

# Eighth Day Design

## Creative Solutions Reimagined



### Exhibit/Specialty Design and Fabrication Portfolio

We are more than architects and designers; we are problem solvers.

By earning the trust of several large institutions with very high aesthetic standards and secured spaces,

we are regularly asked to work with their art, exhibit, and other custom projects.

Frequently these projects require cooperation with the Smithsonian Institution, corporate and private art collections.

Space planning and custom fabrication design are part of nearly every project. Most projects include the management of the fabrication by others and, on occasion, we have physically built smaller projects ourselves.

At EDD, we know materials and technology, and fully understand how "things" are put together.





"Birth of an Idea"

by Bertalan "Bert" Andrasfalvy M.D., PhD.

Commissioned by HHMI - Janelia Farms



Dr. "Bert", a scientist/artist, (<https://vadolo.wordpress.com>) was commissioned to produce a kinetic sculpture depicting a massive brain with a stylized figure of the "thinking man" inside. EDD's role was to adapt an existing community room to become the permanent home for the "Birth of the Idea" mobile, develop the installation process and coordinate the artist's efforts with the facilities department at the Janelia Research Campus of the Howard Hughes Medical Institute.

**Scope of Work:**

Redesign and document structure of existing ceiling to support a 9'X12'X8' mobile.

Test and select suitable suspension line

Design and fabricate ceiling attachment method for 340 lines

Redesign and document room lighting to highlight the sculpture

**Project challenges:**

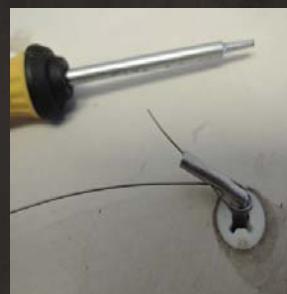
Artist location - Budapest, Hungary / Installation location - Ashburn, VA USA

Coordinating between Metric and Imperial units

No existing model or detailed drawing of the sculpture/mobile. Only one concept drawing to go by.

340 suspension lines - Requirement for lines and suspension points to be "invisible"

Completed 11/2016



# Bretton Woods Exhibit

Commissioned by World Bank / IMF



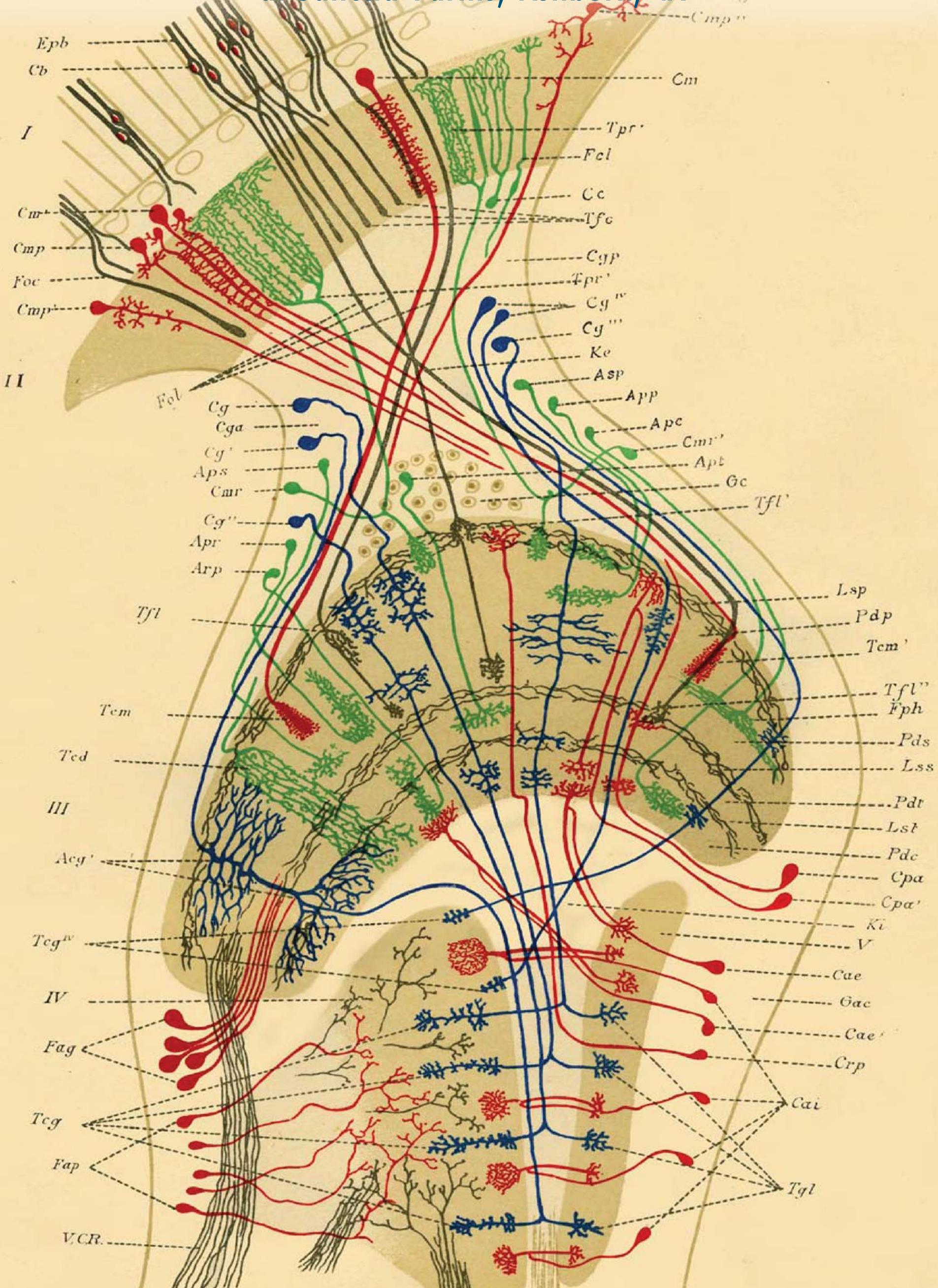
Two of the world's largest international financial organizations commissioned EDD to design and build an exhibition to commemorate the 60th anniversary of the founding of their organizations at the Bretton Woods Conference in New Hampshire. Duplicate exhibits were placed in the lobbies of the two organizations' headquarters buildings. EDD designed and fabricated nine 9-foot tall by 4-foot wide freestanding panels made from aluminum, for each of the two buildings. Each panel was equipped with a slot for graphic "content" board, two lights, and a brochure holder on the side. Two of the display panels contained audio and visual equipment which played recordings of archived interviews with those involved in the Bretton Woods Conference. The exhibits were on display for several months.

#### Project Challenges

The true challenge for both of the exhibits was their location. Each exhibit was at the center of their 12-story atrium of the HQ buildings in DC. The grand scale of these locations called for substantial size of the exhibit elements matching the scale and style of the architecture. To amplify this challenge neither IMF, nor the World Bank, would allow for extended installation in the middle of the busy and prominent public place. Both exhibits had to "appear" instantly at both locations and "disappear" in the same fashion at the end. The solution to this was the use of honeycombed aluminum panels with hinged elements making it portable and collapsible. We shop fabricated two identical sets and popped them up like origami at the scheduled day.

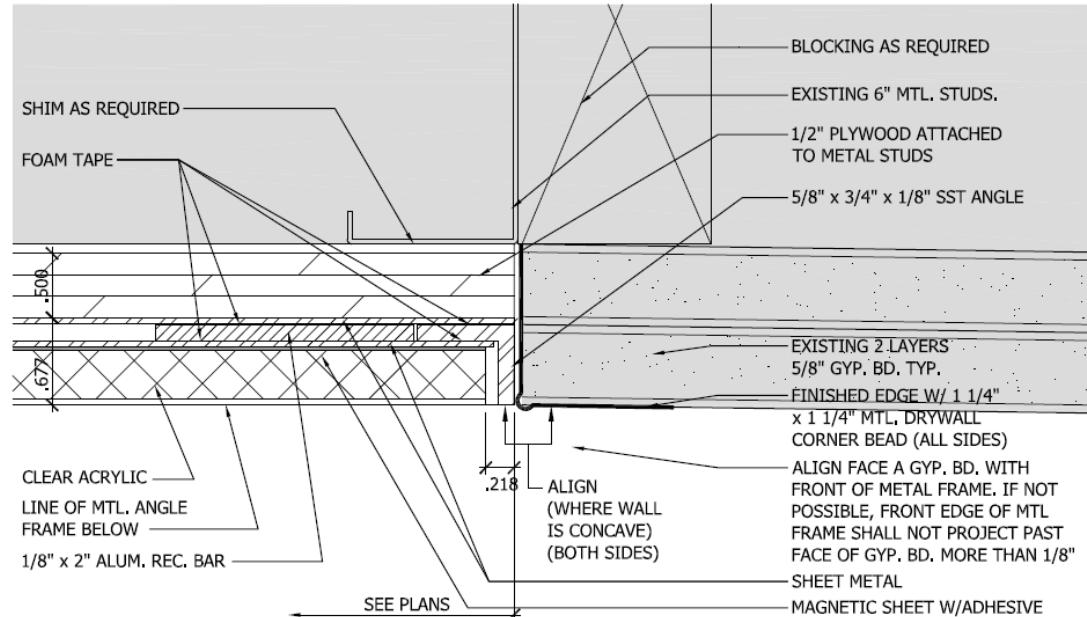
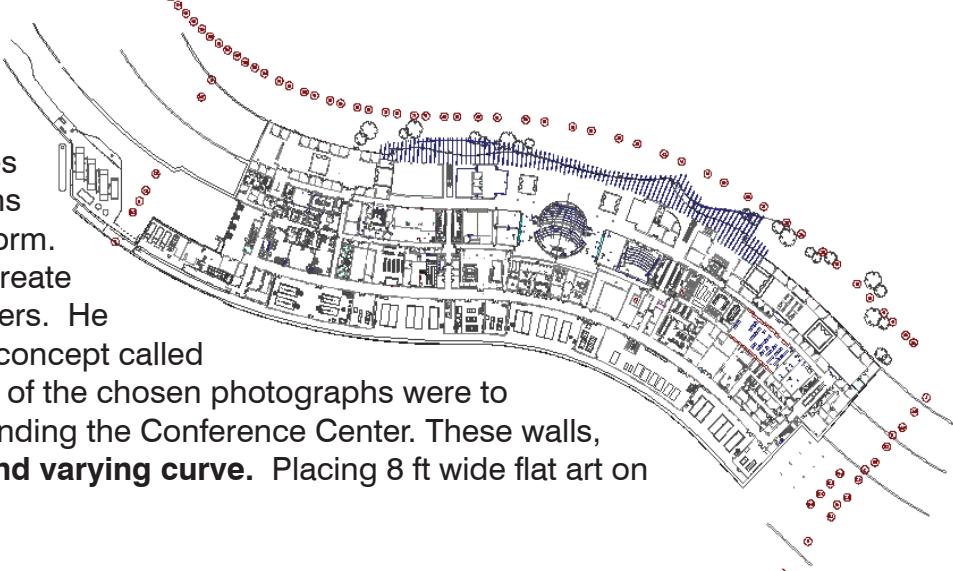


# Neuroscience Wall Art at Janelia Farms, Ashburn, VA



Commissioned by HHMI, Janelia Research Campus  
Gerald Rubin, PhD Executive Director

Researchers at the Janelia Research Campus of the Howard Hughes Medical Institute (HHMI) use nuclear microscopes to study the brains of fruit flies. These images are amazing compositions of color and form. Dr. Rubin, an aesthetic guardian of the Janelia campus, wanted to create a permanent exhibit to prominently display the work of the researchers. He selected a number of these images to be displayed initially and his concept called for the ability to update the images as they become available. Most of the chosen photographs were to be enlarged to 8'x8' and flush mounted on the corridor walls surrounding the Conference Center. These walls, as with most of the buildings main circulation, are built in a **slight and varying curve**. Placing 8 ft wide flat art on curved walls became the biggest challenge of the project.



JAMB DETAIL: GYPSUM BOARD TO METAL FRAME

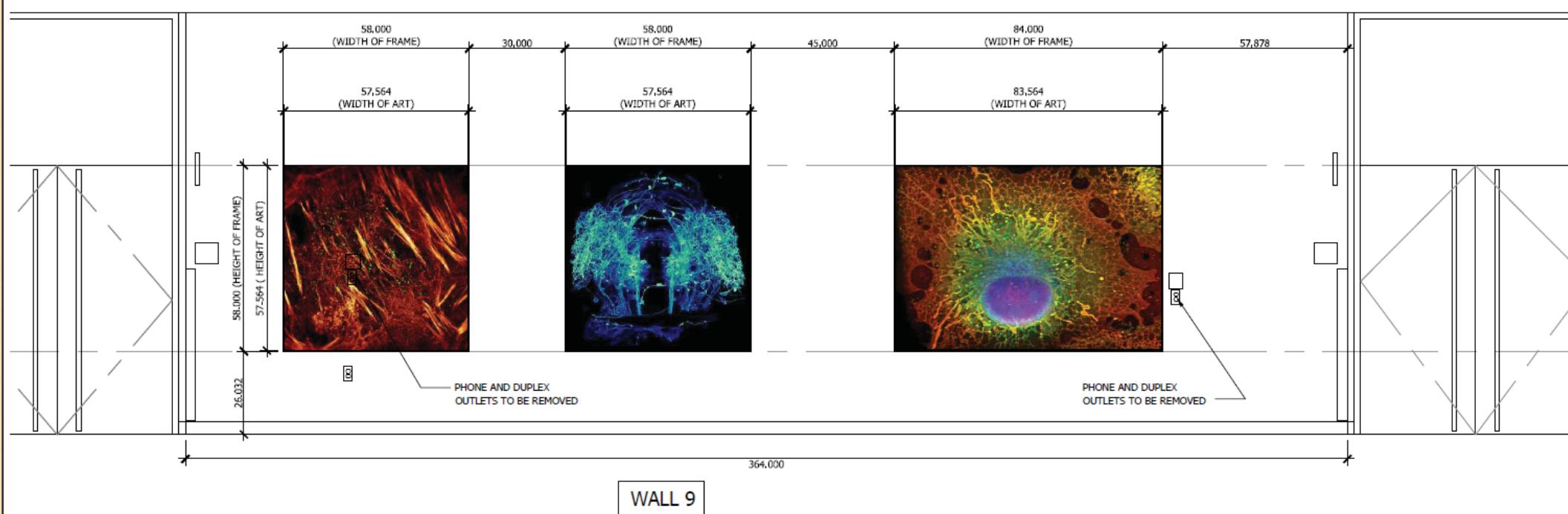
SCALE: 1'-0" = 1'-0"

#### Scope of Work:

- Design removable magnetic mounting
- Produce technical drawings for the fabricator
- Design existing wall structural support
- Assist with selection of images to verify suitable resolution
- Layout design for 26 pieces on 12 walls
- Supervise wall construction
- Supervise installation

#### Project Challenges:

- image surface to be flush with the face of the wall
- Removability to allow periodical replacement
- Walls are curved, images are flat

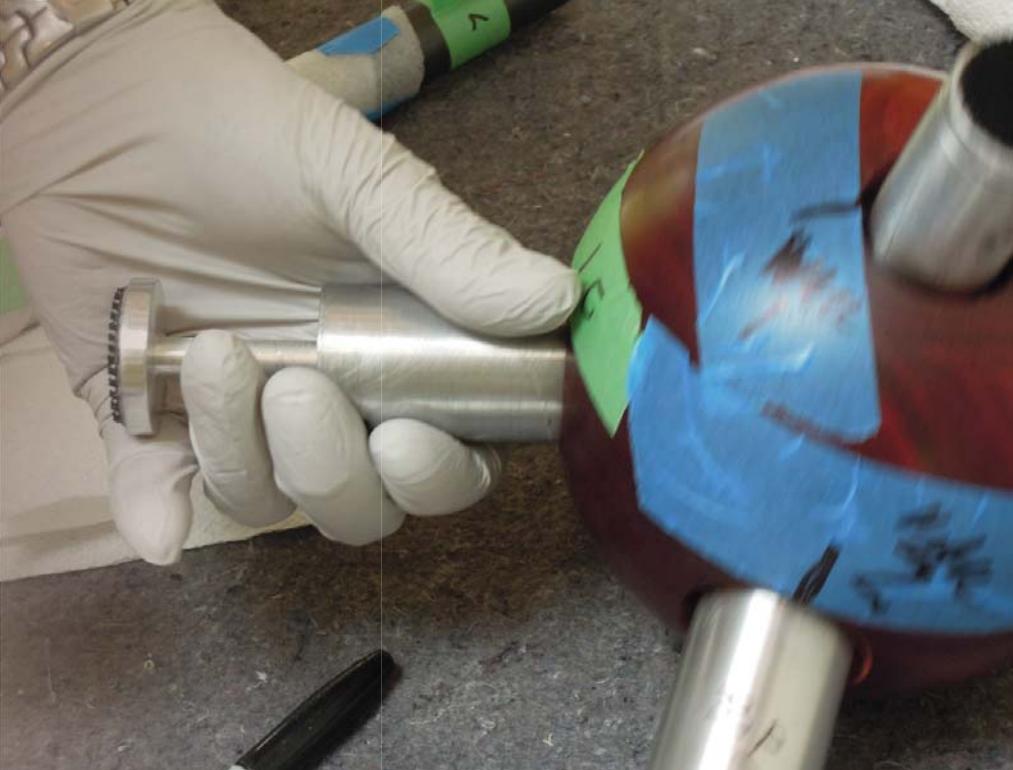


**"The Explorer"**  
by Phlyssa Koshland



**Commissioned by HHMI HQ, Chevy Chase, MD**

**Robert Tjian, PhD HHMI President**



"Explorer" by Phlyssa Koshland (<http://koshart.com/>) was inspired by molecular models used to explore configurations of enzymes. The 16 foot high figure of the climber was mounted on the a curved wall with a square niche. The sculpture was fabricated using 4 sizes of powder-coated aluminium tubing connected with 96 custom joints to 40 wooden spheres turned from 6 different exotic wood species.

To meet the requirement to make the piece removable, custom joints were designed and machined to connect the elements.

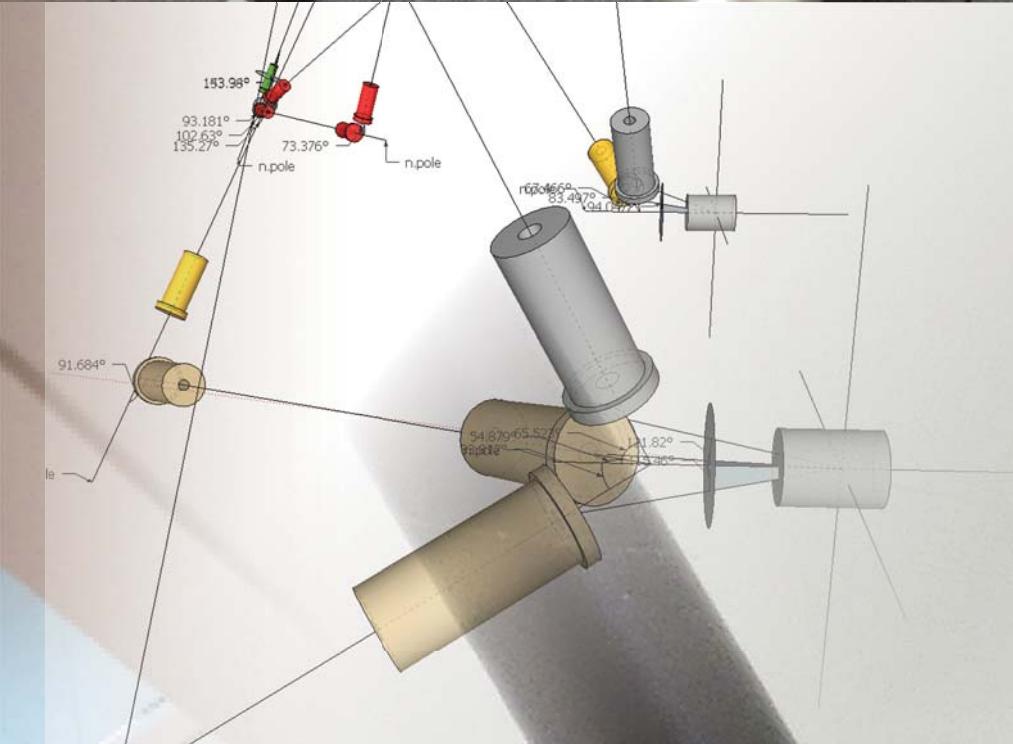
The artist, working out of her Paris studio, sent us a 30 inch high maquette. We converted it to a digital 3-D model along with the curved wall and the niche. Technical drawings and communication with the artist was conducted using the metric system but with local subcontractors we used imperial measurements.

Special attention had to be given to the design and production sequencing of the multiple joints "housed" by each sphere. A 5-axis CNC mill was programmed with our angle data to drill joint openings.

Due to the weight of the piece, the sub-structure of the niche had to be reinforced and refinished.

Technological challenges of wood specie variations, diameters of spheres and complexities of angular relationships during the design were matched by challenge of sequencing the installation of the piece.

Completed 08/2016



# "On the Back of the Giants"

## by Phlyssa Koshland

Commissioned by the departing President of HHMI this 18 foot outdoor sculpture is designed to symbolize the continuity of scientific work. Large elements were water jet cut from a 3/4" aluminum plate and connected to each other with slip joints. Each joint is secured with a custom bracket that is through-bolted with studs and fastened with shallow dome nuts. All surfaces are hand-finished and clear-coated to withstand the weather. The sculpture is attached to the top of a stone pedestal in the center of a large planter. Four computer controlled lights complete the installation.

### Scope of work:

- layout
- design structural foundation and pedestal
- finish selection for the pedestal
- conversion of the model into a 3-D drawing
- create STP file for 5-axis water jet
- fabricate half scale version
- fabricate full size piece
- metal finishing
- installation
- lighting design

### Challenges:

- weight of 3/4" AL
- design and testing of 20 slip fitting joints to allow smooth connection without unwanted slack

Completed  
08/2016

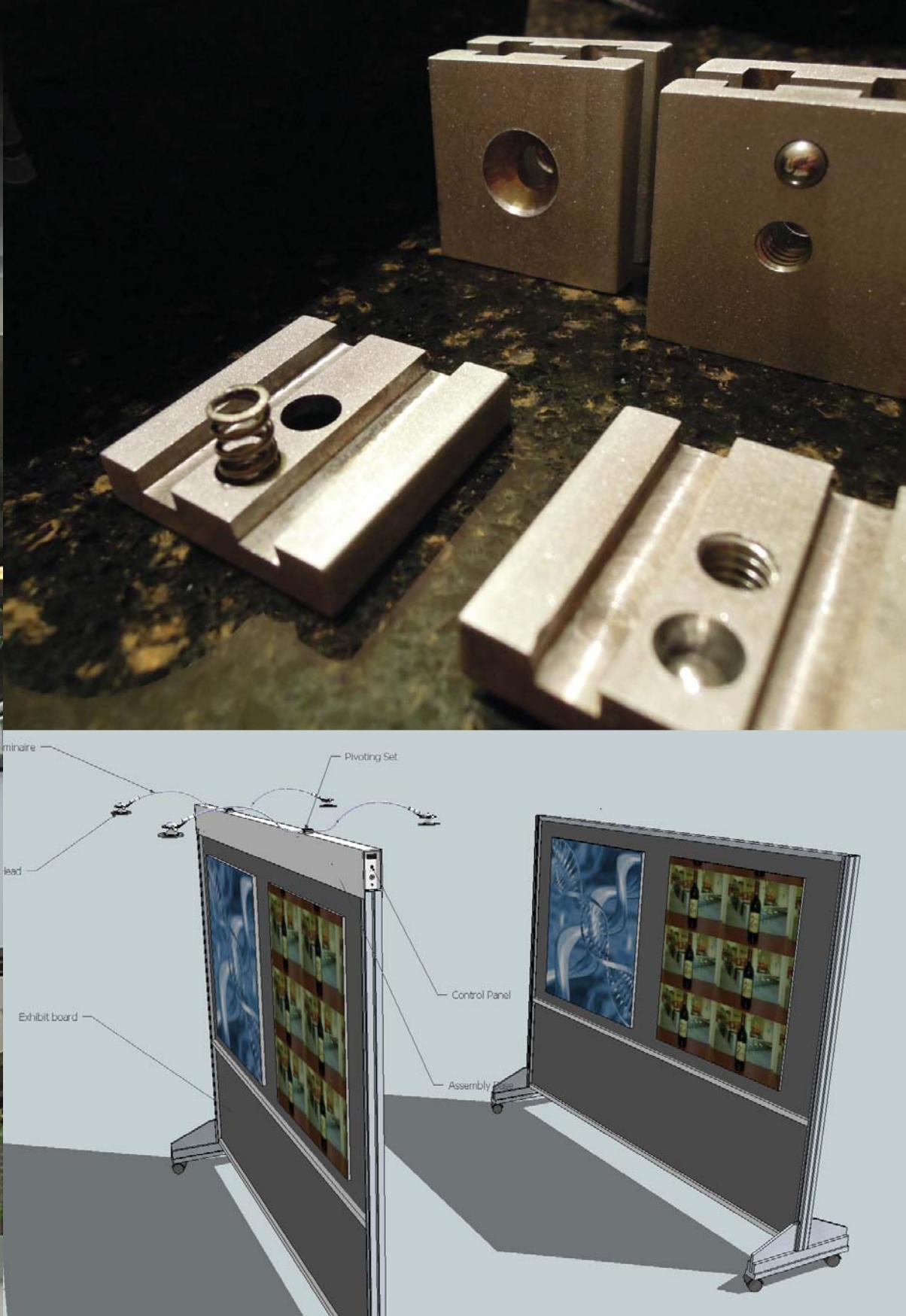
Commissioned by HHMI HQ, Chevy Chase, MD  
Robert Tjian, PhD HHMI President



# Rechargeable Exhibit Light Bars



Commissioned by Howard Hughes Medical Institute



The Howard Hughes Medical Institute (HHMI) was using double-sided, movable, 8' long boards to exhibit the work of visiting scientists during many hosted conferences at their Janelia Farm facility. These boards provided great flexibility as they could be "rolled away" after each conference. In addition, the organizers could "roll out" any number of these required for specific volume of exhibitors. There was a problem though; participants complained that the area, a predominately naturally lit 3-story atrium, was poorly lit for exhibiting.

HHMI asked EDD to provide a solution. After a quick study of the location and ceiling height we came to the conclusion that modifications to the building lighting system would compromise the flexibility of the space. The price of additional light fixtures and wiring was magnified by additional HVAC to provide cooling for the heat created by new lights. This prompted us to think out of the box. We created a prototype of a battery operated fixture to be mounted on top of the movable board and presented it to the client. We were granted a few thousand dollars to test suitable batteries and LED lights available on the market and after presenting test results we were awarded a contract to finalize the design and fabricate an initial series of 24 of these rechargeable units. Each one was equipped with four pivoting luminaires (to facilitate storage), a battery gauge, charger port and a switch. Since that original order we have fabricated 60 more of these sets for other locations of HHMI.



**"Launch"**  
**by Phlyssa Koshland**



**Commissioned by HHMI Janelia Farm Research Campus  
Dr. Gerald Rubin PhD Director**

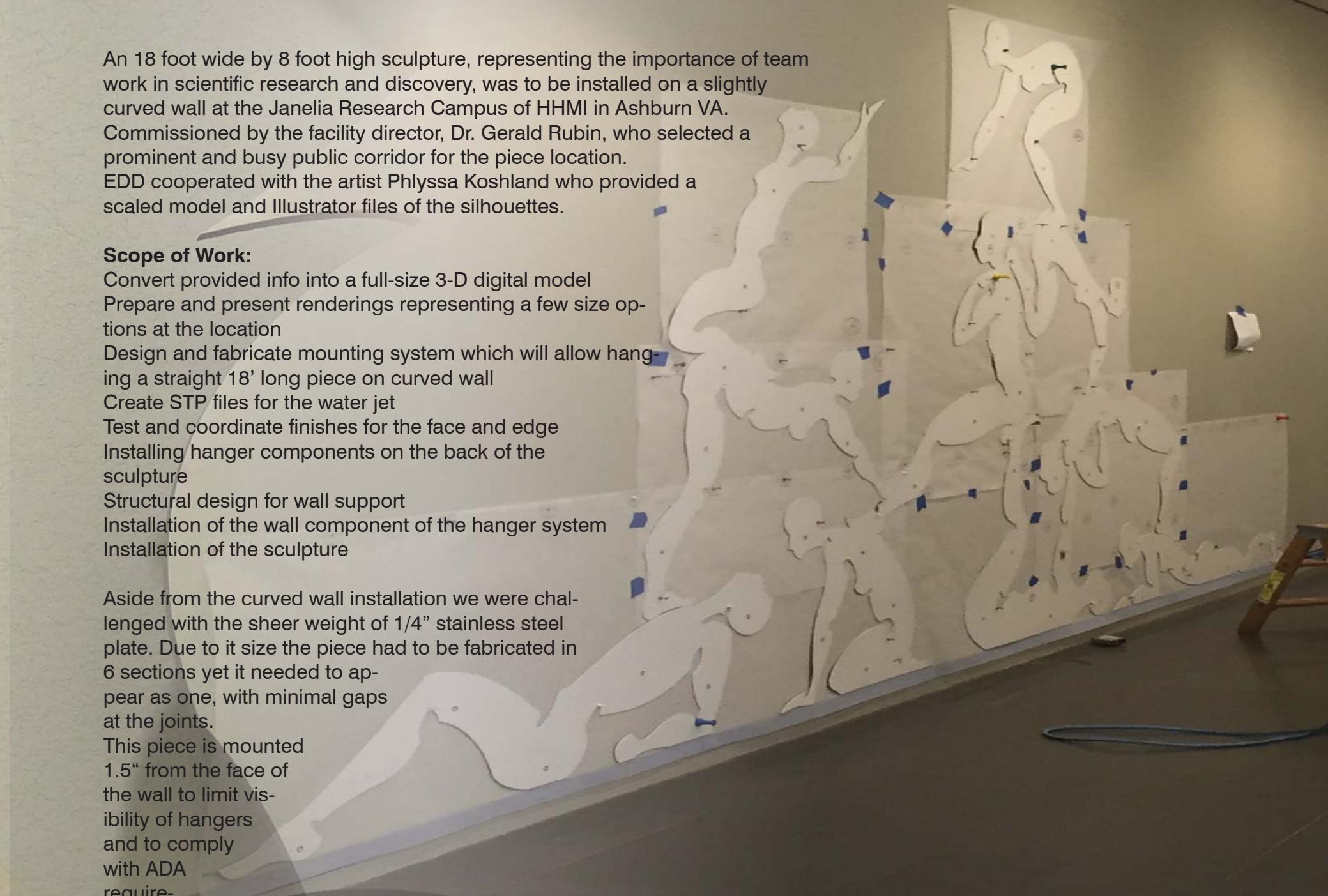
An 18 foot wide by 8 foot high sculpture, representing the importance of team work in scientific research and discovery, was to be installed on a slightly curved wall at the Janelia Research Campus of HHMI in Ashburn VA. Commissioned by the facility director, Dr. Gerald Rubin, who selected a prominent and busy public corridor for the piece location. EDD cooperated with the artist Phlyssa Koshland who provided a scaled model and Illustrator files of the silhouettes.

**Scope of Work:**

Convert provided info into a full-size 3-D digital model  
Prepare and present renderings representing a few size options at the location  
Design and fabricate mounting system which will allow hanging a straight 18' long piece on curved wall  
Create STP files for the water jet  
Test and coordinate finishes for the face and edge  
Installing hanger components on the back of the sculpture  
Structural design for wall support  
Installation of the wall component of the hanger system  
Installation of the sculpture

Aside from the curved wall installation we were challenged with the sheer weight of 1/4" stainless steel plate. Due to its size the piece had to be fabricated in 6 sections yet it needed to appear as one, with minimal gaps at the joints.

This piece is mounted 1.5" from the face of the wall to limit visibility of hangers and to comply with ADA requirements.



# IMF CENTER EXHIBITS

EDD designed 3 temporary exhibits for the IMF Center (a public center for economics education) at the IMF Washington, DC.

**The Artistry of African Currency** - (Cooperation between IMF, Smithsonian Numismatic Collection and Dr. Henry private collection) EDD successfully merged a Smithsonian SITES Exhibit with objects from a private collector to create a unique year-long exhibition for the IMF Center. EDD's design concept featured custom integration of the objects into an existing permanent exhibit space. EDD worked closely with the Smithsonian, the private collector's curator and graphic designers in order to develop a story and an environment which would meet the client's educational goal.

**Money and Sovereignty** (Cooperation between IMF and Smithsonian)

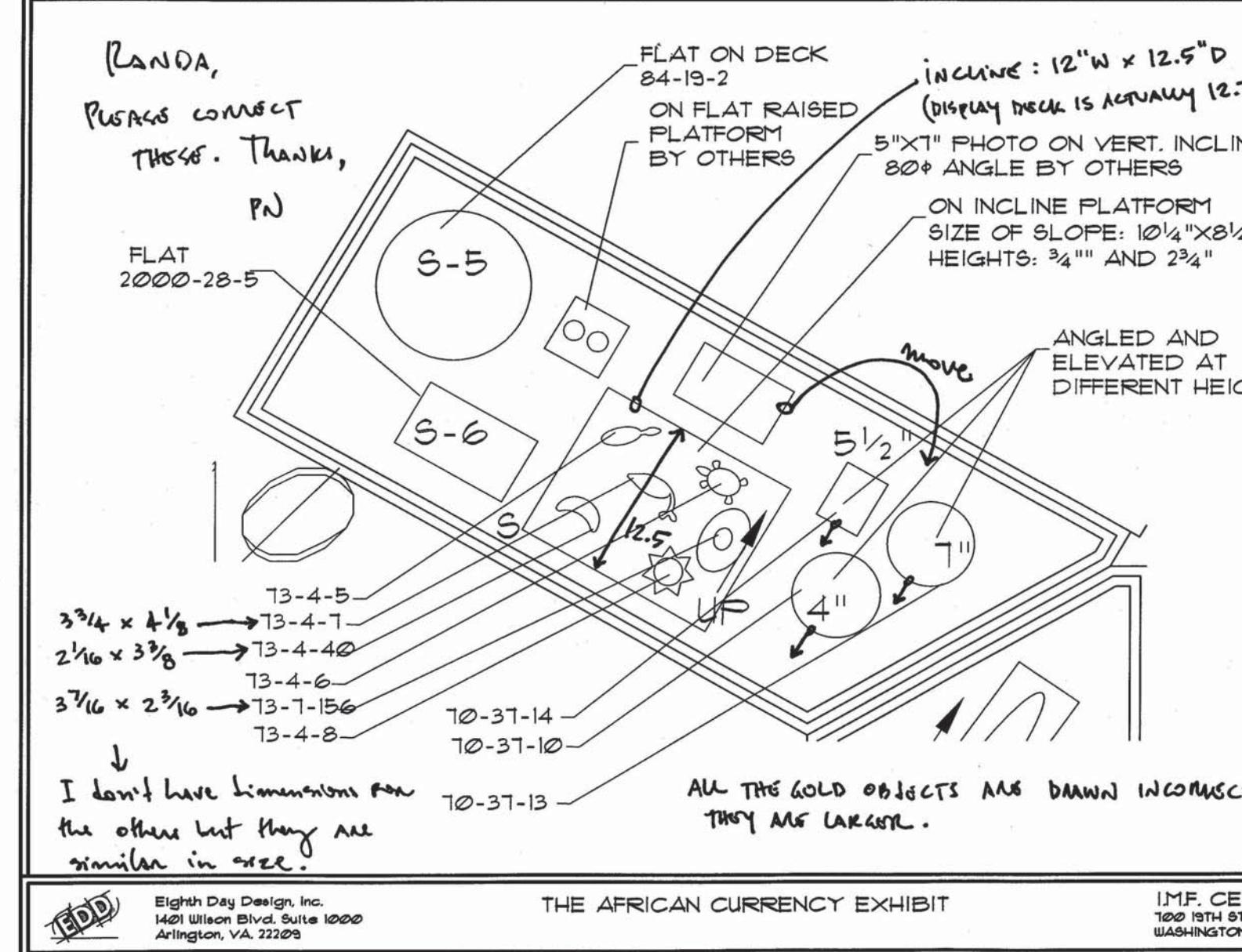
In collaboration with the Smithsonian's Numismatic Scholars, EDD developed an exhibition designed to support the goals of IMF for this two-year showcase. EDD developed custom display cases and oversaw the production and design of custom graphics and text. Additionally, EDD's team researched and identified many of the objects included in the display.

## One World Photo Exhibit

Our team designed, fabricated, and installed the exhibit. Photo content was provided by graphic designer Massoud Etemadi. In an effort to keep costs low and to minimize waste, EDD reused some panels from a previous exhibit. The reused panels were strategically arranged with new graphics and suspended on cables from ceiling to floor, creating a fresh and engaging show tailored to the space it was housed in.



**Commissioned by International Monetary Fund**



INTERNATIONAL MONET



# Balustrade Extension Project

## Locomotive Lounge

## JPEO Chemical Warfare Exhibit

## Vistula River Museum Competition

The headquarter building of a US Government agency was concerned over a number of attempted jumps over an atrium balustrade. After solutions proposed by a renown global architect were rejected, EDD was given an opportunity to give it fresh thought. The EDD team presented a few ideas in 3-D sketches and a solution was agreed upon. The idea was then developed and a prototype was created and installed on site. The solution allowed for modifications to the existing balustrade without disturbing the current assembly minimizing costs and disruption to the facility operations. The 1.5 million dollar installation of stainless steel and glass **balustrade extensions for 10 bridges and balconies** will be completed in April 2017.

**Locomotive Lounge.** ADI General Contracting, another long standing client, was looking to create company lounge for their office employees and site workers alike to relax after a hard days work. The site was to be multifunctional and in a converted warehouse. Continuing with long established corporate theme we utilized existing wall brick/CMU patterns to create a locomotive garage. Original photographs of the locomotive called "The President" were taken at the C&O Railroad Museum in Baltimore and printed on 8 foot by 11 foot fabric stretched over low profile framing.

The US Army base at Aberdeen MD used their executive building corridors to show off the latest technology in detection and protection against chemical weapons. **JPEO Chemical Warfare Exhibit** included 20, 3'x3' vignettes, numerous mannequin "situations" and introduced new lighting to both floors.

In 2007, EDD participated in the competition for the design of the **Vistula River Museum in Poland**. The program spread over two floors of the post-industrial building and included exhibits, interactive stations, research area and small group lecture areas. We presented a virtual 3-dimensional model of both floors to show the visitor experience as they walked through the exhibit from beginning to end.





# "Lateral Motion" by Phlyssa Koshland

As with many of our projects, architectural expertise (in addition to industrial design capability, management skills and artistic talent) is essential throughout the process.

This is our latest and on-going project with Phlyssa Koshland. The artist provided a 1:4 maquette of the sculpture. Ben Gurion University dedicated a large (33' X 14') paneled wall for the "Lateral Motion" sculpture. EDD's role is to build, deliver and install it in Israel.

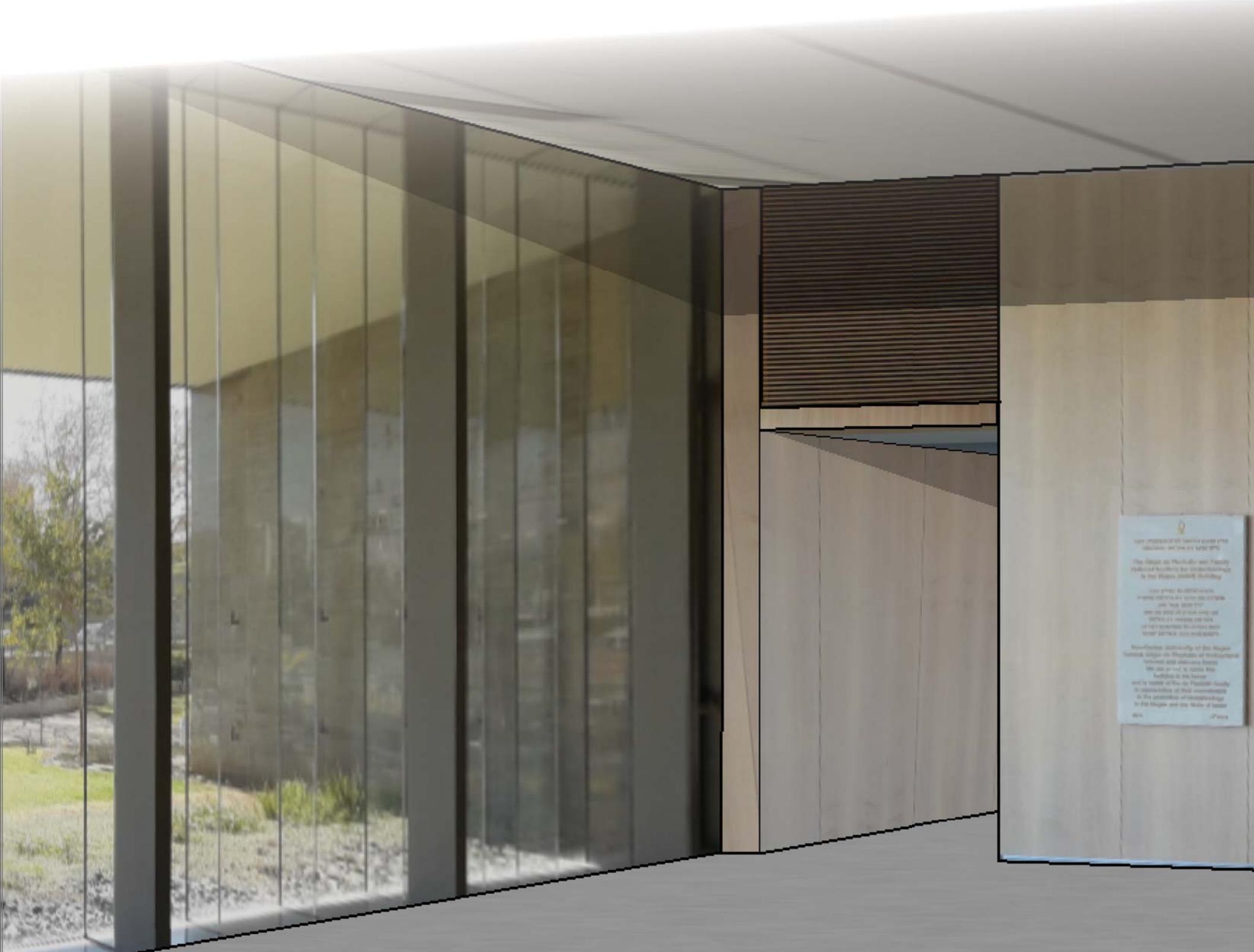
## Scope of Work:

- Convert model to shop drawings
- Design and fabricate custom joints to connect the elements of the sculpture
- Design and fabricate suspension method for the entire piece
- Design modifications for existing wood paneling
- Lighting design
- Fabricate the sculpture
- Ship and install on site at BGU

## Project Challenges: Sculpture refinement

- Selected location is a path of egress . Sculpture projection into the path of travel exceeds ADA limits end angering people and the art piece.
- Finish for spheres - The existing wood panels demand a contrasting finish of the spheres. EDD proposed the removal of (4) existing wood panel sections to create a custom background for the sculpture and modification of the specific finish of the wood spheres.
- Joint design to produce and ship partially assembled, facilitate wall mounting and potential removal

Estimated completion 08/2017



**Commissioned by Ben Gurion University of the Desert**



# COMMUNITY SERVICE

At EDD, we believe in supporting our community with our talent, in addition to financial donations and random acts of kindness.

In as such, we were instrumental in the creation and installation of an exhibit called "Rosslyn: A Work in Progress" This month long exhibit" chronicles Rosslyn's origins as a lawless, rowdy community in the 1800's to the thriving urban village it is today, through historical items and images, and renderings of developments coming soon." This project included the compilation of historical photos, development of text, and project coordinations between historians, transportation partners, developers, photographers and the community. Many tireless hours were donated in the preparation and installation of this exhibit by the team.

The iconic Arlington Temple, in need of a face lift, asked EDD to develop some ideas for a non-invasive way to add color to their facility. Banners designed by students of Art Institute, painted concrete walkways and the exploration of theatrical lighting was developed and installed.

EDD was also a part of the design and installation team for the creation of Rosslyn first temporary "Pop-up Park"





Eighth Day Design / 7653 Leesburg Pike, Falls Church, VA 22043 / [design@edd.biz](mailto:design@edd.biz)

