



# Digital monitoring in “home-cage” and system integration

*Presented by:*

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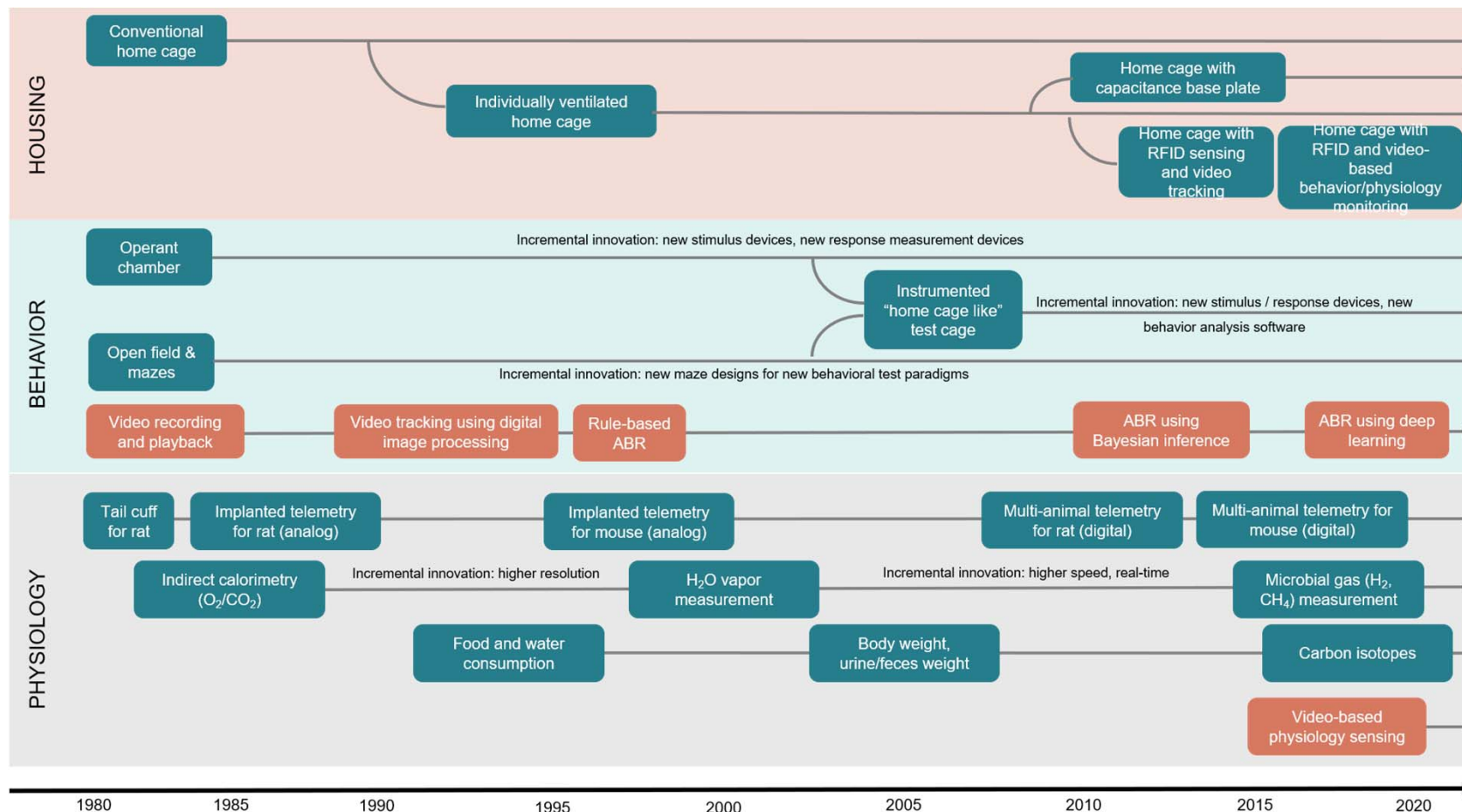
# innovation through passion

## Agenda

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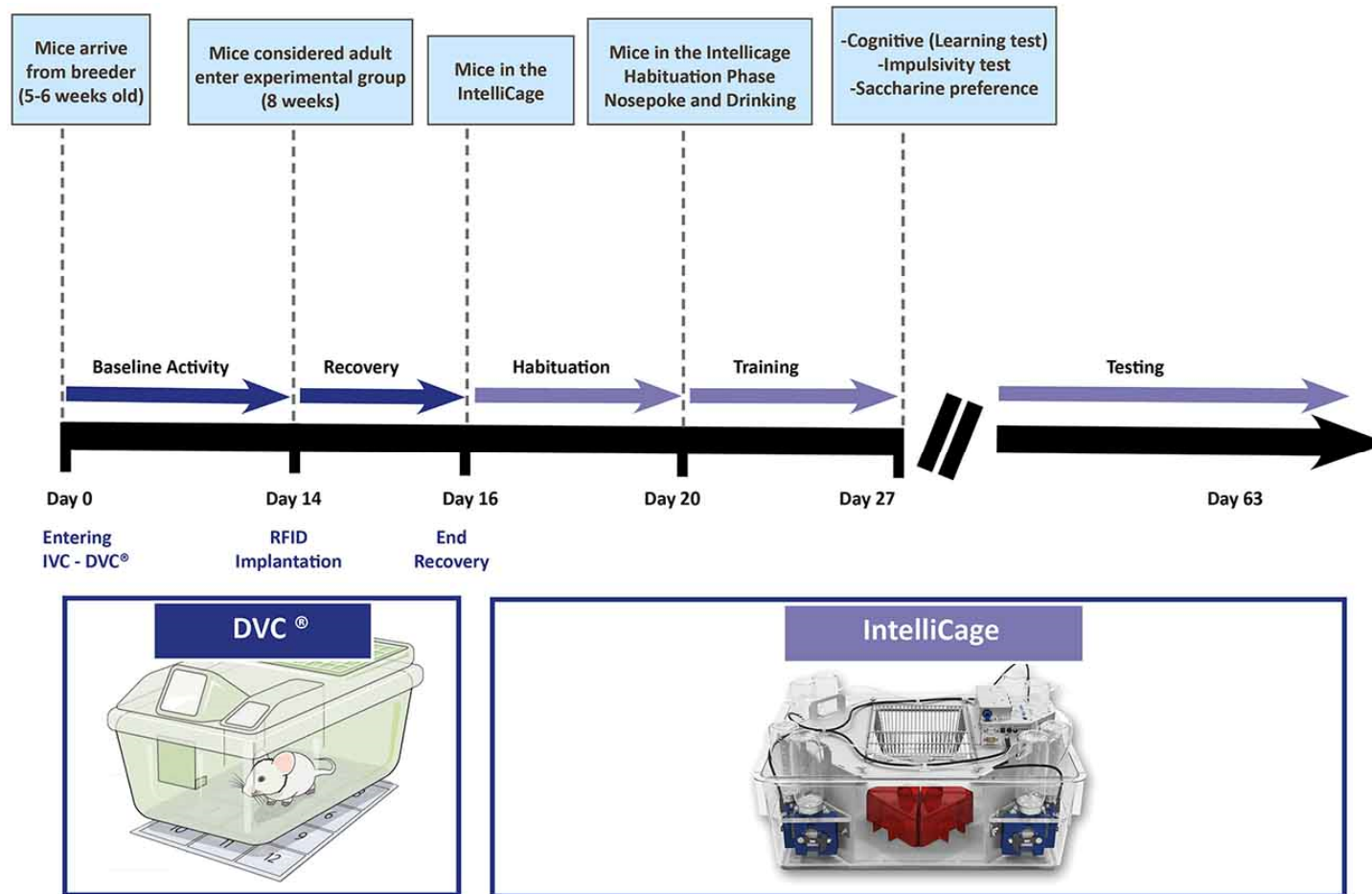
- History of digital monitoring
- Example of integration DVC® - Intellicage
- Different considerations
- Timeline with Pharma Example

# Legacy and new technologies in home-cage monitoring



Baran et al, Manuscript in preparation

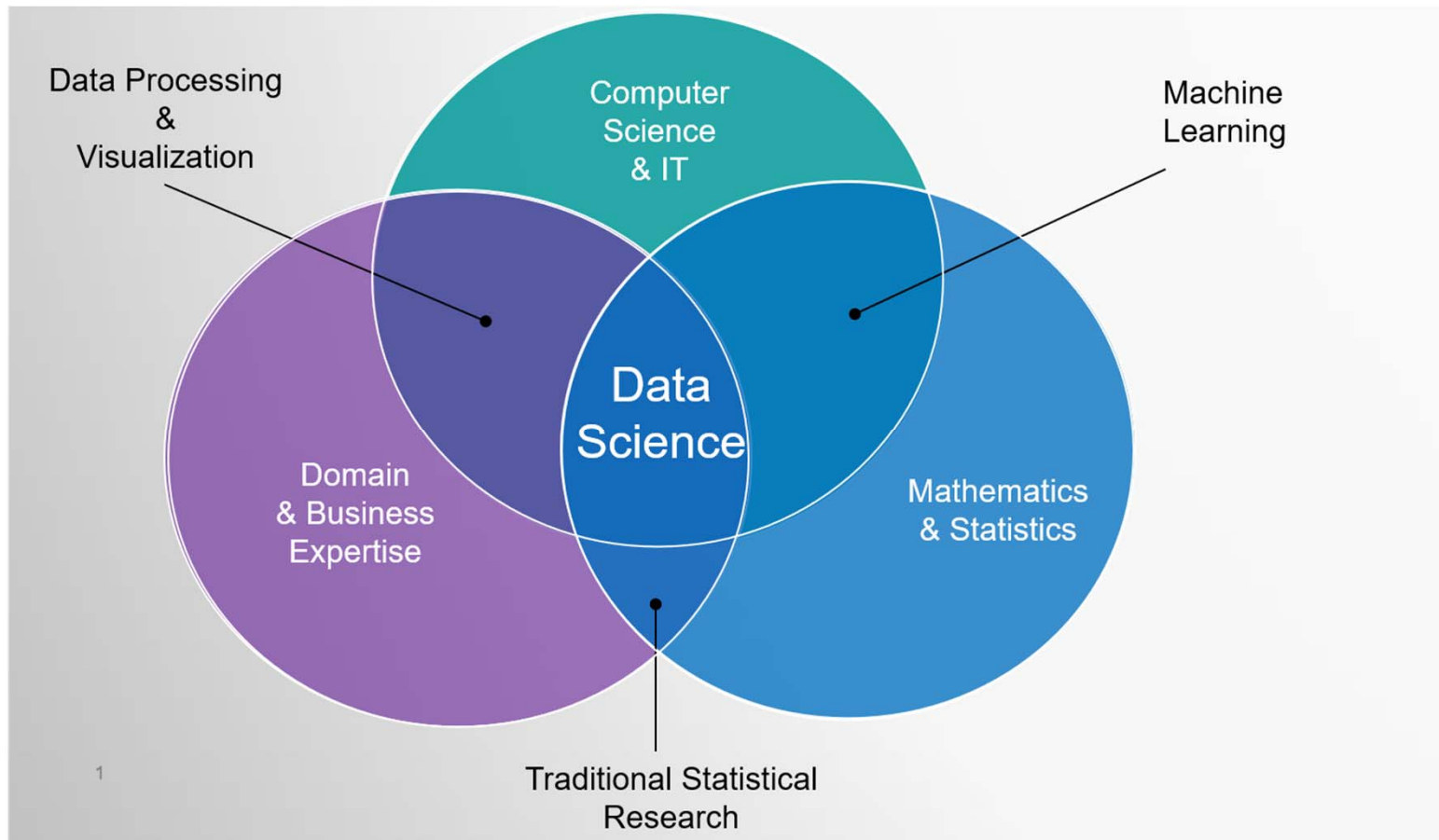
# Integration of technologies: NO-all-in-one system



Voikar & Gaburro, *Front. Beh. Neur.* 2020

# Consideration for digital home-cage monitoring

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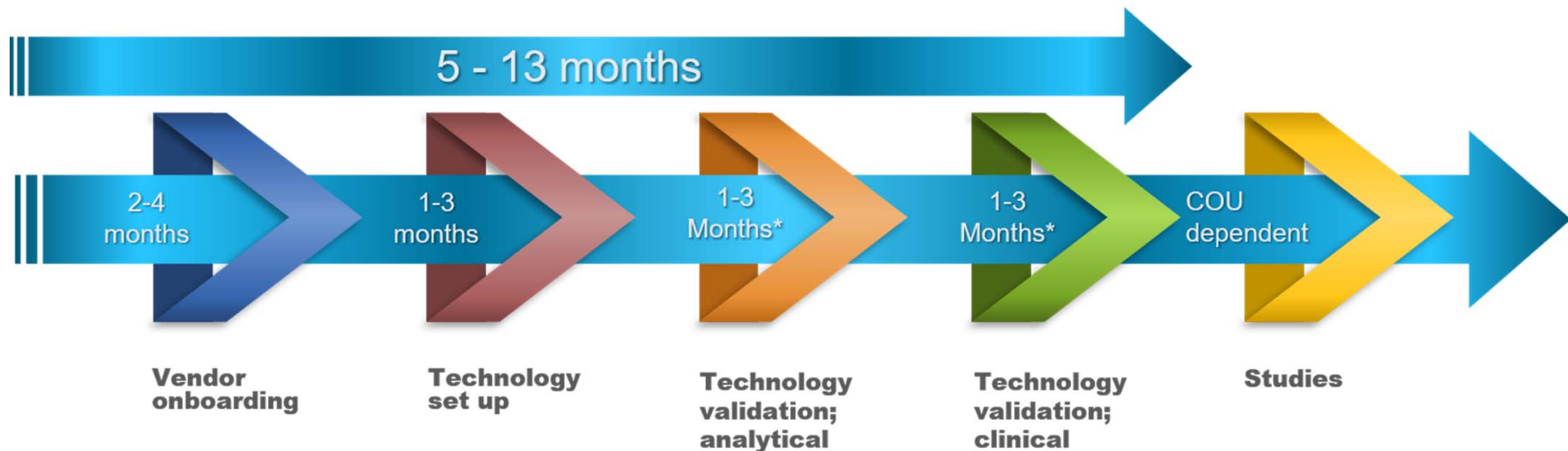


*Baran et al, Manuscript in preparation*

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# Timeline onboarding new technologies: Pharma example

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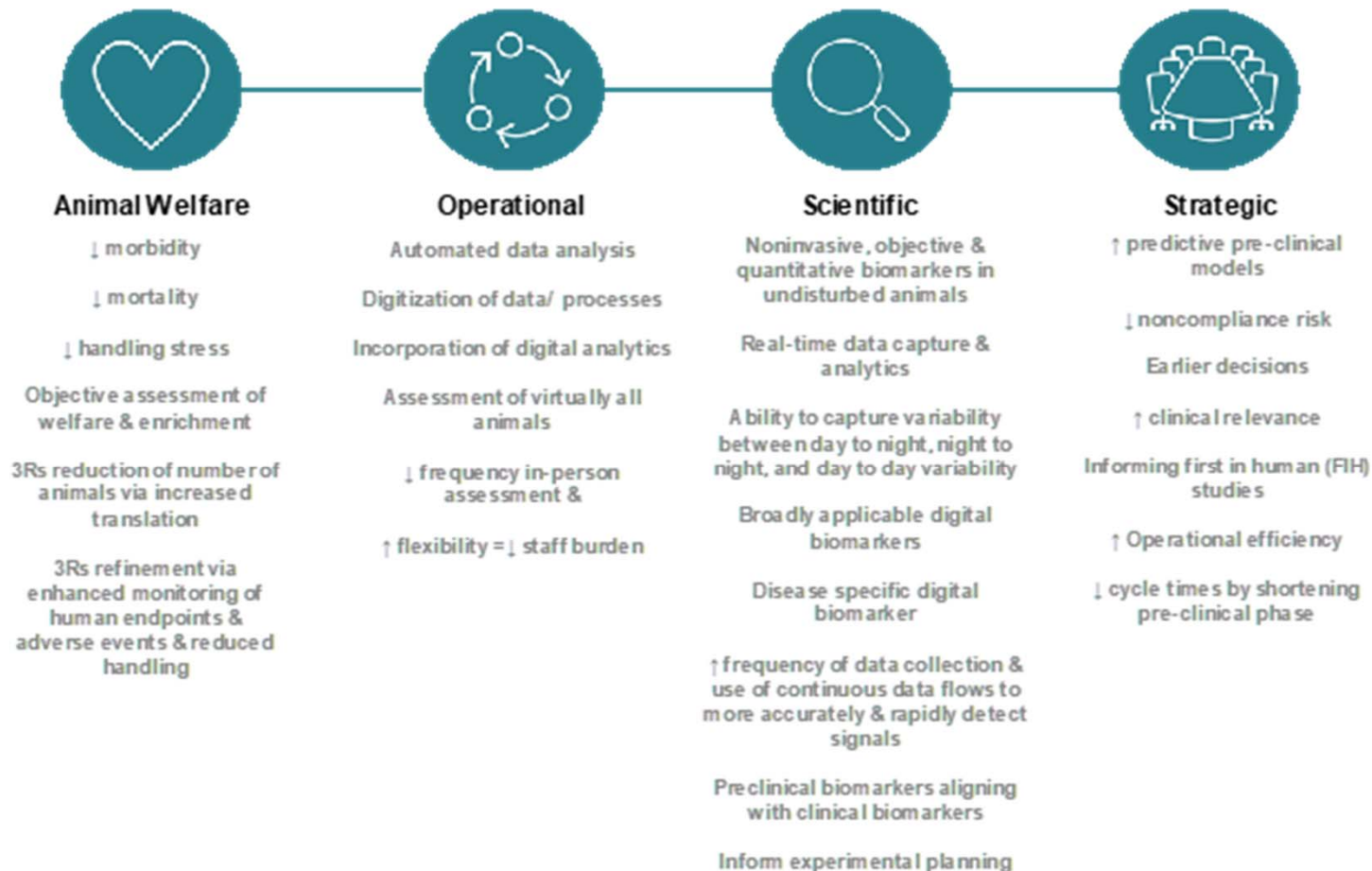


\* These timelines can be significantly prolonged if data will be used for regulatory submissions since the validation process would have to meet regulatory requirements.

*Baran et al, Manuscript in preparation*

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# Why to use digital biomarker in preclinical settings

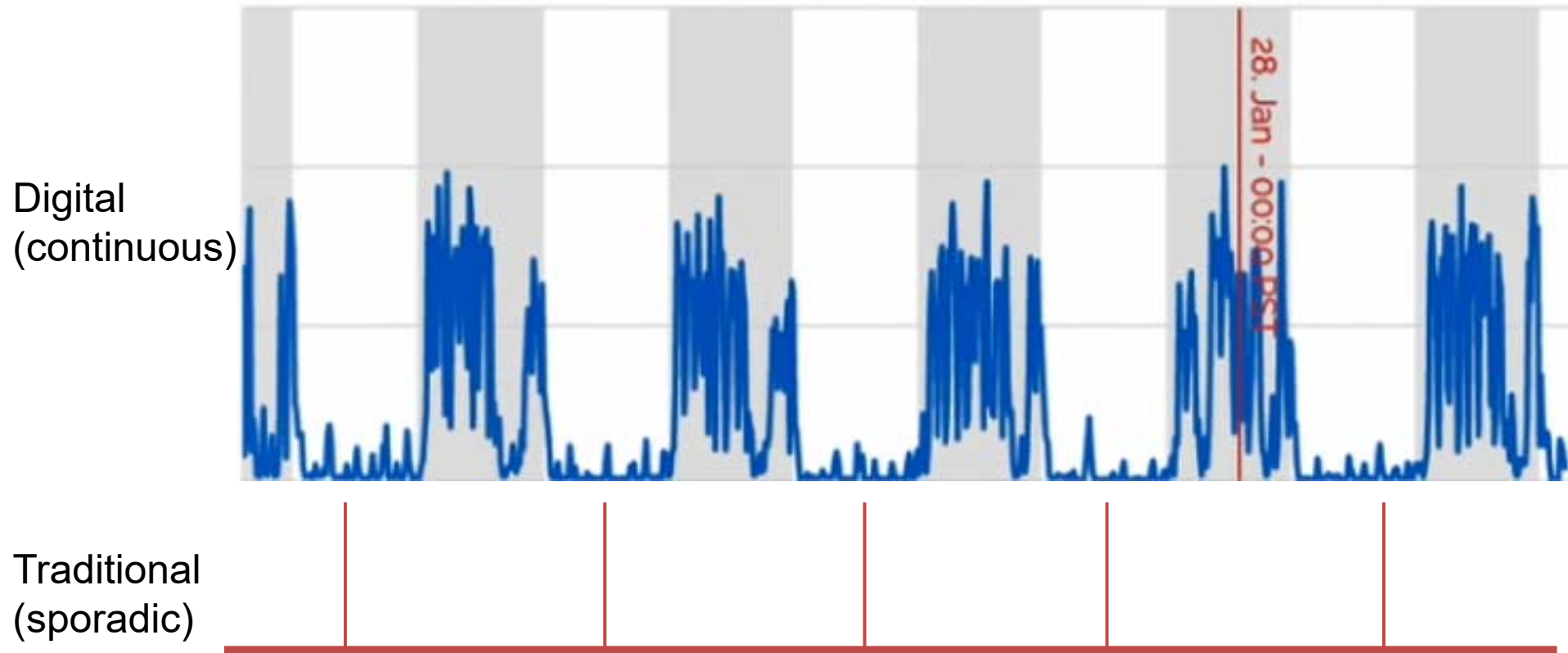


*Baran et al, Manuscript in preparation*



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## Holistic model





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## Take-home messages

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- Digital home cage monitoring is still considered a “new technology”
- Adoption might not be straightforward (data quantity, cybersecurity, IT, maintenance)
- 3Rs (especially in Europe) and 3vs (construct, internal and external validity) are pushing towards such technologies.



Thank You!