



***The Inflection Point***

*From Adaptation to Innovation*

***February 4<sup>th</sup> & 5<sup>th</sup>, 2021***



The MIT Sports Summit is the annual flagship event of the MIT Sports Lab. This event is designed to bring together leaders in industry and academia as well as the greater MIT community to share advances in the field of sports and new work coming out of the MIT labs. This year's program underlines an inflection point in the trajectory of sports, from the adoption of new technologies to the increasing influence of data, illuminating both how the industry is adapting to a changing world and what it takes to evolve.

# SCHEDULE: Day 1

All times in EST

All Virtual Spaces Open 11:15am

Time (ET)	Zoom Events				Gather.town Events
11:30 AM	Welcoming Remarks				Open Viewing Startup Booths and Student Posters
11:45 AM	<b>Industry Panel 1</b> <b>The Inflection Point: From Adaptation to Innovation</b> With RC Buford and David Morehouse, moderated by Christina Chase				
12:30 PM	<b>Research Flash Talks 1</b> Peko Hosoi, Alok Pattani, and Ben Shields				
1:00 PM	<b>Private Roundtable:</b> <b>Using Technology to Aid in Health and Wellness</b>	<b>Private Roundtable:</b> <b>What's working for you? Engaging the next generation of fans</b>	<b>Alumni Talk:</b> <b>Entrepreneurship</b>	<b>Alumni Talk:</b> <b>It's not just about Technology</b>	<b>Interactive Startup Showcase Student Poster Session</b>
1:30 PM	<b>Private Roundtable:</b> <b>Considerations for Stadium/Arena Reopening</b>	<b>Private Roundtable:</b> <b>Quantifying Cognitive &amp; Mental Attributes to Optimize Performance</b>			
2:00 PM	<b>Research Flash Talks 2</b> Jessika Trancik, Seung Kyun Ha, and Ivan Jutamulia				Open Viewing Startup Booths and Student Posters
2:30 PM	<b>Industry Panel 2</b> <b>Championing Diversity, Equity, and Inclusion Across Sports</b> With Rich Cho and Amy Huchthausen, moderated by Ray Reagans				
3:15 PM	Closing Remarks				

# SCHEDULE: Day 2

All times in EST

All Virtual Spaces Open 11:15am

Time (ET)	Zoom Events			Gather.town Events
11:30 AM	Welcoming Remarks			Open Viewing Startup Booths and Student Posters
11:45 AM	<b>Industry Panel 3</b> <b>The Competitive Edge: Data-Informed Decision Making</b> With Mirko Boccalatte, Sean Marks, and Scott Riewald, moderated by Christina Chase			
12:30 PM	<b>Research Flash Talks 3</b> Jaime Peraire, Andy Harland, and Jon Roberts			
1:00 PM	<b>Private Roundtable:</b> <b>Data Validation</b>	<b>Private Roundtable</b> <b>Sustainability in Sports</b>	<b>Alumni Talk</b> <b>Fan Engagement</b>	<b>Interactive Startup Showcase and Student Poster Session</b>
1:30 PM	<b>Special Fireside Chat</b> With Brian Bilello and Tim Zue, moderated by Christina Chase			
2:15 PM	<b>Research Flash Talks 4</b> Ferran Vidal-Codina and Sarah Fay			Open Viewing Startup Booths and Student Posters
2:45 PM	<b>Industry Panel 4</b> <b>Myth Busting: Critical Elements in Vetting New Sports Technologies</b> With Nicolas Evans, Ben Peterson, and Lorena Torres Ronda, moderated by Eric Schmidt			
3:30 PM	Closing Remarks			

# INDUSTRY PANEL 1 (DAY 1)

The Inflection Point: From Adaptation to Innovation



**RC Buford**

Chief Executive Officer  
Spurs Sports and Entertainment



**David Morehouse**

President & CEO  
Pittsburgh Penguins



**Christina Chase**

Co-Founder & Managing Director  
MIT Sports Lab  
Panel Moderator

# RESEARCH FLASH TALKS 1



**Peko Hosoi**

Is it ok to put fans in stadiums during a pandemic?



**Alok Pattani**

Scaling Statistical Insights: Automating  
MLB Game Notes Using Google Cloud



**Ben Shields**

Reimagining what it means to attend a  
sporting event

## INDUSTRY PANEL 2 (DAY 1)

Championing Diversity, Equity, and Inclusion Across Sports



**Rich Cho**

Vice President of Basketball Strategy  
Memphis Grizzlies



**Amy Huchthausen**

Commissioner  
America East Conference



**Ray Reagans**

Alfred P. Sloan Professor of Management  
MIT Sloan School of Management  
Panel Moderator

## RESEARCH FLASH TALKS 2



**Jessika Trancik**

Identifying climate solutions to match  
energy consuming behaviors



**Seung Kyun (SK) Ha**

Modeling player dynamics in football  
dribbling



**Ivan Jutamulia**

Evaluating decision making in basketball  
with Expected Possession Value (EPV)

## INDUSTRY PANEL 3 (DAY 2)

The Competitive Edge: Data-Informed Decision Making



**Mirko Boccalatte**

Chief Operations Officer  
Ferrari F1 Team



**Sean Marks**

General Manager  
Brooklyn Nets



**Scott Riewald**

Senior Director for High Performance  
Projects  
US Olympic & Paralympic Committee



**Christina Chase**

Co-Founder & Managing Director  
MIT Sports Lab  
Panel Moderator

## RESEARCH FLASH TALKS 3



**Jaime Peraire**

High Fidelity CFD on Graphic Processor  
Units



**Andy Harland**

Lab reconstructions of head impacts



**Jon Roberts**

Assessing the accuracy of power  
measurement technology in cycling

# SPECIAL FIRESIDE CHAT



**Brian Bilello**

President  
New England Revolution

As President of the New England Revolution, Brian Bilello reports directly to the Kraft family and oversees all aspects of the club's business and soccer operations. He is responsible for establishing the club's strategic vision and fostering its implementation. Working closely with the Kraft family to represent the Revolution in league matters, Bilello has served on several Major League Soccer and Soccer United Marketing committees. An avid soccer player himself, Bilello played varsity soccer at MIT while studying engineering and economics. He lives in Massachusetts with his wife, Vanessa, and two daughters.



**Tim Zue**

Executive VP and CFO  
Boston Red Sox

Tim Zue is responsible for the financial management of the Boston Red Sox overseeing the organization's operating budget, accounting, financial planning, forecasting, and business analytics. Prior to his current role, Zue served as Senior Vice President of Finance, Strategy and Analytics for both the Red Sox and Fenway Sports Management (FSM). Zue received a Bachelor's Degree in Mechanical Engineering from MIT in 1999, where he won a robotics design contest and competed in an international robotics design competition in Tokyo. A native of Winchester, MA, Zue lives in Lexington with his wife, Nicole, and their three children, Adelyn, Harrison, and Vivienne.



## INDUSTRY PANEL 4 (DAY 2)

Myth Busting: Critical Elements in Vetting New Sports Technologies



**Nicolas Evans**

Head of Football Research & Standards  
FIFA



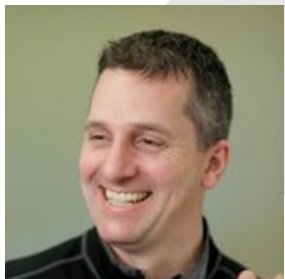
**Ben Peterson**

Head of Player Health & Performance  
San Francisco 49ers



**Lorena Torres Ronda**

Adjunct Fellow  
Institute for Health and Sport at  
Victoria University in Melbourne, Australia



**Eric Schmidt**

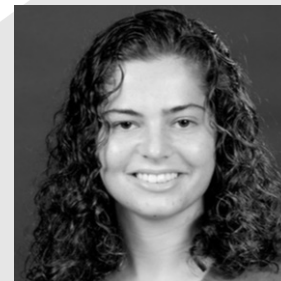
Head of Advocacy for Data Analytics  
Google Cloud  
Panel Moderator

## RESEARCH FLASH TALKS 4



**Ferran Vidal-Codina**

Automatic event detection in football using  
tracking data



**Sarah Fay**

Runners as Springs

# ALUMNI SPEAKERS



**Nick Davis**

Special Assistant - Baseball Research  
Milwaukee Brewers



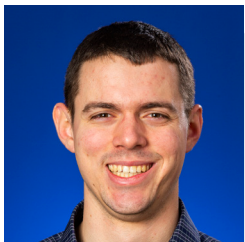
**Sam Feder**

Vice President  
New York Islanders



**Mike Fitzgerald**

VP of Research and Development  
Arizona Diamondbacks



**David Hesslink**

Baseball Operations  
Seattle Mariners



**Kevin Kusch**

Co-Founder and CTO  
notemeal.io



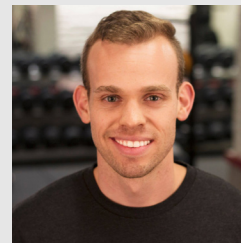
**Matt Lindsay**

Director of Data Science and Software  
New England Patriots



**Bill Near**

Founder and CEO  
Helios Hockey



**Jacob Rothman**

Co-Founder and CEO  
Perch



**Carlos Salmini**

Co-Founder and CEO  
SHRED

# MIT SPORTS TECH STARTUPS



Helios Hockey is an early-stage sports technology company based in Portsmouth, NH. We are developing sensor-based IoT technology, mobile and cloud analytics platforms to bring real-time performance stats to ice hockey. Our team from MIT, the NHL, formerly Intel, Nike and Bauer, is building products to improve the next generation of player, team and equipment development.

## NEXTILES

Nextiles is reinventing the way the sports industry interacts, connects and engages with consumers. Nextiles is a patent-protected advanced materials company providing biometrics through conductive threads. Nextiles is focused on innovating and providing value to high end athletes, coaches, teams and the overall sports performance industry.



Notemeal provides web and mobile solutions for performance dietitians to optimize athlete nutrition. Our applications increase the efficiency of dietitians and provide a vehicle for engagement with athletes. By tracking athlete progress and compliance, Notemeal provides insights and highlights opportunities for furthering nutrition education.



Perch brings strength training into the 21st century by using small 3D cameras to quantify weight room workload for velocity and power outputs. With a simple setup and seamless integration, Perch delivers immediate and objective feedback, enhances performance, and reduces injury.



Rivet is an enablement platform applicable to creative entrepreneurs, allowing them to retain and nurture their most valuable fans around their highest value content. Rivet allows you to leverage better email through powerful audience segmentation and robust CRM features to create flexibility and robust infrastructure for higher-margin monetization in simple easy steps.

# MIT Sports Lab Leadership

## About the MIT Sports Lab

The MIT Sports Lab works with a diverse set of undergraduate and graduate MIT students and faculty across all disciplines. The Sports Lab is committed to addressing complex challenges in sports by advancing research in artificial intelligence, computer vision, mechanics, human and institutional behavior, machine learning, and statistics. Our mission is to accelerate new techniques and approaches in areas such as athlete health and performance, talent identification and development, game strategy, and fan engagement. Driven by the desire to push the limits of human performance, we also focus on the design and discovery of new materials and products to advance high-performance personal and protective equipment.

Partnering with leaders across sports, the Sports Lab provides early entry into advancements in the field, facilitates cross-industry learnings, offers unparalleled access to the latest innovations across disciplines, and helps organizations define and grow their expertise..



**Christina Chase** is a Lecturer at MIT in the Department of Mechanical Engineering. In 2015, she co-founded the MIT Sports Lab and serves as its Managing Director. Prior to this she was the first Entrepreneur in Residence at MIT through the Martin Trust Center for MIT Entrepreneurship. Christina has helped hundreds of teams go from concept to company. In 2013, she was named one of the 25 Most Influential Women in the Boston Tech Community and in 2014, Mashable named her one of the 15 People Shaping Boston's Tech Scene. Christina is a former cyclist where she was one of 12 women selected by the US Cycling Federation to train at the US Olympic Training Center. She has taught downhill skiing in Colorado, summited six of Colorado's 14-ers across seasons, and her latest sport is kiteboarding. Christina is a Techstars mentor and a former board member of the MIT Enterprise Forum.



**Anette "Peko" Hosoi** is the Associate Dean of the MIT School of Engineering, the Neil and Jane Pappalardo Professor of Mechanical Engineering and Professor of Mathematics. Her research contributions lie at the junction of nonlinear hydrodynamics, biomechanics, and bio-inspired design. A common theme in her work is the fundamental study of shape, kinematic, and rheological optimization of biological systems with applications to the emergent field of soft robotics. More recently, she has turned her attention to problems that lie intersection of biomechanics, applied mathematics, and sports. She is the Co-Founder of the MIT Sports Lab which connects the MIT community with pro-teams and industry partners to address data and engineering challenges that lie within the sports domain. She has received numerous awards including the APS Stanley Corrsin Award, the Bose Award for Excellence in Teaching, and the Jacob P. Den Hartog Distinguished Educator Award. She is a Fellow of the American Physical Society (APS), a Radcliffe Institute Fellow, and a MacVicar Faculty Fellow.

# Summit Leadership



**Jess Sonner**  
Summit Co-Lead  
Mechanical Engineering  
Junior



**Ivan Jutamulia**  
Summit Co-lead  
Computer Science  
Graduate Student



**Audrey Bosquet**  
Marketing & Graphics  
MIT Sports Lab  
Alumnus



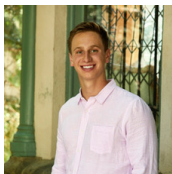
**Seung Kyun (SK) Ha**  
Research Speaker Management  
Chemical Engineering  
Graduate Student



**Kevin Lyons**  
Website  
Computer Science  
Graduate Student



**Ferran Vidal-Codina**  
Research Speaker Management  
MIT Sports Lab  
Graduate Researcher



**Joey Licht**  
Round Table Discussions  
Computer Science  
Sophomore



**Tim Meulemeester**  
Alumni Speaker Management  
MIT Sloan  
MBA Student



**Justin Xiang**  
Resume Book  
Computer Science  
Graduate Student



**Duncan Lee**  
Marketing & Graphics  
MIT Media Lab  
Graduate Student



**Jonathan Berger**  
Alumni Speaker Management  
Computer Science  
Freshman



**Ceci Muñoz**  
Logistics  
Mathematics & Computer Science  
Sophomore



**Grant Miller**  
Logistics  
Computer Science & Mathematics  
Junior



**Simran Pabla**  
Startup Showcase  
Computer Science  
Graduate Student



**Henry Martin**  
Startup Showcase  
Business Analytics & CS  
Senior



**Spencer Hylen**  
Logistics  
Computer Science & Mathematics  
Senior



**Kaleb Blake**  
Student Poster Session & Graphics  
Mechanical Engineering  
Junior



**Cole Koeniguer**  
Event Outreach Management  
MIT Sloan  
MBA Student



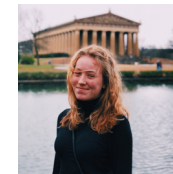
**Christina Antonakakis**  
Roundtable Discussions  
Business Analytics & CS  
Junior



**Brian Bailey**  
Student Ambassadors  
Computation & Cognition  
Sophomore



**Reese Alley**  
Community Outreach  
Brain & Cognitive Science  
Sophomore



**Emma Rutherford**  
Student Poster Session Support  
Mechanical Engineering & Physics  
Sophomore



**Jay Theriault**  
Logistics  
CS & Data Analytics  
Sophomore

# Our Partners

The 2021 Sports Summit would not be possible without the incredible support of our valued **partners, affiliates, and MIT sports tech startups.**

**Thank you!**



Google Cloud

