



# Western Institute for Advanced Study

2022

Annual  
Report

Western Institute for Advanced Study

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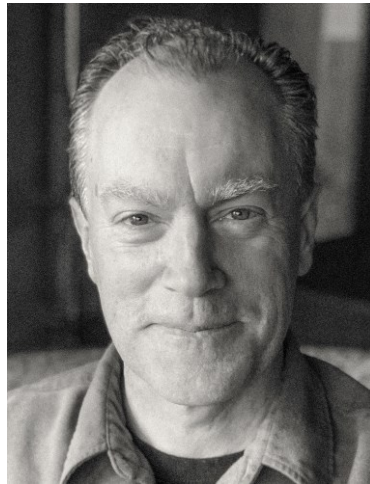
720.999.9363

# 2022 Leadership Growth

## *Board of Directors*



Izi Stoll



Nathan Cassell



Phylecia Jones

The Board of Directors wishes to thank our outgoing Directors, Amy Farrar and Philip Tilker, for their three years of service to the Western Institute for Advanced Study.

The Board of Directors also wishes to thank our new Board of Governance Advisors:

Jason Palmer, General Partner, New Markets Venture Partners

James Wang, General Partner, Creative Ventures

Patrick Kohl, Physics Professor, Colorado School of Mines

Matt Champion, Chief Marketing Officer, Breinify Digital Marketing

Matt Elkin, Non-Profit Attorney, Baker Hostetler Law Advisors

Steve Taylor, Certified Public Accountant, Taylor Roth Accounting Advisors

And the Board of Directors also wishes to thank our new Board of Scientific Advisors:

Yasunori Nomura, Professor of Theoretical Physics, University of California Berkeley

Steven Zeichner, Professor of Pediatric Infectious Disease, University of Virginia

Ramesh Srinivasan, Professor of Cognitive Sciences, University of California Irvine

# 2022 Institute Successes

*Our successes this year include:*

- Getting deals on software platforms to support our operations.



- Creating non-profit web profiles to increase visibility to the public.



- Increasing web traffic by 111% over the previous year.

Site sessions

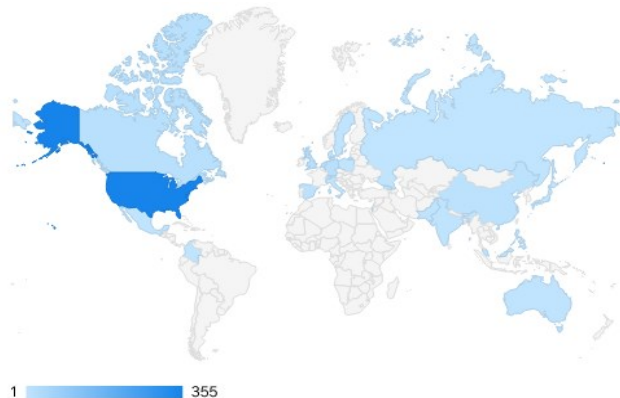
448 ↑ 111%

Unique visitors

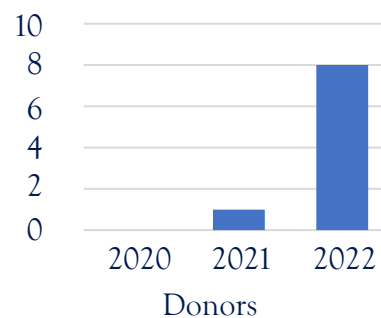
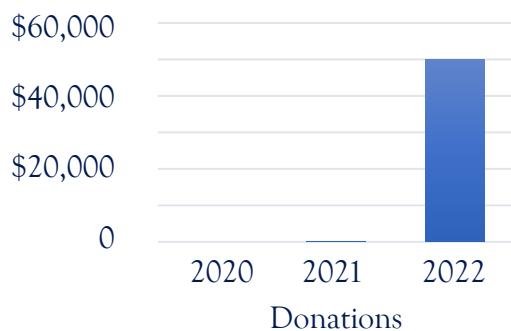
298 ↑ 66%

Avg. session duration

6m 3s ↑ 116%



- Merging our funding strategy with our scientific mission.



# 2022 Scientific Progress

4  
*research papers  
posted on bioRxiv*

A thermodynamical model of non-deterministic computation in cortical neural networks.

pre-print

Random electrical noise drives non-deterministic computation in cortical neural networks.

pre-print

The mechanics underpinning non-deterministic computation in cortical neural networks.

pre-print

Modeling electron interference at the neuronal membrane yields a holographic projection of representative information content.

pre-print

3  
*conferences  
attended*



SOCIETY for  
NEUROSCIENCE



2  
*collaborations  
initiated*



Asger Kirkeby-Hinrup



Michiel van der Vlag

AKH works at the intersection of philosophy and neuroscience. MAV works at the intersection of neuroscience and computation. Both are actively evaluating our new theory of consciousness.

1  
*Grand Challenge  
completed*

Thanks to our sponsors!

We look forward to continuing our efforts to tackle intractable problems in science, with your support.

# 2022 Financial Support

## *Donor Appreciation*

The Board of Directors wishes to thank our amazing donors, who make our continued research efforts possible. Our donors this year include:

Bala Parthasarathy, Founder and Managing Partner, Prime Ventures

Jason Palmer, General Partner, New Markets Venture Partners

Dave Parker, Founder and CEO, Benchmark Wine Group

Patrick Kohl, Physics Professor, Colorado School of Mines

Amy Farrar, Family Physician, Kaiser Permanente

Philip Tilker, Senior Software Developer, Amazon Logistics

Thank you for your incredible support!

