

# MIA JOVANOVA, PhD

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(she/her)

## ACADEMIC POSITIONS

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**School of Medicine, University of St. Gallen, Switzerland** November, 2023-current  
 Scientific Director, CSS Health Lab  
 Core Director Digital Biomarkers in Metabolic Health, Centre for Digital Health Interventions

The CSS Health Lab is a joint research lab between the School of Medicine, the Department of Technology Management at University of St. Gallen (HSG) and the Department of Management, Technology and Economics at ETH Zurich, led by Dr. Mia Jovanova. The lab focuses on advancing digital biomarker development in metabolic health through clinical trials.

**Department of Brain and Cognitive Sciences, MIT, United States** September, 2023  
 Visiting Postdoctoral Researcher, SaxeLab, PI: Dr. Rebecca Saxe

## EDUCATION

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**Annenberg School for Communication, University of Pennsylvania** May, 2023  
 Communication Neuroscience Lab,  
 PhD and M.A

PhD dissertation: A person-specific approach to predict health behaviors: a proof of concept ([link](#))  
 Committee: Drs. Emily B. Falk, David M. Lydon-Staley, Duncan J. Watts

**Department of Communication, Cornell University**  
 B.S. in Communication; Health, Science, and Environment track with Distinction in Research, Summa Cum Laude, GPA (4.1)

## FUNDING

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Swiss CSS insurer, Design of digital biomarkers in metabolic health, Lead-PI, CHF 3.5M  
 MIT Reed Fund, Legitimacy of public health institutions, co-PI with Dr. Rebecca Saxe, \$100k  
 US Army Research Office, Multiscale integration of neural, social, and network theory to understand & predict transitions from illness to wellness. Trainee with PI: Emily Falk, \$7.5M  
 Wharton Risk Management and Decision Processes, Russell Ackoff Doctoral Fellowship, \$2.5k

## RESEARCH INTERESTS

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Digital biomarker development | Digital wearable tools | Clinical trials | Person-specific modeling | Intensive mobile sampling | Behavior change | Health Psychology |

## PEER-REVIEWED PUBLICATIONS

13. Huynh, P., Fleisch, E., Brändle, M., Kowatsch, T., & **Jovanova, M.** (2024). Digital health technologies for metabolic disorders in older adults: A scoping review protocol. *In press at BMJ Open*.
12. Giger, O. F., Pfitzer, E., Mekniran, W., Gebhardt, H., Fleisch, E., **Jovanova, M.**, & Kowatsch, T. (2024). Collaboration and innovation patterns in diabetes ecosystems. *In press at Digital Health*.
11. Brügger, V., Kowatsch, T., & **Jovanova, M.** (2024). Wearables and smartphones for tracking modifiable risk factors in metabolic health: Protocol for a scoping review. *JMIR research protocols*, 13(1), e59539.
10. Liebich, A., Zheng, S., Schachner, T., Mair, J., **Jovanova, M.**, Müller-Riemenschneider, F., & Kowatsch, T. (2024). Non-pharmaceutical interventions and epigenetic aging in adults: Protocol for a scoping review. *Plos one*, 19(8), e0301763.
9. Kang, Y., Ahn, J., Cosme, D., McGowan, A., Mwilambwe-tshilobo, L., Zhou, D., **Jovanova, M.**, Stanoi, O., Mucha, P. J., Ochsner, K., Bassett, D. S., Lydon-Staley, D., & Falk, E. B. Frontoparietal system functional connectivity moderates the within-day associations between increases in time spent on social media and subsequent negative affect. *Scientific Reports*, 13(1), 20501.
8. **Jovanova, M.**, Cosme, D., Doré, B., Kang, Y., Stanoi, O., Cooper, N., Helion, C., Lomax, S., McGowan, A. L., Boyd, Z., Bassett, D. S., Mucha, P. J., Ochsner, K. N., Lydon-Staley, D. M., Falk, E. B. Psychological distance intervention reminders reduce alcohol consumption frequency in daily life. *Scientific Reports*. 13(1), 12045
7. Zhou, D., Kang, Y., Cosme, D., **Jovanova, M.**, He, X., Mahadevan, A., Stanoi, O., Brynlidsen J, K., Cooper, N., Cornblath, E., Parkes, L., Mucha, P. J., Ochsner, K. N., Lydon-Staley, D.M., Falk, E., Bassett, D. S. (2023). Mindfulness promotes control of brain network dynamics for self-regulation and discontinues the past from the present. *Proceedings of the National Academy of Sciences*. 120(2).
6. **Jovanova, M.**, Falk, E. B., Pearl, J. M., Pandey, P., Brook O'Donnell, M., Kang, Y., Bassett, D. S., Lydon-Staley, D. M. (2022). Brain system integration and message consistent health behavior change. *Health Psychology*, 41(9), 611-620.
5. McGowan, A. L., PhD, Sayed, F., Boyd, Z. M., **Jovanova, M.**, Kang, Y., Speer, M., Bassett, D. S., Lydon-Staley, D. M. (2022). Dense sampling approaches for psychiatry research: Adventures with scanners and smartphones. *Biological Psychiatry*.
4. Kang, Y, Cosme, D., Lydon-Staley, D., Ahn, J., **Jovanova, M.**, Corbani, F., et al. Purpose in life, neural alcohol cue reactivity and daily alcohol use in social drinkers. (2022). *Addiction*
3. **Jovanova, M.**, Skurka, C., Byrne, S., Kalaji, M., Greiner Safi, A., Porticella, N., Mathios, D. A., Avery, J. R., Dorf, C. M., Niederdeppe, J. (2021). Should graphic warning labels proposed for cigarette packages sold in the United States mention the Food and Drug Administration? *Nicotine and Tobacco Research*, 23(2), 402-406.
2. McGowan A. L., Parkes L, He X, Stanoi O., Kang Y., Lomax S., **Jovanova M.**, Mucha P. J., Ochsner K. N., Falk E. B., Bassett D. S., Lydon-Staley D. M. (2021). Controllability of structural brain networks and the waxing and waning of negative affect in daily life. *Biological Psychiatry Global Open Science*, 1(1).
1. Scholz, C., **Jovanova, M.**, Baek, E., & Falk, E. B. (2020). Media content sharing as a value-based decision. *Current Opinion in Psychology*, 31, 83-88.

## MANUSCRIPTS UNDER REVIEW

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9. Giger, O. F., Fleisch, E., Kowatsch T., **Jovanova, M.** (*Under Review*). Barriers and facilitators of implementing value-based healthcare: The case of SwissDiabeter.
8. Brügger, V., Kowatsch, T., **Jovanova, M.** (*Under Review*). Personalizing dietary interventions by predicting individual vulnerability to glucose excursions. *MedRxiv*, 2024-08. <https://doi.org/10.1101/2024.08.07.24311591>
7. Mekniran, W., Robert, J., Mair, J., Gand, K., Schlieter, H., Castro, O., Nissed, M., Huynh P., Giger, O. F., Bischof, A., Liester, T., Pfitzer, E., Frese, B., Longral, A., Fleisch, E., Kowatsch, T., **Jovanova, M.** (*Under Review*). Prevention over cure: a prevention-first framework for noncommunicable diseases.
6. Mekniran, W., Giger, O., Fleisch E., Kowatsch, T., **Jovanova, M.** (*Under review*). The longevity landscape: Value creation for healthy aging.
5. **Jovanova, M.**, Stanoi, O., Scholz, C., Doré, B., Cosme, D., Kang, Y., Cooper, N., Boyd Z, M., Bassett D, S., Mucha, P. J., Lydon-Staley, D.M & Falk, E. B. (*Under Review*). Brain responses and susceptibility to peer influence on drinking.
4. Cosme, D., Helion, C., Kang, Y., Lydon-Staley, D.M., Dore, B.P., Stanoi, O., Ahn, J., **Jovanova, M.**, McGowan, A.L., Boyd, Z.M. and Mucha, P. J. (*Under Review*). Mindful attention to alcohol can reduce cravings in the moment and consumption in daily life. [doi.org/10.31234/osf.io/7j4ey](https://doi.org/10.31234/osf.io/7j4ey)
3. Langrock, I., & **Jovanova, M.** Gender gaps in Communication's Open Science movement. (*Under review*). Preprint: <https://ssrn.com/abstract=4283210>.
2. Cosme, D., Kang, Y., Tartak, J. C., Ahn, J., Corbani, F. E., Cooper, N., Doré B., He X., Helion C., **Jovanova M.**, Lomax, S., Mahadevan A S., McGowan A, L., Paul, A., Pei R. et al., (*Under review*). Study protocol: Social Health Impact of Network Effects (SHINE) Study. Preprint: [doi.org/10.31234/osf.io/cj2nx](https://doi.org/10.31234/osf.io/cj2nx).
1. Sayed, F., McGowan, A. L., **Jovanova, M.**, Cosme, D., Kang, Y., Stanoi, O., Ochsner, K. N., Mucha, P. J., Bassett, D., Falk. E. B., Lydon-Staley, D. M. (*Under review*). Momentary associations between affect and alcohol use in the daily lives of college students.

## AWARDS AND HONORS

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Top Paper Award, International Communication Association; biology division	2020, 2023
James D. Woods Award for Outstanding Graduate Teaching, University of Pennsylvania	2022
Russell Ackoff Doctoral Fellowship, Wharton Risk Management and Decision Processes	2021
Student Travel Award, International Communication Association	2018
Academic Excellence Award, highest major GPA (4.1), Cornell University	2017
SUNY Chancellor's Nomination for Student Excellence, Cornell University	2017

## INVITED TALKS

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- Diabetes StatClin Meeting (DISC): Biostatisticians, Engineers and Clinicians Together, Santiago de Compostela, Spain, forthcoming April, 2025
- Society for Research on Internet Interventions, Limerick, Ireland, June 2024
- Digital Health Forum, Centre for Digital Health Interventions, CDHI, virtual, March, 2024
- CAS ETH in Digital Health Workshop, Rorschacherberg, Switzerland, February 2024
- Symposium at Cantonal Hospital, St. Gallen, Switzerland, November, 2023

Summer Institute in Computational Social Science, Imperial College, London, England, June 2022  
 Women in Network Science Seminar Series, virtual, May 2022  
 Self-regulation, emotion and attention lab, University of Reading, virtual, September 2022

## CONFERENCES

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Co-Chair, Scaling-Up Digital Innovations in Healthcare BIOSTEC Workshop, 2024  
 International Communication Association, 13 talk presentations (2018-2023)  
 Swiss Society of Endocrinology and Diabetology Annual Meeting, 4 posters (2024)  
 Society for Research on Internet Interventions, Annual Meeting, 4 posters (2024)  
 Social Affective Neuroscience Society, 4 posters (2018, 2019)

## TEACHING

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**CAS ETH in Digital Health, ETH Zurich**, Department of Management, Technology, and Economics  
 Lecturer in Digital biomarker development Fall, 2024, 2025

### **University of Pennsylvania**

Head teaching fellow, Networked and Social Systems Engineering (NETS 112), Fall 2021

### **Outstanding graduate teaching award**

Teaching fellow, Research Experience (COMM 3100), Fall 2019

### **Cornell University**

Teaching fellow, Introduction to Research Methods (COMM 2820), Fall 2015, 2016

## SUPERVISION OF PHD CANDIDATES

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Victoria Brügger, Panitda Huynh, Odile-Florence Giger (School of Medicine, University of St. Gallen)  
 Magdalena Fuchs, Wasu Mekniran (Department of Management, Technology & Economics, ETH Zurich)

## SKILLS

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Programming Languages: R (advanced), Python (intermediate)  
 Study design & analysis: clinical trials, randomized experiments, multilevel mixed-effects models,  
 intensive mobile sampling, network analysis, functional neuroimaging  
 Statistical analysis plans, data management plans, clinical study reports

## REFERENCES

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Dr. Emily B. Falk (emily.falk@asc.upenn.edu)

### **University of Pennsylvania,**

Annenberg School for Communication, Department of Psychology

Wharton Marketing Department,

Wharton Operations, Information and Decisions Department

Dr. David M. Lydon-Staley (david.lydonstaley@asc.upenn.edu)  
**University of Pennsylvania,**  
Annenberg School for Communication ,  
Leonard Davis Institute of Health Economics

Dr. Duncan J. Watts djwatts@seas.upenn.edu  
**University of Pennsylvania**  
Wharton Operations, Information and Decisions Department  
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Dr. Peter J. Mucha peter.j.mucha@dartmouth.edu  
**Dartmouth College**  
Department of Mathematics

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