



Smithsonian

National Museum of American History Kenneth E. Behring Center

Guide to the Jose L. Hernandez- Rebollar Innovative Lives presentation

NMAH.AC.0917

Alison Oswald.

2007

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Collection Overview

Repository:	Archives Center, National Museum of American History
Title:	Jose L. Hernandez-Rebollar Innovative Lives Presentation
Date:	2005 August 3
Identifier:	NMAH.AC.0917
Creator:	Hernandez-Rebollar, Jose L. Jerome and Dorothy Lemelson Center for the Study of Invention and Innovation.
Extent:	0.25 Cubic feet
Language:	English .
Summary:	Jose L. Hernandez-Rebollar was born in the state of Puebla in Mexico. He is the inventor of the AcceleGlove, a prototype device which can translate the alphabet and over 300 words into American Sign Language. The collection contains original and reference audio cassettes of Dr. Rebollar's presentation, "The Process of Invention: The AcceleGlove," a transcript of the presentation, photocopies of his power point presentation slides, and a CD-ROM containing digital images taken at the presentation.

Administrative Information

Acquisition Information

Transferred by Jerome and Dorothy Lemelson Center for the Study of Invention and Innovation, January 30, 2006.

Provenance

The collection was made for the Innovative Lives Program of the Jerome and Dorothy Lemelson Center for the Study of Invention and Innovation at the National Museum of American History on August 3, 2005.

Processing Information

Processed by Alison L. Oswald, January 2006.

Preferred Citation

Jose L. Hernandez-Rebollar Innovative Lives Program, Archives Center, National Museum of American History, Smithsonian Institution.

Restrictions

The collection is open for research use.

Conditions Governing Use

Collection items available for reproduction, but the Archives Center makes no guarantees concerning intellectual property rights. Archives Center cost-recovery and use fees may apply when requesting reproductions.

Biographical / Historical

Dr. Jose L. Hernandez-Rebollar was born in the state of Puebla in México. He completed his B.S. in electronics at Benemérita Universidad Autónoma de Puebla in 1993 and received his masters in Electronics Engineering from the Instituto Nacional de Astrofísica, Óptica y Electrónica (National Institute of Astrophysics, Optics and Electronics) in 1997. In 1998, Dr. Rebollar obtained a Fulbright scholarship to pursue a Ph.D. at The George Washington University. He was awarded his Ph.D. in Science in Electrical Engineering in 2003. He majored in Signals and Systems with a minor in Micro-Electro-Mechanical Systems (MEMS) and Bioelectronics.

Dr. Rebollar's invention, an electronic glove, called the AcceleGlove, can turn American Sign Language (ASL) gestures into spoken words or text. The glove is placed on the hand and strapped to the arm, allowing sensors on the glove to generate signals from the movement, orientation, and positioning of the hand and the fingers in relation to the body. These signals are analyzed by a micro-controller to find the position of the fingers and hand trajectory. The AcceleGlove translates the alphabet and over 300 words in American Sign Language.

The Jerome and Dorothy Lemelson Center for the Study of Invention and Innovation was founded in 1995 at the Smithsonian Institution's National Museum of American History through a generous gift from the Lemelson Foundation. The Center's mission is: to document, interpret, and disseminate information about invention and innovation; to encourage inventive creativity in young people; and to foster an appreciation for the central role invention and innovation play in the history of the United States. The Innovative Lives series brings together Museum visitors and American inventors to discuss inventing and the creative process and to experiment and play with hands-on activities related to each inventor's product. This collection was created by the Innovative Lives Program of the Jerome and Dorothy Lemelson Center for the Study of Invention and Innovation.

Scope and Contents

Collection documents Dr. Jose L. Hernandez-Rebollar's invention prototype of the AcceleGlove. In his power point presentation *The Process of Invention: The AcceleGlove*, Rebollar discusses his childhood in Mexico and his educational background, emphasizing his Ph.D. work on the AcceleGlove at The George Washington University. Dr. Rebollar describes his research and his attempt to solve communication and translation problems associated with turning American Sign Language into spoken words and text. Rebollar also discusses American Sign Language and its applications. A demonstration of the AcceleGlove is given. The presentation concludes with a question and answer period.

Series 1: Original Audio Cassettes, 2005, is one audio cassette recording of Dr. Rebollar's Innovative Lives Presentation on August 3, 2005. The recording is approximately 70 minutes.

Series 2: Reference Audio Cassettes, 2005, contains copies of Dr. Rebollar's Innovative Lives Presentation on August 3, 2005.

Series 3: Transcript of presentation, August 3, 2005

Series 4: Digital Images, 2005, consists of one CD-ROM containing 46 digital images (jpeg files) documenting Dr. Rebollar's Innovative Lives Presentation. The digital images were taken by Richard Straus of Smithsonian Photographic Services.

Series 5: Power Point Slides contains two photocopied sets of the twenty-one slides used during Dr. Rebollar's power point presentation The Process of Invention: The AcceleGlove.

Arrangement

Collection is divided into five series.

Series 1: Original Audio Cassette, August 3, 2005

Series 2: Reference Audio Cassettes, 2005

Series 3: Transcript of Presentation, August 3, 2005

Series 4: Digital Images, 2005

Series 5: Power Point Slides, 2005

Names and Subject Terms

This collection is indexed in the online catalog of the Smithsonian Institution under the following terms:

Subjects:

- American Sign Language
- Inventions -- 21st century
- Inventors -- 21st century
- Language and languages
- Self-help devices for people with disabilities
- Sign language

Types of Materials:

- Audiocassettes
- CD-ROMs
- Digital images
- Slides (photographs)
- Transcripts

Container Listing

Series 1: Original Audio Cassette, 2005

Box 1, Folder 1,
Cassette OTC 917.1

Jose Hernandez-Rebollar Innovative Lives Presentation, 2005 August 3

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Series 2: Reference Audio Cassettes, 2005

Box 1, Folder 2,
Cassette RTC 917.1

Jose Hernandez-Rebollar Innovative Lives presentation, 2005 August 3

Box 1, Folder 2,
Cassette RTC 917.2

Jose Hernandez-Rebollar Innovative Lives presentation, 2005 August 3

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Series 3: Transcript of Presentation, 2005 August 3

Box 1, Folder 3

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Series 4: Digital Images, 2005

Box 1, Folder 4, Disk CD-ROM
[Image\(s\)](#)

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Series 5: Power Point Slides, 2005

Box 1, Folder 5
[Digital Content](#)

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