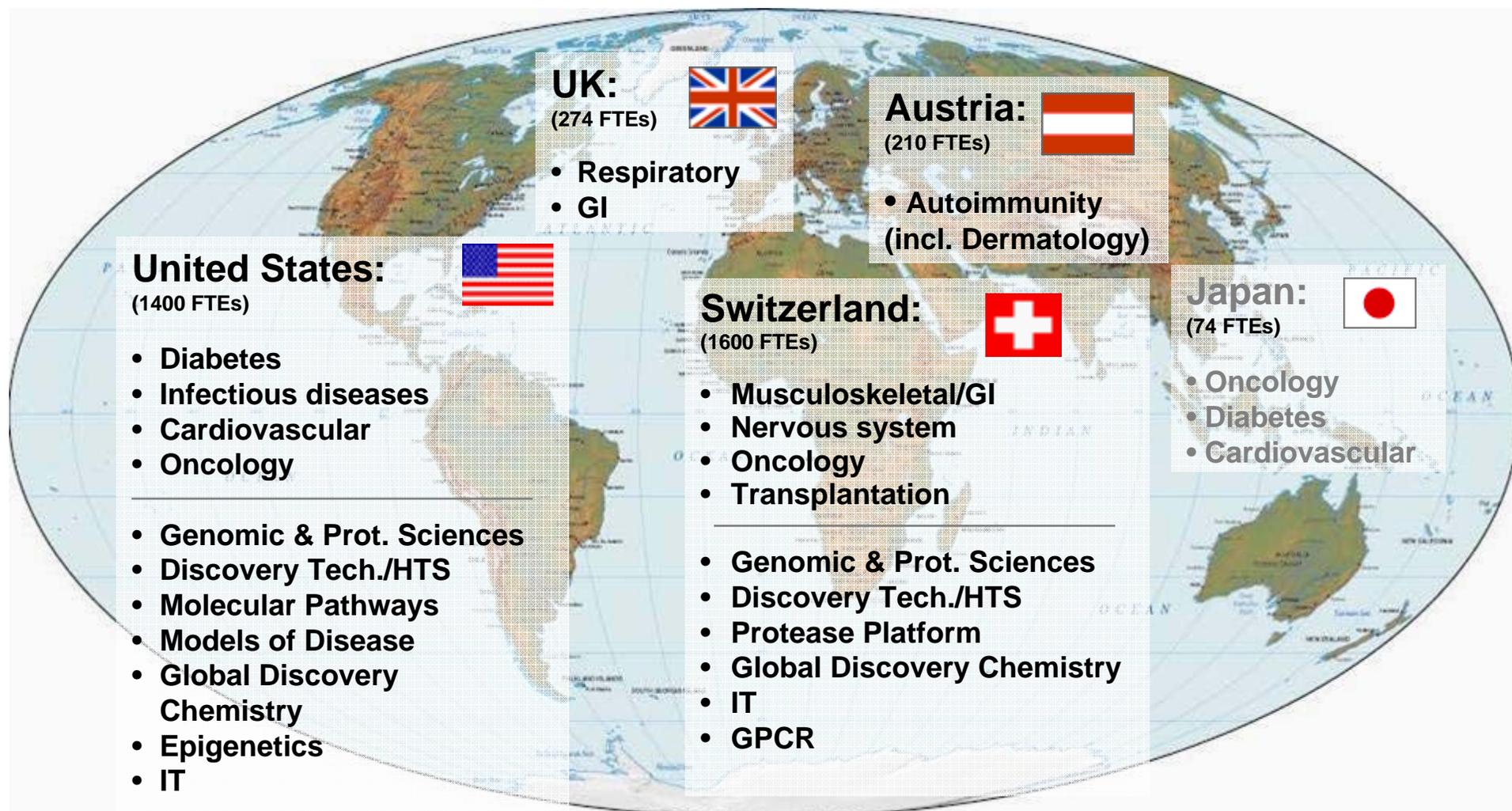


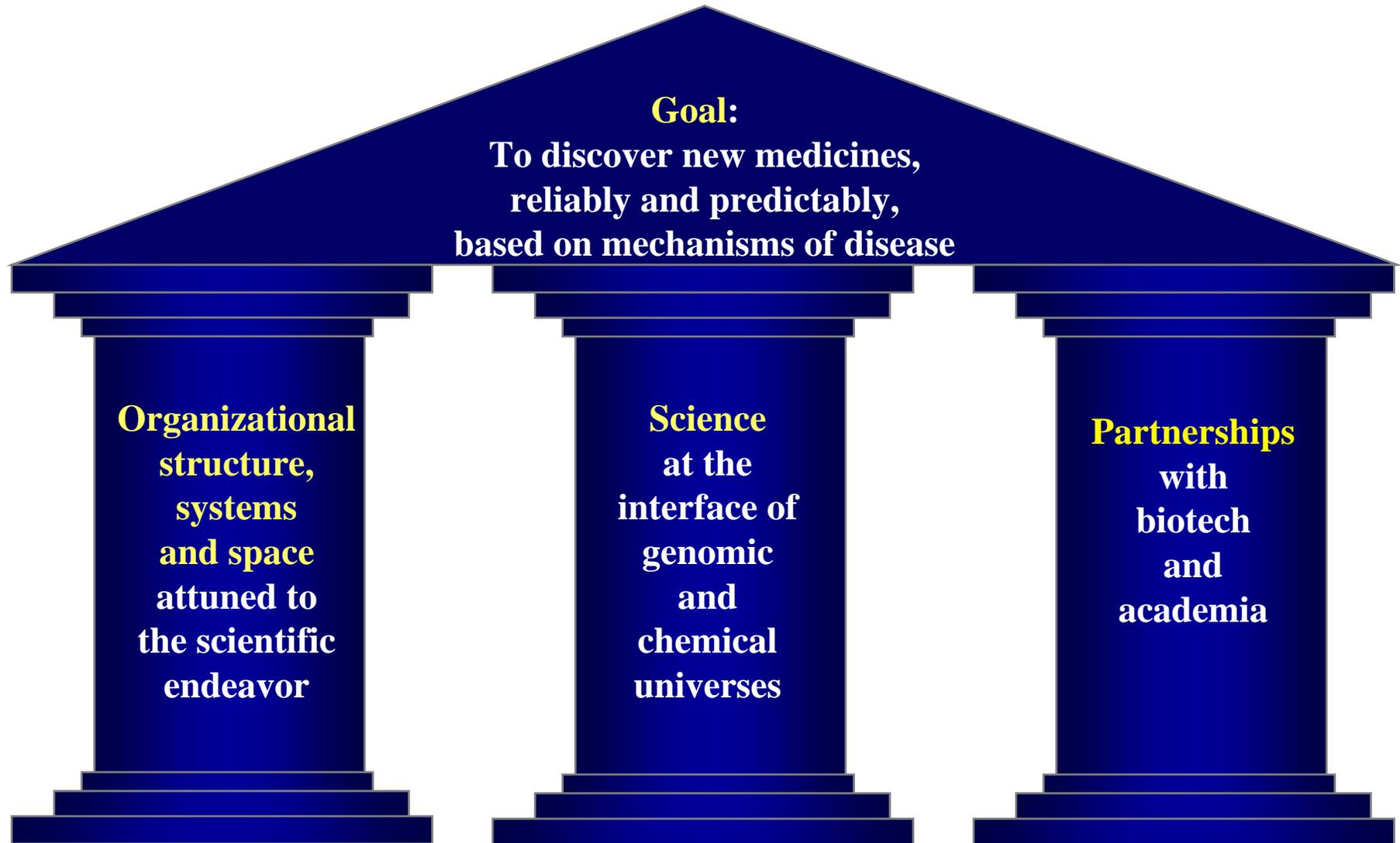
¹ New medical entities
² Biologics license application
³ Gleevec[®] in the US

Source: FDA website, company websites, other public domain information



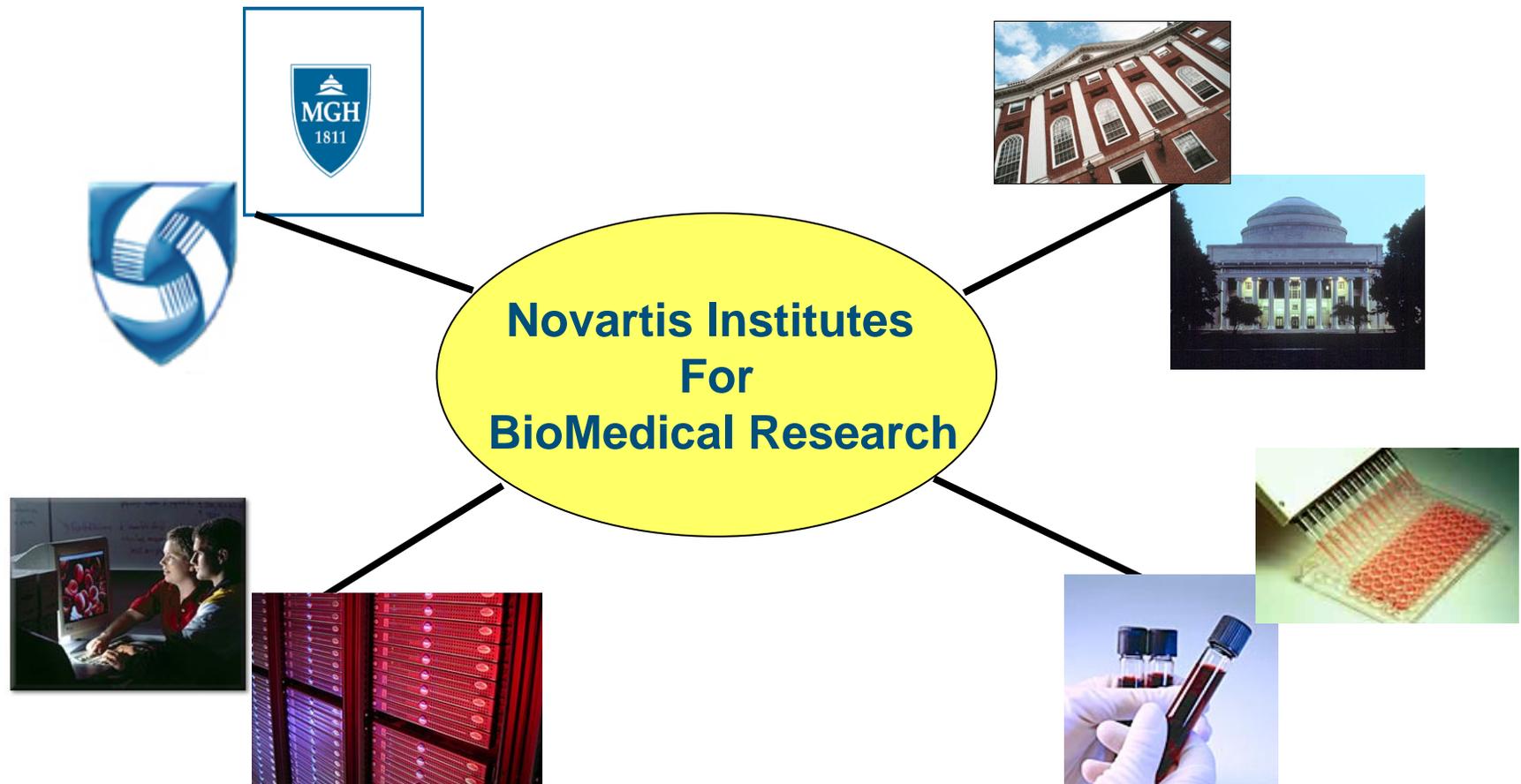
“We want to build the most competitive, most innovative Research Organization with the most promising pipeline in Industry to cure and help people around the world.”





Why Cambridge?

The region's life science industry is unmatched anywhere in the world





Whitehead
Institute

MGH

Genzyme

Biogen

Amgen

Millenium

MIT
Campus

DFCI

Harvard
Med School

Vertex

Why Novartis in Cambridge?

Concerns before creating our new Facilities:

- Can we create a Campus in the city close to Academia?
- Can we meet our ambitious deadline?
- Will we be able to hire enough bench scientists to meet our needs?

From Necco to NIBRI.



Whitehead
Institute

MGH

Genzyme

Biogen

Amgen

Tech. Square

Millenium

Necco @
250 Mass. Ave.

MIT
Campus

DFCI

Harvard
Med School

Vertex

- Can we create a Campus in the city close to Academia?
- Can we meet our ambitious deadline?
- Will we be able to hire enough bench scientists to meet our needs?

Two Sites, Two Buildings, Two Years

Novartis Institutes for BioMedical Research



100 Technology Square

- Start Planning April 2002
- Opened March, 2003
- 250,000 sqf of laboratory space
- Accommodates up to 380 scientists



250 Massachusetts Avenue

- Start Laboratory Planning August 2002
- Opened April, 2004
- 500,000 sqf of laboratory space
- Accommodates >700 scientists

**Build
Massachusetts
Awards
Program
2003**

HONOR AWARD

Presented by

Associated General Contractors of Massachusetts

Novartis Institute for Biomedical Research
Project Name

Walsh Brothers Incorporated
Constructor

The Stubbins Associates
Architect

Novartis Institute for Biomedical Research
Owner

Mark P. Zumb
AGC of Mass Chairman

Robert D. ...
Jury Chairman



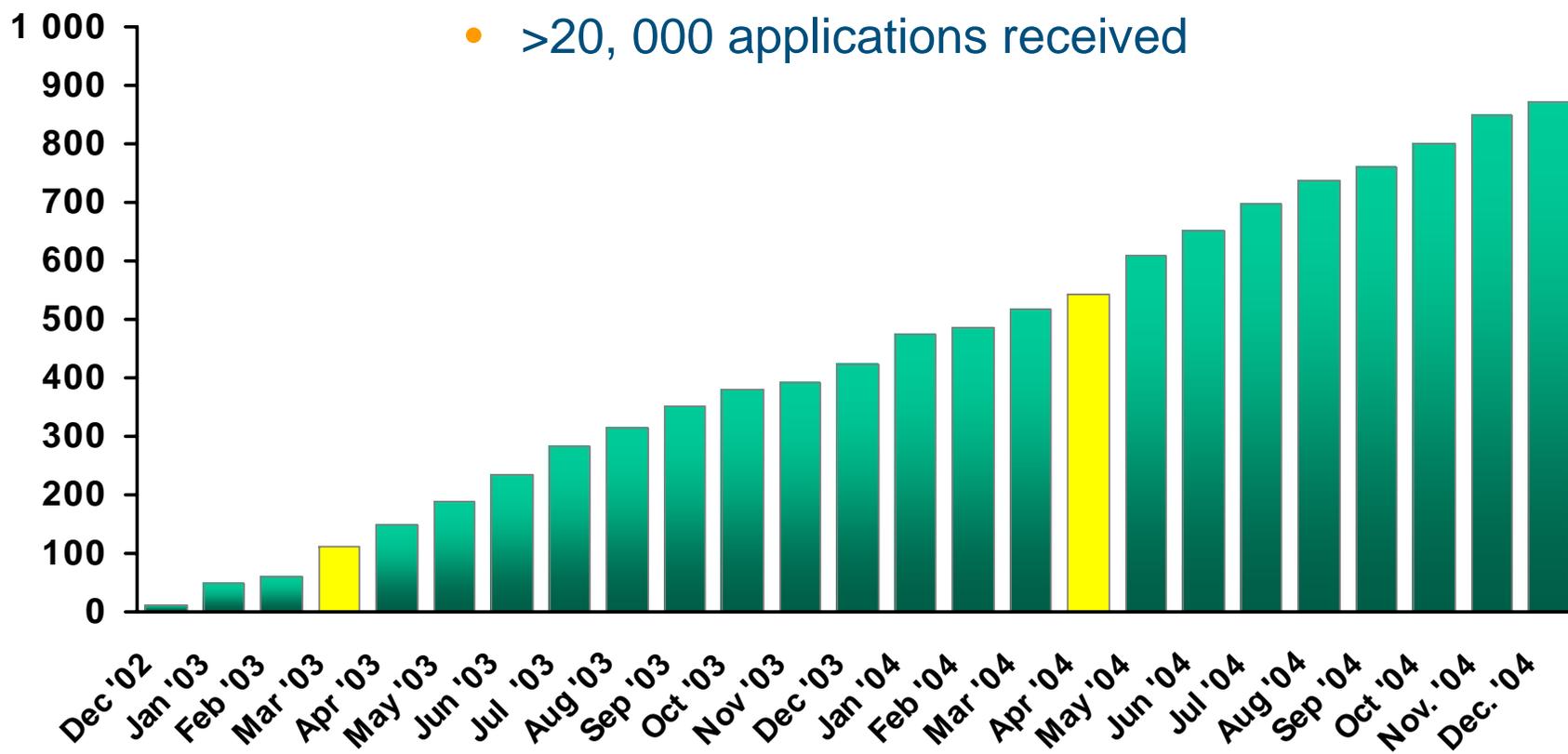
- Can we create a Campus in the city close to Academia?
- Can We Meet our Ambitious Deadline?
- Will we be able to hire enough talented bench scientists to meet our needs?

Growth of Cambridge Site

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of employees in Cambridge*

- Average ~ 1.9 hires/business day
- >20, 000 applications received



Why Novartis in Cambridge?
Concerns before creating our new Facilities.

From Necco to NIBRI.

- History and Space Usage
- Design and Build out
 - ⇒ The Building Core
 - ⇒ The Labs
 - ⇒ The Amenities
 - ⇒ Organization and Timelines



**Of an Old Candy Factory ...
(created in 1927)**

**... into the New NIBR
Headquarters.**



Back to the Old “Necco” Time

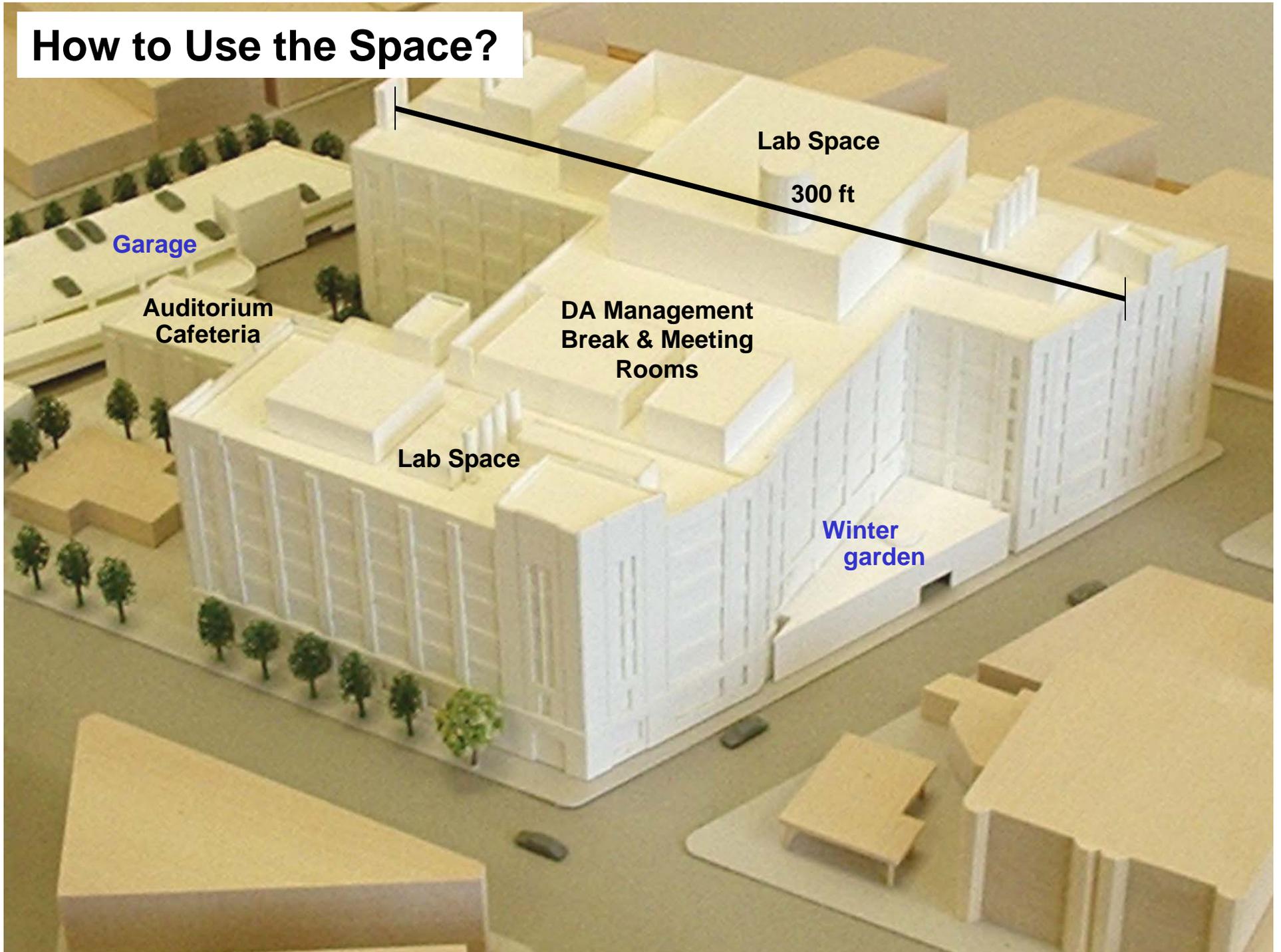
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How to Use the Space?



How to Use the Space?



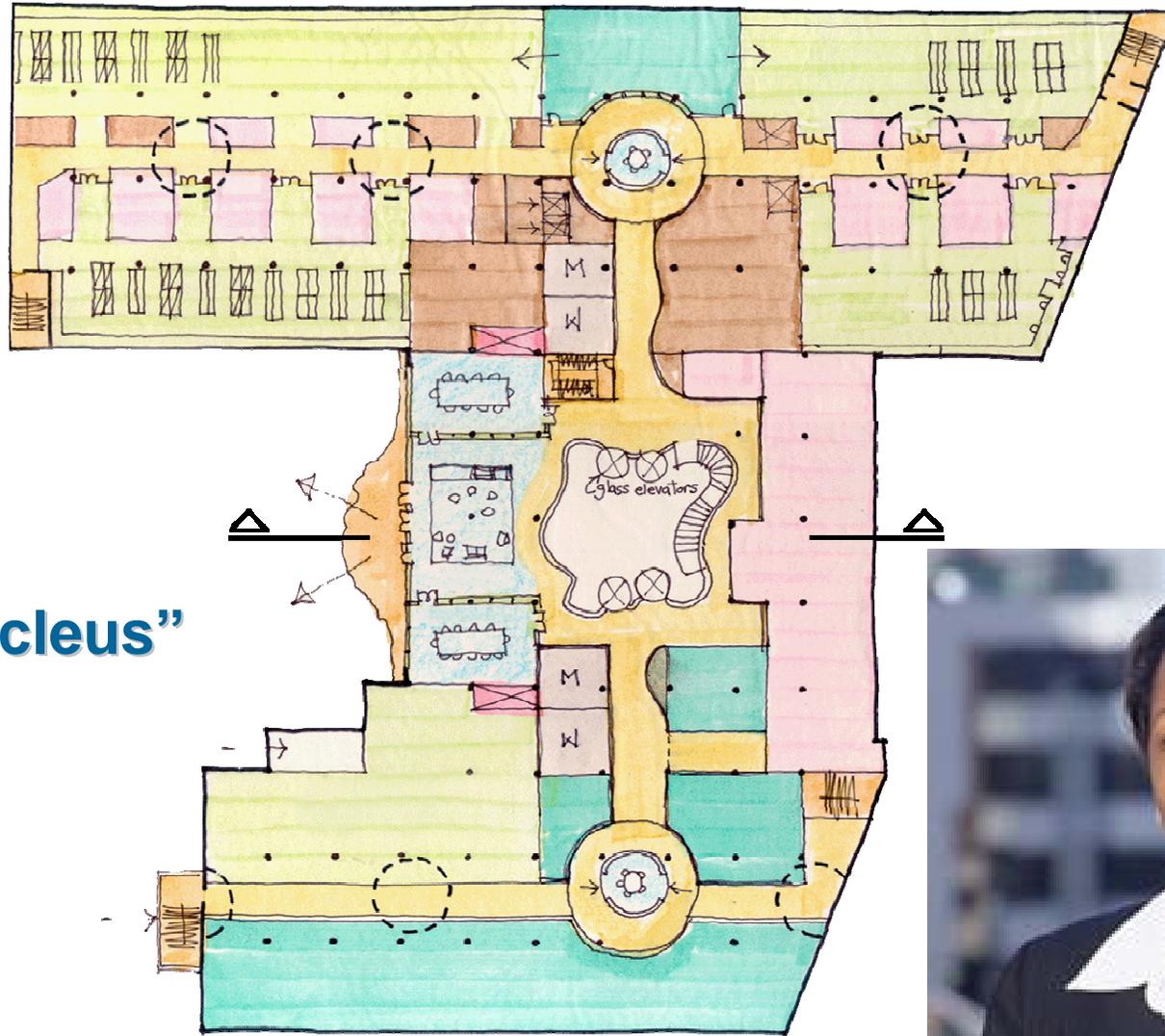
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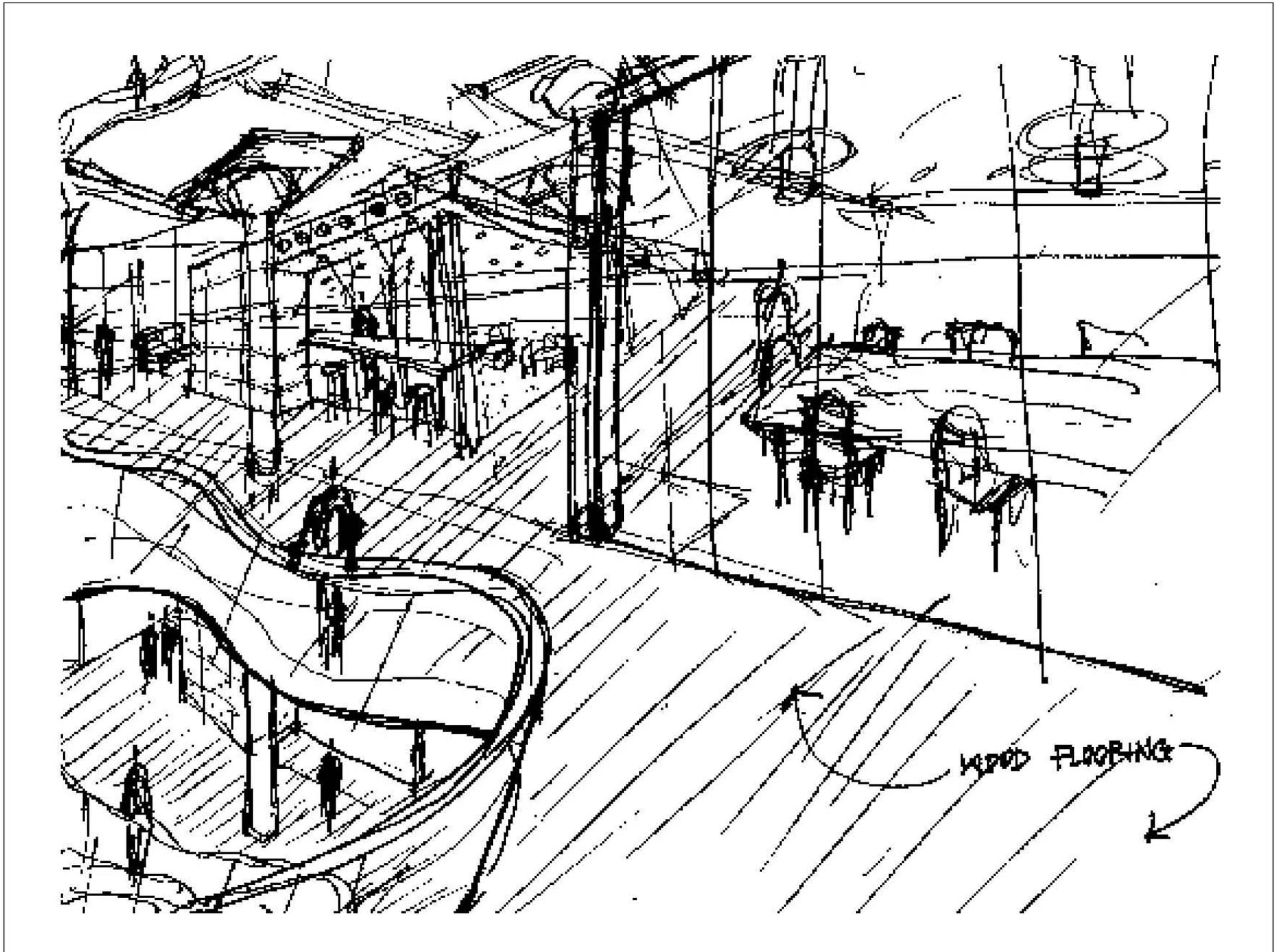
Create a new environment for Research activities that:

- Emphasizes openness and transparency
- Integrates interacting functions (chemistry, biology, and early development)
- Promotes informal social interaction
- Makes an efficient use of the space
- Energizes the scientists



The "Nucleus"





WOOD FLOORING

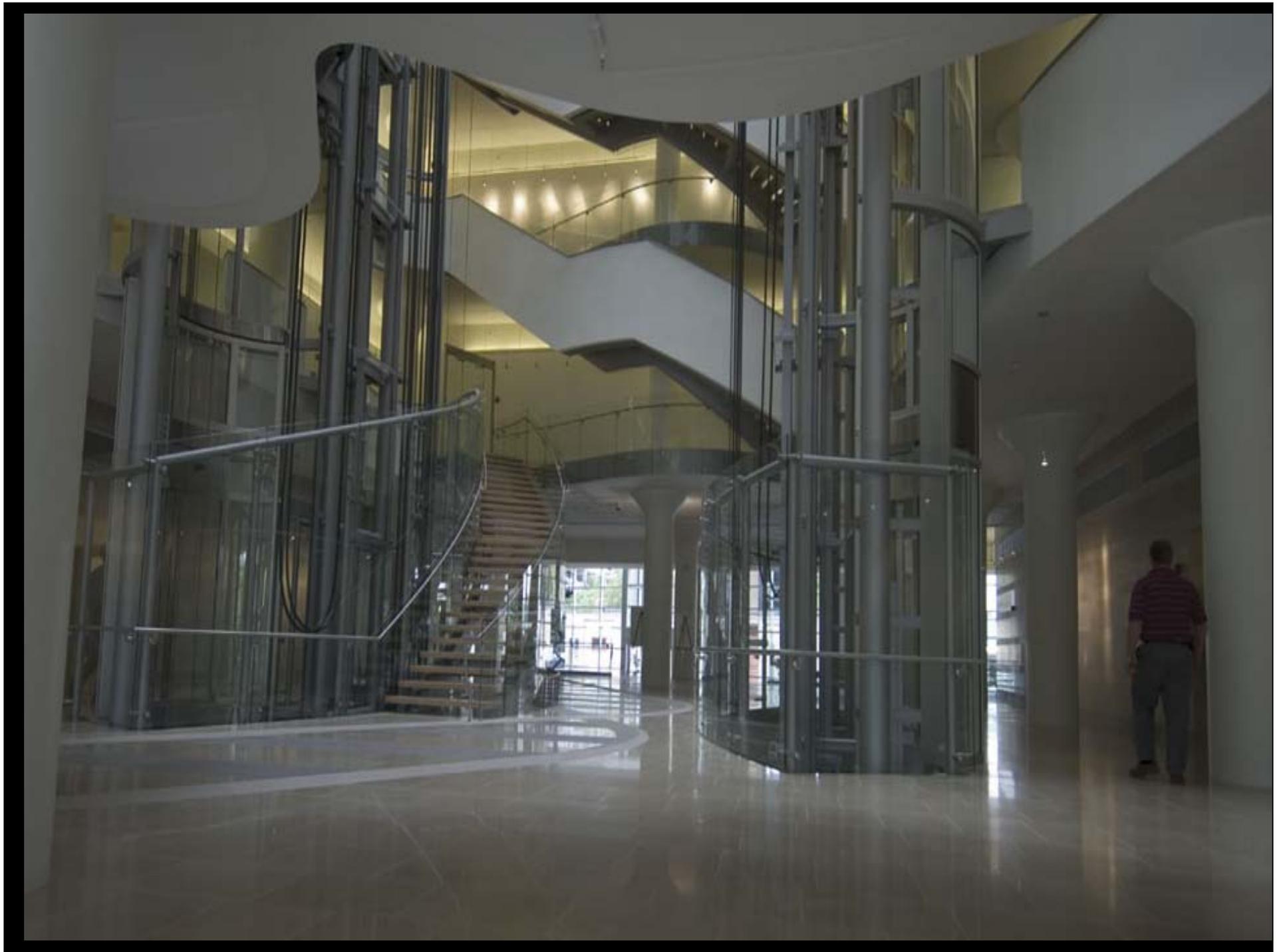
Atrium & Skylight Cut





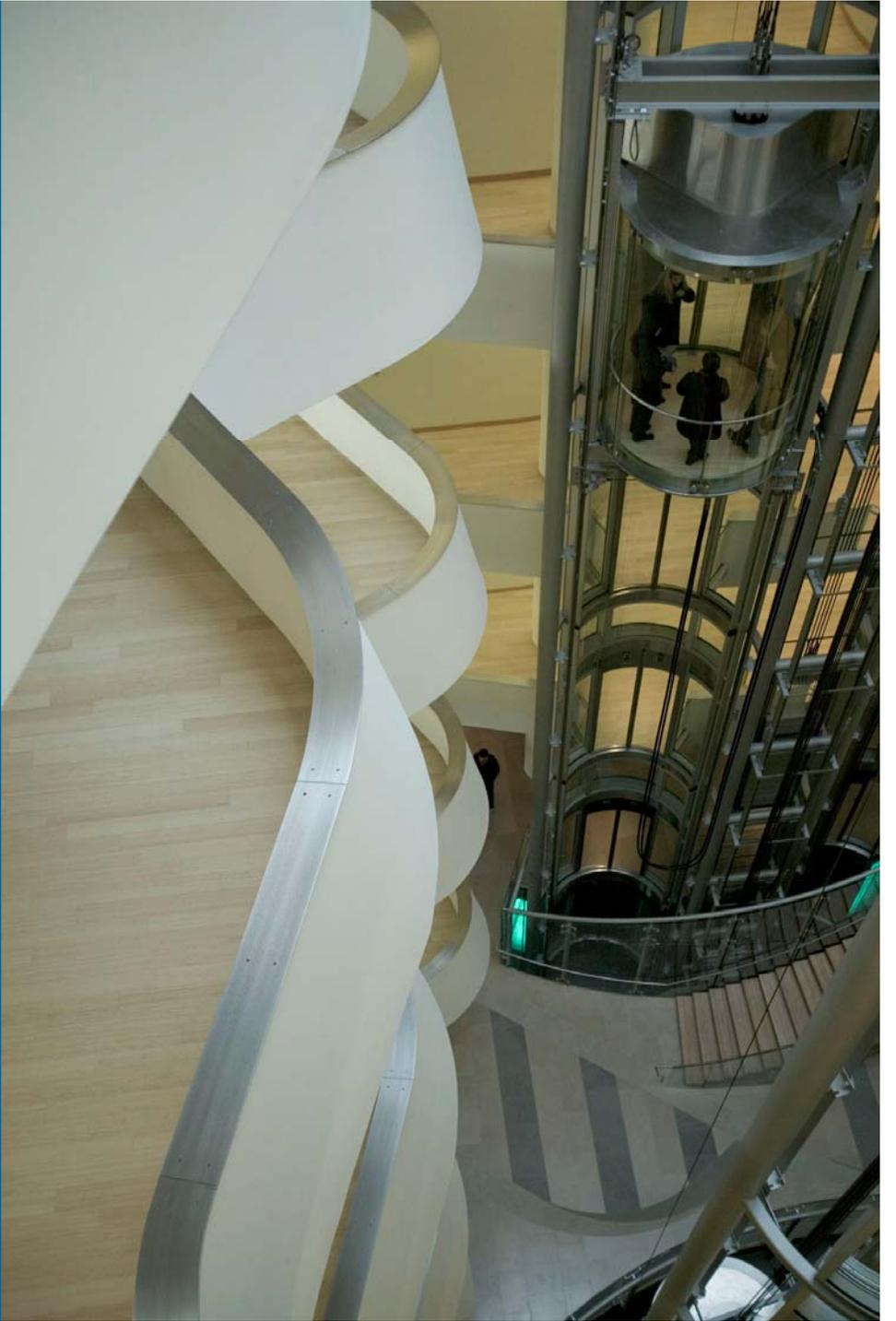














Typical Lab Floor Plan



Wet Lab and Writing Area

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Bio Lab: View from the Office

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Large Flexible Open space

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**Maintain Eye Contact
between
Principal Investigator
and his Associates**

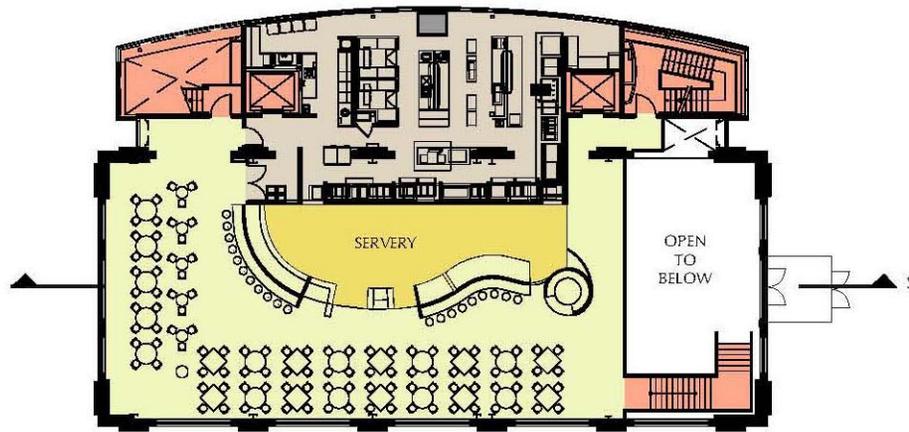


Renovation through Demolition

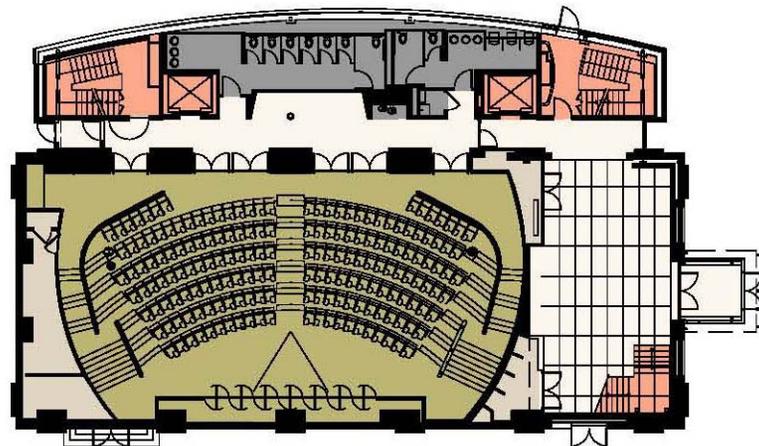
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Amenities

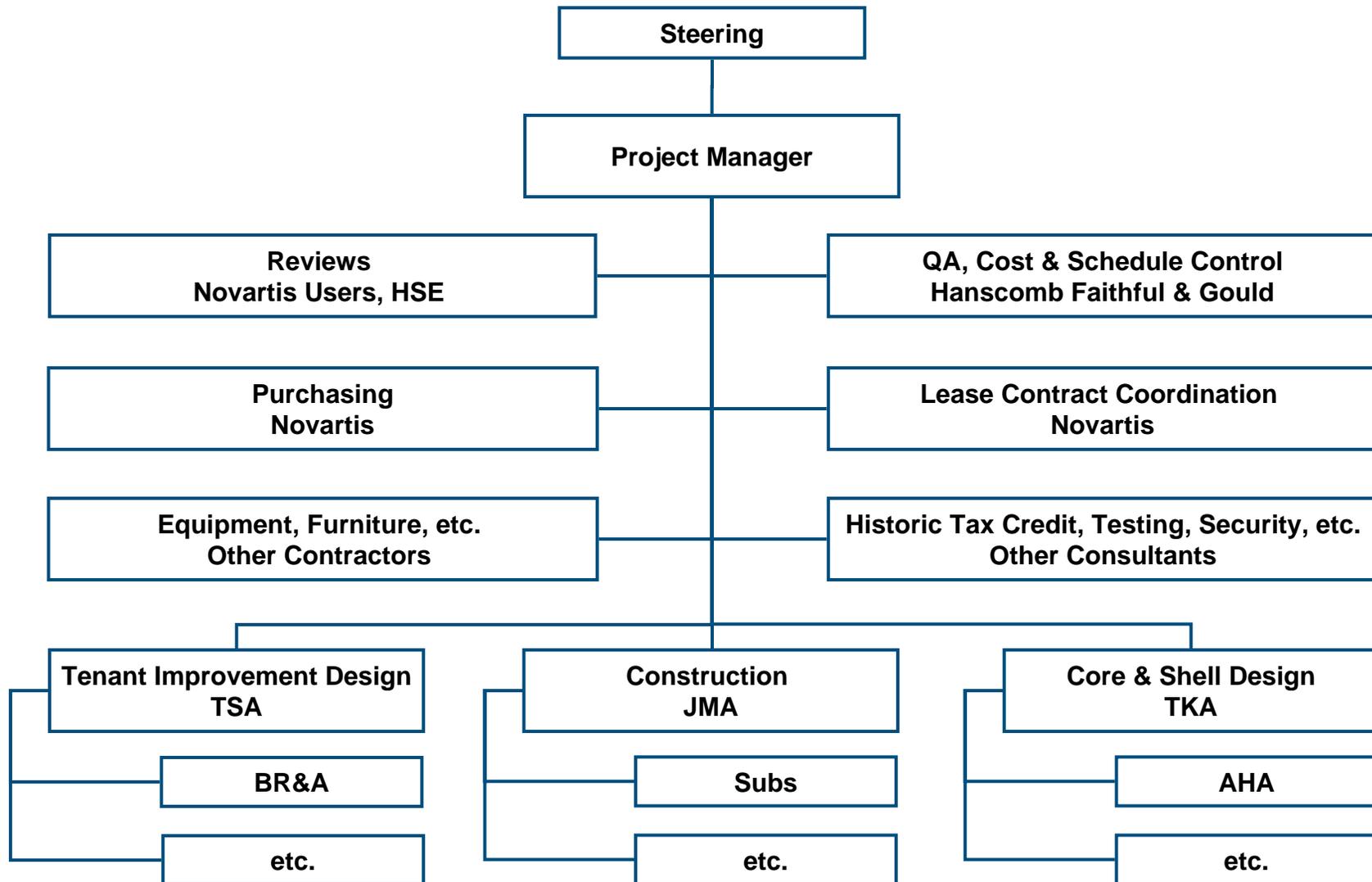


Upper Level Plan

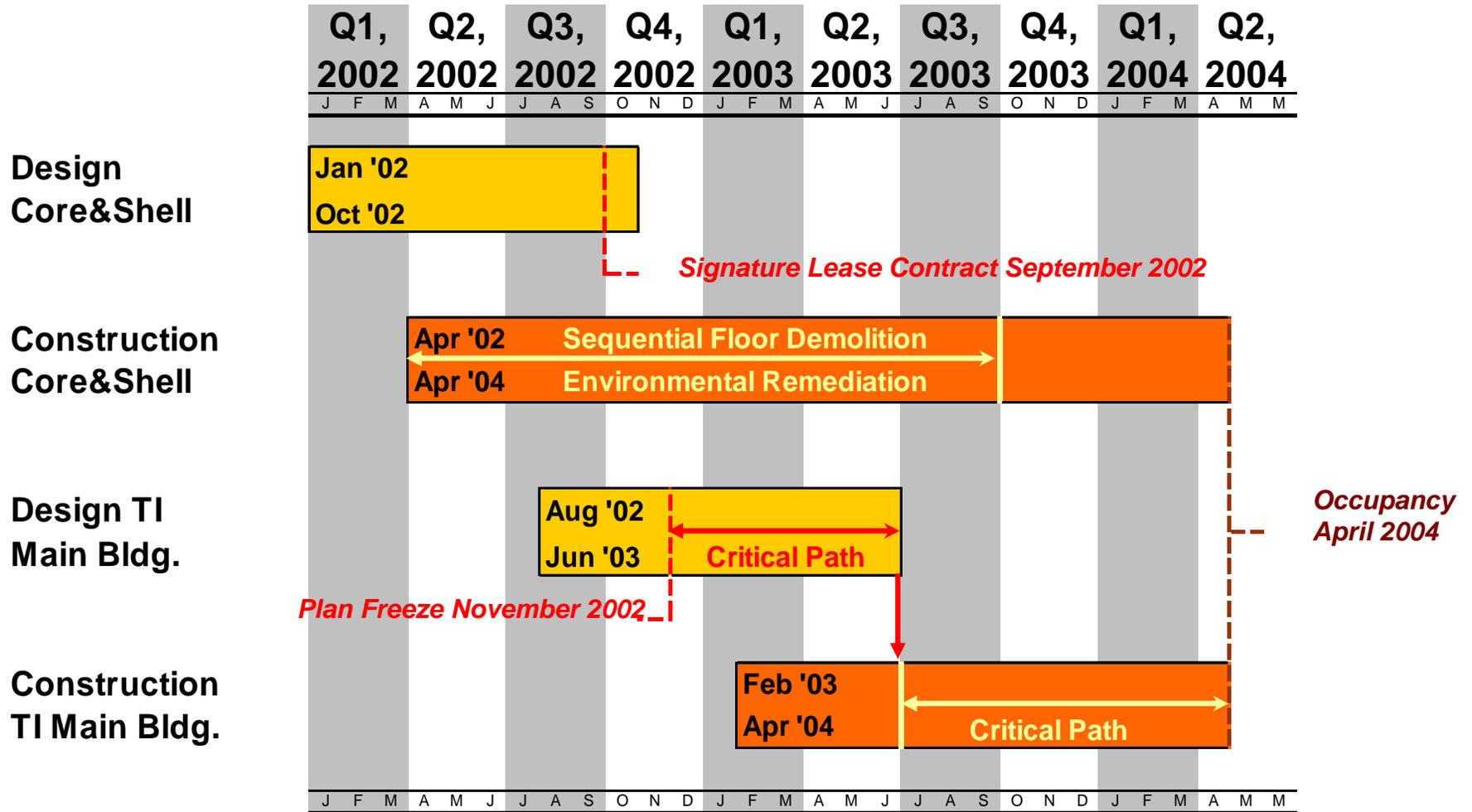


Ground Level Plan





Timelines



Plan Freeze

FOR LDC

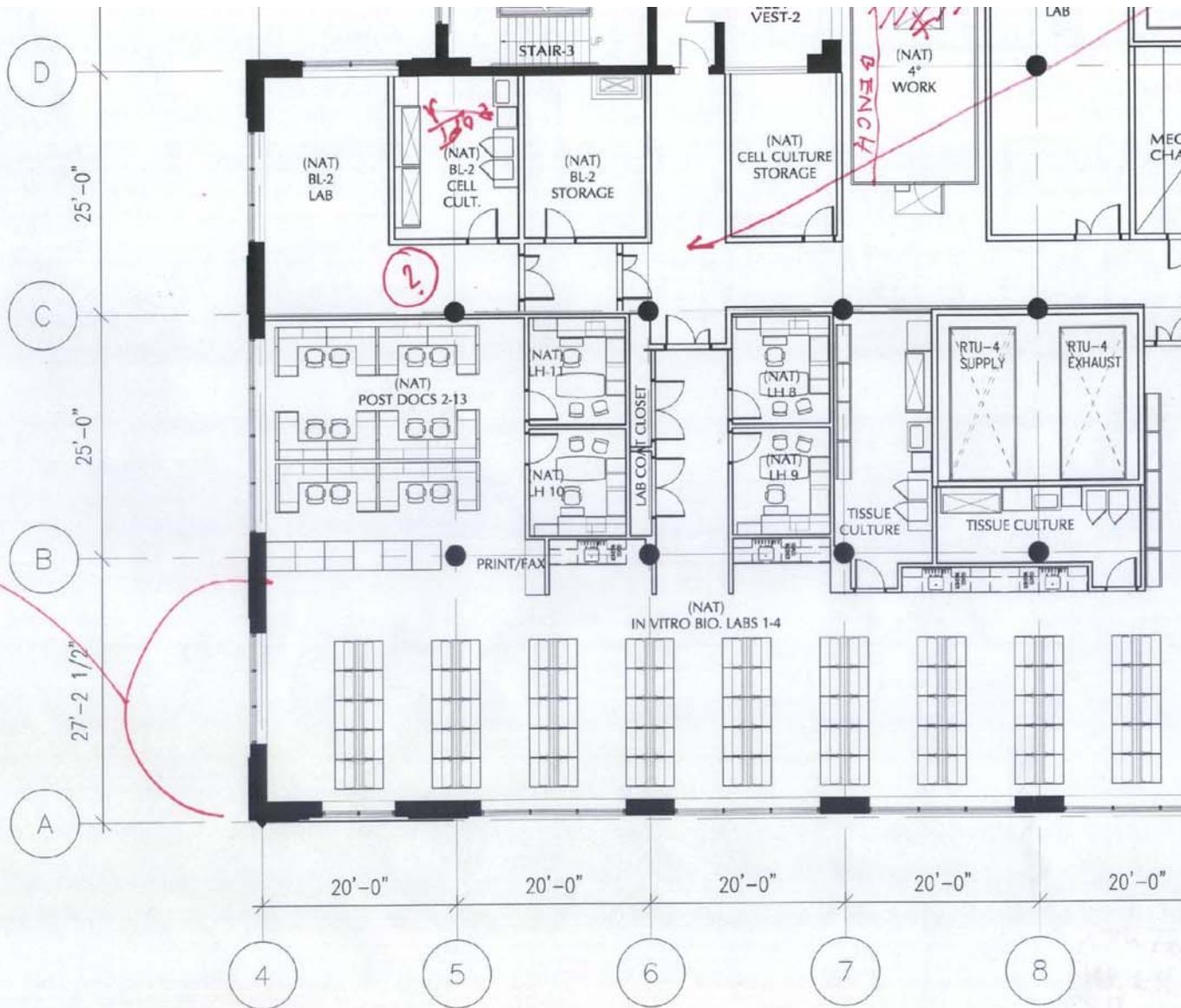
Kailash Swarna

(KAILASH SWARNA)

NOV 14, 2002

John Smith
John Smith

NO FUME HOODS
SINKS @ INSIDE WALL.



March 2003—Atrium & Skylight Cut

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May 2003—Atrium Taking Shape

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June 2003—Stud Framing On-going

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September 2003—Installation of Stairs

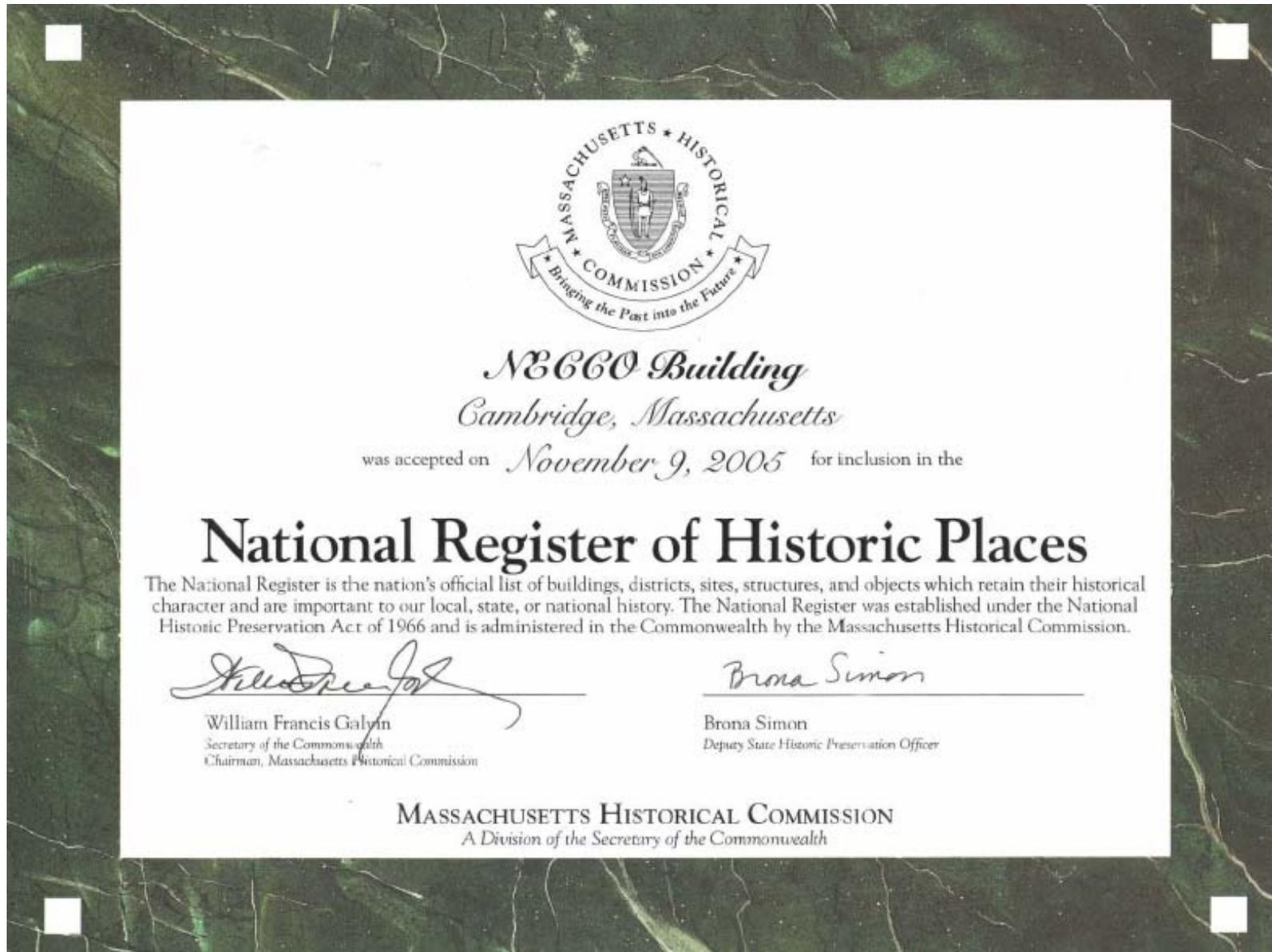
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March 2004—C of O Received

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PRESERVATION AWARD

The City of Cambridge and
the Cambridge Historical Commission honor this property
as an outstanding achievement in historic preservation and on behalf
of the people of Cambridge gratefully acknowledge its value
in making the City a more attractive and desirable place
in which to live and work.

250 MASSACHUSETTS AVENUE



Richard J. Sullivan
Mayor

MAY 11, 2005
Date



William B. King
Chair

The “Necco” Water Tower

Novartis Institutes for BioMedical Research

From Sweets...



...to Science

Reed Business Information

May 2005 Vol. 47, No. 5

R&D

Where Innovation Begins

DEPARTMENTS
12 News & Developments
43 Emerging Technologies
www.rdmag.com

Adaptive Reuse
Novartis Institutes for BioMedical Research

High Honors
National Institute of Standards and Technology Advanced Measurement Laboratory

Special Mention
Carnegie Institution's Global Ecology Center

Renovated
Schepens Eye Research Institute

39th Annual
Lab of the Year Awards

The Future of Laboratory Design