

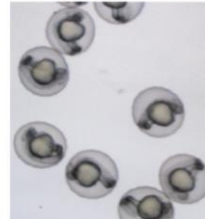
Implementing Exercise Trials in Disability Populations: Story, Strategy, and Science

Jereme D. Wilroy, Ph.D.

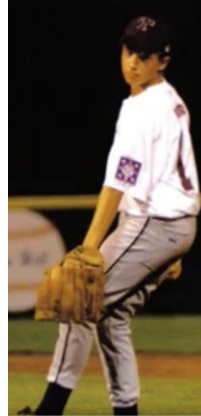
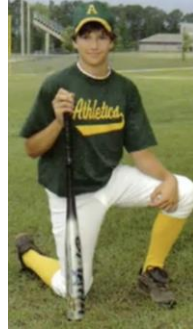
Associate Professor

Department of Physical Medicine & Rehabilitation

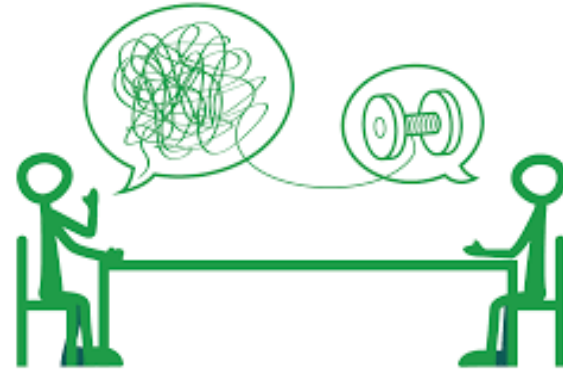
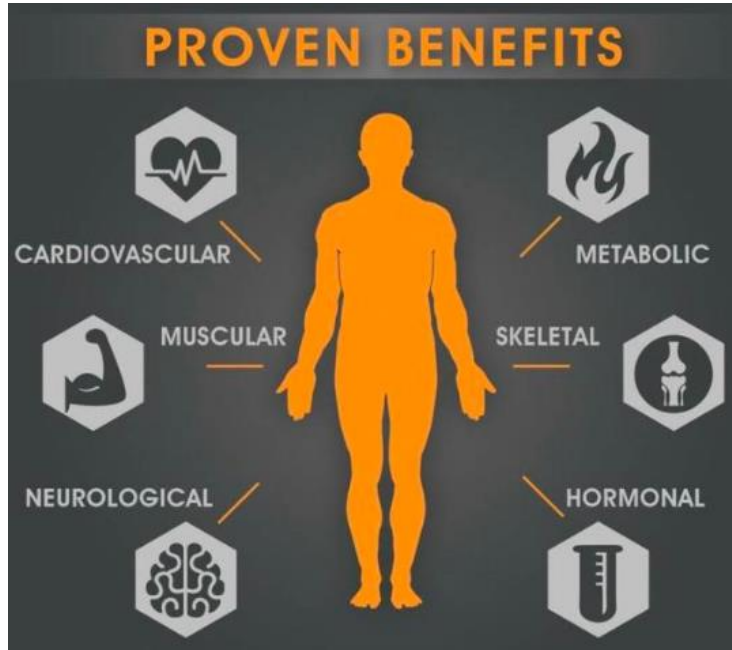
UAB MEDICINE



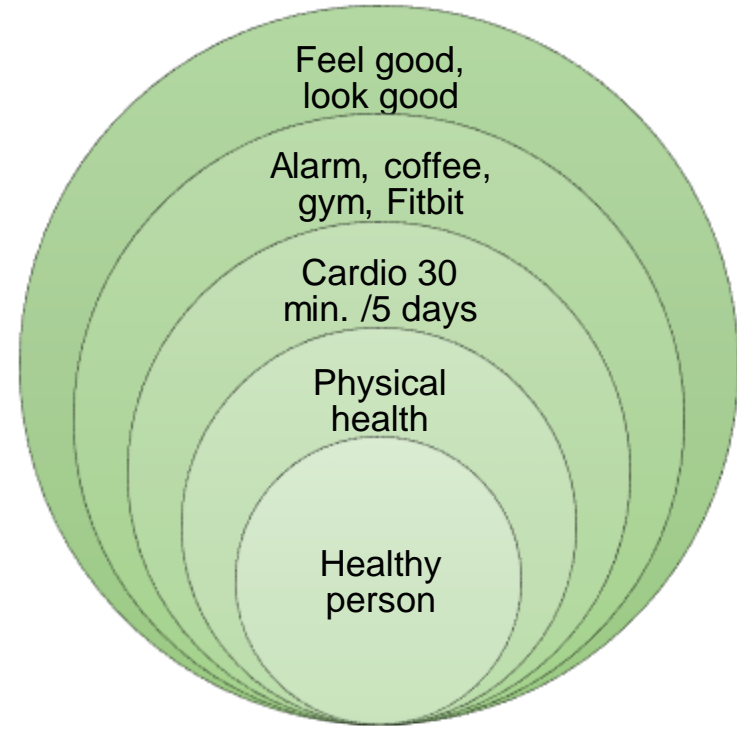
Implementation Story: A Lived Experience



“Behavioral coaching to improve adherence to exercise”



Universal Model



Online Education



Department of Epidemiology and Biostatistics
University of California, San Francisco

Certificate in Implementation Science

Jereme D. Wilroy, PhD

A handwritten signature in black ink, appearing to read 'M. Garcia', is positioned above the printed name.

Maria E. Garcia, MD, MPH, MAS

A handwritten signature in black ink, appearing to read 'Priya B. Shete', is positioned above the printed name.

Priya B. Shete, MD, MPH

Co-Directors, Implementation Science Training Program

Learning Objectives

- Discuss health disparities of people with disabilities.
- List and describe barriers to health promotion at the intrapersonal and interpersonal level for people with disabilities.
- Describe implementation science strategies used in delivery of exercise trials targeting people with disabilities.
- Discuss the power of strategic partnerships for implementation science.

Disability Impacts ALL of US

Disability is especially common in these groups:

women

1 in 4

women have a disability



minorities





3 in 10

non-Hispanic blacks have a disability



One in five American adults has a disability.*

Adults living with disabilities are more likely to:

| | With Disabilities | Without Disabilities |
|--|-------------------|----------------------|
|  BE OBESE | 38.4% | 24.4% |
|  SMOKE | 30.3% | 16.7% |
|  HAVE HIGH BLOOD PRESSURE | 41.7% | 26.3% |
|  BE INACTIVE | 36.3% | 23.9% |

Adults living with disabilities are **3x** more likely to have heart disease, stroke, diabetes, or cancer

Rehabilitation to Community through Exercise

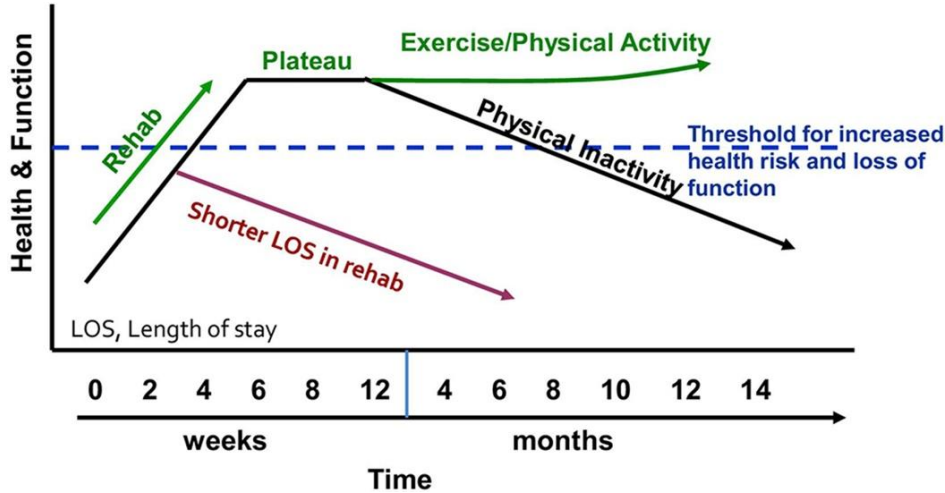


Figure 1. Getting beyond the plateau (Rimmer, 2012)

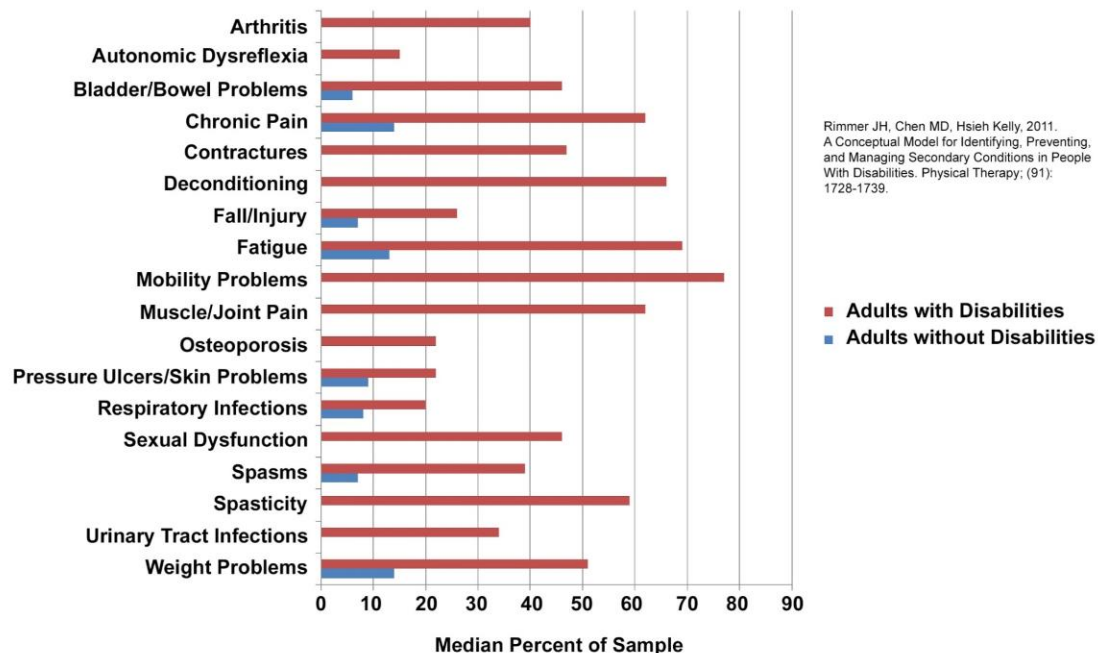
- People with disabilities are predisposed or at risk for developing three sets of health conditions that must be considered in the design and implementation of health promotion programs:

- *Associated Conditions*
- *Secondary Conditions*
- *Chronic Conditions**

* affect the general population

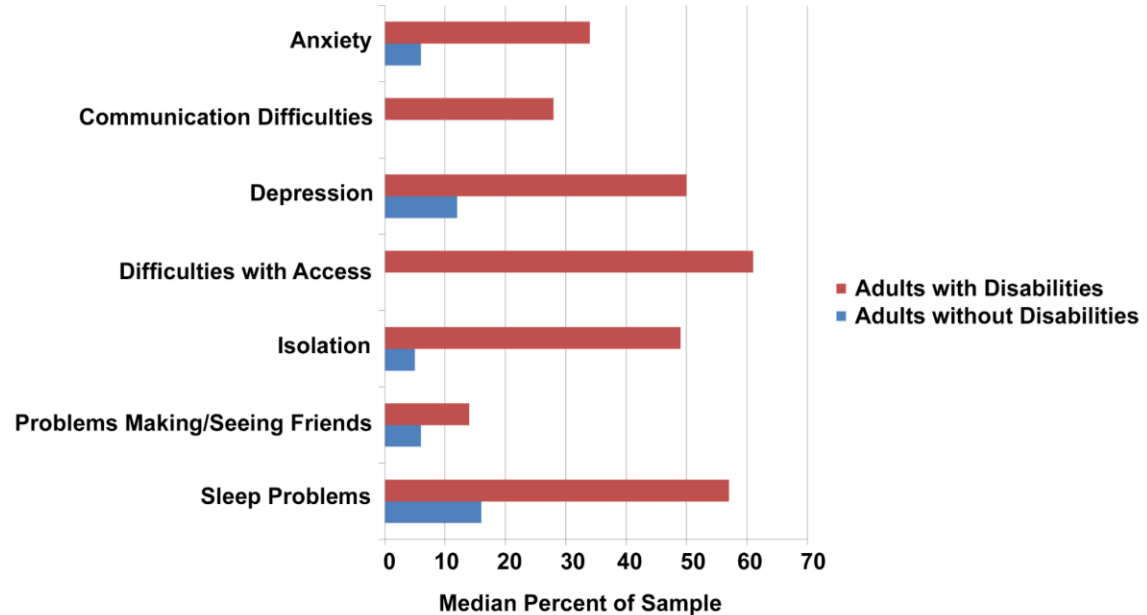
Secondary Health Conditions

Physical Secondary Conditions



Secondary Health Conditions

Psychosocial Secondary Conditions



Barriers to Exercise for People with Disability

Healthy,
Active
Lifestyles
FOR ALL

- There are barriers to exercise every level for people with disabilities.

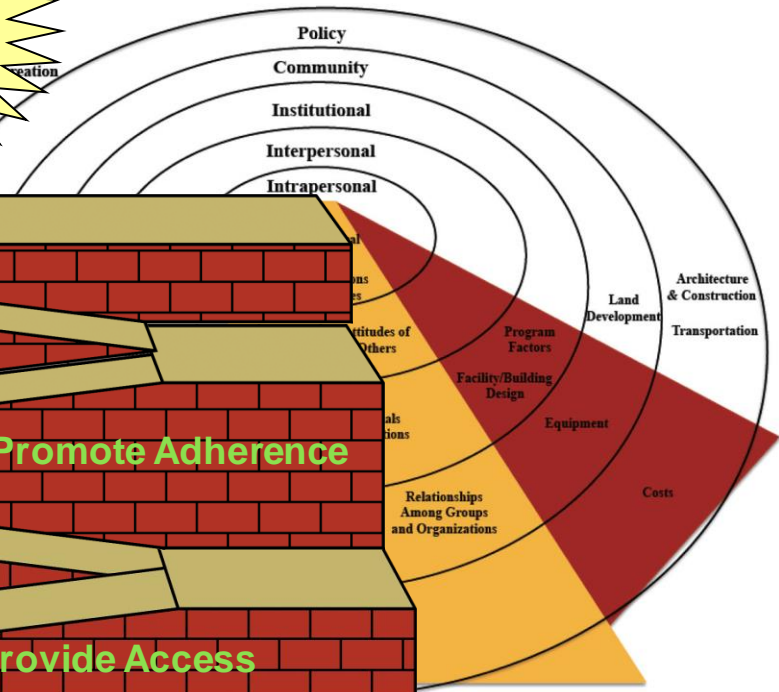
- Trans
- Acces
- Kno

Improve Physiological and Psychological Health

Promote Adherence

Increase Usability

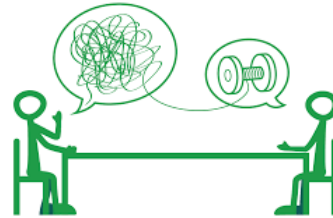
Provide Access



Goal of Exercise Research



+



+



Using Telehealth Technology

Telehealth is the distribution of health-related services and information via electronic information and telecommunication technologies.

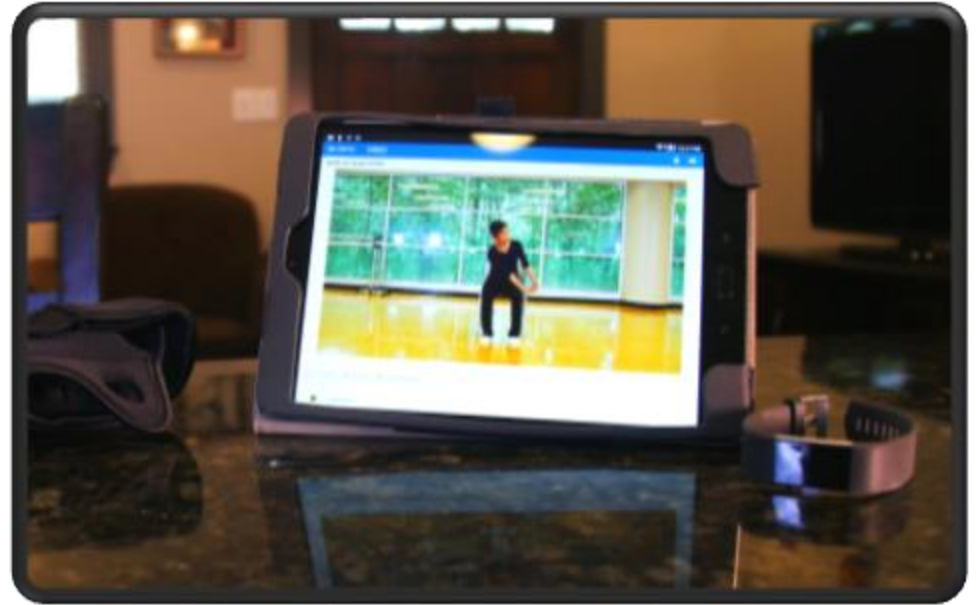
SCI e-STORIES
discover why - learn how - overcome barriers - empower others

SUPERHEALTH
SCALE UP PROJECT EVALUATING RESPONSIVENESS TO HOME EXERCISE AND LIFESTYLE TELE-HEALTH

CHIME 

Cardiometabolic Health Intervention using Music and Exercise

 **SMART HEALTH**



Problems With Research to Practice (Impact)

Translational Issues*:

- 14% of Interventions succeed in benefiting patients
- 17 Years to move into practice
- ~80% of medical research dollars do not make a public health impact for various reasons**

Implementation Issues***:

- Only 44% of adults with disabilities who visited a doctor in the past year received a physical activity recommendation from their doctor.
- Nearly half of all adults with disabilities get no leisure time aerobic physical activity.



Implementation Strategies by the dozen



Call



Email



Text

Calendar

Today < > Dec 4 – 10, 2016 Day Week Month 4 D

CREATE

December 2016

S M T W T F S
27 28 29 30 1 2 3
4 5 6 7 8 9 10
11 12 13 14 15 16 17
18 19 20 21 22 23 24
25 26 27 28 29 30 31
1 2 3 4 5 6 7

My calendars

- Stephen Altrogge
- Birthdays
- FollowUp.cc
- Reminders

Other calendars

Add a friend's calendar

| GMT-04 | Sun 12/4 | Mon 12/5 | Tue 12/6 | Wed 12/7 | Thu 12/8 |
|--------|----------|-----------------------------|---------------------------|------------------------------|---------------------------------|
| 9am | | 9 – 11 Writing | 9 – 11 Writing | 9 – 11 Client calls | 9 – 11 Research project |
| 10am | | 10 – 11 Client calls | | | |
| 11am | | 11 – 12p Update meetings | 11 – 12p Blog research | 11 – 12p Writing | 11 – 12p Blog writing |
| 12pm | | 12p – 1p Lunch | 12p – 1p Lunch | 12p – 1p Lunch | 12p – 1p Lunch |
| 1pm | | 1p – 2p Email | 1p – 2p Email | 1p – 2p Email | 1p – 2p Email |
| 2pm | | 2p – 4p Client calls | 2p – 4p Client calls | 2p – 4p Research proposal | 2p – 3:30p Meeting with John |
| 3pm | | | | | |
| 4pm | | 4p – 5p Staff update | 4p – 5p Update meeting | 4p – 5p Staffing meeting | 3:30p – 5p Staff meeting |
| 5pm | | 5p – 6p Review plan | 5p – 6p Review | 5p – 6p Review | 5p – 6p Review |
| 6pm | | | | | |



Implementation Science: The power of people, participants, and partners

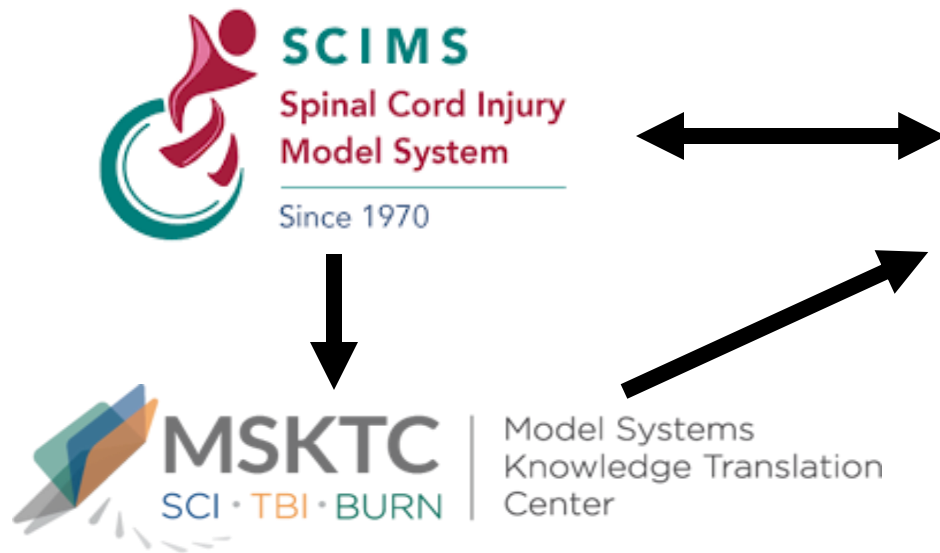


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Connecting you to a healthier future, today.

Rehabilitation Center and Model Systems



Lakeshore Foundation Sports Science Performance Center





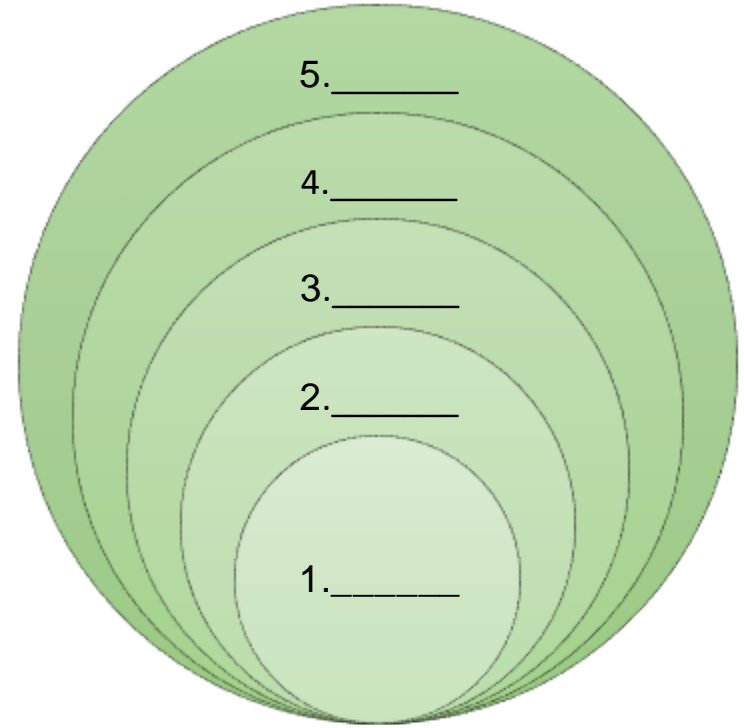
Creating Health Equity for People with Disabilities

NCHPAD connect
Connecting you to a healthier future, today.

rectech
www.rectech.org

CONTINUUM lab

What do you want to implement for a powerful partnership?



Questions



Jereme Wilroy

jdwilroy@uab.edu