

An Equal

START

Numeracy Education in Latin America
and the Caribbean

June 7 - 11, 2010
Inter-American Development Bank - Atrium
Washington DC

An Equal START Numeracy Education in Latin America and the Caribbean

Introduction

This art exhibit embodies the hope and aspiration that all students will gain a level of numeracy essential for successful participation in school, work and everyday life. Through the hands and eyes of the region's artists, we hope to bring attention to mathematics and natural science as foundational skills our children need. In today's knowledge-based societies, understanding basic numeric concepts and theories, and the capacity to structure and solve scientific questions, are more critical than ever. The mathematics and natural science skills that were once only required by few are now necessary to seek employment in today's global economy.

The artworks on exhibit were selected from over 250 pieces submitted by artists representing nineteen Latin American and Caribbean countries. A separate category was created for young Honduran art students who were inspired to conduct a numeracy art school project. All artworks highlight the importance of learning to think critically, and to make informed decisions based on scientific information.

The exhibition constitutes the visual launch of a new IDB effort focused on implementing policies that help children reach their full potential in mathematics and natural science. An accompanying expert seminar analyzes the status of numeracy education in the region, as well as the results of recent innovative initiatives.

This exhibit could not have come to life without the help and dedication of many people, and we thank the IDB Cultural Center, particularly Félix Angel and Elba Agusti, for their devotion and talent; their efforts have made this exhibit possible. The financial support of our sponsor, the government of Finland, through the IDB Knowledge Economy Fund, was essential. Finally, we thank the artists for their participation and for inspiring policy-makers, educators, parents, and children to get excited about mathematics and natural science.

Marcelo Cabrol
Chief of the Education Division

The works selected for this exhibition were chosen for their correlation with the main theme of the open call launched in February 2010 by both the IDB Cultural Center and the Education Division. As other artists advocate for more fashionable causes, the idea this time was to gather artworks which specifically raise awareness in our societies that education in Latin America and the Caribbean must narrow the gap that still exists in the areas of mathematics and natural sciences; a condition required to improve the quality and future of development.

The large interest in the call for proposals is encouraging, given that certain issues affecting the region – race, social equality, the environment, immigration, and human rights, to name a few – are brought up far more often for discussion. Advancement in the areas of mathematics and natural sciences does not command the same attention, reflecting a lack of attention to surpass the lowest established indicators tolerable in developed countries. For example, in Brazil and Mexico, 70 percent of students face difficulties performing routine tasks in mathematics, compared with 25 percent in the Organization for Economic Co-operation and Development countries. These realities make the work of the five artists included in the exhibition even more remarkable.

Alonso Durán Alfaro expresses an interest in geometry uniting mathematics and physics to create a topological universe where research and discovery associate with philosophy and speculation. Durán attempts to illustrate combined, oscillating movement in opposite directions, demonstrating a proficiency in digital technology that produces captivating results.

Silvia Elena Monge Puig conveys a concern for the lack of resources – physical, academic and technological – needed to meet the higher levels of education demanded by our times. Her expression is highly pictorial and visually enticing.



Susana Sulic explores the nature of scientific knowledge as possible truth, based on the genetic processes of chaos and order, the sometimes incomplete understanding of life as we know it, and the incomprehensible origins of DNA. French critic Jacques Leenhardt suggests that Sulic's images represent the most precise state of our beliefs and convictions, with an avalanche of pixels that suggest a photograph of the soul.

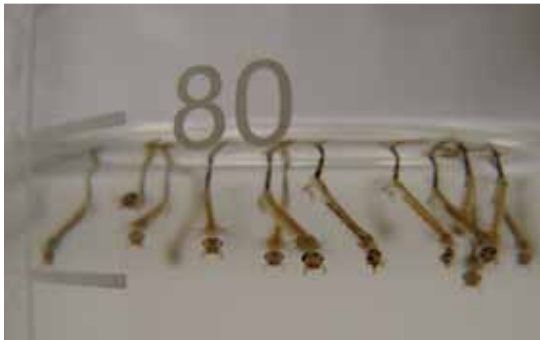
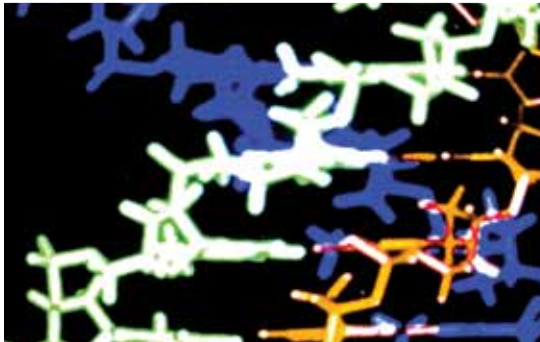
Alejandro Valencia Tobón centers his attention on the natural sciences, specifically tropical diseases like malaria and leishmaniasis, which are both transmitted through insects. His images combine didactic scientific knowledge expressed through artistically conceived imagery.

Jorge Alonso Zapata Sánchez evokes the need to teach mathematics and natural science in a didactic manner to keep younger generations motivated; as their desire for learning increases, they become more aware of the challenges ahead. His unusual works made out of scrap materials demonstrate a consciousness towards recycling resources.

Any open call is subject to surprises, and this event was no exception: from Tegucigalpa, Honduras, the private art school of Carolina Flores de Carias inspired students to participate in the contest. The result was 27 additional works presented to the selection panel. In appreciation for such a response, a separate category in the exhibit was established for the inclusion of the works by two of Mrs. Flores' students: José Manuel Matheu Sánchez (*Roots for a Better World*), and Andrea Kafati (*For a Better Future*).

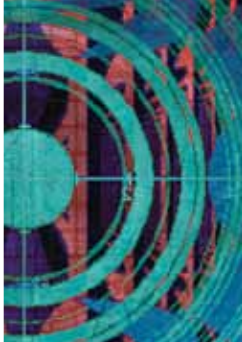
The IDB Cultural Center is pleased to have partnered with the Education Division of the IDB to implement this contest and exhibition. This exhibit affirms the Center's role as a vehicle to bring culture into the development discussion, and highlights one of the key areas in the IDB development and social agenda.

Félix Ángel
IDB Cultural Center



ALONSO DURÁN ALFARO alonsoduranarte@yahoo.com

Born May 31, 1965, Grecia, Costa Rica.
Received a Bachelor's degree in Art with emphasis in painting from the University of Costa Rica, and has taken courses in artistic photography at San Jose's Instituto Creativo. Previously he studied Chemical Engineering for three years at the University of Costa Rica.
He has exhibited individually at Amodeo Gallery (2008), Grau Gallery (2004), the Joaquin Garcia Monge Exhibition Hall (2003), the Costa Rican Science and Culture Center (2002), and the San José Hotel and Melico Salazar Theater (1995), all in San José, Costa Rica.
He lives in San José, working as a full time artist, and is a member of the board of the Costa Rican Association of Visual Artists.



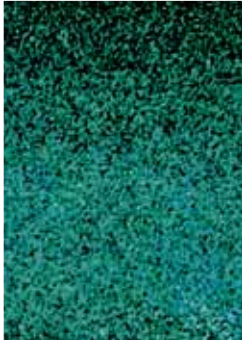
SILVIA ELENA MONGE PUIG semstudio@hotmail.com

Born in April 5, 1959, San José, Costa Rica.
Studied Architecture for three years (1977-79) at the Autonomous University of Central America in San José. She has taken a number of independent courses in drawing, painting, sculpture, ceramics, and glasswork in Miami's Ceramic League and South Art Center, and workshops in Spain, India, Mexico, and Peru.
She has been an instructor at the Ceramic League of Miami, the Art Institute of Miami, and the Nueva Escuela de Artes Visuales in San José, Costa Rica.
She has exhibited individually at the Center for Science and Culture, National Gallery of San José (2009); Casa España (1998); National Theater (1991), all in San José; and at San Diego University (CA, 1986). She lives in San José.



SUSANA SULIC sulicsu@hotmail.com

Born in 1959, Buenos Aires, Argentina.
Art researcher and professor of Fine Arts. Studied art at ENBA Prilidiano Pueyrredón and Sociology at UNBA, Argentina. Received a DEA in Contemporary Art History from the Sorbonne in Paris, a Diploma in Graphics from the Kunstakademie of Düsseldorf, and a Doctorate in Aesthetics and New Technologies of the Image from the University of Paris VIII (1996). Exhibitions include ArtexArte Foundation, Buenos Aires (Argentina, 2009); Siggraph, Global Eyes Gallery, San Diego (CA, 2007); Le Cube, Issy (France, 2006); Genom Expo, Cité des Sciences e de l'Industrie, La Villete, La jeune Création (France, 2002); Saint Charles di Rosa, and Alyskeywtz galleries (Paris, 2001); and has participated in numerous multimedia and collective events in Argentina, Spain, France, Italy, Switzerland, Taiwan and the United States.



ALEJANDRO VALENCIA TOBÓN alejandrovalenciat@gmail.com

Born April 7, 1986, Medellin, Colombia.
Graduated as a Biologist at the University of Antioquia (2009). Participated in the first interactive course on Vector Biology and Control (USAID/PECET, Programa de Estudio y Control de Enfermedades Tropicales, 2009); and took a course in film appreciation through language at Yurupay (2008).
He has presented his work on "Leishmaniosis and Society" in communities of the Colombian states of Antioquia, Tolima and Choco (2009); and on "Diptera: Psychodidae" at La Habana, Cuba (2007) and Cartagena, Colombia (2007).
He currently works as Associate Researcher at the Study and Control of Tropical Diseases Program (PECET) of the University of Antioquia. He lives in Medellin.



JORGE ALONSO ZAPATA SÁNCHEZ jorgezap@colombia.com

Born September 18, 1965, San Vicente Ferrer (Antioquia), Colombia.
Studied for six months at the Faculty of Industrial Design of Bolivariana University; and Graphic Design for two years at the School of Fine Arts, both in Medellin.
He has had solo exhibitions at Medellin's Palace of Culture (2008); at Café Literario (2008); at the exhibit hall of Medellin University (2008); at Ceres Bar (2007); and Forjar Foundation (2006), all in Medellin.
He works as a full time artist, and lives in Medellin.



SPECIAL CATEGORY FOR STUDENTS

Private Art School Carolina Flores de Carias – Cultural circuit. Tegucigalpa, Honduras.

José Manuel Matheu Sánchez
Roots for a Better World
20 x 16 inches



Andrea Kafati
For a Better Future
17.5 x 27.5 inches



List of Works



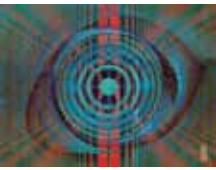
Alonso Durán Alfaro
Trigonometric Inequalities 1
2003
Digital Prints
28.7 x 47.2 inches



Alonso Durán Alfaro
Trigonometric Inequalities 2
2003
Digital Prints
31.5 x 47.2 inches



Alonso Durán Alfaro
Trigonometric Inequalities 6
2008
Digital Prints
35.4 x 47.2 inches



Alonso Durán Alfaro
Trigonometric Inequalities 8
2008
Digital Prints
35.4 x 47.2 inches



Silvia Elena Monge Puig
Flying High
2010
Acrylic on canvas
36 x 36 inches
Photo: Rodrigo Rubí



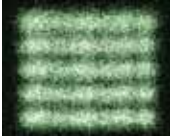
Silvia Elena Monge Puig
Education
2010
Acrylic on canvas
36 x 36 inches
Photo: Rodrigo Rubí



Susana Sulic
Formal Cloning Series
1997-09
Variable dimensions



Susana Sulic
Formal Cloning Series
1997-09
Variable dimensions



Susana Sulic
Formal Cloning Series
1997-09
Variable dimensions



Susana Sulic
Formal Cloning Series
1997-09
Variable dimensions



Susana Sulic
DNA Project
1997-09
Variable dimensions



Susana Sulic
DNA Project
1997-09
Variable dimensions



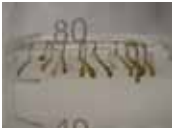
Susana Sulic
DNA Project
1997-09
Variable dimensions



Susana Sulic
Chain Without Ending
DNA Project
1997-09
Variable dimensions



Alejandro Valencia Tobón
Protagonist Insects
2010
Photograph
15.7 x 19.7 inches



Alejandro Valencia Tobón
Protagonist Insects
2010
Photograph
15.7 x 19.7 inches



Alejandro Valencia Tobón
Movements
2010
Video
1'33"



Jorge Alonso Zapata Sánchez
Mathematics: Mother of All Sciences
2010
Assembled and colored numbers on paper
28.3 x 40.9 inches



Jorge Alonso Zapata Sánchez
Natural Soup of Letters
2010
Assembled and colored letters on paper
28.7 x 40.9 inches



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Inter-American Development Bank Social Sector Department Education Division

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