

Welcome to the 2020

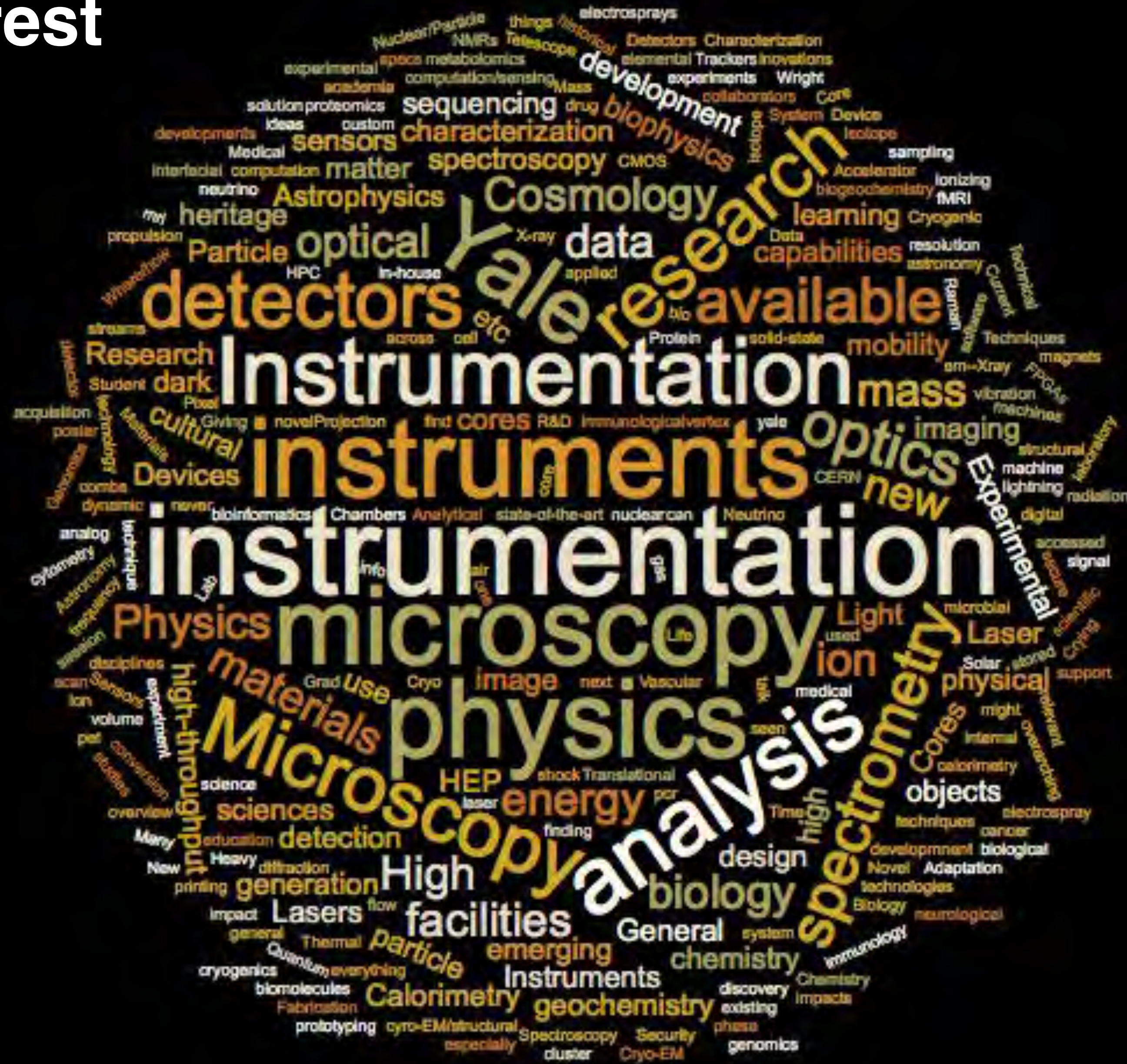
Yale Day of Instrumentation

instrumentation.yale.edu

Instrumentation at Yale



Topics of Interest



May 2018

Yale

Report of the University Science Strategy Committee

Priority areas

Integrative data science and its mathematical foundations

Quantum science, engineering and materials

Neuroscience, from molecules to mind

Inflammation science

Environmental and evolutionary science

Cross-cutting initiatives

Graduate student support

Diversity across the STEM pipeline

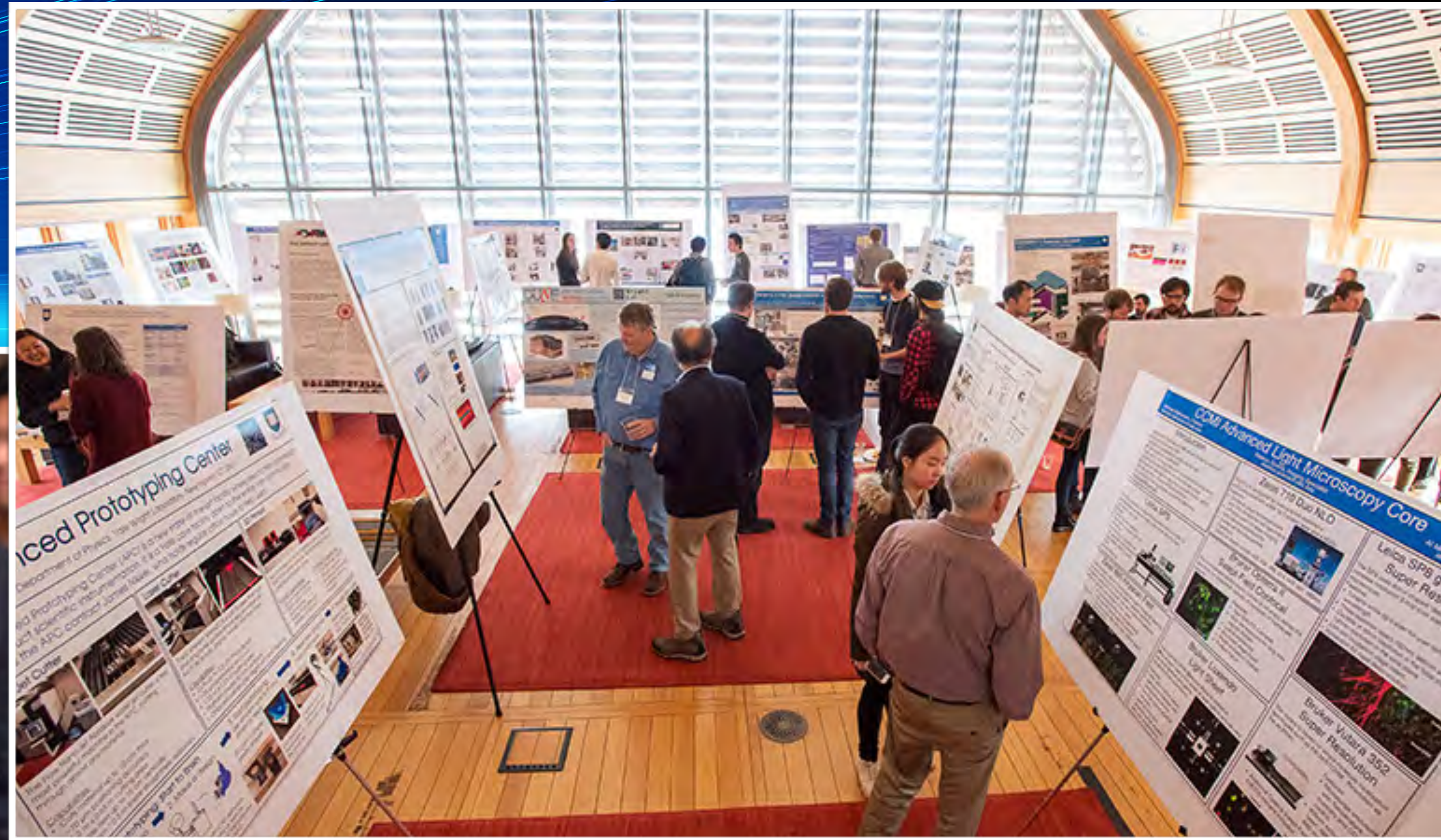
Instrumentation development

Core facilities

"....engineering and applied sciences will play a vital role in implementing many of these ideas."



2018 Yale Day of Instrumentation



instrumentation.yale.edu

Instrumentation Development Committee

Karsten Heeger, *Department of Physics and Wright Laboratory* (co-chair)

Joerg Bewersdorf, *Department of Cell Biology and Department of Biomedical Engineering* (co-chair)

Todd Constable, *Radiology and Biomedical Imaging, Neurosurgery, MR Research Center*

Pieter van Dokkum, *Astronomy*

Mark Johnson, *Chemistry*

Jun Liu, *Microbial Sciences Institute, West Campus*

Rajit Manohar, *Electrical Engineering, Computer Science*

Peter Raymond, *Forestry and Environmental Studies, Yale Analytical and Stable Isotope Center*

Peter Schiffer, *Professor of Applied Physics and Physics*

Lisa d'Angelo, *Office of the Provost*

Angelika Hofmann, *Office of the Provost*

2020 Yale Day of Instrumentation - Goals



Continue to develop the campus community
around instrumentation development at Yale.

Make 1 new connection today!

2020 Yale Day of Instrumentation - Goals



Seek input on the needs and next steps in the instrumentation initiative at Yale.

Participate in a working group!

2020 Yale Day of Instrumentation

8.30 **Registration** - YSB Lobby

9.00 **Introductions and welcome** - Marsh Lecture Hall

- Jeff Brock, Dean of Sciences, FAS
- Michael Crair, Deputy Dean for Scientific Affairs, Yale School of Medicine
- Karsten Heeger, Joerg Bewersdorf, co-organizers of YDol

9.15 **Role of instrumentation and technology development in science** - Marsh Hall

- Thomas Ullrich (Yale/BNL), *Instrumentation and technology development for the Electron-Ion Collider*

9.35 **Core Facilities and Instrumentation Development at Yale** - Marsh Hall

- Lisa D'Angelo, Associate Provost for Research
- Ben Myers, Director of Research Cores (Central)
- Janie Merkel, Director of Research Cores (School of Medicine)

9.55 **Q&A and discussion about cores and instrumentation development** - Marsh Hall

10.05 **Communicating the excitement of instrumentation and technology** - Marsh Hall

- Angelika Hofmann, Strategic Projects and Communications Advisor to the Vice Provost for Research

10.20 **What's in a name?** - Brainstorming (facilitated by K. Heeger) - Marsh Hall

10.30 **Coffee break** - YSB Lobby

10.50 **Core Facilities and Instrumentation Development at Yale** - Marsh Hall

- Center for Engineering Innovation and Design (CEID) - Joe Zinter
- Chemical and Biophysical Instrumentation Center (CBIC) - Eric Paulson
- Wright Lab Advanced Prototyping Center - James Nikkel
- Neurotechnology Core - Joel Greenwood

11.50 **Instructions for the working groups** - Marsh Hall

12.00 **Lunch** provided for registered participants - pick up in YSB Lobby and walk to break out rooms

2020 Yale Day of Instrumentation

12.15 Working group breakout sessions: Instrumentation and technology development across Yale.

- Quantum science - David DeMille, Eric Altmann - YSB 254
- Neuroscience - Todd Constable, Michael Higley - YSB 101
- Env. Sci/Ecology/Climate Change - Peter Raymond, Drew Gentner - YSB C142
- Instrumentation development and core facilities - Lisa D'Angelo, Jun Liu - YSB 153
- Instrumentation development, training, education - James Nikkel - YSB C143
- Mass Spectrometry - Mark Johnson, Noah Plavansky - YSB 253
- Instrumentation development in the arts and other disciplines- Anikó Bezur - YSB 251

2.30 Photography and video contests - Marsh Hall

2.45 Results from working groups - Marsh Hall

3:15 Coffee and social hour - YSB Lobby

4:00 Program end

Working Groups

Quantum science

David DeMille, Eric Altmann - YSB 254

Neuroscience

Todd Constable, Michael Higley - YSB 101

Environmental Science, Ecology, Climate Change

Peter Raymond, Drew Gentner - YSB C142

Instrumentation development and core facilities

Lisa D'Angelo, Jun Liu - YSB 153

Instrumentation development, training, education, professional development

James Nikkel - YSB C143

Mass spectrometry

Mark Johnson, Noah Plavansky - YSB 253

Instrumentation development in the arts and other disciplines

Anikó Bezur - YSB 251

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Instrumentation development in the arts and other disciplines

Anikó Bezur - YSB 251

Collect **your input and ideas** for how instrumentation and technology development can best **support the research and education mission of Yale.**

Write a brief report within a month!

Working Group Questions

Role and opportunities of instrumentation and technology development?

What are the main challenges and hurdles?

What is missing? Where is the gap?

Top 3 suggestions for what Yale should invest in to be a leader in this field?

New ideas/models for shared technical support and infrastructure?

Possible sources of funding from outside of Yale?

BNL - Yale Partnership: New Opportunities

GOV

SCIENCE & INNOVATION ENERGY ECONOMY SECURITY & SAFETY SAVE ENERGY, SAVE MONEY

Department of Energy

U.S. Department of Energy Selects Brookhaven National Laboratory to Host Major New Nuclear Physics Facility

JANUARY 9, 2020

[Home](#) » U.S. Department of Energy Selects Brookhaven National Laboratory to Host Major New Nuclear Physics Facility

WASHINGTON, D.C. – Today, the U.S. Department of Energy (DOE) announced the selection of Brookhaven National Laboratory in Upton, NY, as the site for a planned major new nuclear physics research facility.



BROOKHAVEN
NATIONAL LABORATORY

“The Electron Ion Collider (EIC), to be designed and constructed over ten years at an estimated cost between \$1.6 and \$2.6 billion, will smash electrons into protons and heavier atomic nuclei in an effort to penetrate the mysteries of the “strong force” that binds the atomic nucleus together.”