



Institute for Clinical and  
Translational Research  
AT EINSTEIN AND MONTEFIORE

BERD

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Montefiore

# EAC recommendations

“The volume of requests for BERD continues to rise and there may be a **need for more prioritization, more resources to respond to requests, and strategic deployment of resources.**”

## BERD's focus in 2025:

- **Revised and launched a centralized ICTR request portal** to streamline project intake, prioritize requests, and generate usage summaries.
- **Student engagement:** select medical and graduate students supporting routine consulting projects under BERD guidance
- **Alignment with the new Data Science Institute (DSI)** to expand resources for data science collaborations
- Increase **statistical self-sufficiency of investigators** through BERD House training materials in statistics and data science

“Some consideration should be given to the approach for measuring the added **utility of the joint BERD/Informatics support for EHR based projects.**”

BERD’s Focus in 2025: **strengthen our collaboration with Health Informatics:**

- Data Science Institute – BERD and HI leadership
- Joint lectures in R, EHR-based research, and data science
- Several BERD faculty members will be trained as Data Scientists and super-users in **Epic Cosmos** to facilitate researcher access to EHR data

***Evaluation and measurement of the added utility of these collaborations is a goal for 2026***

# EAC recommendations

“The EAC would be interested to see a **collaboration between BERD and the Community Collaborative Core in EHR training.**”

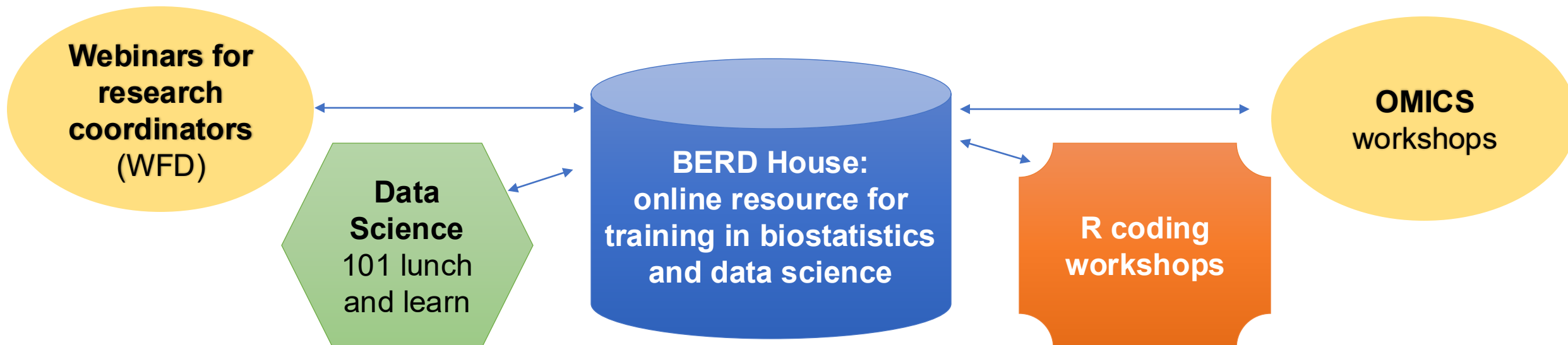
## BERD's Focus in 2025:

- An **EHR-focused lecture developed for the DS 101 lecture series**  
*We will expand this training in collaboration with HI, WFD and CCC to include case studies using de-identified EHR + SDOH data*
- New collaboration with Community Collaborative Core and Informatics to **develop novel analytic methods in the analysis of social determinants of health**  
*Evaluates neighborhood, socioeconomic, and structural factors that may influence clinical outcomes and facilitates research promoting health for all*

# EAC recommendations

“In the coming year, many projects are planned and the EAC did not have a good sense of how they were going to be integrated into the total operational work. **What is the strategic focus?**”

BERD's Focus in 2025: emphasized **integration** and **self-sufficiency**:  
*A rising-tide-lifts-all-boats* approach built on multiple training initiatives



1. Suggestions for expanding and measuring the impact of our data science training?
2. What strategies have worked at other hubs for integrating BERD House-like resources?
3. Effective models for providing methodological support for EHR based research?

# Module Goals and Alignment with ICTR Strategic Goals

## ICTR strategic goals

**Catalyze** and support research to advance translational science

**Create** and **implement** state-of-the-art scientific resources, services, and informatics capabilities to facilitate CTR

**Develop** and maintain a skilled, multidisciplinary translational workforce to support and lead high-quality CTR

**Partner** with other CTSA hubs and CTSA consortium to accelerate TR and rapidly respond to public health emergencies



## BERD Program Goals

Provide **accessible and high-quality expertise and support** to maximize the rigor, reproducibility, and impact of CTR, facilitate research promoting *health for all*.

Develop, implement, and disseminate novel statistical methods and software to advance *translational science*

Expand biomedical *data science capabilities*



Provide **educational and training opportunities** in statistics and data science for researchers and clinical research staff of all levels.



**Strengthen partnerships** with other regional and national CTSA BERD groups and the CTSA consortium

# Accomplishments Year 3

- ✓ Developed a ***Machine Learning in R*** workshop. (Goals 1, 3 & 4)
- ✓ Developed a **Data Science 101 series** that includes an overview of machine learning, artificial intelligence, data visualization, and reproducible research (Goals 1, 3 & 4).
- ✓ Presented a webinar in February 2025 in collaboration with the **Clinical Research Resources Core**. “The Basics of Study Design for Research Coordinators” (Goal 4).
- ✓ Added new statistical resources to our online **BERD House**, including internally developed lectures and soon to include short tutorial videos in Data Science concepts (Goals 3 & 4).

# Collaborations Across ICTR, Nationally



- Dr. Kim is a member of the CTSA Steering Committee.
- Both Dr. Kim and Dr. Fazzari participate in the BERD Special Interest Group.
- Dr. Fazzari is a voting member of the BIDS enterprise committee.
- Dr. Fazzari serves on the Board of Biostats4you, a website hosted by University of Minnesota which was developed and is maintained by members of the Biostatistics, Epidemiology and Research Design Special Interest Group (BERD SIG)

# Impact

- **Increased support to more clinical departments**, including with the Department of Obstetrics & Gynecology and Montefiore's Burke Rehabilitation Hospital.
- **Publications: 67 high impact papers** in aging, Alzheimer's, infectious disease, ophthalmology journals
- **Novel methodological translational science solutions:** Ventilator-free days model (Lo & Kim; *BMC Medical Research Methodology*, 20025) and mid-trial design changes in RCTs (Choi, *Clinical Trials*, 2025)
- **Five new/fundable NIH grants** (out of 93 grant submissions with BERD faculty involvement)
- **Expanded data science resources and training opportunities**

# Innovations and Unique Capabilities

BERD is creating new institutional capabilities, collaborations, and expertise that will position **Einstein-Montefiore as a leader in data science**

- BERD faculty are leaders in our new **Data Science Institute (DSI)**, with expertise in machine learning, artificial intelligence and OMICs.
- **Data Science 101 Series**, a new model for cross-disciplinary learning was developed and launched

***BERD faculty are innovators in training and development, grants, papers, and pilot awards***

# Innovations and Unique Capabilities

- Finally, we redesigned BERD House with the goal to become an integrated **learning platform** with the addition of video-based modules along with integrated Machine Learning/Data Science/OMICs content

[einsteinmed.edu/centers/ictr/biostatistics-epidemiology-research-design-core/berd-house/](https://einsteinmed.edu/centers/ictr/biostatistics-epidemiology-research-design-core/berd-house/)

Statistical Methods



Machine Learning



Data Science 101



- [ICTR DS 101 Lecture 1 Slide Deck - DATA WRANGLING](#)
- [ICTR DS 101 Lecture 1 Recording - DATA WRANGLING](#)

▶ 0:00 / 1:14:01 — 🔊 ⋮

- [ICTR DS 101 Lecture 2 - CONCEPTS IN BIostatISTICS](#)

# Dissemination

## Publications

67 co-authored papers by  
BERD faculty in 2025.

## Conferences

IBS, JSM, Lifetime Data  
Science, ICSA, and AAZPIRE  
workshops.

## Resources

BERD House tutorials, analytic  
tools, and videos.

## Partnerships

Developing an online course in  
biostatistics and study design  
(Univ. of Minnesota)

# Planned Initiatives Year 4

- **EHR data extraction and analysis** - in collaboration with HI and DSI (Goals 1 and 3).
- Cross-core collaborations through work with Community Collaborative Core and Informatics to **develop novel analytic methods in the analysis of social determinants of health** (Goals 1, 2, and 3).
- Data science resources - explore the possibility of a **new certificate program in Data Science**, in collaboration with Informatics and the DSI (Goals 3 and 4).
- Develop **programs in data science and biostatistics as a component of one of Einstein-Montefiore's numerous pathway programs** for the Bronx community (Goals 4 and 5).

# Q&A

## 1. Suggestions for expanding and measuring the impact of our data science training?

- Biggest demand currently is for introductory DS courses
- Potential demand for more advanced courses and mentorship in select groups
- **Currently measuring signup, attendance, length of time in session, feedback through surveys**

Did you attend the Oct 23rd Lunch & Learn session on Data Wrangling?

Yes  No

How engaging did you find the lecture overall?

	Very engaging	Somewhat engaging	Neutral	A bit hard to follow	Not engaging
	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How would you rate the difficulty level of the materials?

	Much too advanced	A bit advanced	Just right	Too basic
	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

How useful was this session for your own work?

	Extremely useful	Moderately useful	Slightly	Not useful
	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Which of the following best describes your current position?

Faculty  
 Postdoctoral Fellow  
 Graduate Student/Trainee  
 Research Staff/Coordinator

Other comments on the session

## 2. What strategies have worked at other hubs for integrating BERD House-like resources?

- Steadily growing audience, but not yet fully integrated as a resource

### How do other BERDs create similar resources and promote it?

What analytics (page hits, completion rates, engagement) are used?

	Page title and screen class	Views	Active users	Views per active user	Average engagement time per active user
	Total	1,182 0.14% of total	350 0.22% of total	3.38 Avg -36.3%	1m 12s Avg -40.44%
1	BERD House   Harold and Muriel Block INSTITUTE FOR CLINICAL AND TRANSLATIONAL RESEARCH at Einstein and Montefiore   Albert Einstein College of Medicine   Montefiore Einstein	953 (80.63%)	347 (99.14%)	2.75	1m 01s
2	BERD House   Harold and Muriel Block INSTITUTE FOR CLINICAL AND TRANSLATIONAL RESEARCH at Einstein and Montefiore   Albert Einstein College of Medicine	229 (19.37%)	10 (2.86%)	22.90	6m 34s

### **3. Effective models for providing methodological support for EHR based research?**

- Growing collaboration with CCC and HI cores vital, but not sufficient
- EHR training already in place and will increase over time

**What models have worked well at other CTSA hubs?**