



Hello,

Welcome to the February edition of the U-CAN Newsletter.

Happy February! I hope you are trying to stay warm as we hopefully get closer to spring. Groundhog Day is fast approaching on February 2<sup>nd</sup> and hopefully Punxsutawney Phil will not see his shadow (which means spring will come early)!

Did you know that February is the shortest month of the year but has the most holidays of any other month: 139 that are celebrated all over the world! My favorite holiday on the list is Margarita Day, celebrated on February 22<sup>nd</sup>! I have attached the link for you to take a look at and enjoy:

<http://www.holidayscalendar.com/months/february/>

Don't forget to check out the upcoming events section if you want to stay active. There are several indoor and outdoor activities throughout the winter.

### **Upcoming Meeting**

Our next U-CAN meeting will be held on **Tuesday, February 5<sup>th</sup>, 5:30-7:30 pm**. On the agenda is Year in Review & Group discussion. Hope to see you there.

**Please note that if the Ann Arbor public schools are closed, the monthly group meeting will not be held.**

### **A look Ahead**

March 5<sup>th</sup>- UM Prosthetics residents

**Quote of the month:** *"For beautiful eyes, look for the good in others; for beautiful lips, speak only words of kindness; and for poise, walk with the knowledge that you are never alone"* - Aubrey Hepburn

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## **Articles**

- Robot hand comes close to human original, newatlas.com, December 2018;  
<https://newatlas.com/cambridge-piano-robot-hand/57795/>
- New Zealand women receive 3D- printed prosthetic breasts, www.tvnz.co, December 2018;  
<https://www.tvnz.co.nz/one-news/new-zealand/kiwi-company-using-3d-printers-create->

[breasts-women-after-mastectomies-have-been-through-enough-already?variant=tb v 1](#)

- Meet the man with Adam Jensen's bionic arm from Deus Ex, venturebeat.com, December 2018; <https://venturebeat.com/2018/12/24/meet-daniel-melville-the-man-with-adam-jensens-bionic-arm-from-deus-ex/>
- College student who lost leg inspired to make custom prosthetic covers,press-citizen.com, December 31, 2018; <https://www.press-citizen.com/story/news/2018/12/31/no-limits-prosthetic-custom-limb-covers-university-iowa-student-erica-cole-jpec/2361878002/>
- New technique could give people more control of their prostheses, mddionline.com, January 2, 2019; <https://www.mddionline.com/new-technique-could-be-breakthrough-motility-research>
- The Alternative Limb Project creates imaginative prosthetics for unique clients, outerspaces.com, January 3, 2019; <https://www.outerplaces.com/science/item/19213-alternative-limb-project>
- Can 3D printing reinvent the prosthetics industry?, designworldonline.com, January 4, 2019; <https://www.designworldonline.com/can-3d-printing-reinvent-the-prosthetics-industry/>
- Dad makes a cool prosthetic hand for his son and for other children, January 8, 2019; [https://www.theepochtimes.com/dad-makes-a-cool-3d-iron-man-arm-for-amputee-son-and-he-totally-loves-it\\_2760020.html](https://www.theepochtimes.com/dad-makes-a-cool-3d-iron-man-arm-for-amputee-son-and-he-totally-loves-it_2760020.html)
- Bionic reconstruction after amputation of a hand show that muscles can be repurposed using nerve transfers, health.economictimes.com, January 9, 2019; <https://health.economictimes.indiatimes.com/news/industry/bionic-reconstruction-after-amputation-of-a-hand-muscles-can-be-repurposed-using-nerve-transfers/67446863>
- Quadruple amputee given double hand transplant, bbc.com, January 9, 2019; <https://www.bbc.com/news/uk-scotland-glasgow-west-46814473>
- Double amputee overcomes challenges and bowls a perfect 300, 14news.com, January 14, 2019; <http://www.14news.com/2019/01/15/double-amputee-overcomes-challenges-bowls-perfect/>
- Machine learning customizes powered knee prosthetics for new users in minutes,rdmag.com, January 23, 2019; <https://www.rdmag.com/article/2019/01/machine-learning-customizes-powered-knee-prosthetics-new-users-minutes>
- Quiet Hero marks 30 years restoring limbs and dignity in war, nytimes.com, January 23, 2019; <https://www.nytimes.com/2019/01/23/world/asia/disabled-afghans-war-amputee.html>

## **Research Corner**

- ❖ **University of Michigan Neurobionics Laboratory** is looking for paid volunteers with a below knee amputation to participate in research studying a new prosthetic ankle design with variable ankle stiffness.

Participation requirements:

- Have a single below knee amputation
- Attend up to 5 testing sessions that include walking tests such as level walking, walking up

and down stairs and ramps while wearing the prosthesis

Participants will receive \$40 / hour during testing session and free parking.

The study will take 25 hours or less of your time.

If you are interested in volunteering for this project, please contact:

Catherine Kinnaird

Phone: 734-764-6395

Email: [kinnaird@umich.edu](mailto:kinnaird@umich.edu)

- ❖ **University of Michigan Graduate Students** are looking for upper extremity volunteers who are willing to be interviewed to help them create a one-handed convenience product that would help people with limited or no mobility in one hand/arm.

Participation requirements:

- Have an upper extremity limb loss at any level or those with limited hand mobility

An interview will be conducted with 1-2 participants that will help the students get a glimpse into the everyday challenges that take place. The interview will take between 20 and 30 minutes.

If you are interested in volunteering for this project, please contact:

Andrea Krusheski at: [akrush@umich.edu](mailto:akrush@umich.edu)

- ❖ **University of Michigan has 3 ongoing prosthetic research studies that are looking for volunteers to participate.** They are listed below:

***Evaluating and Improving Assistive Robotic Devices Continuously and in Real-time***

Participation requirements:

- 18+ years old, unilateral transtibial amputation, K3 or above, prosthesis for 6 months, can walk 30 minutes at a time

Exclusions from this study include:

- History of orthopedic or neurologic disorder to intact limb, history of cardiovascular disease, unable to walk 30 minutes at time

***Mechanisms of Low Back Pain Development in People with Lower Limb Amputation***

Participation requirements:

- 18-65 years old, unilateral transtibial amputation, independently ambulating for 2 months, 10 minutes of unassisted walking

Exclusions from this study include:

- Pathology or injury to intact limb, cardiovascular or neurologic disease, uncorrected vision problems, taking medication affecting balance or ability to walk, residual limb length that prevents incorporating load cell or performing alignment adjustments

## **Characterizing Limits of Performance Imposed by Upper-Limb Prostheses**

Participation requirements:

- 18 +years old, unilateral upper limb amputation (transradial or transhumeral), BP or MYO prosthesis, or both, Prosthesis use for at least 6 months

Exclusions from this study include:

- Self-reported history of neurologic disorders, visual impairments, and/or balance impairments

If you are interested in volunteering for any of the above projects, please contact:

Kelsey White (Study Coordinator)

Phone: 734-647-5514

Email: [klucinda@umich.edu](mailto:klucinda@umich.edu)

## **Upcoming Events**

- **Dance Mobility- Amputee and wheelchair Ballroom Dancing class will be held on Saturday, February 9, 2019 from 11:00 am-12:30 pm at the Fred Astaire Dance Studios in Bloomfield Hills- 2172 Franklin Rd.** The Dance Mobility program provides free amputee and wheelchair ballroom group lessons led by Fred Astaire's professional, certified dance instructors with experience in teaching amputee and wheelchair ballroom dancing. Participants are welcome to bring their own dance partner or they will be paired with a volunteer partner. **The class is free but you do need to make a reservation.** For more information or to reserve a spot, please call: 248-454-1715 or visit the website; <https://www.fredastaire.com/bloomfield-hills/2183-2/>

For more information, please contact Amy St. Amour at: [astamour@umich.edu](mailto:astamour@umich.edu)

- **Michigan Adaptive Sports learn to ski clinics from January-March 2019.** The lesson includes access to specialized adaptive equipment, a certified instructor, and a lift ticket. The dates for 2019 are listed below:

*February 2, 9 and 23, 2019* - Pine Knob

*March 2 2019* - Crystal Mountain

*March 3, 2019* - Crystal Mountain

For questions or for more information, visit the website;

<https://www.michiganadaptivesports.com/lessons-and-guides>

- **Mt. Brighton Adaptive Sports has group and individual ski lessons available, for more information, visit the website;** <http://mtbadaptivesports.org> or contact Mike Waning, Ski & Snowboard School Director at: [Mwaning@VailResorts.com](mailto:Mwaning@VailResorts.com), (810) 229-9581
- **UMAISE adult wheelchair basketball program in partnership with U of M RecSports.** It's free and open to anyone 18 and over, equipment is provided. The games are held at the North Campus

Recreation Building (NCRB), 2375 Hubbard Rd, Ann Arbor. The game schedule is listed below:

February 3, 2-4 pm

February 12, 6-8 pm

March 10, 2-4 pm

March 21, 6-8 pm

April 7, 2-4 pm

April 17, 6-8 pm

- **Amputee Coalition 2019 National Conference, July 25-27<sup>th</sup> in San Antonio, Texas.** Scholarships are available for 1<sup>st</sup> time attendees. For more information, visit the website at: [www.amputee-coalition.org/events-programs/national-conference/](http://www.amputee-coalition.org/events-programs/national-conference/)
- **Ann Arbor Center for Independent Living** offers sports, recreation and art all year round. For 2018, they offer drop in art classes and open gym as well as resources in the community. For more information, visit the website at: <http://www.annarborcil.org>
- **Amputee Coalition Travel Adventures** - To check out trips planned for 2018 or if you would like to plan your own trip and want more information on accessible travel, visit the website: <http://easyaccesstravel.com/>

Stay warm and have a good month.

Carla