

# ALEXANDER GOLDOWSKY

www.interact.museum

alexander@interact.museum

## ***Education:***

### **Harvard University Graduate School of Education, Cambridge, MA**

*Doctor of Education*, 2002. Teaching, Curriculum and Learning Environments Program

Qualifying Paper: *Research Approaches for Informal Learning Environments: Matching Museums and Methodologies.*

Dissertation: *Lessons from Life: Learning from Exhibits, Animals and Interaction in a Museum.*

Doctoral Committee: *Dr. Philip Sadler, Dr. Eleanor Duckworth, Dr. George Hein*

### **Lesley College Graduate School, Cambridge, MA**

*Master of Education*, 1987.

### **Harvard University Extension School, Cambridge, MA**

Concentration in Software Engineering (1982, 1983)

### **National Audubon Society Expedition Institute/Lesley College, Cambridge, MA**

*Bachelor of Science*, 1982. Environmental Science, Joint Degree Program.

### **Southampton College of Long Island University, Southampton, NY**

Concentration in Environmental Sciences/Biology. Dean's List of Honors (1978, 1979)

## ***Employment:***

### **Interact LLC, Principal, Boston, MA, 2020-Present**

*Interact LLC* offers consulting services to museums and educational institutions with a focus on interactive learning. Services include exhibit content and interactive experience development, exhibit master planning, action-focused evaluation and research, and professional development. *Interact LLC* helps craft interactive experiences that support our human drive to explore, engage and learn. Based on the premise that interaction is fundamental to learning, my work is grounded in research and 30 years of experience working in museums and schools.

### **Boston Children's Museum, Boston, MA, 2014–2019**

Head of Special Projects, 2019

Senior Vice President, Exhibits and Programs, 2014-2019

The Boston Children's Museum is the second oldest children's museum, and third most visited museum in Massachusetts with an annual attendance of over 550,000. The museum serves as a first museum experience for Boston children with exhibits that range from culture, to health and wellness to STEAM. The museum has an extensive collection, and runs a wide range of programs including live theater, an art studio, art gallery, and maker studio.

- As Head of Special Projects, I coordinated the masterplanning project for the Museum's outdoor spaces incorporating harbor access, educational features, and flood control measures meeting Boston's climate resiliency standards, and worked on consulting projects including the Qatar Children's Museum, and other local and international projects.
- As SVP, I supervised the exhibit, program and visitor service staff, and set the overall direction for programs and exhibits, including restructuring the exhibit process to actively incorporate prototyping and formative evaluation. I oversaw the development of new exhibits, including *Explore-A-Saurus*, *Keva*, *What's for dinner?* and *PlaySpace*. Exhibit work was supported by three IMLS grants, as well as numerous foundation and corporate grants and private funders.

**MIT Museum, Director of Exhibitions, Cambridge, MA, 2013–2014**

With the mission to “engage the wider community with MIT's science, technology and other areas of scholarship in ways that will best serve the nation and the world in the 21st century,” the MIT museum reaches over 120,000 visitors a year. It blends exhibits of current research, technology and the arts at MIT, with artifacts from its extensive collections of photographs, technology, nautical and scientific history.

- Worked with scientists, researchers, and visiting artists to develop new exhibits, and worked to increase the capacity of the exhibits department, including hiring, starting a visitor studies internship, and managing sub-contracts with exhibit design firms.
- Worked as a member of the senior staff on museum planning, exhibit budgeting, scheduling and cross departmental exhibit development, including a new focus on visitor engagement.
- Project managed new exhibit projects, including *Time Machines: Stanley Greenberg* (750 sf), *Daguerre's American Legacy* (750 sf), and developed the interactive *Process Gallery* for *5000 Moving Parts*, a group exhibit of contemporary kinetic artists (3400 sf), as well as several exhibits showcasing faculty and student work at MIT.
- Developed concept and interactive experiences for *Images of Discovery* (3400 sf) featuring work of three MIT affiliated photographers, Doc Edgerton, Berenice Abbott and Felice Frankel, paired with interactive stations allowing visitors to capture their own images using parallel techniques.

**EcoTarium, Director of Exhibits and Education, Worcester, MA, 2002–2013**

The EcoTarium is the museum of the Worcester Natural History Society (founded in 1825), and receives over 130,000 visitors a year. It offers indoor and outdoor exhibits, nature trails, natural history and living collections (over 200 animals), as well as a full range of school, planetarium and camp programming.

Accomplishments include:

- Developed and managed a successful portfolio of education and exhibit grants totaling over \$2 million.
- Developed an exhibit master plan, currently in the implementation phase, with funding from the Institute for Museum and Library Services.
- Created the Environmental Exhibit Collaborative (EEC), with EcoTarium, Echo at the Leahy Center for Lake Champlain (Burlington, VT), Children's Museum of Maine (Portland, ME), Musée de la nature et des sciences (Sherbrooke, Québec), and Acton Discovery Museums (Acton, MA). Secured funding from Jane's Trust, Cabot Foundation and Institute for Museum and Library Services (IMLS) totaling over \$1.3 million.
- Developed and oversaw school programs, including collaborative programs with the Worcester Public Schools, reaching over 20,000 school children, teacher education programs, and camp programs.
- Built an effective and cohesive department during a period of institutional restructuring.
- Wrote the museum's strategic plan for Programs and Exhibits.
- Supervised exhibits department, with responsibility for all aspects of permanent and traveling exhibits, including in-house development, design and fabrication shop, traveling exhibition program, and collections.

**New England Aquarium, Boston, MA, 1988-2002**

**Senior Program Developer, 1994-2002**

**School Programs Specialist, 1990–1994**

**Teacher Trainer/Outreach Specialist, 1988–1990**

Established in 1969, the Aquarium serves over 1.4 million visitors annually through exhibitions, education programs, outreach and whale watch excursions. It is widely regarded as the pioneer modern aquarium.

Accomplishments include:

- Planned and implemented collaborative programs with Boston, Somerville, and Charlestown public school systems.
- Coordinated teacher education programs, including curriculum development, kit development, topic-based workshops, summer teacher institutes and teacher publications.
- Supervised school outreach programs (reaching 20,000 students per year).
- Led project teams, and developed content and interactives for over 10 exhibits ranging from 200 sq. feet to 5000 sq. feet.
- Served as lead exhibit developer for the New England Aquarium Exploration Center at Newport.
- Developed and served as Co-PI on NSF grant for Nyanja: Africa's Great Lake, the Aquarium's first major special exhibit that included cultural and environmental perspectives.

## **Teaching:**

**College of the Atlantic**, Visiting Faculty, Bar Harbor, ME, Spring 2021-Present  
Taught *Museum Education: Understanding and Planning for Learning*.

**Tufts University**, Adjunct, Education & Art History Department, Medford, MA, 2002  
Taught graduate level *Pro-Seminar in Museum Education*.

**Simmons College**, Adjunct, Boston, MA, 1997–1998  
Taught *Methods and Materials in Elementary Science and Social Studies Curriculum*.

**Lesley College Graduate School**, Lecturer, Cambridge, MA, 1987–1990  
Taught *Creating an Educational Environment in Logo*.  
Supervised Independent Studies in Logo and Pascal.

**Boston Museum of Science, Course Developer/Teacher**, Boston, MA, 1987–1988  
Developed and taught a range of family courses linked to current exhibit topics.

**The Phoenix School, Teacher & Curriculum Developer, Cambridge, MA, 1984–1987**  
Taught Kindergarten through 5th grade science, social studies, and computer classes.  
Co-developed yearly school-wide integrated curriculum.  
Participated in admissions interviews, and other administrative responsibilities for this teacher-run school.

**Boston Public Schools, Computer Lab Teacher, Boston, MA, 1983–1985**  
Developed and taught Kindergarten through 5th grade computer classes integrated with math and language arts curriculum. Worked with teachers to integrate computers into the classroom curriculum.

## **Selected Consulting:**

- *Lesley University, STEAM Lab* (Cambridge, MA), 2020-Present  
Curriculum development; teacher professional development.
- *Discovery Museum* (Acton, MA), 2020-2021  
Exhibit concept development and staff workshops.
- *Boston Children's Museum/Niantic Children's Museum* (Boston, MA; Niantic, CT), 2020-2021  
Museum exhibit masterplanning.
- *Echo at the Leahy Center for Lake Champlain* (Burlington, VT), 2005-2006  
Project and grant development.
- *Amaze Design* (Boston, MA), 2005-2006  
Exhibit development for *National Children's Museum* Project.
- *Gloucester Maritime Heritage Center* (Gloucester, MA), 2000–2003  
Concept development and exhibit planning prior to opening.
- *Smithsonian Center for Astrophysics, Science Media Group* (Cambridge, MA), 1999–2002  
On-screen science demonstrations for the Annenberg teacher education video series:  
*Energy* and *Shedding Light on Science*.
- *Exhibit Services Program, Maryland Historical Trust* (Calvert County, MD), 1998–1999  
Exhibit consulting and evaluation training for staff and volunteers.
- *Museum of Science* (Boston, MA), 1998  
Program evaluation of Science Theater program.
- *Academy of Natural Sciences* (Philadelphia, PA), 1994  
Conceptual planning for gallery redesign.
- *Tennessee Aquarium* (Chattanooga, TN), 1992  
Education consulting.

## ***Selected Grants:***

### **National Science Foundation (NSF)**

- Co-Principal Investigator, Video Resources for In-depth Investigations of Pond Organisms, with Bernie Zubrowski, Education Development Center, Newton MA. ISE-0137735 (\$231,672). 2003-2004
- Co-Principal Investigator, Lake Victoria: Mukasa's Tear, with Mark Chandler, New England Aquarium. ISE-9627216 (\$998,368). 1996-2001
- Consultant, Seasons of Change, Brown University, ISE-0714744
- Consultant, Building Mathematics Momentum in Science Centers, Technical Education Research Center (TERC), DRL-0229782
- Consultant, Statistics for Action, TRRC, DRL-0812954

### **Institute for Museum and Library Services (IMLS)**

- Project Director, Our City, Final Design and Fabrication [MA-10-18-0013-18]. (\$250,000) 2018
- Project Director, PlaySpace [MA-10-17-0232-17]. (\$182,977) 2017
- Project Director, Our City, Concept Design [MA-10-16-0398-16]. (\$150,000.) 2016
- Project Director, Exhibit Lab, a Project of the Environmental Exhibit Collaborative [MP-00-11-0049-11]. (\$308,169.) 2011
- Project Director, EcoTarium Exhibit Masterplanning Implementation: Urban Exhibition: Planning Stage [MA-04-10-0280-10]. (\$59,573.) 2010
- Project Director, Audience Research for Environmental Exhibit Collaborative, EcoTarium. (\$146,711). 2004
- Project Director, Exhibit Master Planning for EcoTarium, EcoTarium. (\$74,870) 2003

### **Other Federal & State**

- Project Director, Pond Remediation and Exhibit Project, EcoTarium. Massachusetts Environmental Trust (\$30,000). 2004-2005
- Principal Investigator, Time and Tidepools: using computer time-lapse video to encourage audience engagement with a marine life exhibit, EcoTarium. MIT SeaGrant Subaward #5710001702 (\$25,000). 2004-2005
- Curriculum Developer, Marine Mammal Curriculum, New England Aquarium. Massachusetts Cultural Council (\$15,000). 1993-1994
- Curriculum Specialist, Partnership for Advancing Learning in Mathematics and Science (PALMS) New England Aquarium. Massachusetts Department of Education (\$17,000). 1993-1994
- Project Manager, Boston Public School Outreach Program, New England Aquarium. Massachusetts Cultural Council (\$11,220). 1990-1991

### **Selected Foundations**

- Project Director, The Arctic Next Door: Mount Washington/Top Floor Renovation, EcoTarium. Alden Trust (\$375,000), Hanover Insurance Group Foundation (\$1,000,000). Exhibit development and renovation of upper level of museum. Opened 2011.
- Project Director, Environmental Exhibit Collaborative, Jane's Trust (\$840,000) and Cabot Family Charitable Trust (\$133,256). Traveling exhibit collaboration with EcoTarium, Echo at the Leahy Center for Lake Champlain, Children's Museum of Maine and Musée de la nature et des sciences, (Sherbrooke, Québec), Acton Discovery Museums (Acton, MA). 2005-2007. Additional funding through IMLS.
- Project Director, Habitat Enhancement Project, EcoTarium. Boston Foundation (\$15,000). 2004-2006
- Project Director, Wayfinding and Perimeter Trail Project, Daniels Foundation (\$15,000) 2003-2005
- Project Director, TASC (Teen Action Science Crew), EcoTarium. Howard Hughes Medical Institute HHMI#51003421 (\$200,000). 2001-2005

## ***Publications:***

- Collaborative Structures: Many Ways, Common Paths, with Betsy Loring. *Exhibitionist*, the Journal of the National Association for Museum Exhibition/American Alliance of Museums, Spring 2012, 14-15.
- The One-Two Punch: Synergy Between Simulation Games and Other Interactive Elements in Exhibits, with Maureen McConnell. Chapter in: *Museums at Play: Games, Interaction and Learning*, Katy Beale Ed., Museums Etc., 2011.
- Connecting and Interacting: A Trip to the New Zoo, 2009. *Museums & Social Issues*, 4(2), 187-205.
- Insights: A Museum Learning Resource. Contributor to *Insights*, the proceedings of the In Principal, In Practice Conference, published on the web by the Institute for Learning Innovation, 2006 ([www.ilinet.org/ipip](http://www.ilinet.org/ipip)).
- Video Resources for In-depth Investigation of Pond Organisms, 2002–2004. Co-Principal Investigator with Bernie Zubrowski, Education Development Center. Funded by NSF [0137735]. Software and curriculum guide published by NeoSci, Nashua, NH.
- Energy and Shedding Light on Science, 1999–2002. Harvard/Smithsonian Center for Astrophysics, Science Media Group, Cambridge MA. Developed onscreen science demonstrations for teacher education video series syndicated by Annenberg Media, Washington, DC.
- Science Theater as an Interpretive Technique. Co-written with Dana Riley-Black. *National Association for Research in Science Teaching Annual Conference Proceedings*, 1999, Boston, MA. (ERIC accession number ED443709).
- Where in the World is Carmen Sandiego? *Newspapers in Education Curriculum*. 1993, 1995. Co-written with Ellen Davidson. Educational newspaper supplement, syndicated through *National Newspapers in Education Program & WGBH*, Boston, MA.
- *Marine Mammals: New England Aquarium Education Curriculum Guide*, 1994. New England Aquarium, Boston, MA.
- Where in the World is Carmen Sandiego? *Season II, Season III Geography Curriculum Guides*, 1992, 1993. Co-written with Ellen Davidson and Jim Hammerman. WGBH, Boston, MA.
- *New England Coastlines: New England Aquarium Education Curriculum Guide*, 1992. New England Aquarium, Boston, MA.
- *Geology in Action!* 1987. Developed with Stephan Cohen. Structural geology simulation software. Published by Que Software, Pleasantville, NY.
- *The Easthampton Star*, 1975-1979. Science columnist on local natural history and ecological topics.

## ***Selected Exhibit Projects:***

- Project Director, *PlaySpace*  
(4,400 sf permanent exhibition and gallery renovation. Opening 2020, Boston Children's Museum)
- Project Director, *What's for Dinner?*  
(2400 sf makeover of lunch room and STEAM kitchen. Opened 2016, Boston Children's Museum)
- Project Director, *Explore-A-Saurus*  
(2000 sf traveling exhibition. Opened 2016, Boston Children's Museum)
- Concept and Interactive Developer, *Images of Discovery*  
(3,400 sf art and interactive exhibition. Opened 2017, MIT Museum)
- Exhibit Director, *Time Machines: Stanley Greenberg and Daguerre's American Legacy*  
(750 sf temporary curated photography exhibitions. Opened 2013 and 2014, MIT Museum)
- Exhibit Director, *5000 Moving Parts*  
(3,400 sf curated kinetic art exhibition & companion hands-on process gallery. Opened 2013, MIT Museum)
- Project Director, *The Arctic Next Door: Mount Washington*  
(2,800 sf permanent exhibition and gallery renovation. Opened 2011, EcoTarium)
- Project Director, *SmartArt*  
(2000 sf traveling exhibit, Environmental Exhibit Collaborative. Opened 2008, EcoTarium)
- Project Director, *DinoTracks*  
(2000 sf traveling exhibit, Environmental Exhibit Collaborative. Opened 2007, EcoTarium)
- Project Director, *Attack of the Bloodsuckers!*  
(2000 sf traveling exhibit, Environmental Exhibit Collaborative. Opened 2006, EcoTarium)
- Project Director, *Tree Houses*  
(1200 sf traveling exhibit, Environmental Exhibit Collaborative. Opened 2005, EcoTarium)
- Project Director, *Turtle Travels*  
(2000 sf traveling exhibit, Environmental Exhibit Collaborative. Opened 2005, EcoTarium.)
- Project Director, *Secrets of the Forest*  
(1600 sf permanent exhibit, Phase one opened 2003, Phase Two opened 2009, EcoTarium)
- Conceptual Design/Lead Developer *New England Aquarium Exploration Center at Newport*  
(3000 sf exhibit center, Opened 2000, Newport, RI.)
- Project Director, *Wetland Gallery Enhancement*  
(100 sf exhibit enhancement. Opened 2000, New England Aquarium)
- Co-Principal Investigator, *Nyanja: Africa's Great Lake*  
(5000 sf traveling exhibit. Opened 2000, New England Aquarium. NSF [9627216])
- Lead Developer, *Charting the Coast of New England*  
(500 sf exhibit. Opened 1999, New England Aquarium)
- Lead Developer, *TOPEX/POSEIDON*  
(100 sf exhibit. Opened 1998, New England Aquarium, in collaboration with MIT and the Gulf of Maine Aquarium. NASA funding)
- Lead Developer, *Georges Bank*  
(2000 sf exhibit. Opened 1997, New England Aquarium. Now at the Sea Coast Science Center, Rye, NH)
- Lead Developer/Project Manager, traveling outreach exhibits:  
*Whale Day* (Opened 1992) and *Global Oceans* (Opened 1994)
- Additional exhibit development and/or evaluation for New England Aquarium:  
*Living Links, The Boston Harbor Room, Tropical Gallery, Edge of the Sea, Ponds, Everglades, The Mercury Story, Shark Cart and Biodiversity Cart.*

### ***Selected Conference Presentations:***

- *Enculturating Innovation*, 2012. Presenter at the New England Museum Association Annual Conference, Burlington, VT.
- *Models of Collaboration for Traveling Exhibitions*, 2004. Session chair and presenter at the New England Museum Association Annual Conference, Burlington, VT.
- *Biodiversity and Biophilea*, 2003. Paper presented at the Association of Science and Technology Centers Annual Conference, St. Paul, MN.
- *Animal Enrichment from the Audience Perspective*, 2001. Paper and panel presentation at the Association of Zoos and Aquariums Annual Conference, St. Louis, MO.
- *Youth Evaluating Exhibits: Charting the Way*, 2000. With Kerry Bronnenkant. Paper presented at the Visitor Studies Association Annual Conference, Boston, MA.
- *Interactive Exhibits for Aquarium Visitors and Other Animals*, 1999. With Kerry Bronnenkant. Paper presented at the Visitor Studies Association Annual Conference, Chicago, IL.
- *Watching the Audience*, 1998. With Dana Riley-Black. Poster Session, Visitor Studies Association Annual Conference, Washington, DC.
- *Constructivism Reshapes Exhibits and Programs*, 1993. With Ann Hornickal, Kathy Roth, Phelan Fretz. Paper and roundtable presentation at the Association of Science and Technology Centers' Annual Conference, Columbus, OH.
- *Pedagogy for the Future*, 1993. With Phelan Fretz. Paper presented at the Third International Aquarium Congress, Boston, MA.
- *Programs from the (cutting) Edge: Innovative Outreach*, 1992. Roundtable presentation, National Marine Educators Conference, Portland, OR.
- *The Root of the Question: Questioning Strategies for Teaching*, 1992. Workshop, New England Environmental Education Conference, Breadloaf, VT.
- *Museums and Schools*, 1992. Workshop, National Science Teachers Association Annual Conference, Boston, MA.
- *Logo Mapping Microworlds*, 1986. Presentation, MIT Logo '86 Conference, Cambridge, MA.
- *Using Logo In the Classroom*, 1985. Panel presentation, Lesley College Seventh Annual Computer Conference, Cambridge, MA.

### ***Professional Affiliations & Awards:***

- New England Museum Association, Member
- American Association of Museums, Member
- Association of Science and Technology Centers, Member
- New England Museum Association, Program Committee (2007)
- Massachusetts Marine Educators, Outstanding Marine Educator Award 1997
- Massachusetts Museum Educators Round Table, Steering Committee 1992-1994
- Boston Computer Society, Director of Logo Special Interest Group 1987-1988