

**FIU** | Communication,  
Architecture +  
The Arts

FLORIDA INTERNATIONAL UNIVERSITY  
[fiubydesign.fiu.edu](http://fiubydesign.fiu.edu)

**FIU**

**By Design**

E n v i s i o n  
C o m m u n i c a t e  
R e a l i z e

A word cloud shaped like a cross, centered on a white background. The words 'Envision', 'Communicate', and 'Realize' are the primary elements, appearing in various sizes and orientations. The word 'Envision' is written in blue, 'Communicate' in dark blue, and 'Realize' in orange. The words are arranged in a cross pattern, with 'Envision' on the left, 'Communicate' on the right, 'Communicate' on the top, and 'Envision' on the bottom. The central intersection contains overlapping instances of all three words. Smaller, fainter versions of the words are scattered around the main structure, creating a sense of depth and repetition.

**FIU By Design**  
 #9 Nationally Ranked Interior Architecture Graduate Program in the US  
 500+ Internships  
 4th Largest University in The Nation  
 CARTA @ Mana Wynwood  
 11% Graduate Students  
 70% Hispanic  
 11% African  
 68% Female  
**Inspicio**  
 Innovation Lab  
 CARTA at Mana Wynwood  
 70% Female  
 Resilient Design Miami Urban Future Initiative  
 54,000 Students  
 R1 Carnegie Classification  
 Robotics & Digital Fabrication Lab  
 Miami Beach Urban Studios

Dear Partners,

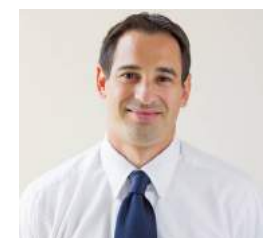
As climate change impacts South Florida, what will become of historic Virginia Key Beach Park? With the revitalization of Wynwood, is it possible to design a residential project with a neighborhood feel that will attract diverse families, young professionals, and creative artists and entrepreneurs? To redevelop Liberty Square, how do we ensure that all stakeholders, from government leaders to residents to business owners, have a voice in key aspects of the project, including housing, public safety, economic development, historic preservation and art for public spaces?



These are just a few of the projects that Florida International University and FIU By Design have undertaken recently. As a unique research and service arm of the College of Communication, Architecture + The Arts, FIU By Design provides students with distinct opportunities. By working closely with our clients and an award-winning faculty on real-life projects, our students gain invaluable experience. In turn, our clients receive answers to their most complex issues.



This booklet highlights select projects that showcase our unique approach in helping clients envision, communicate, and realize their ideas. We focus on innovative problem-solving and challenging projects that demand transdisciplinary, collaborative, and solution-oriented responses. Our success, and the satisfaction of our clients, partners, and community, comes from a dedicated and curious student body, guided by engaged faculty mentors.



As we move to expand our portfolio to seize new opportunities and address future challenges, we look forward to enhancing our relationship with existing clients and forging new partnerships.

Thank you for your interest in Florida International University and FIU By Design. Please contact us if you have questions or feel we could be of assistance with your next project.

Brian Schriener, Dean  
 Shahin Vassigh, Associate Dean, Research and Faculty Affairs  
 Mark Marine, Director, FIU By Design

[fiubydesign.fiu.edu](http://fiubydesign.fiu.edu)  
 Ph: 305-348-7357 | Fx: 305-348-6717

## Mission

FIU By Design is a professional service unit within the College of Communication, Architecture + The Arts (CARTA) at Florida International University. Our mission is to enhance our faculty and students' success by serving as an innovative solution center that provides professional and technical consulting services. Through real-world experiential-learning opportunities, our faculty and expert professionals align our pedagogy with project deliverables for a wide range of clients and organizations. FIU By Design provides opportunities for exceptional students to work shoulder-to-shoulder with our faculty, partners, and clients to gain meaningful learning experiences while contributing to our community's development.

## Vision

Through the integration of engaged scholarship, creative activities, and professional services, we aspire to be a national model for student and faculty success. FIU By Design leverages the University's and community's expertise to address challenging issues confronting private sector businesses, not-for-profit organizations, and governmental agencies. FIU By Design draws expert knowledge from faculty, staff, and members of the community across a variety of disciplines to provide professional services in four distinct areas.

1

### Design Research and Conceptualization

Sustainability and Resiliency Projects  
Sponsored Design Studios  
Design Charrettes  
Master Planning and Urban Design

2

### Visualization and Fabrication

3D Fabrication  
3D Modeling and Animation  
Interactive Learning Environment  
Large Scale Immersive Visualization

3

### Community Engagement and Organizational Development

Professional Development and Training  
Community Engagement  
Leadership Workshops  
Speech Coaching

4

### Creative Services in Visual and Performing Arts

Public Art Works  
Music Performances  
Theatre Performances  
Film and Digital Media

# 1

## Design Research and Conceptualization

**Sustainability and Resiliency Projects**  
**Sponsored Design Studios**  
**Design Charrettes**  
**Master Planning and Urban Design**

Through the unique lens of architecture, journalism, arts, and technology, FIU By Design works with the community to take on challenging Sustainability and Resiliency Projects, particularly important in tropical and sub-tropical environments.

Sponsored Design Studios are ideal for the integration of engaged scholarship and professional services, necessary elements in solving pressing public concerns. In a carefully planned, semester long structured design studio, our faculty work with students and appropriate experts to explore design ideas, examine alternatives, and provide solutions to our clients' challenges. While addressing the local and broader community needs, faculty align learning objectives with deliverables in projects ranging from small-scale building design to large-scale urban development. Students propose architectural solutions, adaptation strategies and visualization tools to support policy and decision-making, while raising the public's awareness of crucial issues.

FIU By Design also provides services for organizing and facilitating intensive Design Charrette sessions. These meetings bring together a project's various stakeholders to contribute ideas and provide feedback in a collaborative forum. The charrettes are conducted in one to three days or longer, depending on the scope of the project and the requested deliverables.

Another service area includes Master Planning and Urban Design. We leverage the expertise of our faculty from the Departments of Architecture and Landscape Architecture, Environmental + Urban Design to engage in urban development and visionary large-scale projects.



# Virginia Key Beach

Sustainability and Resiliency Project



## Virginia Key Beach Park Resiliency Plan

Location: 4020 Virginia Beach Drive, Miami, FL 33149

Faculty: Marilys Nepomechie and Claudio Salazar, Department of Architecture; Tiffany Troxler, Sea Level Solution Center

Project Date: Spring 2016

Historic Virginia Key Beach Park opened in 1945, when segregation prohibited people of color from using the county's other beaches. It was closed in 1982 by the City of Miami due to high maintenance costs. The public's interest in reviving the park grew, and in 1999, the Virginia Key Beach Park Trust (VKBT) was appointed. The park was placed on the National Register of Historic Places in 2002, and, after restorative work, the park re-opened to all in 2008. However, much remains to be done to finish the restoration of the park and to ensure that as environmental and climate changes affect South Florida's barrier islands, Historic Virginia Key Beach Park is still an escape to a protected treasure.

A multidisciplinary team of students and faculty from FIU's Department of Architecture, College of Engineering and Sea Level Rise Solution Center collaborated on a Sponsored Design Studio to conduct research for the development of the Historic Virginia Key Beach Park Master Plan. The semester-long design studio produced several proposals to facilitate dialogue between all stakeholders. In a series of coordinated meetings, members of the Historic Virginia Key Beach Park Trust, City of Miami leaders, and park visitors discussed various design proposals. The project outcome was the production of architectural drawings and 3D renderings of various proposals to illustrate visions for the park's future that met the requirements set forth by VKBPT.



# Mana Wynwood

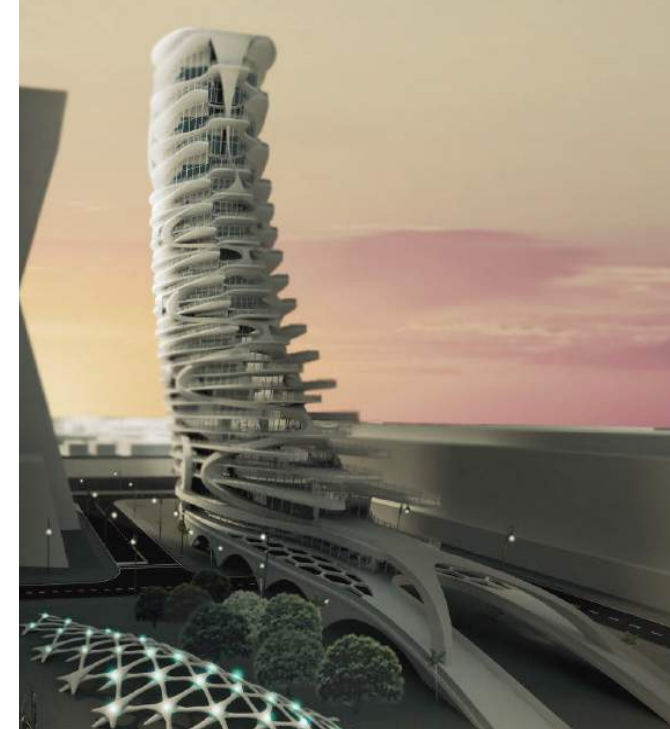
Sponsored Design Studio



**Envisioning Mana Wynwood**  
**Location:** Wynwood, Miami, FL  
**Faculty:** Claudia Busch and Alfredo Andia  
**Department of Architecture**  
**Project Date:** 2016

With the dynamic revitalization of Wynwood, the downtown Miami-area neighborhood has moved from an old industrial district and community melting pot to a bustling urban hub filled with artists, galleries, restaurants and name-brand retailers. Mana Wynwood, the architectural vision of the area's largest landowner, Moïse Mana, is a 30-acre project site comprised of approximately 13 development blocks in the southwest section of Wynwood. Two architecture graduate studios with 30 students working in teams selected a site in one of the blocks to design a building and develop the neighborhood, which will eventually be the site of residential housing, offices, retail shops, hotels, art centers, and convention space that will attract creative types such as artists, entrepreneurs and the technology sector. Projects began with the research of Miami 21 zoning codes and the required regulations for the selected area. Throughout their work, students met with stakeholders to gather information and implement feedback into their projects.

Using drawings and models, students presented their building proposals for the redevelopment of the area. The proposals celebrated the emergence of energy and creativity that has reinvented the area over the past five years and explored design visions for what is destined to become Wynwood's future core. The work culminated with an exhibit of the projects during Art Basel.



# Miami Children's Museum

Design Charrette



## Interactive Exhibit

Location: 980 MacArthur Causeway, Miami, FL 33132

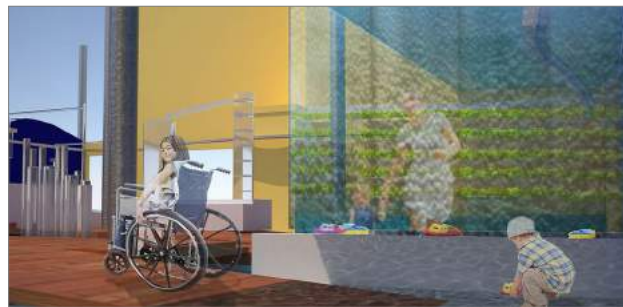
Faculty: Marilys Nepomechie and Eric Peterson, Department of Architecture; Mark Marine, CARTA; Tiffany Troxler, Sea Level Solution Center; Andrea Adelman and Daniela Foerch, School of Education and Human Development

Project Date: Fall 2016

To educate children and their families on the impact of sea level rise and South Florida's ecosystem, Miami Children's Museum wanted to create an interactive water exhibit. They turned to FIU By Design to organize a multidisciplinary design team for a charrette to work on the project.

Held at the museum, the two-week charrette included the museum's education team and the FIU By Design multi-disciplinary team of students and faculty. The teams were asked to design and produce conceptual drawings and models as a basis for fundraising and for enabling the museum to receive proposal bids from various fabricators.

Each team focused on developing interactive and engaging ways of communicating ideas on the causes, consequences and possible mitigation of South Florida's environmental challenges. The ideas, architectural drawings, renderings and models developed during this intensive period of collaboration were used to apply for several federal grants to support educational programming. The project has advanced to the next phase for developing a million-dollar design proposal.





# City of Parkland

Design Charrette



## Parkland Library Extension

Location: Parkland, FL

Faculty: Glenda Punte, Department of Architecture and Marie Mihalik, Department of Interior Architecture

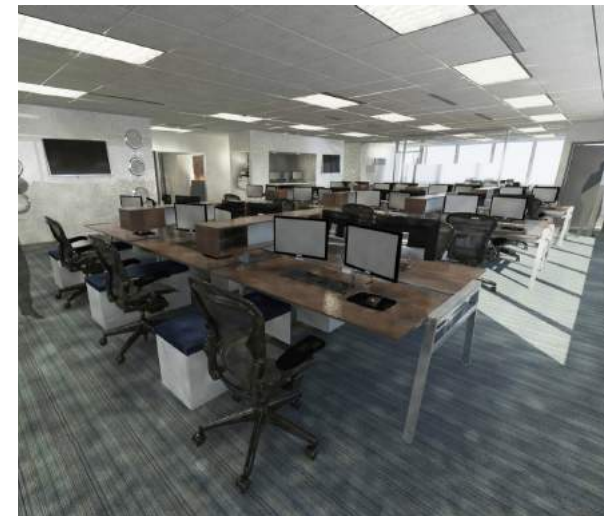
Project Date: Spring 2016

In 2011, the City of Parkland Library received the "Best Library of the Year" award from the Florida Library Association. Since then, it has operated at full capacity and cannot keep up with the needs of the community. It hosts book clubs for adults, teens and children, offers film discussion and artist-of-the-month receptions, provides tutoring for teens and kids, holds art and writing workshops and more. In a collaborative project with the City of Parkland, FIU By Design investigated the renovation of the existing library. The design objectives included the incorporation of natural light and vegetation, merging interior and exterior spaces and providing secure outdoor spaces for reading and recreation.

Faculty members and students from the Department of Architecture and Interior Architecture worked on transforming the library's programmatic requirements into multiple design strategies. The preliminary designs focused on creating two distinct schemes for the City of Parkland, providing the basis for further discussions and support of the decision-making process.

# TCH Interior

Design Charrette



## TCH Office Renovation

Location: 1001 Brickell Bay Drive, Suite 2100, Miami, FL

Faculty: Katie Rothfield, Department of Interior Architecture and Mark Marine, CARTA

Project Date: 2014

Established in 1989 and owned by the Bank of Montreal, Taplin, Canida, and Habacht (TCH) is an investment firm with a focus on fixed income portfolios and institutional investors. The project involved design and documentation for the renovation of approximately 3,890 square feet in the TCH Miami office. With expansive windows on the 21st floor, the most notable asset of the project was its position, facing sweeping views of Biscayne Bay to the east and city views to the north and south. Project design goals included maximizing natural light and views, developing a more functional floor plan, improving acoustics, increasing the employee capacity and updating the overall aesthetic.

FIU By Design provided interior design services from programming through design development, including interior space planning, color schemes, furnishing and interior finish selections, working drawings, specifications and project coordination.



# 2

## Visualization and Fabrication

**3D Fabrication**  
**3D Modeling and Animation**  
**Interactive Learning Environment**  
**Large Scale Immersive Visualization**

Advanced visualization and fabrication technologies have opened a new world of possibilities in the field of architecture and design. FIU By Design supports clients' projects with sophisticated services for helping our partners communicate their ideas with 3D realistic renderings, 3D digital printed models and immersive visualization. With these services, a wide range of projects in the areas of architectural design, landscape architecture, interior architecture, urban design, art and product development can be supported. Our state-of-the-art facilities include:

- The Robotics and Digital Fabrication Lab, which bridges the gap between the virtual and physical worlds. It includes 3D scanners and printers, laser cutters, robotic arms and programmable objects, providing unique solutions for testing, prototyping, manufacturing and fabrication.
- The Integrated Computer Assisted Virtual Environment (I-CAVE), with five 9x5-foot high-resolution screens and surround sound which provides an immersive virtual reality experience and simulated environment.
- The Fabrication Lab, a full wood workshop with CNC milling capability, a metal shop and concrete lab, able to use diverse materials and scales.



# Miami Beach Convention Center

3D Fabrication



**Miami Beach Convention Center Model Production**  
**Location:** 1700 Convention Center Drive, Miami, FL 33139  
**Faculty:** Eric Peterson and Julia Sarduy, Department of Architecture; and Mark Marine, CARTA  
**Project Date:** Fall 2015

When a client wants to highlight intricate details and unique elements of a proposed building, a presentation model is called for. FIU By Design was contracted by the City of Miami Beach to construct a model for presentation of the newly proposed \$615 million expansion and renovation of the Miami Beach Convention Center, designed by Fentress Architects in collaboration with Arquitectonica and Dutch landscape architecture firm West 8.

A team of FIU Architecture faculty, Fabrication Lab staff and research assistants worked together to develop a digital model of the 600,000-square-foot project using 3D modeling software. The team 3D printed the building components and used laser cutters and traditional model-making techniques. The model included LED lights to highlight facade details, trees, pedestrians and other contextual features that helped communicate the scale of the proposed building. The model was delivered for a special unveiling event held by the City of Miami Beach and attended by Miami Beach Mayor Philip Levine and Miami-Dade Mayor Carlos Gimenez. Proceeds from the project were used to help support ongoing research in the Fabrication Lab.



# Betsy Hotel

3D Fabrication



**Betsy Hotel Model Production**  
**Location:** 1440 Ocean Drive, Miami Beach, FL 33139  
**Faculty:** Eric Peterson and Julia Sarduy, Department of Architecture; and Mark Marine, CARTA  
**Project Date:** 2015

The Betsy Hotel was named to Forbes Travel Guide's list of "The 15 Most Anticipated Hotel Renovations of 2016." To live up to expectations, the hotel asked FIU By Design to construct a presentation model of the expansion and renovation project. The iconic South Beach hotel was originally designed as two separate hotel buildings in 1937 and 1941 by architects L. Murray Dixon and Henry Hohauser. The office of Alan Shulman, Shulman + Associates, served as the preservation architect and the architect of record for the renovation and expansion, which included taking over the Carlton Hotel next door, adding an Art Deco Wing, restaurants, rooftop pool complex, library, event space and guest rooms.

A team of FIU Architecture faculty, staff and research assistants worked to develop a digital model of the project using 3D modeling software. Using 3D printers, the team produced several of the complex building components and used laser cutters and traditional techniques to build the model. It is currently displayed in the lobby of the hotel and is used for marketing purposes. Proceeds from the project were used to help support ongoing research in the Fabrication Lab.



# 3

## Community Engagement and Organizational Development

Professional Development and Training  
Community Engagement  
Leadership Workshops  
Speech Coaching

FIU By Design conducts a range of educational, coaching, training, and outreach projects. These include formal training sessions, seminars, and communication workshops in a broad range of areas. In addition, the Bold Agency at the School of Communication + Journalism offers a variety of services for clients looking to expand their brand, craft social media, create communication strategies, and produce creative advertising. The student-run, faculty-supervised agency also conducts market research and guides clients through crisis planning.



MICD  
MIAMI

# Miami-Dade County Youth Dialogues

Professional Development and Training



**MDPD Youth Dialogues**  
**Location:** Miami-Dade County  
**Faculty:** Antoine Hardy, Gabriela Portela, and Joann Brown, Department of Communication  
**Project Date:** 2016

The relationship between police officers and youth is often fraught with tension. As violent police encounters played out more regularly in the last few years on media across the country, the mistrust and miscommunication between the groups seemed to grow. The Police-Youth Community Dialogues Program was initiated to promote a shared understanding of the community's issues between Miami-Dade Police Department (MDPD) officers and area youth. The program was built on the belief that effective policing and maintaining of public safety requires community members to provide information about crime in their neighborhoods.



As a result, the purpose of this crime prevention training program was to raise awareness of the issues and to build trust between the police and community members. Although MDPD has a long history of relationship-building through crime prevention programs and community policing efforts, the additional training created yet another way to create a bond between the groups and strengthen their connection. The dialogues took place in a relaxed, neutral setting, in four distinct phases:

Phase 1 - Orientation session, cultural awareness and sensitivity training

Phase 2 - Who are we? Finding common ground, establishing rapport and identifying key issues

Phase 3 - Contemporary issues on the beat

Phase 4 - Diagnosing the problem and finding solutions

The positive outcomes of the program have led to continued dialogues and meetings in other communities.



# Little Havana Senior Campus Redevelopment

Community Engagement

**Little Havana Community Meetings**  
**Location:** Little Havana, FL  
**Faculty:** Mark Marine, CARTA and Ralph Rosado, Rosado and Associates  
**Project Date:** 2017

Affordable housing for seniors and the disabled is a nationwide problem, and Miami is no exception. Plans are in the works to redevelop the Little Havana Senior Campus. The project includes multiple buildings, some constructed in the 1970s that need complete renovation or rebuilding. FIU By Design was selected to host a series of community events for the proposed development of the Little Havana Senior Campus. The job required coordination of a series of meetings among Resident Council Governing Boards, the City of Miami Police Department, Miami-Dade County Public Housing and Community Development, the Related Group, community members and key stakeholders from the City of Miami and Miami-Dade County. These meetings were divided into four 'presentation sessions' that covered specific topics for the proposed redevelopment, one 'pen-to-paper' charrette, and one wrap-up session.

To conduct the project, students and faculty worked directly with all stakeholders to gather the community's input on key aspects of the project including: housing needs, exterior space requirements, public safety, community services, economic development, historic preservation and art in public spaces. These sessions focused on gathering information about the types of services and quality of life the community desires, as well as polling them about possible new usage, such as mixed-income or mixed-age housing.

The pen-to-paper session included a Visual Preference Survey, in which residents and community members were guided to Grouping Stations to indicate their likes and dislikes. This allowed stakeholders to build consensus about amenities and ideas for the proposed project. The sessions concluded with community members and residents sketching and labeling their desires on the Campus site plan — an effort which was guided by FIU facilitators.



## MICD

Leadership Workshop



**Mayors' Institute on City Design Forum**  
**Location: Florida International University Miami Beach Urban Studios**  
**Faculty: Marilyns Nepomechie, Department of Architecture; and Mark Marine, CARTA**

Mayors' Institute on City Design [MICD] is a leadership initiative of the National Endowment for the Arts in partnership with the American Architectural Foundation and the United States Conference of Mayors. In 2016, through a competitive national application process, FIU College of Communication, Architecture + The Arts was selected to co-host the session with the City of Miami Beach.

Since 1986, MICD has helped transform communities by giving mayors tools that will assist them in serving as the chief urban designers of their cities. MICD selects and partners with academic institutions from across the United States to organize six meeting sessions each year. During the sessions, mayors engage with leading design experts to discuss and seek solutions to some of the most critical urban design challenges facing their cities. Sessions are organized around "case study" problems. Each mayor presents a problem from his or her city and works with other mayors and the participating design experts in responding to the case study.

FIU By Design work included organization of the entire event in Miami, recruitment of the participating mayors and travel to each participating city to aid in the selection of a case study. Mayors from cities in Maryland, Massachusetts, New York, Connecticut, North Carolina and Florida participated. FIU By Design collaborated with MICD in identifying a team of preeminent design professionals to act as moderators, and the team also prepared a post-event summary report and case study briefing book.



## Liberty City

Community Engagement



**Liberty City Community Meetings**  
**Location: Liberty City, FL**  
**Faculty: Marilyns Nepomechie, Department of Architecture, Mark Marine, CARTA**  
**Project Date: 2016**

Miami's Liberty Square was the first segregated public housing in U.S. history, built in 1937. In 2015, it was announced that the housing project would be razed, and in its place, a \$307 million redevelopment project with more than 1,500 new housing units would be built. FIU By Design helped coordinate and co-host a series of Liberty Square community and stakeholder meetings that included community members, local law enforcement, the Liberty Square Resident Council and key personnel from the City of Miami and Miami-Dade County. The groups gathered to discuss various aspects for revitalization of the Historic Liberty Square, and FIU faculty and students compiled input on housing, exterior spaces, public safety, community services, economic development, historic preservation and art for public spaces.

In addition, throughout the seven community meetings, FIU students and faculty collected information about the community's concerns and interests for redevelopment, as well as the services they would like. Feedback was directed to the developers to help them gain better insight into the community's desires for the proposed project.



# 4

## Creative Services in Visual and Performing Arts

Public Art Works  
Music Performances  
Theatre Performances  
Film and Digital Media

As a global city, Miami is home to many talented visual and performing artists. FIU By Design provides creative services for public and private events and projects that demand the expertise of one or more of our students and/or faculty from our visual and performing arts disciplines. We have a wide range of highly-skilled artists, musicians, and scholars who are nationally and internationally recognized performers, set designers, graphic designers, actors, and artists. They are as diverse and multicultural as our community. Our services range from multi-performance contracts to specific individual projects.



# Liberty City Tree of Unity

Public Art Works



**Liberty City Community Mural**  
 Location: Liberty City, FL  
 Faculty: Jacek Kolasinski, Department of Art + Art History  
 Project Date: 2015

When Liberty City searched for projects that would bring the community together, it found a drab 40-foot wall ripe for attention and contacted FIU By Design to create a Public Art Mural. Mural projects have historically been used as a vehicle for education and cultural expression, but this project had an added element — to unify area residents. In a series of meetings, the community decided on a “Tree of Life” mural as a vibrant metaphor for the promise of a strong community and the resilience of its residents. The initial phase of the project was to create the painting on the wall. Five weeks later, children, residents, community leaders and FIU students and faculty gathered to complete the work. Using stencils and stamps created by FIU’s fine arts students, children from Liberty City, FIU volunteers and students from Miami Northwestern Senior High completed the mural.



# Jazz Big Band Performance

Music Performance

**City of Sunny Isles Beach Jazz Concert**  
 Location: Sunny Isles Beach, FL  
 Faculty: Mark Marine, CARTA  
 Project Date: 2017

Launched in 2010, the Four Seasons Cultural Series is a program offered by the City of Sunny Isles Beach to make the classical arts accessible to all ages. For the kick-off of the 2014 season, the city contracted with FIU By Design to bring the School of Music’s Jazz Big Band to Heritage Park. The 19-piece studio jazz band, as well as faculty members, captured the essence of the Big Band era, playing jazz standards to contemporary tunes. The concert repertoire included interpretations of songwriters from the Great American Songbook.







*Paul L. Cejas School of Architecture facility  
designed by renowned architect Bernard Tschumi*

## Facilities and Resources

FIU By Design offers a wide range of high-tech, sophisticated, and centrally located facilities to support client projects and the education needs of the community. These include, but are not limited to, the Robotics and Digital Fabrication Laboratory (RDF), Integrated Computer Assisted Virtual Environment (I-CAVE), Fabrication Lab, Structural + Environmental Technologies Lab (SEt Lab), CARTA Miami Beach Urban Studios, the School of Communication and Journalism Broadcast Studios, Herbert and Nicole Wertheim Performing Arts Center, and CARTA @ Mana Wynwood.

RDF Lab | Robotics and Digital Fabrication Laboratory

ICAVE | Integrated Computer Assisted Virtual Environment

Fabrication Lab

SEt Lab | Structural + Environmental Technologies Lab

CARTA Miami Beach Urban Studios

Broadcast Studios

Herbert and Nicole Wertheim Performing Arts Center

CARTA @ Mana Wynwood

## Facilities and Resources



### RDF | Robotics and Digital Fabrication Laboratory

FIU Modesto A. Maidique Campus  
Paul Cejas Architecture Building, Room 131  
Directors: Shahin Vassigh, Department of Architecture, and Shu-Ching Chen, Department of Computer Science

The Robotics and Digital Fabrication Laboratory (RDF) is a state-of-the-art facility with robotic arms, 3D scanners, laser cutters, programmable objects and 3D printers. The lab offers unique technology solutions for testing, prototyping, manufacturing and fabrication. RDF is a catalyst to invigorate research, development, and entrepreneurship by bridging the gap between the virtual and physical world. The RDF Lab is a collaboration between the College of Communication, Architecture + The Arts and the College of Engineering and Computing.



### I-CAVE | Integrated Computer Assisted Virtual Environment

FIU Modesto A. Maidique Campus  
Engineering and Computer Science Building, Room 268  
Directors: Shu-Ching Chen, Department of Computer Science; and Shahin Vassigh, Department of Architecture

The I-CAVE is a visualization facility composed of five large, high-resolution screens arranged in a hexagonal pattern and a surround sound system that create an immersive virtual reality experience. Hardware and software tracking capabilities track movement and coordinate with displayed images for the immersion of users in the simulated environment. This facility provides new opportunities for research, creative projects and data visualization. The I-CAVE has been established as a collaborative effort between the College of Communication, Architecture + The Arts and the College of Engineering and Computing.

## Facilities and Resources

### Fabrication Lab

FIU Modesto A. Maidique Campus  
Paul Cejas Architecture Building, Room 105  
Director: Julia Sarduy, Department of Architecture

The FIU School of Architecture's Fabrication Lab is a fully operational lab and workshop. The Fab Lab features a diverse range of equipment from simple traditional tools to cutting-edge computer controlled devices. Our design pedagogy actively promotes a culture of creativity and production through physical modeling, material testing, full-scale mock-ups, advanced fabrication techniques, prototyping, and installations. The facility and its highly-trained staff offer support for a variety of design-oriented projects, including custom one-off and small-batch manufacturing job. The facility houses a metal shop, cabinet shop, concrete lab, Computer Numerical Control (CNC) Milling Machine, vacuum former, and laser cutters.



### SET Lab | Structural + Environmental Technologies

FIU Modesto A. Maidique Campus  
Paul Cejas Architecture Building, Room 341  
Directors: Shahin Vassigh and Thomas Spiegelhalter, Department of Architecture

FIU's Structural and Environmental Technologies Lab (SET LAB) is an interdisciplinary facility dedicated to teaching and research in building science and technology with a focus on ecology and the importance of climate responsive and energy-conscious design and construction. The SET LAB serves the curricular needs of CARTA's programs by providing a dedicated space and equipment for learning through research, testing and investigation of materials and systems for resource efficient built environments.



## Facilities and Resources



### CARTA Miami Beach Urban Studios

420 Lincoln Rd. Suite 440, Miami Beach, FL 33139  
Director: John Stuart, CARTA

The 3,000-square-foot MakerBot Innovation Lab, housed at CARTA's Miami Beach Urban Studios, is a collaborative makerspace for students and innovators. The Lab offers public programs, private innovation and exploration workshops and educational opportunities for all age groups. It supports a range of programs from dual enrollment for local high school students to for-credit classes for FIU students and start-up initiatives. Community members can also use the space to develop new products, ideas and tools, conduct research or launch personal projects.



### Broadcast Studios

FIU Biscayne Bay Campus  
Academic II Building, Room 161  
IT Manager: Wayde Klipper, Department of Journalism + Media

The School of Communication + Journalism Broadcast Studio is a great resource for faculty, students, and the community for creating movies, commercials, documentaries, and news clips. The studio space includes several large monitors, a professional lighting grid, HD cameras with teleprompters on professional studio pedestals, lit sets, cycloramas, Chroma key walls, a 10 by 12-foot screen, Final Cut training station, sound mixer, computer, Surround Sound system, and a projector. It is adjoined by a 20 by 15-foot master control room that mirrors a professional studio with stations for a teleprompter, clip and still storage, technical director mix effect switch board, digital effects, character generator, director and assistant director workspace, monitor wall and audio. Headset communication is located at all stations.

## Facilities and Resources

### The Herbert & Nicole Wertheim Performing Arts Center

Modesto A. Maidique Campus  
10910 SW 17th St, Miami, FL 33199  
Music Contact: Nathalie Brenner, School of Music  
Theatre Contact: Judy Litt, Department of Theatre

With its state-of-the-art theatres and halls, beautiful outdoor rotunda plaza, and individual box offices with spacious lobby areas, the Herbert & Nicole Wertheim Performing Arts Center has the right space for every occasion. The Music Wing at the WPAC offers a Concert Hall, equipped with a custom-made Schantz organ and a Steinway grand piano. It also houses an Instrumental Hall, a Recital Hall, and over 25 practice rooms, including a percussion room and allocated drum music space. Across the rotunda, the Theatre Wing contains two green rooms, two dressing rooms, a scene shop, a costume shop, rehearsal space, a design shop, the Black Box Studio Theatre, and the 200-seat venue Mainstage Theatre.



### CARTA @ Mana Wynwood

318 NW 23rd St, Miami, FL 33127  
Director: Marilys Nepomechie, CARTA

Located in the heart of the Wynwood Arts District, CARTA @ MANA Wynwood is home to the FIU-Bauhaus Think Tank, the Miami Urban Future Initiative, as well as design studios, seminar, and exhibition spaces. The 5,000-square-foot facility offers a range of public programs, including lectures, workshops, panel discussions and opportunities for networking, collaboration, and education and is open to participants of all age groups.





## Clients and Projects

- Little Havana Senior Campus Redevelopment, Little Havana, FL 2017
- The Oaks Landscape Charrette, Ft. Lauderdale, FL 2017
- Miami Children's Museum-Phase 2, Miami, FL 2017
- Parkland Library Addition, Parkland, FL 2016
- Liberty Square Rising Community Meeting, Miami, FL 2016
- Miami-Dade County Police Youth Dialogues, Miami, FL 2016
- Mana Wynwood Envisioning Project, Miami, FL 2016
- Historic Virginia Key Beach Envisioning Project, Miami, FL 2016
- Mayor's Institute on City Design, Miami Beach, FL 2016
- The Betsy Hotel Model, Miami Beach, FL 2016
- City of Miami Cultural Sensitivity Trainings, Miami, FL 2016
- Taplin, Canida and Habacht Interior Renovation, Miami, FL 2016
- Florida Department of Transportation, District VI Façade Specifications, Doral, FL 2016
- Miami Beach Convention Center Model, Miami Beach, FL 2016
- National YoungArts, Miami, FL 2016
- Whole Foods Market, Miami, FL 2016
- Miami Children's Museum-Phase 1, Miami, FL 2016
- Alton Road Flyover, Miami Beach, FL 2016
- Beth Israel Synagogue Renovation, Miami Beach, FL 2016
- Sports City International, Miami, FL 2015
- Little River Envisioning Project, Miami, FL 2015
- Miami-Dade County District 11 Master Plan Proposal, Miami, FL 2015
- Hebrew Academy, Miami Beach, FL 2015
- Tonkinson Residence, Pinecrest, FL 2015
- L'I Abner Community Center, Sweetwater, FL 2015
- National YoungArts, Miami, FL 2015
- Florida Department of Transportation, District VI EIFS Evaluations, Doral, FL 2015

*"You will be pleased to know that we are proceeding with our plans concerning the expansion of the Parkland Library. A lot of our success can be attributed to your excellent work with the FIU by Design program. The City Commission and the City Manager continue to praise all of your efforts on our behalf."* Joseph Green, Director The Parkland Library

*"Opens up information on how to relate, perceive, and interact with others."*

*"I usually dread mandatory trainings but this kept my attention. I actually learned something."*

*"This course should be implemented either more often or last a couple days. This course was very informative and educational."*

*"Subject matter was relevant and important to police patrol functions."*

*"A major strength of the course are the instructors. They were able to hold the class's attention and they taught from a non-law enforcement perspective. If this element is removed, there's a chance for the class to lose its flavor. Please DO NOT replace these instructors with cops."*

*"I was really drawn to this class. I really enjoyed the class and I didn't really want it to end."*

*"My name is Nattalya Avila. My father, Jorge Avila, is a police officer for the City of Miami and he took a course today on conflict and cultural diversity. He was so excited about the course and says that he gained a great deal from the experience. I am currently a graduate student at Florida State University getting my Masters in Communications. I specialize in communication theory and persuasion campaigns. I've long since thought that the police department needed a program (especially one that can garner so much excitement from officers) such as this! I'm happy to see that FIU is working alongside them. I appreciate your time."*

### Student Work

Urban Topography, Alberto Barbetti & Juan Manuel Gatica, p. 9

Virginia Key: Elizabeth Alers, Lillian Marin-Saenz p.10-11

Ethereal Warp, Sharit Ben-Asher & Andrea Canaves, top left p.13

Wynwood M.A.R, Lorena Velazquez & Christian Garcia, top right p.13

Wynwood 24, Grecia Estrada & Vikki Tou, bottom right p. 13

250 Pods, Priscilla Cuadra & Jesse Cardenas top middle p. 13

MANA Art Tank, Julian Ramirez & Gabriel Diaz, bottom left p.13

Miami Children's Museum: Julia Sarduy, Dominic Mack & Shaylin Castillo p. 14-15

Parkland Library: Vanessa Gorrochategui, Stephanie Jenkins, Scheherezade Marles, Adam Medal, Daniel Rodriguez, Sergio Rodriguez, Zoe Russian, Melba Suarez p. 16

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Betsy Hotel: Julia Sarduy, Joshua Pagano & Dominic Mack p.21

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### Book Design

Stephanie Alvarez, Graduate Research Assistant, College of Communication, Architecture + The Arts

Hadi Alhaffar, Graduate Research Assistant, College of Communication, Architecture + The Arts

Giovanna Gallardo, Graduate Research Assistant, College of Communication, Architecture + The Arts