Gallery Addition: Indianapolis Museum of Art

INDIANAPOLIS, INDIANA

1984

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Credits

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Studio Critic

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Preface

Thesis year has been different than in past years in that every aspect of our design project was self-chosen. Arriving at that perfect project, to spend the next thirty weeks on, was a most difficult task. My decision to design an art museum was based on my desire to learn more about art and its preservation and to meet the people in the profession, such as artists, curators, and conservators. I also wanted to select a building that offered a good deal of design freedom while still requiring the resolution of complex situations. It was exciting to work on a project in Indianapolis because of my familiarity with the city and also its recent cultural growth and expansion; I wanted to be a part of it. Since the museum has future plans to add an addition to its site, the project seemed all that more realistic, which was something I was ready for after four years of hypothetical projects. I was able to speak with different members of the museum staff, as well as the associated architects for the existing buildings, and could evaluate their thoughts on what the addition should be. Most of their suggestions, although well-founded, tended to be a bit conservative in both design and economic terms in comparison to what I had envisioned my thesis design to be. Thus the following design, while based on solid research, has turned out, to my pleasure, unconservative, a little experimental, and quite dynamic. Thesis year has been the time to experiment and to study specific and personal interests. This book is the final project, however its intent is not to fully document the entire process but to summarize the efforts and to present important aspects of the process and the final design solution. Explanations of the existing museum and site have been included in order to offer a brief background of information to the reader so that full comprehension of the addition is possible.
The Indianapolis Museum of Art (IMA) is celebrating its 100th anniversary this year. One of the major reasons for the IMA's popularity is that it is the home for all of the arts; it offers a full-fledged experience of art exhibitions, lectures, films, theatres, and music. Art education in general has become more popular; the public is more cultural and therefore is donating more money to art museums. As a result of many of these private endowments, the museum now can proudly display 4,000 years of art in permanent and special traveling exhibitions of painting, sculpture, graphic art, furniture, and the decorative arts in its three art pavilions. Due to both the IMA's increasing volume of art work and its public and professional popularity, it is in dire need of additional space in most areas.

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CRITICAL ISSUES

---connecting the addition to Krannert in a way that allows each to keep its separate identity
---tying the addition into three of Krannert's levels
---recognizing the fact that the building will be viewed from all sides
---allowing certain areas to be opened and closed for various activities held after hours, for security reasons
---flexibility for the varied types and sizes of artwork to be displayed
---achieving a variety of ceiling heights and room sizes
---achieving a variety of lighting conditions
---providing easy access to galleries from service areas

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PROPOSAL

My proposal is to design a gallery addition for the Indianapolis Museum of Art to house everchanging temporary and special exhibits. This ongoing program of concurrent exhibitions will allow the temporary exhibits to become a major policy attracting people to the museum. It will also allow the museum to attract art worldwide, especially in the weak areas of their collections, as well as help the museum adopt a more progressive and dynamic image.

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PHILOSOPHY

My philosophy, with regard to this museum, is a little more daring than usual because of the site, the program of the building, and the fact that this is a thesis project, thus a time to experiment. I aimed at pristine geometry, exciting and varied spaces, and a lot of controlled daylight to arrive at an exciting and dynamic building.
GOALS

--to change the museum's image to a more dynamic one
--to acknowledge and take advantage of the excellent site conditions so as to integrate art, architecture, and nature
--to deviate from the rigid and conservative existing site master plan
--to entice visitors to the backside (west) of the museum
--to successfully attach an addition to a very powerful building without disrupting it
--to explore different design solutions to arrive at an exciting design that functions as well as it looks
--to design an addition very different from the building it connects and relates to, but at the same time making sure it enhances and supplements the museum campus as a whole
--to relate the visitor to nature from time to time to remind him that there is life outside of the building

OBJECTIVES

--to drive the major mass of the addition as far as functionally possible from Krannert to allow them to maintain separate identities
--to scale down the addition in comparison to Krannert by stepping it down the site
--to design a building that contrasts the boxy shape of Krannert
--to connect the addition to Krannert in an efficient and subtle way
--to provide a variety of spaces with different volumes
--to provide access to the upper entertainment floor after hours

PROCESS/METHODOLOGY

--speaking with museum staff members from various art museums to learn the needs of an addition and what elements constitute a successful art museum
--speaking with the associated architects, Wright, Porteous, and Lowe, Indianapolis, to obtain museum plans and information, and to learn of future addition proposals
--developing a thorough understanding of the existing buildings and site and the needs of the museum
--researching art museums as a building type
--developing and designing a building that solves the most issues and problems

BUILDING TYPE ANALYSIS

There appears to be no consistent philosophy where museum design is concerned. The two very different and overriding theories are:

1. The museum's first priority is the preservation and conservation of artwork, with education the second priority, because without conservation there would be no education. Persons subscribing to this theory design or approve of vault-like museum buildings with few windows.

2. The museum's first priority is education, because what purpose do paintings in storage serve? It is felt that a museum is not a burial vault for the past; rather it seeks to combine the past and the present in a living and vital relationship. Persons subscribing to this theory design or approve of buildings resembling the "greenhouse aesthetic"; in other words, they let the daylight in.
- Main entrance to site is off of 38th Street.
- Buildings are evenly spaced on the densely wooded 57 acres.
- Canal, built 1830
- Lilly Pavilion of Decorative Arts
- Outdoor stage and amphitheater
- Showalter Pavilion (Theater)
- KRANNERT Pavilion
- CLOWES Pavilion
- Publications Building
- Plaza
- Employee parking
- Retail greenhouses
- Grounds maintenance building
- Fountain
- Garden on the Green Restaurant
- Newfields Better-than-New Shop
- 38th Street
HISTORY

1906-1969 Herron Art Museum
1967 Lilly donated 44 acres to museum
1967 Lilly Decorative Arts Museum opened
1970 IMA (Kranert Pavilion) opened, debt-free
1971 Lagoon was dug by Hubert, Hunt, & Nichols, general contractors, to build the highway; the spring-fed land was donated to the IMA after it was determined unbuildable.
1973 Clowes Pavilion opened
1974 Showalter Pavilion opened

RELATIONSHIP TO EXISTING BUILDINGS

The addition has a dramatically different footprint than the existing museum buildings. The intent of the contrast is to suggest that the art and architecture of the addition are more relaxed, everchanging, and unpredictable. The contrast is refreshing; the addition is a complement to Kranert.

The addition needs to be respectful of the existing buildings and patterns since the IMA is presently so pleased and proud of them. The large plaza and the buildings on it are very formally ordered and symmetrical. It seemed inappropriate to attach a building to the plaza that is not going to conform. For this reason the building steps down off of the main plaza plateau to be respectful of the plaza and to further demonstrate the addition's independence. This independence is more of an individuality, for the art pavilions should also all work uncompetitively together as a unified complex.

KRAHNERT PAVILION

Kranert—(1970) designed to look like Parthenon on the Acropolis because of its location on the highest point in Indianapolis; contains gallery, administrative, library, parking, bookstore, service and storage space; 125,000 total square feet (50,000-gallery).

The following changes can be made while keeping the integrity of the building:
--Move the bookstore/gift shop to the first floor for greater visibility
--Provide an entrance to the addition from the parking garage at the northwest corner
--Change northern gallery, where the connecting corridor punctures Kranert, to a "recent acquisitions" room. This would house any new artwork that the museum obtained; it would be an everchanging exhibit, similar to those in the addition, and therefore would be a good transition.

CLOWES—(1973) resembles and is connected to Kranert; contains gallery, auditorium, and classroom space; 21,600 total square feet (12,000-gallery).

SHOWALTER—(1974) a stage for theatre, ballet, drama, and music; home of Indianapolis Civic Theatre; 700 seats; for museum use if available; uses separate mechanical systems.

LILLY PAVILION OF DECORATIVE ARTS—(1967) 18th Century style French Chateau cultural center displaying decorative art in period room settings.
SITE DESCRIPTION

--MACRO

The IMA is located about five miles northwest of the Circle in downtown Indianapolis on the highest natural point in the city. It is situated high above the White River and Indianapolis Water Company Canal on 154 acres of picturesque wooded grounds that contain formal gardens, fountains, sculpture, and a botanical garden designed originally by the Olmstead Brothers. In addition to the three art pavilions and theatre, the site also contains two large beautiful homes, one of which is now a restaurant, the other a retail store, plus many greenhouses, an outdoor concert terrace, and a sculpture court. The museum site is surrounded by a park, two universities, a cemetery, two country clubs, and residential neighborhoods. To the west of the site is a lagoon with Indiana trees and grasses growing around it that in another 10-15 years will represent Indiana in the early 1800's as close as we could ever hope to reproduce today. There are 150 different species of labeled trees scattered over the IMA grounds.

The site context is not crucial to the museum site due to its segregation.

--MICRO

The addition site is composed of a flat treeless plateau, with stable soil, surrounded by a wide and dense band of large trees. The trees are on a steep slope that drops 60 feet to the west towards the canal. Rainwater flows down a ravine to the north and into the canal. There is no pollution or dust problem in this area because of the distance between the site, the downtown area, and the highways, and because the trees filter the air. The air is clean, without odors or noise, and the views are all excellent; the site is ideal.

SITE ISSUES

--save as many trees as possible by proper building placement and by careful construction
--step building down site to make it part of the land
--draw people out into the site and to the backside (west) by providing exterior circulation that can also provide excellent opportunities for sculpture settings
--relate building through exterior paths to the rose garden and the canal
--expose as many of the superb views as possible

ACCESS

There is easy access to the site from all parts of the city via 38th Street and Northwestern, or the Interstate system. The Metro Bus also stops at the museum.

PARKING

There are various parking lots on the site, both indoor and outdoor, and they can accommodate approximately 700 cars. Overflow parking can use the grass north of Newfields. The parking lot east of the museum is frequently referred to as the best landscaped parking lot in the city.

ZONING

The site is zoned SU7, which defines it as a special use district for charitable and philanthropic institutions.
Proposed Addition

By Wright/Porteous & Lowe, Inc., Architects. 1983
EXISTING PROPOSAL

An overall Master Plan was devised in 1972 when the Krannert Pavilion was originally designed; it suggests the possibility of a major expansion to occur just northwest of Krannert as the next phase, with another building in the southeast corner being the last phase.

A proposal of Phase IV by the associated architects of the existing buildings is shown at the left. It gives a good idea of what might be built.

BUDGET

Presently, on an annual budget of approximately four million dollars, 57 percent of the money comes from endowment funds, 35 percent from gifts, and 8 percent from activities. The budget covers the salaries of the 150 employees, the maintenance of the museum and grounds, and the purchasing of artwork.

It was assumed that a large sum of money was donated to the museum for this addition, for it would not be until then that the museum could finance an addition.

IMAGES

Existing museum: symmetrical powerful impact conservative simple box form solid dominates site foreboding static straight-forward inwardly oriented permanent

Museum addition: unsymmetrical subtle impact contemporary, daring complex angular forms delicate works with site inviting dynamic holding surprises outwardly oriented everchanging

EARLY CONCEPTS

--give an illusion of symmetry
--break away from and contrast the boxy shape of Krannert
--break down the building mass
--use a singular tall vertical element--a sculpture? a tower?
--"float" building to make it appear lighter
--use linear circulation
--offer good views
--include a variety of spaces
--give elements of surprise
Concept Sketches
MUSEUM USERS

--general public, the layman to the expert—both must be satisfied
--local tour groups, schools, clubs—lobby and circulation must allow for
--tourists—give them a good and lasting impression of Indianapolis’ culture and scenery
--benefactors, present or future—demonstrate museum’s stability, progressiveness, and pride; make them eager to help
--handicapped—accommodate for their easy access
--employees—listen to their suggestions and give them a museum they are proud of

MUSEUM ACTIVITIES

Due to various time schedules and security, the museum must be able to open and close areas within the museum.

Frequent activities that might occur in the evening after the museum has closed are:
--special events for members
--parties
--cocktails/dinners
--receptions
--openings
--fundraisers

NEEDS

Additional gallery and storage space is always needed; currently, the IMA can only display one-fourth to one-third of its collection. Their artwork has doubled since 1970.

A big demand for expansion of the museum’s back-up functions such as the conservation lab and the workshop which are currently located two floors underground below the parking garage, is another need.

The museum currently has no entertainment space, therefore they have the many dinners they serve weekly in the gallery space or wherever else available. They want and need a flexible space with a kitchen to accommodate social functions and dinners, as well as serving as an overflow space in case an exhibition would require it.

An indoor sculpture court would be welcome since presently all large sculptures are displayed outdoors, which makes for seasonal viewing only.

A new and special area to house “The Artery,” a gallery of video displays, games, and touchable art, is necessary.

Overall, most importantly, an addition should contain gallery, entertainment, storage/work space, and a new conservation lab.
Final Design

DESIGN STATEMENT

The most difficult question to answer when beginning this addition was, "How does one add on to Krannert?" After drawing a series of study sketches of various types of buildings to connect to Krannert, it became readily apparent that Krannert does not easily accept an addition, but if it had to, it would harmonize best with either an exact replica or something of a totally different nature, emphasized as a separate entity. I felt confident in my decision that a contrast was indeed appropriate —a contrast in form as well as a contrast in mass. The addition was designed to be "lighter-looking" than Krannert; it steps down with the land to break up the mass and fit into the site, and it incorporates angles and axes. The building unfolds down the site into a sequence of varied spaces and effects. Pieces of the building and artwork will be seen through the trees from 38th Street; its intrigue alone will be quite powerful. There are no answers to all the problems a museum has, but flexibility of spaces seems to solve the most problems. Consequently, the interior is designed to accommodate a variety of types and sizes of exhibitions.

The museum should not be merely an efficient warehouse, but rather an art object, an object of beauty. It should welcome people in order for them to view the art; people feel welcomed and enticed by the presence of gardens, gathering places, and special entrances. The different forms of art should be allowed to enhance each other by the encouragement of interplay between art, architecture, and nature. The building is outwardly oriented so as to offer this rare integration of nature and art—viewing with the enjoyment of the landscape; few museums have grounds this special to display. For this reason the building offers a smorgasbord of unlimited good views. Most of the views out of the addition are panoramic, not selected; there was little need to select views on this site.

PARTI

The overall parti of the building is a pair of axes radiating from a central space, and stepping down the site. One axis is the circulation spine, and the galleries all develop to the northeast of it; it acts as the main organizational element since one must begin and end at this spine at each level.

The building is horizontally oriented, thus it balances the verticality of the trees.

SCALE

Krannert Pavilion is "King of the Mountain" and should remain so; that was the original design intent and needs to be respected, especially since the addition cannot compete in size or power with Krannert. For this reason the mass of the building has been broken down by stepping the building down the site. Sharp angles and extensive use of glass have been incorporated to suggest lightness and delicateness.
APPROACH/ENTRANCE STATEMENT

The connection directs the visitor into a simple and straightforward approach to the entrance. Both the approach and entrance are low-key so as to offer the visitor a surprise as he steps into the building and it unfolds into various exciting spaces before him. There are purposefully no preconceptions when you approach the addition; one does not know what to expect, therefore he gets the unexpected.

CONNECTION

Most importantly, the connection had to be designed in a way that allowed each building to maintain its own separate identity. To accomplish this, it was designed to be long and narrow, and as transparent as possible by using glazing to make it disappear into the lush surroundings.

A ramp occurs below the connection so that circulation to the backside (west) of the museum is not cut off.

BUILDING CIRCULATION

The circulation in a museum is complex because of the different impacts on the circulation; for instance, it must be as comfortable for a group of people as it is for an individual, and it must be able to accommodate the moving of large sculpture, as well as the moving of people.

The building is zoned in such a way that the main circulation occurs to the west side of the building in an open staircase that steps down the site with the building. This staircase is a special and separate entity of the building; it is something to be remembered after a visit to the museum. The stairs provide an adventure as one unwinds down the steps with the eyes constantly drawn to new views and to different spaces.

The overlooks in the circulation spine to the different floors below provide a preview of the museum. The circulation is neither fixed nor fluid; with this controlled degree of choice offered before him, the visitor can decide the manner in which he wants to view the museum. The circulation should be readily comprehensible, unencumbering, and leisurely for obvious reasons: visitor orientation, accommodation of crowds, service requirements, effective fire and security surveillance, good sense of direction.

The building offers a sense of entrance, of logical sequence, and of climax and return.

Passenger and service elevators are located in service core.
### Space Summary

#### Second Level:
- **Dining/Reception**: 4,700
- **Lounge**: 1,220
- **Kitchen/Storage**: 2,100
- **Outside Deck**: 1,200
- **Coat Check**: 100
- **Restrooms**: 400
- **Janitor Closet**: 100
- **Circulation/Reception**: 1,030

**TOTAL = 10,850**

#### First Level:
- **Lobby/Exhibition/Reception**: 5,550
- **Offices**: 1,450
- **Storage**: 400
- **Restrooms**: 400
- **Janitor Closet**: 100
- **Circulation/Connection**: 5,000

**TOTAL = 12,900**

#### First Lower Level:
- **Gallery**: 28,600
- **Guard Room**: 150
- **Restrooms**: 400
- **Janitor Closet**: 100
- **Circulation**: 4,500

**TOTAL = 33,750**

#### Second Lower Level:
- **Gallery**: 25,125
- **Conservation Lab**: 3,200
- **Storage**: 1,200
- **Conservator’s Office**: 400
- **Photography Lab**: 400
- **Restrooms**: 400
- **Janitor Closet**: 100
- **Circulation**: 4,200

**TOTAL = 35,025**

#### Third Lower Level:
- **Gallery**: 1,750
- **Circulation**: 450

**TOTAL = 2,200**

**GRAND TOTAL = 94,725**
RESTAURANT/ENTERTAINMENT LEVEL—LEVEL TWO

Located on the upper level to provide the best views, this large universal space has a social atmosphere and can easily be partitioned for flexibility. It may be a lounge, a restaurant, or a reception area to hold openings in or to rent out. A good dinner restaurant would attract many people to the site, as well as be able to serve lunch for museum visitors and employees since there are few places to eat in the area. The Garden on the Green is a restaurant on the site located in the Lilly's old pool house, but it is a separate entity and would not be competitive.

This versatile space should be very attractive and impressive, and versatile enough to be formal or informal. Artwork should decorate the walls, and skylights will brighten the room. An outdoor deck is available for outside eating and viewing. There is direct access to this floor via elevators from the parking garage.
ENTRANCE LEVEL OFF OF PLAZA—LEVEL ONE

Functions:
--lobby
--information
--meeting/gathering space for groups
--organizer of building space to help orient the visitors
--resting area
--lookout point
--display area for small art pieces
--access to restaurant
--reception room
GALLERIES—LOWER LEVELS ONE, TWO, THREE

The galleries were designed for their function, to display art, however the varied types and styles of art to be displayed requires that the design solution provide various types and sizes of space. Flexibility solves the most problems, especially since temporary exhibits usually range anywhere from 150-400 running feet and spaces cannot be designed for specific pieces of art. Movable ceilings, along with temporary walls, will aid in providing a variety of different volumes. Also important is the ability of visitors to view art from different distances, with outside views at the break points where art fatigue sets in.

The galleries should have relaxed decor and simple materials to make them comfortable and soothing. Neutral natural textures and an avoidance of ceiling structure will accomplish this, as well as to emphasize the exhibits, the building itself, and the natural surroundings. The thermostats and fire exits should be located out of the way to avoid interrupting useable running wall space.

The eastern galleries have the greatest amount of daylight control, while the galleries to the west of those receive more natural daylight due to the glass atrium. The small gallery on the lowest level is an exclusive space to house the museum's existing display of "fun and touchable" art. It will attract visitors to the lower level and then tempt them with an option to go outside to the sculpture terraces.

The everchanging temporary exhibits will add a dynamism to the museum, as well as an added incentive to keep people coming back to the museum for more.
CONSERVATION LAB--LOWER LEVEL TWO

A new conservation lab was included in the addition program primarily because additional space, northern light, and outside access were needed.

Besides needing more working space, the lab needed some extra large areas in order to handle large tapestries or pieces of sculpture. Northern light is something that they do not presently have but that is crucial to see "true" colors. All windows are louvered for proper control of daylight. Outside access is needed so that objects requiring loud or messy treatments, such as sandblasting, can be taken outdoors. Also, a new technique called light bleaching (short-term light exposure instead of bleaching an object, which leaves a chemical residue more harmful than light) is now becoming popular, which is another reason to provide outside access.

Currently, the conservators spend 50 percent of their time on outside work for individuals or for other art museums. Their work and environment are fascinating. The lab and equipment is all painted white and it has a very high-tech look. For these reasons, the public can view a portion of the lab and the conservators from a gallery above.
Sculpture Plaza
Flexibility: Temporary Walls

example: gallery, lower level one
STRUCTURAL

The addition has a 20-foot structural grid, which is purposely the same as Krannert's to allow the buildings to connect easily. The addition is structured with a steel framework. The floors are poured concrete slabs over a steel framework. The ceiling structure is hidden by drop ceilings and the columns are clad in drywall. Steel joists structure the atrium. The walls are non-bearing. The interior walls are clad with drywall; the exterior walls are clad in limestone.

MECHANICAL

Krannert's systems were designed so as to be able to take on four additions. They have two boilers and chillers; the boilers can fire on any fuel material. All pipes are stubbed out for an addition on the northwest corner. Pipes will run in the 5-foot space above the dropped ceilings.

Climate control is extremely important; all systems need to be attended to 24 hours a day, everyday. Year-round the galleries are kept at 70°, the storage areas at 65°, and the relative humidity at 50°. A dehumidifier is built into the system, but humidity can be steam-injected if needed. With 95 percent filtration, there's no dust problem. The IMA's current air filtration system has won six engineering awards.

None of the galleries are sprinklered because of possible water damage; smoke detectors are used instead. The rest of the building is sprinklered.

SECURITY

Security of an art museum deals with protection against people, bugs, climate, weather, and fire.

Tight security will be needed when the addition is built, especially when it is actually connected into Krannert. Video cameras have limited views and cannot do the same job a guard can. The more the walls and exits, the more guards that are needed. The IMA has only had one minor theft in 14 years.

A quarantine area is need after the loading dock to spray for bugs; there is a fear of bugs getting into the storage area.
DISPLAYS

The various sightlines of children, persons in wheelchairs, and basketball players all need to be considered when designing displays. Verbage also needs to be placed where all can read it.

All displays are built in-house.

LIGHTING

Although natural vegetation will shade much of the building, natural light should play an important part of the building's illumination since it has all of the moods of the time of day; it is more exciting. The best method of providing natural light in a museum is through skylights; the walls are to be filled with paintings, not masses of glazing. The addition has a large atrium over the gallery area and skylights on the restaurant level as a carry-over. Mechanical louvers control the daylight.

For artificial lighting, incandescent light is used because it gives off the least amount of infra-red rays, which are the most dangerous rays with long-term exposure to artwork. However, it gives off a lot of heat so it must be kept at a distance. Wall washer lights are to be used to evenly light walls, with track lights to flood specific paintings. Track lights should be installed on a 20-foot module; it is mandatory for any art museum and especially one with temporary exhibits. Spotlights should not be used because they are too hot and they sometimes give an arc of light on the wall. Light-colored walls will help reflect light onto the surfaces of sculptures and paintings.

Lighting is a curatorial decision made for each exhibit; it should be extremely flexible.

PICTURE HANGING

Pictures hung from a nail are more attractive than ceiling-hung pictures which have exposed wire. Plaster walls are a maintenance problem since holes have to be patched after every nail is removed. Since the purpose of this addition is to house temporary art, holes would have to be plastered after every exhibition. This is not practical, and therefore stretched fabric walls should be used, even though plaster walls have the advantage of being able to be painted a certain color to create an atmosphere or period setting for an exhibition. The stretched fabric will cover all nail holes and is very durable.
Elevations/Sections

west

north
Models

concept model
Conclusion

This thesis book represents thirty weeks of research and design and countless hours in the studio; it has provided me with quite a challenge. The design solution presented here is a viable and workable solution to the problem, but of course there are innumerable details yet to be attended to. I guess one never really feels like he has a "complete" design.

Overall, I feel that the project was a successful one, if for no other reason than for the realization of how much I have learned and even more how much more there is to learn; my architectural education will undoubtedly continue.
The following have given assistance in the research of this building type:

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--Robert Yassin, Director
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--Marty Radecki, Chief Conservator
--Matthew Cornacchione, Business Manager
--Sherman O'Hara, Exhibitions Designer
--Sherrie Battista, Conservator

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--David Berreth, Director

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