Add Biomarker Assay Laboratory drop down to the NCRAD website as a choice under the “Biospecimens & Data” tab.

**Biospecimens Assay Laboratory (BAL)**

With the establishment of the Biomarker Assay Laboratory (BAL), NCRAD has expanded our services to include processing of well-established fluid-based biomarkers and provide more support to research studies. The goal is to ensure standardized processing and reliable research biomarker results. This approach allows for longitudinal quality monitoring and consistent delivery of results over time, as well as the opportunity for cross-laboratory comparability studies.

For more than 30 years, NCRAD has been a key research infrastructure for NIA to support ADRD research. NCRAD’s mission has grown from a DNA storage repository for genetic studies to a specialized research repository that supports a broad range of biospecimens and focuses on the aspects of sample collection, storage, distribution, and processing. NCRAD’s success is driven by the use of standard operating procedures to ensure uniformity and to minimizing the impact of preanalytical variables on downstream sample analyses.

Plasma assays currently\* available in the BAL:

|  |  |
| --- | --- |
| P-tau 181 | NfL |
| Aβ40 | Aβ42 |

\*GFAP assay validation to start early 2022

All assays processed at the NCRAD Biomarker Assay Laboratory are research-based results only. For investigators interested in CLIA results, requests can be facilitated by NCRAD, in collaboration with C2N. In addition, NCRAD is partnering with Eli Lilly to coordinate P-tau 217 testing.

To request a quote and/or letter of support for the above assays through NCRAD, please complete the following [form](https://redcap.uits.iu.edu/surveys/?s=YXR9K7973YAMMMEF).

**BAL Investigators:**

Jeff Dage, Ph.D., joined Indiana University School of Medicine from Eli Lilly & Co in August of 2021 as a Senior Research Professor of Neurology and Primary Member, Stark Neurosciences Research Institute. He is a NCRAD co-investigator and is the Scientific Director of the Biomarker Assay Laboratory.



Kristen Russ, Ph.D., has been with Indiana University School of Medicine since August 2018. In 2021, she joined NCRAD as an Assistant Research Professor of Medical and Molecular Genetics. She is the Biomarker Assay Laboratory Director.

**Uniform Sample Collection**

To ensure the highest quality and most consistent assay results, NCRAD recommends standard uniform collection of biospecimens as outlined by the Standardization of Alzheimer’s Blood Biomarkers (SABB) working group.

(Verberk, I. M., Misdorp, E. O., Koelewijn, J., Ball, A. J., Blennow, K., Dage, J. L., ... & Teunissen, C. E. Characterization of pre-analytical sample handling effects on a panel of Alzheimer's disease-related blood-based biomarkers: Results from the Standardization of Alzheimer's Blood Biomarkers (SABB) working group. *Alzheimer's & dementia: the journal of the Alzheimer's Association*.)

NCRAD Recommendations for **Plasma Collection**.

NCRAD Recommendations for **CSF Collection**.

NCRAD Recommendations for **Serum Collection.**

NCRAD recommends the use of polypropylene for all collection and processing materials.