

## **PRESS RELEASE**

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Date: 04/12/2023

We are delighted to share some exciting news from our esteemed lab. Our latest co-authored article, 'Wirelessly observed therapy compared to directly observed therapy to confirm and support tuberculosis treatment adherence: A randomized controlled trial', has been making waves in the scientific community and beyond, garnering an impressive Altmetric score of 156.

The Altmetric Attention Score is a powerful metric that takes into account the online attention that our research has received across a wide range of sources, including social media, news outlets, and blogs. This score is a testament to the outstanding impact that our research has had on the global community, and we are humbled and grateful for this recognition.

We extend our heartfelt thanks to all those who have supported our work and contributed to this achievement. None of this would have been possible without the dedication and hard work of our talented team of researchers, who continue to push the boundaries of scientific knowledge and make a positive impact on the world.

We invite you to explore the links below to see some of the media coverage that our lab's co-authored article has generated. We hope that our work will inspire others to continue pursuing innovative solutions to some of the world's most pressing challenges.

Thank you for your continued support and interest in our research.

### **Links to Media Coverage:**

<http://www.medicalhealthnews.net/edible-sensor-helps-tb-patients-take-their-meds>

<https://www.thestar.com.my/tech/tech-news/2019/10/08/edible-sensor-helps-tb-patients-take-their-meds>

<https://weatherherald.com/fitness/study-proteus-digital-pill-system-accurate-improved-adherence-california-tb-patients-44246224>

<https://www.freepressjournal.in/health/new-edible-sensor-helps-tb-patients-take-their-medicines>

[https://www.business-standard.com/article/pti-stories/new-edible-sensor-helps-tb-patients-take-their-meds-study-119100700356\\_1.html](https://www.business-standard.com/article/pti-stories/new-edible-sensor-helps-tb-patients-take-their-meds-study-119100700356_1.html)

<https://www.geo.tv/latest/250115-ingestible-sensor-has-potential-to-revolutionise-treatment-for-tb-study>

<https://www.news-medical.net/news/20191004/New-sensor-technology-to-revolutionize-treatment-and-cure-of-tuberculosis.aspx>

<https://www.medicalbrief.co.za/archives/ingestible-sensor-could-revolutionise-tb-treatment/>

<https://dailyheralds.org/fitness/study-proteus-digital-pill-system-accurate-improved-adherence-california-tb-patients-40648468>

<https://www.mobihealthnews.com/news/north-america/study-proteus-digital-pill-system-accurate-improved-adherence-among-california-tb>

<https://www.outlookindia.com/newscroll/new-edible-sensor-helps-tb-patients-take-their-meds-study/1635387>

<http://www.medindia.net/news/edible-sensor-benefits-tb-patients-190756-1.htm>

<http://7thspace.com/headlines/992215/ingestible-sensor-allows-patients-to-be-independent-but-still-supported-during-tb-treatment.html>

<https://uk.news.yahoo.com/revolutionary-edible-sensor-enables-health-180100530.html>

#### **Links to Blog Coverage :**

<https://life.ru/1246753>

<https://bioengineer.org/ingestible-sensor-allows-patients-to-be-independent-but-still-supported-during-tb-treatment/>

<https://naked-science.ru/article/medicine/sedobnye-sensory-pomogayut>

#### **Links to Policy Document Citation:**

<https://www.cadth.ca/direct-observational-therapy-treatment-tuberculosis-clinical-evidence-and-guidelines>

#### **Publication References:**

[Drug and Opioid-Involved Overdose Deaths — United States, 2013–2017](#)

Lawrence Scholl, Puja Seth, Mbabazi Kariisa, Nana Wilson, Grant Baldwin  
2018, MMWR Morbidity and Mortality Weekly Report - Article

[A patient-level pooled analysis of treatment-shortening regimens for drug-susceptible pulmonary tuberculosis](#)

Marjorie Z. Imperial, Payam Nahid, Patrick P. J. Phillips, Geraint R. Davies, Katherine Fielding, Debra Hanna, David Hermann, Robert S. Wallis, John L. Johnson, Christian Lienhardt, Rada M. Savic  
2018, Nature Medicine - Article

[Adherence interventions and outcomes of tuberculosis treatment: A systematic review and meta-analysis of trials and observational studies](#)

Narges Alipanah, Leah Jarlsberg, Cecily Miller, Nguyen Nhat Linh, Dennis Falzon, Ernesto Jaramillo, Payam Nahid  
2018, PLOS Medicine - Article

[Digitizing Medicines for Remote Capture of Oral Medication Adherence Using Co-encapsulation](#)

SH Browne, C Peloquin, F Santillo, R Haubrich, L Muttera, K Moser, GM Savage, CA Benson, TF Blaschke  
2017, Clinical Pharmacology & Therapeutics - Article

[Usability of a novel digital medicine system in adults with schizophrenia treated with sensor-embedded tablets of aripiprazole](#)

Timothy Peters-Strickland, Linda Pestreich, Ainslie Hatch, Shashank Rohatagi, Ross A Baker, John P Docherty, Lada Markovtsova, Praveen Raja, Peter J Weiden, David P Walling  
2016, Neuropsychiatric Disease and Treatment - Article

[Development, roll-out and impact of Xpert MTB/RIF for tuberculosis: what lessons have we learnt and how can we do better?](#)

Heidi Albert, Ruvandhi R. Nathavitharana, Chris Isaacs, Madhukar Pai, Claudia M. Denking, Catharina C. Boehme  
2016, European Respiratory Journal - Article

[Enhancing management of tuberculosis treatment with video directly observed therapy in New York City](#)

C Chuck, E Robinson, M Macaraig, M Alexander, J Burzynski  
2016, The International Journal of Tuberculosis and Lung Disease - Article

[The Role of Adherence and Retreatment in De Novo Emergence of MDR-TB](#)

Dominique Cadosch, Pia Abel zur Wiesch, Roger Kouyos, Sebastian Bonhoeffer  
2016, PLOS Computational Biology - Article

[Let Visuals Tell the Story: Medication Adherence in Patients with Type II Diabetes Captured by a Novel Ingestion Sensor Platform](#)

Sara H Browne, Yashar Behzadi, Gwen Littlewort  
2015, JMIR mHealth and uHealth - Article

[Optimizing the clinical pharmacology of tuberculosis medications](#)

E F Egelund, A Alsultan, C A Peloquin  
2015, Clinical Pharmacology & Therapeutics - Article

[New anti-tuberculosis drugs and regimens: 2015 update](#)

Lia D'Ambrosio, Rosella Centis, Giovanni Sotgiu, Emanuele Pontali, Antonio Spanevello, Giovanni Battista Migliori  
2015, ERJ Open Research - Article

[An Ingestible Sensor for Measuring Medication Adherence](#)

Hooman Hafezi, Timothy L. Robertson, Greg D. Moon, Kit-Yee Au-Yeung, Mark J. Zdeblick, George M. Savage  
2014, IEEE Transactions on Biomedical Engineering - Article

[The Changing Face of Heroin Use in the United States: A Retrospective Analysis of the Past 50 Years](#)

Theodore J. Cicero, Matthew S. Ellis, Hilary L. Surratt, Steven P. Kurtz  
2014, JAMA Psychiatry - Article

[The Temporal Dynamics of Relapse and Reinfection Tuberculosis After Successful Treatment: A Retrospective Cohort Study](#)

Florian M. Marx, Rory Dunbar, Donald A. Enarson, Brian G. Williams, Robin M. Warren, Gian D. van der Spuy, Paul D. van Helden, Nulda Beyers  
2014, Clinical Infectious Diseases - Article

[Efficacy and safety of thrice weekly DOTS in tuberculosis patients with and without HIV co-infection: an observational study](#)

Richa Vashishtha, Krishna Mohan, Bhagteshwar Singh, Satish K Devarapu, Vishnubhatla Sreenivas, Sanjay Ranjan, Deepak Gupta, Sanjeev Sinha, Surendra K Sharma  
2013, BMC Infectious Diseases - Article

**Supporting grants**

[A Novel Wireless Ingestible Sensor System for Measurement of Medication Adherence in HIV Treatment and Prevention](#) National Institute of Mental Health to CONSTANCE ANN BENSON, SARA H. BROWNE

#### **Clinical trial references**

[A Pilot Clinical Trial Characterizing Use of Ingestion Sensor Enabled Rifamate in Comparison to Directly Observed Therapy for the Treatment of Tuberculosis](#)

University of California, San Diego

#### **Publication Citations**

[Involvement of Human Volunteers in the Development and Evaluation of Wearable Devices Designed to Improve Medication Adherence: A Scoping Review](#)

Livia Luize Marengo, Silvio Barberato-Filho

2023, Sensors - Article

[Variation in missed doses and reasons for discontinuation of anti-tuberculosis drugs during hospital treatment for drug-resistant tuberculosis in South Africa](#)

Elize Pietersen, Kim Anderson, Helen Cox, Keertan Dheda, Aihua Bian, Bryan E. Shepherd, Timothy R. Sterling, Robin M. Warren, Yuri F. van der Heijden

2023, PLOS ONE - Article

[Bibliometric analysis and evidence of clinical efficacy and safety of digital pills](#)

Olena Litvinova, Elisabeth Klager, Andy Wai Kan Yeung, Nikolay T. Tzvetkov, Oliver Kimberger, Maria Kletecka-Pulker, Harald Willschke, Atanas G. Atanasov

2023, Frontiers in Pharmacology - Article

[Improving Tuberculosis Medication Adherence: The Potential of Integrating Digital Technology and Health Belief Model](#)

Mohd Fazeli Sazali, Syed Sharizman Syed Abdul Rahim, Ahmad Hazim Mohammad, Fairrul Kadir, Alvin Oliver Payus, Richard Avoi, Mohammad Saffree Jeffree, Azizan Omar, Mohd Yusof Ibrahim, Azman Atil, Nooralisa Mohd Tuah, Rahmat Dapari, Meryl Grace Lansing, Ahmad Asyraf Abdul Rahim, Zahir Izuan Azhar

2022, Tuberculosis and Respiratory Diseases - Article

[Adaptive interventions for opioid prescription management and consumption monitoring.](#)

Neetu Singh, Upkar Varshney

2022, Journal of the American Medical Informatics Association - Article

[Use of an Ingestible, Sensor-Based Digital Adherence System to Strengthen the Therapeutic Relationship in Serious Mental Illness](#)

Anabel G Richey, Ildiko Kovacs, Sara Browne

2022, JMIR Mental Health - Article

[eHealth in TB clinical management](#)

I Margineanu, C Louka, O Akkerman, Y Stienstra, J-W Alffenaar

2022, The International Journal of Tuberculosis and Lung Disease - Article

[Impact of Poverty on Health](#)

Ahmad Alqassim, Maged El-Setouhy

2022, Healthcare Access - New Threats, New Approaches [Working Title] – Chapter

[Formative acceptance of ingestible biosensors to measure adherence to TB medications](#)

Clint Vaz, Nisha K. Jose, Jeremiah Jacob Tom, Georgia R. Goodman, Jasper S. Lee, Rana Prathap Padappayil, Manjunath Madathil, Conall O'Cleirigh, Rashmi Rodrigues, Peter R. Chai  
2022, BMC Infectious Diseases - Article

[Effectiveness of a digital medication event reminder and monitor device for patients with tuberculosis \(SELFTB\): a multicenter randomized controlled trial](#)

Tsegahun Manyazewal, Yimtubezinash Woldeamanuel, David P. Holland, Abebaw Fekadu, Vincent C. Marconi  
2022, BMC Medicine - Article

Policy document citations

[Direct Observational Therapy for the Treatment of Tuberculosis: Clinical Evidence and Guidelines](#)

2020, Canadian Agency for Drugs and Technologies in Health