



Get your Consumer Health Information from an Avatar!

Guus van den Brekel
Central Medical Library. University Medical Center
Groningen. The Netherlands

EAHIL Workshop Krakow, September 11-15th 2007

Diabetes

Do you know the warning signs?

Get Real!

You don't have to knock yourself out to prevent diabetes.

It's about taking small steps: losing 10 to 15 pounds if you weigh 200 pounds, walking briskly for 30 minutes most days, and making healthy food choices.

It's about big rewards: living a longer and healthier life—and avoiding serious health problems such as heart attacks, strokes, blindness, kidney failure, or amputation.

Take the first step today. If you're over 45 and overweight, you may be at high risk for diabetes. Talk to your health care provider today. For free information about preventing diabetes, call 1-800-438-5383.



A message from the National Diabetes Education Program, sponsored by the National Institutes of Health and the Centers for Disease Control and Prevention.



How to Prevent or Delay Diabetes
The National Diabetes Education Program (NDEP) is a partnership between the National Institutes of Health (NIH) and the Centers for Disease Control and Prevention (CDC). NDEP is dedicated to helping people understand and prevent diabetes. For more information, visit www.nidk.nih.gov or call 1-800-438-5383.



Let's prevent diabetes and its complications

Common Diabetes Facts For You

Type 1 Diabetes

Type 1 diabetes is an autoimmune disease in which the body's immune system attacks the insulin-producing cells in the pancreas. It is most often diagnosed in children and young adults. About 5% of people with diabetes have Type 1 diabetes. The body does not produce enough insulin to keep blood sugar levels in the normal range. People with Type 1 diabetes must take insulin every day to live.

Type 2 Diabetes

Type 2 diabetes is the most common type of diabetes, accounting for about 90% of all cases. It is often diagnosed in middle-aged and older adults. The body does not produce enough insulin or the cells do not respond properly to the insulin that is produced. People with Type 2 diabetes can often manage the disease with diet, exercise, and oral medications. However, some people may need insulin.

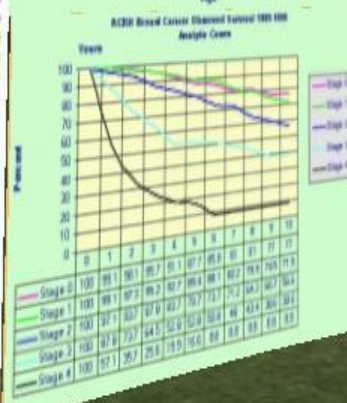
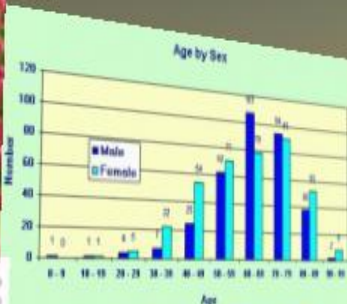
Diabetes Complications

High blood sugar levels can lead to serious complications over time, including heart disease, stroke, kidney failure, blindness, and nerve damage. These complications can often be prevented by keeping blood sugar levels under control through diet, exercise, and medication.

Prevention and Management

For Type 2 diabetes, lifestyle changes such as losing weight, eating a healthy diet, and exercising regularly can help prevent or delay the disease. For both types, regular medical checkups and blood sugar monitoring are essential for managing the condition.





Stroke References

American Heart Association. (2007a). Statistical Fact Sheet Populations 2007 Update: American Indians/Alaska Natives and Cardiovascular Diseases-Statistics. Retrieved July 26, 2007 from <http://americanheart.org/downloadable/heart/1168553154544F502AMN07.pdf>

American Heart Association. (2007b). Statistical Fact Sheet Populations 2007 Update: African Americans and Cardiovascular Diseases-Statistics. Retrieved July 26, 2007 from <http://americanheart.org/downloadable/heart/1168611462350AFAM07.pdf>

American Heart Association. (2007c). Statistical Fact Sheet Populations 2007 Update: Hispanic/Latinos and Cardiovascular Diseases-Statistics. Retrieved July 26, 2007 from <http://americanheart.org/downloadable/heart/1168553375037HSP07.pdf>

American Stroke Association. (2007a). Impact of stroke templates between 2000 and 2006. Retrieved July 10, 2007 from <http://strokeassociation.org/presenter.cfm?id=1033>

American Stroke Association. (2007b). Stroke facts. Retrieved July 10, 2007 from <http://strokeassociation.org/presenter.cfm?id=478>

CDC. (2005). Age-adjusted percentage with doctor-diagnosed selected chronic diseases among persons 18 years of age and over, by selected characteristics: United States, 2005. Summary Health Statistics for U.S. Adults: National Health Interview Survey, 2005. Data from the National Health Interview Survey. http://www.cdc.gov/nchs/data/whi/2005_20.pdf

Rosenfield, W., Flegal, K., Gray, S., Flegal, K., & Greenlund, K. (2007). Heart Disease and Stroke Statistics-2007 Update: A Report from the American Heart Association Statistics Committee and Stroke Statistics Committee. Circulation, 115, e52-107.

U.S. Department of Health and Human Services. The office of minority health (2007). <http://www.omh.gov>

Hispanics/Latinos

- 3.1% of men and 1.9% of women 20 and older have had a stroke
- The 2003 stroke death rate for Hispanic/Latinos males was 43.0 and 38.1 for females
- The BASIC study demonstrated an increased incidence of stroke among Mexican Americans compared to whites. The study cumulative incidence rate was 168/10,000 in Mexican Americans and 136/10,000 for whites
- 74.0% of men and 73.0% of women 20 and older are overweight or obese
- 11.0% of men and 10.9% of women that are Mexican American and are 20 and older have physician diagnosed diabetes (AHA, 2007c)

African Americans

- Blacks have twice the risk of first ever stroke compared with whites
- Data from the GCKSS study show that ischemic stroke patients tend to be younger, black, diabetic, hypertensive, myocardial infarction, and have high cholesterol than non-diabetic patients
- Compared with whites, blacks develop HSP earlier in life and their average BP is higher. As a result, compared with whites, blacks have a 1.3 times greater rate of nonfatal stroke and a 1.6 times greater rate of total stroke



Prepared by
Diversity Con
Public Health

STROKE

Are You Susceptible?



Stroke in Racial and Ethnic Minorities

- Stroke is the 3rd lead and the most common ability (ASA, 2007a)
- About 700,000 American or recurrent stroke (A 2007)
- Strokes kill more than 200,700 a & Rosamond

Do you know the warning signs of a stroke?

Click here for a notecard !

Risk Factors

Age

After age 55, the chances of having a stroke doubles. Although strokes are common among the elderly, people under 65 also have strokes (ASA, 2007b).

Heredity

Stroke risk increases when a person's parent, grandparent, sister or brother have had a stroke.

Sex (Gender)

Strokes are more common among men than women, regardless of age (ASA, 2007b). Although more men have strokes than women, women are more likely to die from strokes (ASA, 2007b). ~46,000 more women have a stroke each year more than men (Rosamond et al, 2007).

Race/Ethnicity

African American men and women are at greater risk of dying from a stroke than Whites (ASA, 2007b). In 2004, 73.9% of African American male deaths were due to strokes compared to White males at 48.1% (ASA, 2007b).

Diet

Diets high in saturated fat, trans fat and cholesterol can raise blood cholesterol levels. Increased amounts of sodium can contribute to high blood pressure. Diets containing five or more servings of fruits and vegetables per day may reduce the risk of stroke (ASA, 2007b).

High Blood Pressure

High blood pressure is the most controllable risk factor of stroke. Researchers believe the effective treatment of high blood pressure can decrease stroke deaths (ASA, 2007b).

Diabetes Mellitus

Diabetes is an independent risk factor for stroke. Many people with diabetes also have high blood pressure. While diabetes is treatable, the presence of the disease increases a person's chance of stroke (ASA, 2007b).

Tobacco Use

Cigarettes are an important risk factor for stroke. Studies have shown that the use of nicotine and carbon monoxide in cigarette smoke can damage the cardiovascular system.



- Consumer Health Grant
- Second Life
- HealthInfo Island
- Accomplishments
- Cooperation
- Medical Sims
- Observations & the Future

The background image depicts a virtual world environment. A tall, cylindrical, transparent building stands prominently, revealing multiple interior levels with various objects and avatars. The building's exterior is composed of a grid of green-tinted rectangular panels. The surrounding landscape features rolling green hills, a body of water in the distance, and a sky with a bright, low sun creating a warm orange and yellow glow. In the foreground, there are several colorful, semi-transparent spheres (green, blue, yellow) and a small, dark, rectangular object. The overall scene has a soft, hazy atmosphere typical of early virtual world graphics.

“Providing Consumer Health Outreach and Library Programs to Virtual World Residents in Second Life”

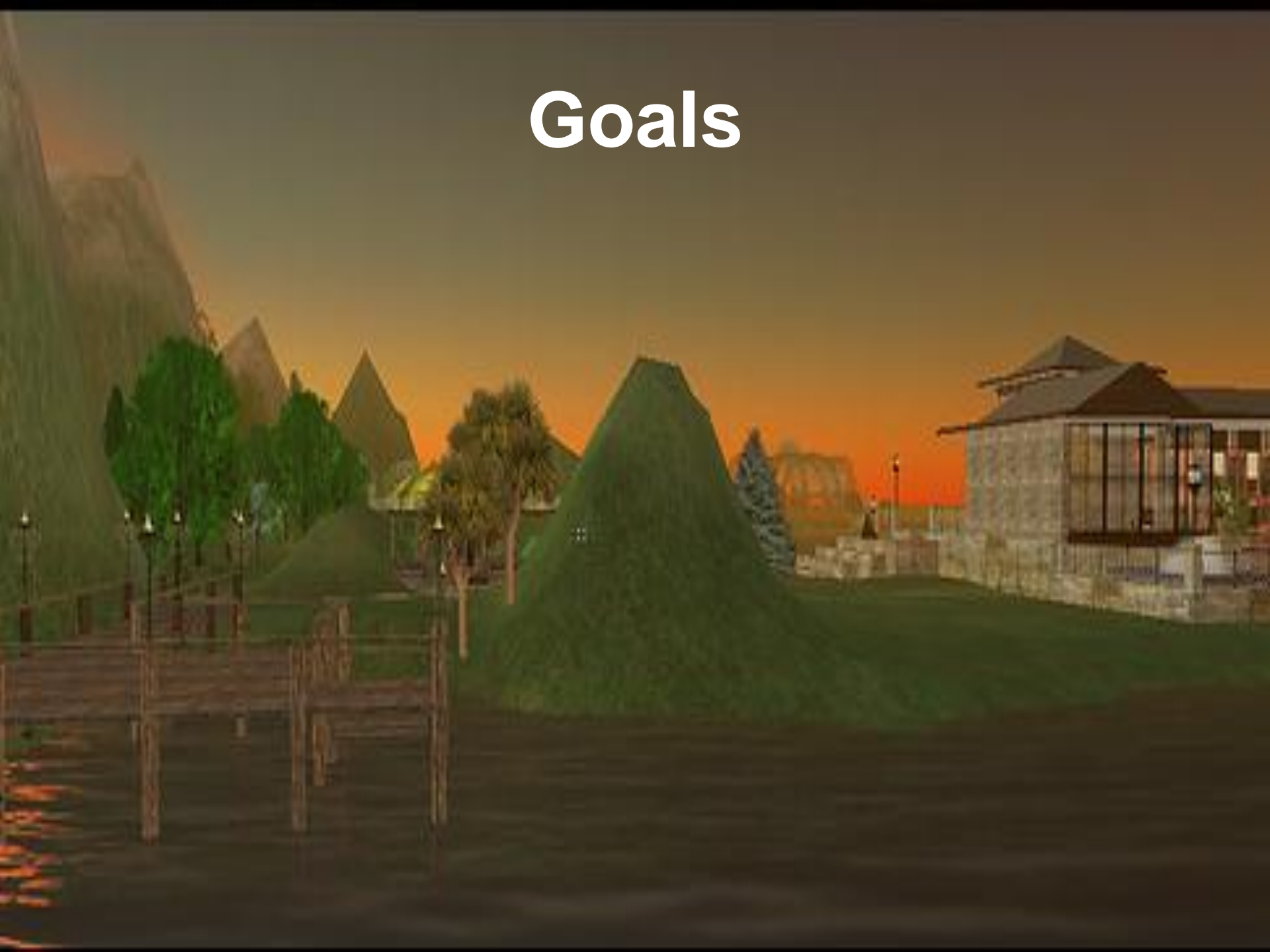
Alliance Library System Receives Grant to Provide Consumer Health Information Services in Virtual World

The Alliance Library System (ALS) is pleased to announce that the **National Library of Medicine/Greater Midwest Region** has awarded ALS a \$40,000 grant to provide consumer health information services in the virtual world of Second Life. ALS is working on the project in partnership with the **University of Illinois Library of the Health Sciences-Peoria**, **Central Medical Library, University Medical Center Groningen (UMCG)** in the Netherlands, and **TAP Information Services**.

Second Life (<http://www.secondlife.com>) is a booming virtual world with over ~~1~~ **9** million residents.

"By providing reliable information to people at the point-of-need we hope that consumers will make better informed decisions that will affect their health care and quality of life."

Goals



- Explore and research practices of health information transfer
- Provide reliable information at the point-of-need



Why in Second Life and ... what is it?



Second Life =

Massive Multi-User Online
Roleplaying “Game”

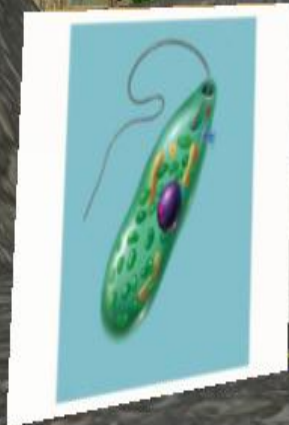
More than a game, meet
others

Interact, Compete,
Collaborate

Teaching & learning; social
learning

Virtual communities

Go anywhere, do anything





Source: Iseldora's Photos. All Rights Reserved. <http://www.flickr.com/photos/childlit513/>



Second Life : some figures



250.00 Residents in March 2006!

And now ..

Total Residents:	9,381,825
Logged In Last 60 Days:	1,551,313
Online Now:	27,518
US\$ Spent Last 24h:	<u>\$1,141,357</u>
LindeX Activity Last 24h:	<u>\$222,673</u>

Appearance

Body Parts

Shape

Skin

Hair

Eyes

Clothes

Shirt

Pants

Shoes

Socks

Jacket

Gloves

Undershirt

Underpants

Skirt

New New NEwNamro2

Located in /My Inventory/Body Parts

Body

Head

Eyes

Ears

Nose

Mouth

Chin

Torso

Legs

Female

Male

Randomize

Short

Tall

Height

100

Body Thin

Body Thick

Body Thickness

100

Save

Save As

Revert

Make Outfit

Save All

Close

DONATE LIFE

Namro Orman

(Editing Appearance)

Profile

2nd Life

Web

Interests

Picks

Classified

1st Life

My Notes

Name: Namro Orman

Currently Online

Photo:

Born: 4/22/2006

Account: Resident

Payment Info Used

Partner: ?

Groups:

Member of Assitive Technology

Member of BrainTalk Communities Incorporated

Member of Consumer Health Librarian

Member of eLumenata Educational Research

Member of Good Samaritan Group

About: (500 chars)

Namro Orman, in real live Coordinator electronic Services of the Central Medical Library of the University Medical Center Groningen (UMCG) in the Netherlands. AI, Communication, Virtual environments, gadgets, widgets, modules, User environent, getting into the flow, medical information and related subject, clinical, educational

Give item:

Drop inventory item here.

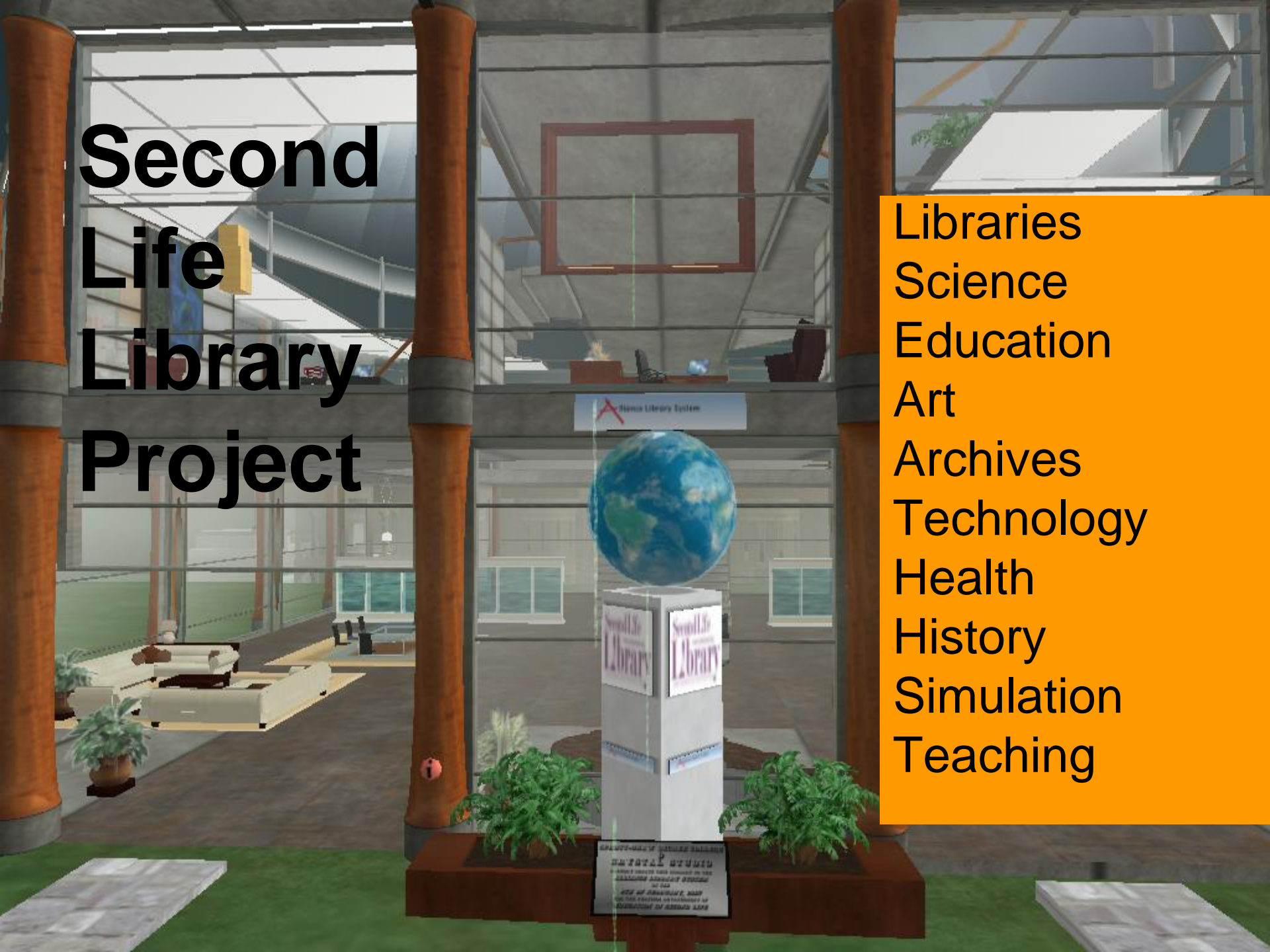
☒ Publish on the web ?

OK

Cancel

Second Life Library Project

Libraries
Science
Education
Art
Archives
Technology
Health
History
Simulation
Teaching





Info Island

All Islands



Alliance Building

Bell Library

Genealogy

Holodeck

ICT

Library Gallery

Main Library

Mystery Manor

Open Air Theatre

Religious Resources

SciFi-Fantasy

TechSoup.org

Training

Welcome Area

World Bridges

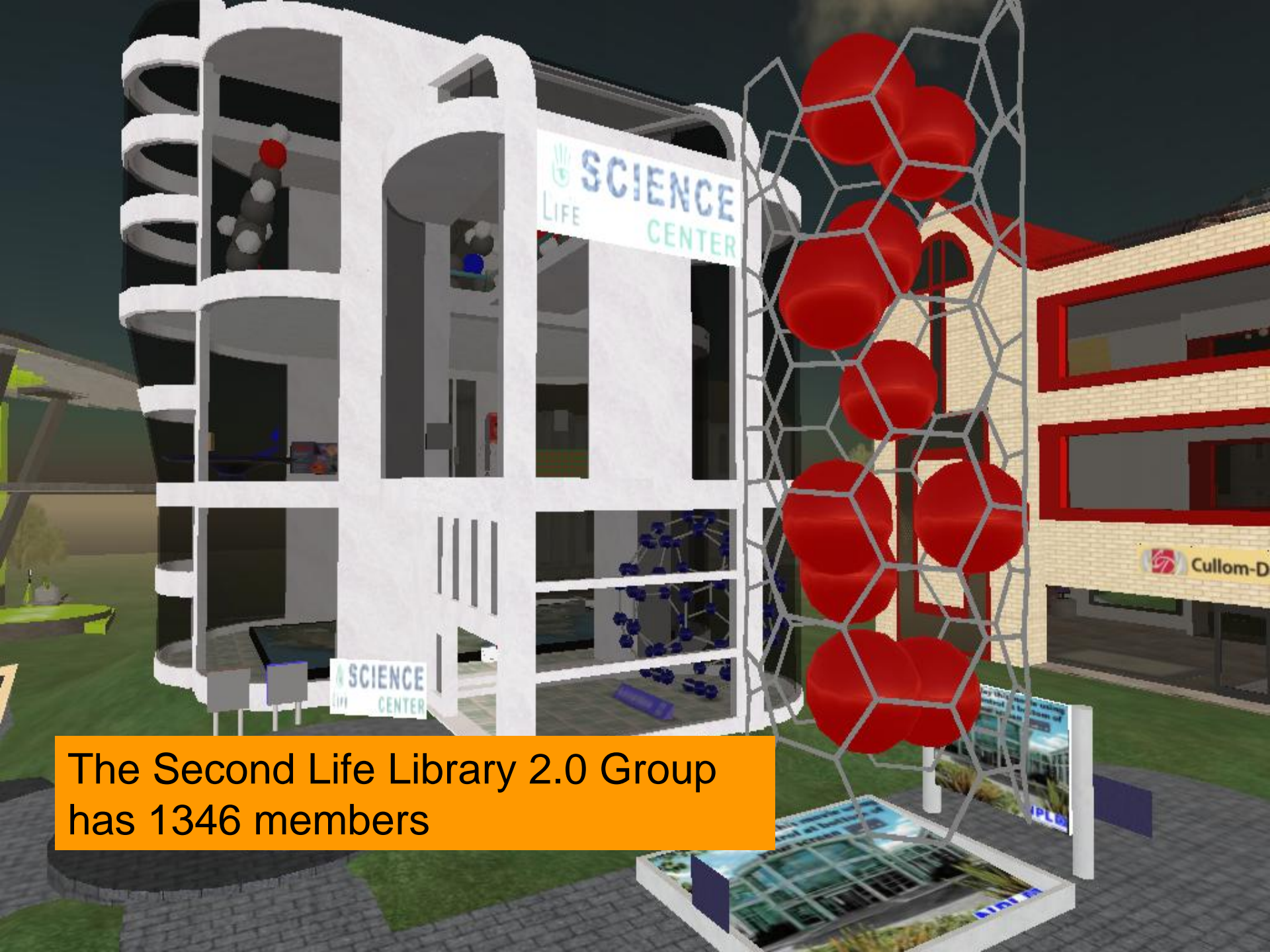


Technology Place for Nonprofits

[Flickr: SL Library](#)

INFOISLAND Archipelago

www.infoisland.org



The Second Life Library 2.0 Group
has 1346 members

THIS NEW CONTINENT WOULD HAVE ITS OWN MYSTERY AND CHARM, PUZZLING
PHENOMENA THAT WE ENCOUNTERED RIGHT FROM THE GET GO AND ITS OWN UNIQUE
ECOSYSTEMS AND TOPOGRAPHICAL LAYOUT. TRUE, MANY OF THE PLANTS AND ANIMALS
LOOK IDENTICAL TO THOSE FOUND ON THE MAINLAND, THAT DOESN'T
WARRANT ME. THE ISLAND IS RELATIVELY CLOSE. WHY, THE EAST NORTHERN TIP
THE NEW CONTINENT AT YUKIN (232, 170, 22) IS JUST UNDER 11,000 METERS
THE MAINLAND, ONLY ABOUT 2 KILOMETERS. IT TAKES A LOT OF ENERGY TO
OF THIS WORLD.

IF THE NEW CONTINENT WILL MOVE AT ALL? ONE NEVER KNOWS WITH
UNPREDICTABLE PLATE TECTONICS FOLKS HAVE WITNESSED IN THE PAST. IT
UP RIGHT NEXT TO THE MAINLAND. WE'LL HAVE TO WATCH IT.

IF BEING SETTLED DO INDEED LOOK FAMILIAR. IT COULD BE AN INFLUX
OF TRULY UNIQUE RESIDENTS MOVING ON. IT MAY BE WHILE
THINGS OR MORE ESTABLISHED RESIDENTS THERE, IN TERMS OF A LARGE SCALE
NATURAL OR OTHERWISE). WILL ANY AREA DEVELOP THERE? OR WILL IT
BE UNORGANIZED LOT? WILL ANY AREA REMAIN FORESTED? WILL
WHO DECIDE TO LIVE IN SUBVERSIBLE ENVIRONMENTS? HARD TO
BEEN A WEEK. THE THING IS THERE ARE PEOPLE THERE, AND THEY
OWN SPIN ON THINGS. CHECK BACK IN TWO YEARS AND SEE WHAT

WHAT IS THE POINT IN GOING TO LOOK AT IT?
BECAUSE IT'S THERE.



AllianceLibrary Google discussion
group: 584 members



*HealthInfo
Island*



SL Consumer Health Library

Research

**research into benefits and effectiveness of “delivering”
Consumer health Information in the Second Life
environment**

evaluate effectiveness also based on:

- **gathered statistics**
- **different training techniques**
- **interviews, meetings & surveys**

**emphasis placed upon empowering individuals to make
informed lifestyle and health decisions**

Public Health Games .Health Fitness Co-op...Men's Health
.Sacred Heart Hospital Real Mental Health...MD Kiosk
National Institutes of Health .Positive Mental Health Psychosis
and Depression.... Prostate Cancer Support Alternative Health
Club....Foundation for Diabetic Children.... Cancer Co-Op
Virtually You! Center for Health and Wellness .NicoBloc Stop
Smoking Exhibition Broken Silence - Domestic Violence
Resource Center....Centers for Disease Control and Prevention
(CDC) test site...New Babbage Medical League Prostate Cancer
Research Foundation Master Physicians Honor Corps Old
Time Medical Clinic Depression Support...AIDS and HIV
HELP Group....Dreams The Leukemia & Lymphoma
Society Alcoholics Anonymous Breast Cancer
Awareness Second Life Relay For Life Alternative
Cancer Support Expert Breast Cancer Awareness
Center and Why Not? Shop Support Diabetes
Friends MS Support Group Fibromyalgia

Central Medical Library, UMCCB Digitalib.blogspot.com



Press ESC to leave Mouselook.

Info Island II 235, 228, 28 (PG) - Info Island II
Maxito Ricardo



Carolina Keats: sorry there's not much time
Maxito Ricardo: Yes, I'm still thinking about how to pursue the eval



Carolina Keats's 'Smart Cigarette'

What kind of information about smoking do you need or want?.

- 1) How to quit
- 2) information about the effects of smoking
- 3) Flash tutorial on smoking
- 4) What happens when I quit?
- 5) Research, news, and clinical trials about

7

8

4

5

6

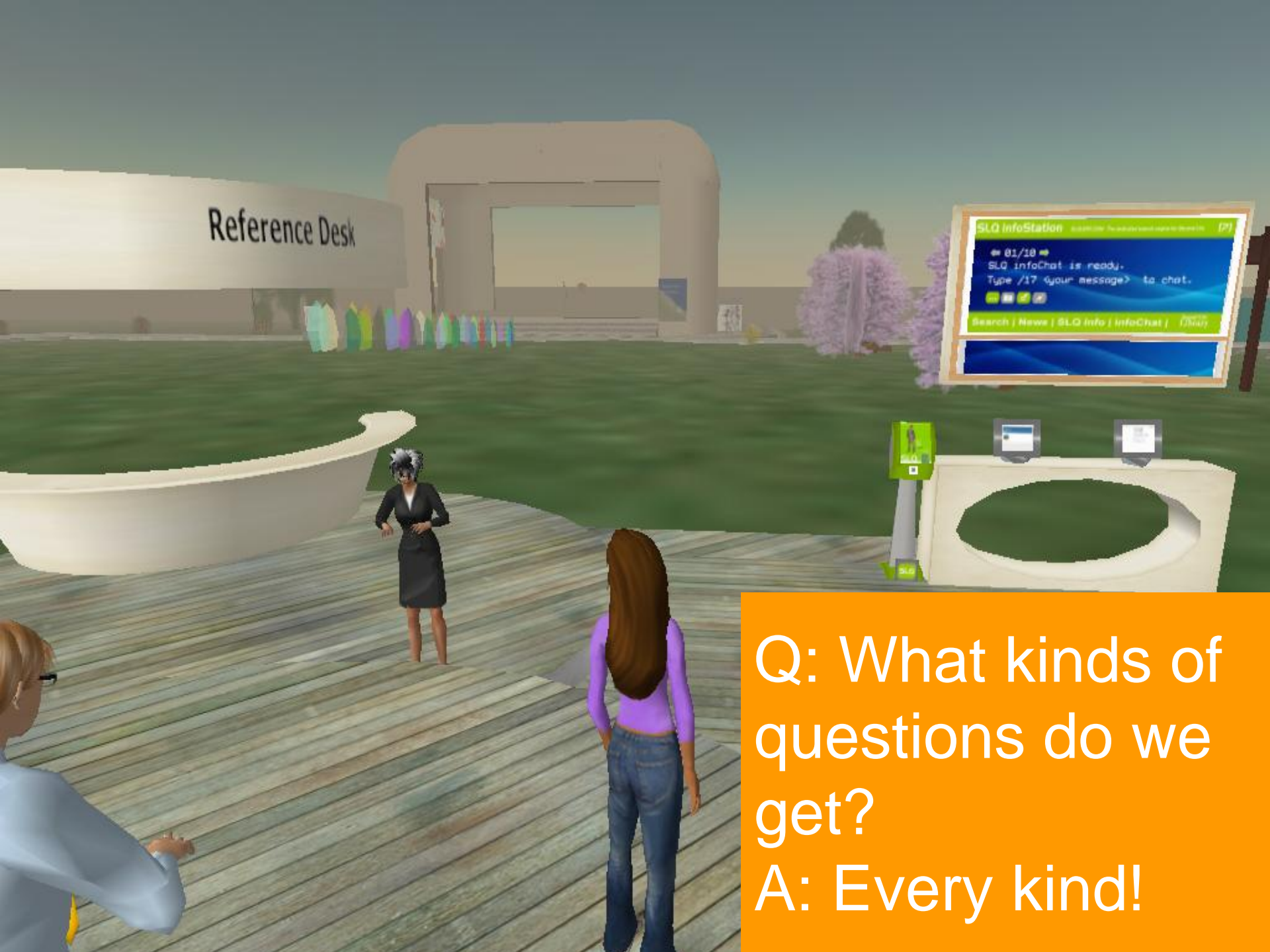
1

2

3

Ignore





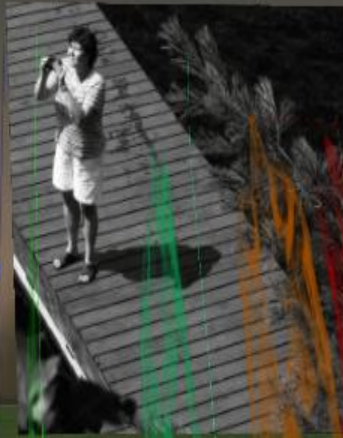
Q: What kinds of questions do we get?

A: Every kind!

consider us



discover us



Head Space
Stroll through a human brain



grow with us



remember us





**Types
of Color Vision
or Color Blindness**

Trichromacy

Anomalous Trichromacy

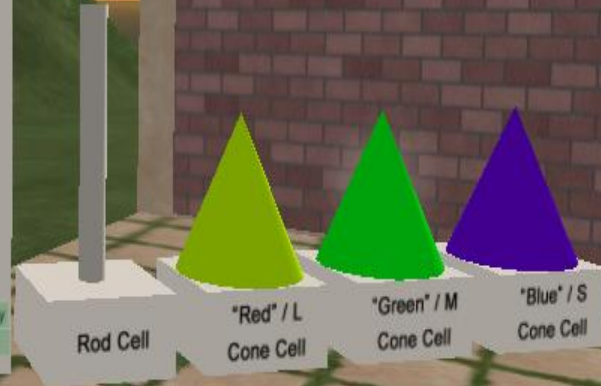
- Protanomaly
- Deuteranomaly
- Tritanomaly

Dichromacy

- Protanopia
- Deuteranopia
- Tritanopia

Monochromacy

- Blue Cone Monochromacy
- Rod Monochromacy



[illegible]



Identifying existing support groups in Second Life

Starting Outreach & meetings

One-to-One Consumer Health Reference

Health Displays and Events

PubMed Search in world (Medical Library)

Consumer Health Survey

Collecting and presenting quality consumer health resources

An experiment with artificial intelligence (AI) and Chatbot-technology, dubbed 'Healthy'



Workshops on the evaluation of health information
on the internet

Trial access to EBSCO's Consumer Health
Database & Reuters Consumer Health News & with
Workshops on the Consumer Health Database

Automated Tours of the Island with information
about specific services and events

Inworld RSS-feeds for several medical subjects
from PubMed, Reuters Health News etc



Second Life Library Accessibility Center

THE
EXT
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left side
window
size
right

THIS ACCESSIBILITY
CENTER HAS BEEN
ENERGICALLY FINANCED BY
The Long
Library of Medicine
University of
UC
WORLD
WORLD



TO REPORT TO
RIGHT CLICK
HOLD YOUR
TO VIEW AND
SELECT "UI" FROM
THE MENU

TO REPORT TO
RIGHT CLICK
HOLD YOUR
TO VIEW AND
SELECT "UI" FROM
THE MENU
THANK YOU FOR
VISITING THE
ACCESSIBILITY
CENTER.



Alzheimer Society
ONTARIO

CREDITS:
Spearheaded and coordinated by the Alzheimer Society of
Photography: Catrice Croward

Creative and text: Wayne MacPhail (Medium Helvetic), wific in
Branco (Gothic),
Maddie Henshaw (Millicent Holloworthy),
Roxanne Meadows (Pacey Brower),
Catherine Campbell (Tide London) - Alzheimer Society of
Michelle Lydon (Michael Legend), Synthesis Designs Inc.

Our thanks to Shelley Fugitt for mounting this exhibition



Featured site

The Heron Sanctuary

SLURL Available upon request; this is currently an invitation-only location

Contact: SuperQuiet Heron or Gentle Heron

Webpage <http://www.theheronsanctuary.info>

The Heron Sanctuary is a community of support for all disabled people. The community offers members: information, companionship, a way to make a living and to contribute to the community, and a way to have fun. These are all things everyone wants; the disabled community has specific needs that can best be met in the virtual environment of Second Life.

Touch for a take-away notecard

Featured site

The Autistic Liberation Front

Porcupine (25,184,107)

What's there?

Conferences, workshops, activism, an Autism museum, and a hangout by and for autistic people

Touch for a take-away notecard

Featured Health Resources & Sites at Second Life



Touch for a take-away notecard



The Second Life Medical Library 2.0



Consumer Health Information

Breast Cancer
Awareness



Showcase for what is possible

Result #2
Botulinum toxin type A as a migraine preventive treatment. For the ...
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10849039&dopt=Abstract

Closest match
What do patients want from acute migraine treatment?
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=15595989&dopt=Abstract
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=14693316&dopt=Abstract

Result #4
Identifying patients who require a change in their current acute ...
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=15265257&dopt=Abstract

Result #5
Costs and outcomes of early versus delayed migraine treatment with ...
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12458030&dopt=Abstract

Send me a keyword search on channel 2
Last search was for: migraine treatment
Currently searching: PubMed



SL Health Information Outreach Research Lab



SIS Specialized Information Services



KIB - Library



Also in Second Life



We want you

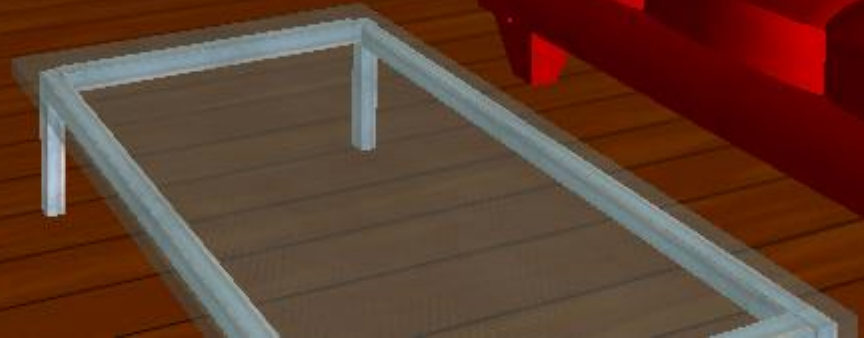
as a Red Cross Volunteer



Help build Red Cross Island



touch for a TP to the Red Cross



Some Virtual Medical Sims in SL

- [Virtual Neurological Education Center](#)
- [HeartMurmer sim](#)
- [Virtual Hospital at Imperial College London](#)
- [GenePool](#)
- [Anne Myers Medical Center](#)
- [UC Davis' Virtual Hallucinations](#)
- [NLM Toxtown](#)
- [Centers for Disease Control and Prevention](#)
- [Play2Train](#)
- [MD Kiosk : CEC Courses](#)



Central Medical Library, UMCG Digicmb.blogspot.com

Virtual Neurological Education Center





[Drinking Water](#)
[Factory](#)
[Homes](#)
[Offices & Stores](#)
[School](#)
[Park](#)
[All Locations](#)

[Arsenic](#)
[Asbestos](#)
[Benzene](#)
[Carbon Monoxide](#)
[Chromium](#)
[Lead](#)
[All Chemicals](#)

Tox Town

[Text Version](#)

Welcome to the Town

An introduction to toxic chemicals and environmental health risks you might encounter in everyday life, in everyday places.

• Neighborhoods

Select a view of the **Town, City, US-Mexico Border, Farm** or **Port** to learn about suburban, urban, rural, border and coastal health risks.

• Locations

Click on a location in the neighborhood, like the school, and find out more about the chemicals that could be in that location. Also learn about health risks that might be in that location.

• Chemicals

Roll your mouse over a chemical name to see where it might be found in the neighborhood. Then click the button for selected Internet information on that chemical.

• Are these chemicals in MY community?

SL Health Information Outreach Research Lab



SIS Specialized Information Services



NLM Toxtown

Anne Myers Medical Center



Virtual Hospital at Imperial College London

Acute Care - A&E

Urgent Care Centre

ACUTE CARE
The one in this building and
five ambulances.

(HCU) for patients who
of more traditional

icks will be treated



Heart Murmur Sim

CARDIAC AUSCULTATION TRAINING CONCEPT



Platform for future healthcare training applications



www.Play2Train.org



New! SL Healthy wiki

<http://slhealthy.wetpaint.com/>

All health sims in SL



Central Medical Library, UMCG Digicmb.blogspot.com

Limits & Thresholds

- System Requirements & fast growth
- Interface (takes time to learn)
- “content management” poor
- Interaction met Web still limited
- Account & login needed
- Public Image: sex, violence & gambling



But the positive thing is

- Visual & Communities : Social environments
- Web3D developments
- Gaming & learning & training
- Cooperation & collaboration



Some observations

- (small) Libraries alone, is not optimal: you need large communities and/or mixed interest
- Local, regional, national collaboration can work!
- But international collaboration is more logical
- Location and authority does matter, even in a virtual world
- The personal touch still important
- Extra dimension to communication & reference work



Invitation

- Come and have a look at HealthInfo Island!
- I will arrange special Tours for EAHIL members for free ;-)
- There are options to explore SL for your Health organisation without costs!

Ask Namro Orman or Carolina Keats
(or just email me)



Thank you for your attention.



<http://digicmb.blogspot.com>

<http://del.icio.us/digicmb/>

<http://slideshare.net/digicmb>



Central Medical Library, UMCG [Digicmb.blogspot.com](http://digicmb.blogspot.com)

