# Open Scholar Awards at UBC:
## Increase the Impact of Your Research

**Hilde Colenbrander**, cIRcle Coordinator

**Joy Kirchner**, Scholarly Communications Coordinator

**Tara Stephens**, cIRcle Librarian

*Open UBC, October 31, 2012*

# Today's agenda

- Introduction: Open Access at UBC via cIRcle
- Need an incentive to make your work openly accessible?
  - GSS cIRcle Open Scholar Award
  - Innovative Dissemination of Research Award
  - Increase the impact of your research

# Open Access via cIRcle

- cIRcle, UBC's digital repository
  - 42,300 items in cIRcle
  - UBC theses and dissertations since 1919
  - Journal articles (pre and post prints)
  - Conference proceedings
  - Working papers, technical reports
  - Videos and podcasts of speeches, lectures, events

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# GSS cIRcle Open Scholar Award

- Collaboration between the Graduate Student Society and cIRcle
- UBC Vancouver graduate students are eligible
- Award is sponsored by
  - the Graduate Student Society, UBC Vancouver
  - cIRcle, UBC Library

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# GSS cIRcle Open Scholar Award

- Purpose of Award:
  - To feature UBC as a leader in the open dissemination of exemplary non-thesis graduate coursework
  - to create an incentive for graduate students to populate cIRcle with material beyond theses and dissertations

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# GSS cIRcle Open Scholar Award

- Lottery style award
  - Two awards twice a year, October and April
  - Randomly selected from submissions made to cIRcle during the previous 6 months
  - $500 per award
- Students' course instructors approve all submissions

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# GSS clRcle Award

The GSS (Graduate Student Society) clRcle Open Scholar Award is a lottery based award for graduate students at UBC Vancouver which went live on July 9, 2012. The first two awards were presented on October 18, 2012.

For the GSS clRcle Open Scholar Award, graduate students may submit to clRcle **exemplary non-thesis manuscripts or projects that are part of their graduate coursework**, with approval from their course instructors.

**NOTE: This collection is NOT for UBC Theses and Dissertations** which must be submitted in accordance with the requirements of the Faculty of Graduate Studies (FoGS) into the Electronic Theses and Dissertations collection in clRcle. Please contact FoGS for authorization to submit your thesis or dissertation.

About the Award | Who's eligible? | How do I submit my work? | When/How are Awards made? | For Course Instructors

## About the Award

The GSS clRcle Open Scholar Award is a five-year collaboration of the Graduate Student Society and clRcle/UBC Library. The Award was the brainchild of Francisco Grajales who was, at the time, the GSS Senator. He worked closely with Hilde Colenbrander (clRcle


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# GSS cIRcle Open Scholar Award

- Award approved by UBC Senate; went live in July 2012
- September 30, 2012:
  - 29 submissions qualified for inclusion in lottery
- First two awards presented:
  - on October 18, 2012
  - by the Graduate Student Society

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# Examples of student projects

**Contagion and Antidote: Changing Locations of "Risk" in BC Public School's Discourse on Disability**
Stafford, Anika (*2012-09-21*)

**Reclaiming the traditional role of Two-Spirited people in post-secondary and community education**
Plaut, Shayna; Kirk, David (*2012-09*)

**Design Thinking, Innovation and Business Incubators: A Literature Review**
Beausoleil, Angele (*2012-08-31*)

**Facilitating effective methods of physical therapy student learning during shadowing experiences**
Bennett, Jami; Aiers, Jen; Chicoine, Anna; Gagne, Erin; Gardiner, Susan; Bainbridge, Lesley (*2012-08-10*)

**Visual Artist Influential Relationship Ontology : a Methodology Report**
Foster, Patricia (*2012-08-03*)

**Multiple project management at academic libraries**
Buschert, Kimberly; Ishida, Mayu; Tang, Bixia (Helen) (*2012-08*)

**The Effectiveness of Exercise Therapy in Reducing Pain and Improving Clinical Outcomes in Rotator Cuff Tendinopathy : a Systematic Review**
Gonsalves, Jennifer; Kuyer, Evin; McKay, Tamara; Moffat, Amy; Palmer, Stephanie (*2012-08*)

**Value of Physical Function in Breast Cancer Survivors: A Systematic Review**
Nishikawa, Kei; Lo, Kenneth; Lam, Jackson; Sy, Vincent; Chu, Johnathan (*2012-08*)

**The Effects of Non-aerobic Exercise on Cognitive Function in Older Adults**
Wan, Thomas; Ghannadan, Reza; Bell, Jon; Johnson, Garett; Bai, Seungjin (*2012-08*)

**The Role of Design in Business ROI: A Literature Review**
Beausoleil, Angele (*2012-08*)

# Is the decrease in maximal voluntary contraction following tibialis anterior tendon vibration accompanied by a disruption in excitation contraction coupling?

L.M. Cornish, V.M. Feige, A.D. Guenter, C.L. Kliewer, E.A. Mellis

Supervisor: S.J. Garland, Ph.D.

## Introduction

- Individuals utilizing equipment with vibratory elements demonstrate increased musculoskeletal and neurovascular impairments related to reduced strength and muscle fatigue (1).
- However, the reduced MVC may also be due to the disruption in E-C coupling (2).
- E-C coupling is ascertained in human subjects during functional activities (10 Hz) whereas maximal exercise (50 Hz) increases calcium in muscle beyond typical functional activation levels accounting for decreased E-C coupling (3).

## Objective

- The purpose of this study was to investigate the extent to which E-C coupling plays a role in force attenuation following vibration.

## Methods

- Subjects: 9 female and 1 male, age 33 (10.6)
- Individuals sat in a Biodex chair with 90° of hip and knee flexion.

Figure 1: Equipment set-up. The dominant foot and leg were immobilized while ankle dorsiflexion was measured.

- Stimulating electrodes were placed on the common peroneal nerve (CPN) just distal to the fibular head. For stimulation trials (7 singlet pulses, doublet, 10 Hz and 50 Hz), a dorsiflexion twitch was evoked via constant voltage stimulator.
- E-C coupling was determined by evaluating the ratio of 10 Hz to 50 Hz peak torque.
- For vibration trials, a vibrator was secured to the distal musculotendious junction of the tibialis anterior muscle.

## Methods


Figure 2: Subjects were exposed to a combination of 4 conditions that included 10 minutes of vibration or no vibration bracketed by MVC or electrical stimulation (ABCD, CDAB, ACBD, BDAC, ADBC).

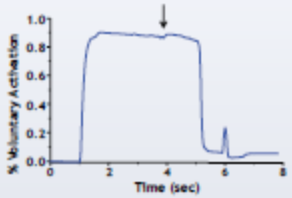


Figure 3: Torque trace during MVC. Black arrow denotes timing of interpolated twitch used to assess % voluntary activation. Interpolated twitch was elicited with doublet stimulation during and after MVC.

## Results

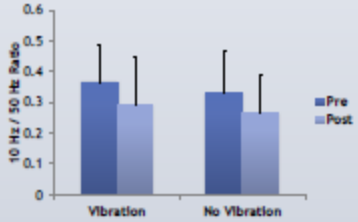


Figure 4: 10 Hz / 50 Hz ratio for peak torque. A significant decrease (p=0.007) following vibration and no vibration was observed; however, no significant difference was found across conditions.

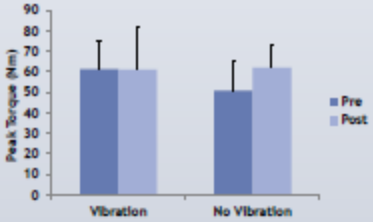


Figure 5: Peak torque during MVCs. No significant difference was found across the conditions.

| | Vibration | | No Vibration | |
|---|---|---|---|---|
| **Singlet** | **Pre** | **Post** | **Pre** | **Post** |
| Peak Torque (Nm) | 2.4 ± 1.0 | 5.2 ± 10.8 | 2.3 ± 1.1 | 2.0 ± 0.9 |
| Time to Peak Torque (ms) | 110 ± 15.9 | 113 ± 13.4† | 106 ± 10.5 | 109 ± 10.9† |
| **Doublet** | | | | |
| Peak Torque (Nm) | 8.9 ± 2.8 | 8.7 ± 3.3 | 8.4 ± 1.9 | 7.9 ± 1.8 |
| Time to Peak Torque (ms) | 113 ± 41.2 | 117 ± 43.6† | 123 ± 12.6 | 126 ± 10.8† |
| **10 Hz** | | | | |
| Peak Torque (Nm) | 8.4 ± 3.8 | 6.7 ± 3.1* | 7.4 ± 3.1 | 6.5 ± 2.9* |
| **50 Hz** | | | | |
| Peak Torque (Nm) | 27.2 ± 11.5 | 25.5 ± 9.3 | 24.0 ± 7.1 | 25.2 ± 5.7 |
| Time to Peak Torque (ms) | 205 ± 38.1 | 217 ± 16.4 | 210 ± 21.4 | 218 ± 11.8 |

Table 1: There was a significant drop in peak torque generated for pre to post comparisons for 10Hz stimulation. For the singlet stimulation, time to peak torque (mean ± SD) was significantly different between pre and post measurements in both conditions. For doublet stimulations, time to peak torque exhibited a trend towards difference in pre and post measurements.
*p<0.001, †p=0.007, ‡p=0.07

## Results

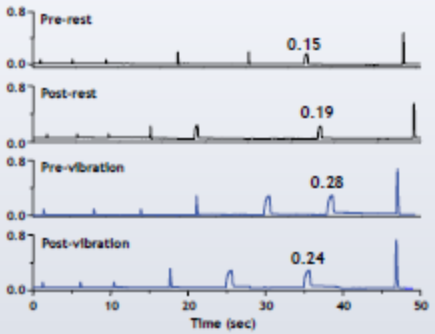


Figure 6: Real data figures displaying the following stimulations: 3 single twitches, doublet, 2 10 Hz and 50 Hz. Absolute values of torque labeled in figure demonstrate the decrease in torque during the vibration condition.

## Conclusion

- Impairment in torque production by low frequency stimulation at 10 Hz suggests that the capacity to produce torque is compromised both during periods of immobilization and vibration.
- E-C coupling, as indicated by the 10 Hz/50 Hz torque ratio, may not be affected by vibration.
- Vibration was not found to attenuate MVC force production.

## References

(1) Worksafe BC (2011).

(2) Shinohara, M. (2005a). Medicine and Science in Sports and Exercise, 37(12), 2120-2125.

(3) Cheng, A. J., & Rice, C. L. (2005). Journal of Applied Physiology. 99(4), 1446-1452.

# The Effectiveness of Exercise Therapy in Reducing Pain and Improving Clinical Outcomes in Rotator Cuff Tendinopathy- A Systematic Review

RSPT 572
Submitted August 10, 2012


Supervisor: Dr. Alex Scott

Jennifer Gonsalves
Evin Kuyer
Tamara McKay
Amy Moffat
Stephanie Palmer

# Conny Lin, GSS President

"This opportunity is exactly the kind of thing that I hoped for when I started out as a graduate student. It is an opportunity to be recognized by my peers outside of the normal networks. This is an important initiative both for the collegial spirit it promotes and the way it encourages us to collaborate more openly."

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# Measuring impact

- DSpace Reporting Suite Module
  - Views
  - Downloads
- Google Analytics
  - Geographic location
  - Referrals
  - Keyword searches

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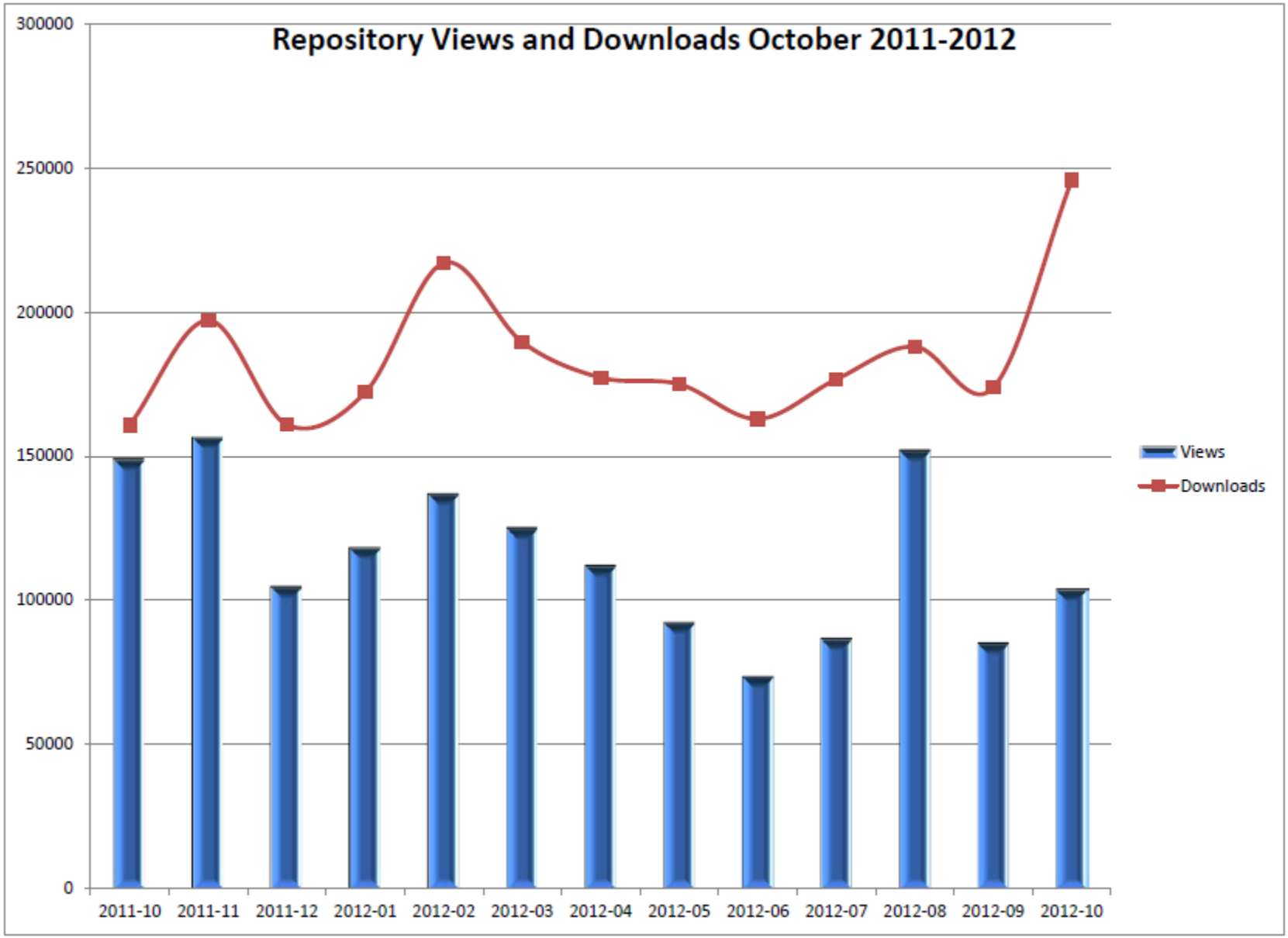
Repository Views and Downloads October 2011-2012
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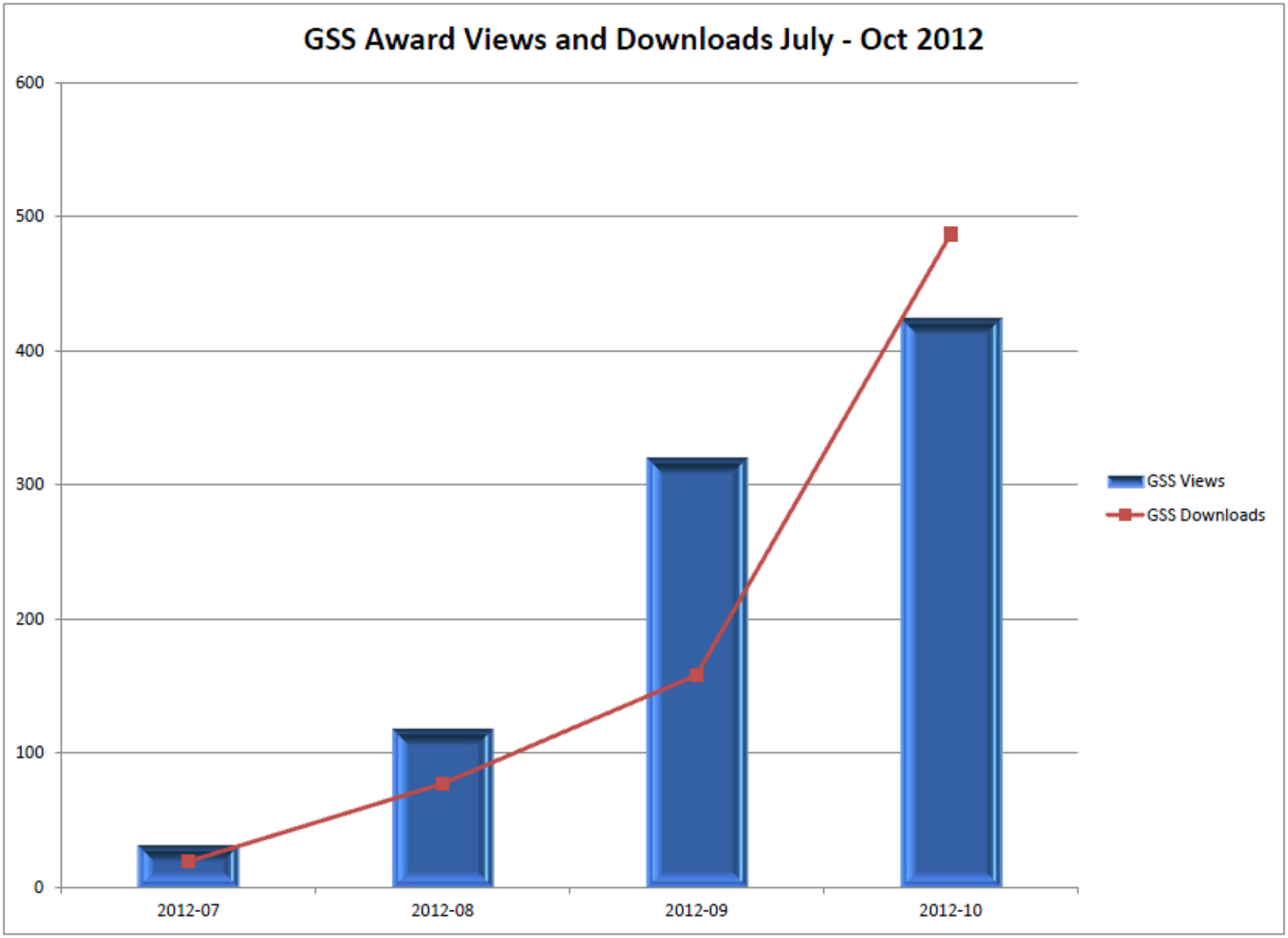
GSS Award Views and Downloads July - Oct 2012
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GSS Views
GSS Downloads

# The Effectiveness of Exercise Therapy in Reducing Pain and Improving Clinical Outcomes in Rotator Cuff Tendinopathy

## Page displays

| | 2012-05 | 2012-06 | 2012-07 | 2012-08 | 2012-09 | 2012-10 |
|---|---|---|---|---|---|---|
| The Effectiveness of Exercise Therapy in Reducing Pain and Improving Clinical Outcomes in Rotator Cuff Tendinopathy : a Systematic Review | 0 | 0 | 0 | 32 | 44 | 81 |

## File downloads

| | 2012-05 | 2012-06 | 2012-07 | 2012-08 | 2012-09 | 2012-10 |
|---|---|---|---|---|---|---|
| UBC ROTATOR CUFF SR.pdf | 0 | 0 | 0 | 33 | 44 | 63 |
| Moffat_A_PHTH572_Exercise_therapy_reducing_2012.pdf | 0 | 0 | 0 | 0 | 0 | 15 |

## Top countries

| Country Code | Views |
|---|---|
| Canada | 91 |
| United States of America | 38 |
| India | 34 |
| Australia | 32 |
| United Kingdom | 32 |
| Korea | 14 |
| Turkey | 9 |
| Taiwan | 7 |
| Sweden | 6 |
| Chile | 3 |

# Is the Decrease in Maximal Voluntary Contraction Following Tibalis Anterior Tendon Vibration Accompanied by a Disruption in Excitation Contraction Coupling?

## Page displays

| | 2012-05 | 2012-06 | 2012-07 | 2012-08 | 2012-09 | 2012-10 |
|---|---|---|---|---|---|---|
| Is the Decrease in Maximal Voluntary Contraction Following Tibalis Anterior Tendon Vibration Accompanied by a Disruption in Excitation Contraction Coupling? | 0 | 0 | 0 | 0 | 14 | 44 |

## File downloads

| | 2012-05 | 2012-06 | 2012-07 | 2012-08 | 2012-09 | 2012-10 |
|---|---|---|---|---|---|---|
| Kliewer_C_et_al_PHTH572_Decrease_maximal_2012.pdf | 0 | 0 | 0 | 0 | 4 | 2 |

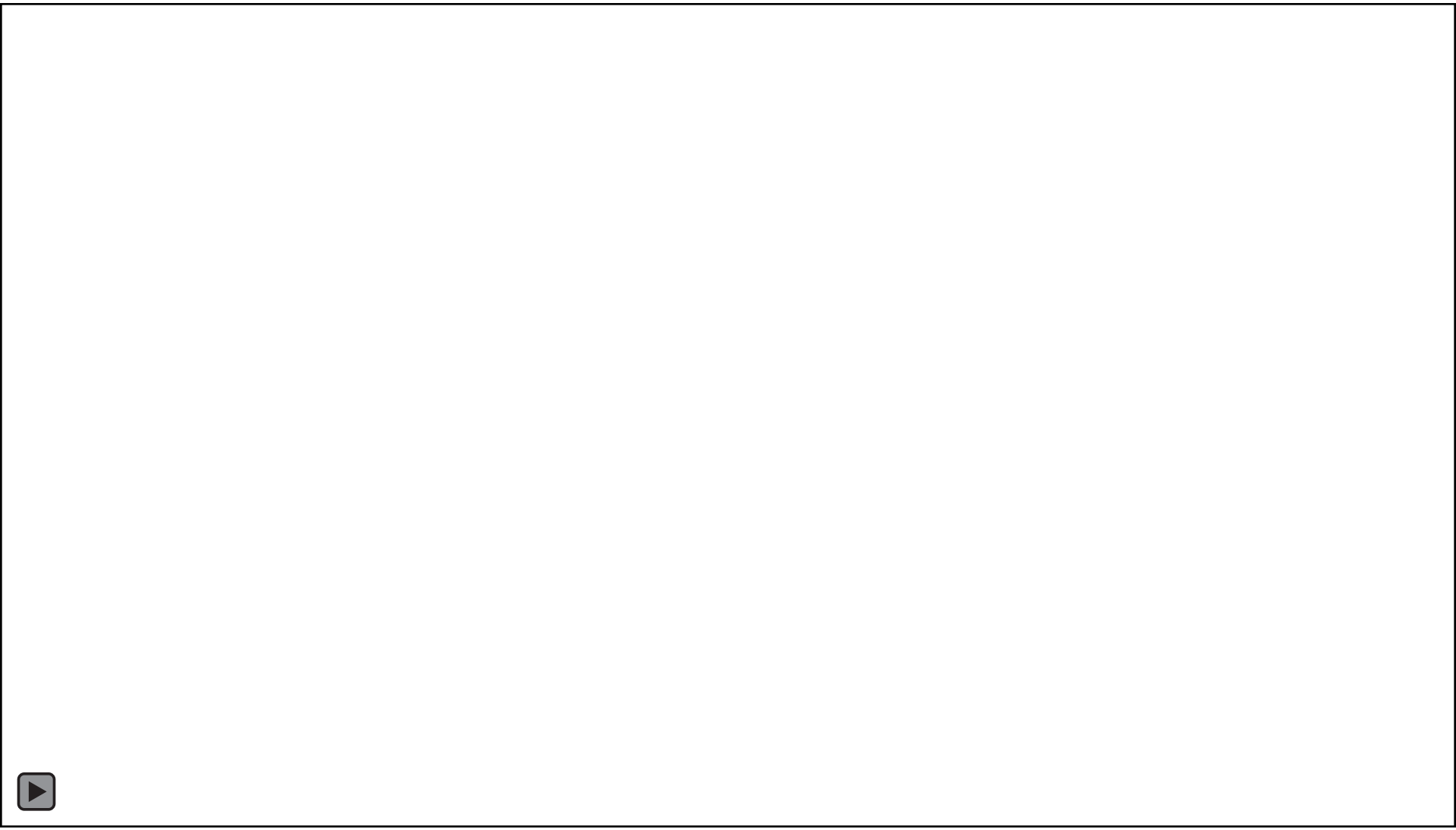
## Top countries

| Country Code | Views |
|---|---|
| Canada | 60 |
| India | 2 |
| Belgium | 1 |

## Top cities

| city | Views |
|---|---|
| Vancouver | 53 |
| Burnaby | 2 |
| Calgary | 2 |
| New Delhi | 2 |
| Windsor | 2 |
| Berchem | 1 |
| Kelowna | 1 |

# Demographics of cIRcle users via Google Analytics



View the video at http://www.screencast.com/t/gcyJ1Hbf

# Thank you for coming!

- Questions, comments?
  - Please contact us any time
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