

2021-12-03 Meeting notes

Date

03 Dec 2021

Attendees

Committee Member	Present	Absent
Kuffel, Gina (NIH/NCI) [C]	X	
Pihl, Todd (NIH/NCI) [C]		X
Unknown User (leblancak)		X
Otridge, John (NIH/NCI) [C]	X	
Kim, Erika (NIH/NCI) [E]	X	
Sommers, Connie (NIH/NCI) [E]	X	
Debbie Knapp	X	
Toby Hecht	X	
Unknown User (parchmentr)	X	

Goals

- Discuss updates to ICDC and define emerging strategies and priorities

Box Folder

<https://nih.box.com/s/5wmrgl85z6fxpo3ldhanxzmqq3ekfy7>

Relevant Links for Today's Meeting

1. [Candidate Publication List](#)
2. [Submission Folder for 1st Candidate Publication](#)
3. [Submission Folder for PanCancer Study](#)
4. [Data Transfer Agreement](#)
5. [Data Use Guidelines](#)

Outstanding Action Items

- [Kuffel, Gina \(NIH/NCI\) \[C\]](#) Add Gardner et. al paper to candidate publication list: <https://www.nature.com/articles/s42003-019-0487-2>

Discussion items

Item	Who	Talking Points
Steering Committee Meeting Updates	Unknown User (parchmentr)	<ul style="list-style-type: none">• Last meeting was Nov. 17th• Next meeting is Dec. 15th• Will ask for volunteers to have a brain storming session for ICDC research questions

ICDC Next Phase	Unknown User (hechtt)	<ul style="list-style-type: none"> • Next steps for soliciting a small group of comparative oncology researchers who are ICDC users • Recruitment at the next PRECINCT SC meeting (Dec. 10th) • Need to develop scientific questions and hypothesis from the research community • Will ask for volunteers to have a brain storming session for ICDC research questions • NCPI Use Case: https://github.com/NIH-NCPI/NCPI_use_case_tracker/blob/main/one_pagers/UC14_NCI_CRDC_KF.md
DGAB Updates	Kuffel, Gina (NIH/NCI) [C]	<ul style="list-style-type: none"> • Updates to existing studies <ul style="list-style-type: none"> ◦ GLIOMA01- 77 case-level vcf and 77 tbi files added (80.2 MB) • New studies released <ul style="list-style-type: none"> ◦ MGT01- Molecular Homology and Differences Between Spontaneous Canine Mammary Cancer and Human Breast Cancer (68 files, 289.3 GB) ◦ C0TC022- A Contemporaneous Controlled Study of the Standard of Care in Dogs with Appendicular Osteosarcoma (2 files, 0.08 MB) • Communications with authors of first candidate publication test case from Candidate Publication List <ul style="list-style-type: none"> ◦ Data Submission Request was completed on their behalf ◦ Email was sent by Warren Kibbe on behalf of DGAB ◦ Folder containing all submission artifacts for this test case can be found here • Data ingestion PanCancer study to begin soon <ul style="list-style-type: none"> ◦ Folder containing all submission artifacts for this study can be found here • Data Transfer Agreement is in final stages of legal approval <ul style="list-style-type: none"> ◦ Folder containing any artifacts related to the DTA can be found here
Data Use Guidelines	Kuffel, Gina (NIH/NCI) [C]	<ul style="list-style-type: none"> • Sent to Jason Cristofaro for review • Questions remain around the commercial use of the data • Link to draft document can be found here
User Research for ICDC by the Office of Communications and Public Liaison (OCPL)	Kuffel, Gina (NIH/NCI) [C]	<ul style="list-style-type: none"> • In kick-off and planning phase • Finalizing user interview dates: The UX company is targeting January or early February • Google Analytics reports have been shared with the UX contractor for their discovery period • Recruitment is critical- these will be folks targeted for user interviews <ul style="list-style-type: none"> ◦ DGAB members ◦ PRECINCT members ◦ Pharmacodynamics group ◦ Other groups, channels, or individuals?
ICDC Site Updates	Kuffel, Gina (NIH/NCI) [C]	<ul style="list-style-type: none"> • Production release targeted for Dec. 15th • New slide deck available (if we want to spend the time talking about features)

Minutes (Not Verbatim)

EK - Collected use cases in 2019 before any data was in ICDC. Around 8 use cases were documented. Many of the responses included high-level, overarching concepts. To uncover the real scientific use cases we need to talk with PostDocs and Grad Students.

TH- Comparative Oncology community will be interested in specific questions.

EK- NCPI has a team comprised of NHLBI, NCI, Common Fund, and NHGRI to provide use cases of interoperability across the platforms and cloud resources. We are exploring congenital cancer in Gliomas, we might be able to add canine glioma data to identify any correlations that may exist. Use cases are in the works. We solicited researchers to get the scientific use cases.

TH- Longitudinal studies can be very useful in dogs. We can use that data to draw comparisons in humans. We will probably give some funding to the Dog Aging Study that may be matched by the Dog Aging Institute. They have ~30k dogs they are following, healthy dogs, many develop cancer. They are willing to sequence if they had the funding.

JO- Valuable just to have healthy, normal dogs as well. Could they be a source for deposit into ICDC?

TH- Reference standards are prolific at this point. There is a new canine reference German Shepherd 1.0 named Mischka.

Previous ICDC Use Cases from Steering Committee

1. Genomic correlates across platforms (DNA, RNA, protein).

2. Correlating multi-omics data with clinical annotation and phenotypes, particularly outcomes.
3. Comparative analyses of canine and human. Examples include:
 1. Search for conserved mutations between canine and human tumors
 2. Disease diagnosis (e.g. cancer type) and classification mapping between canines and humans
 5. Gene expression changes and mutational profiles associated with therapeutic response and outcome
 6. How do sporadic tumors in non-human mammals compare to sporadic human tumors?
 7. Correlations and model building from radiomic and pathomic features extracted from medical and histopathologic images with outcomes and genomics, as is currently being widely done with human images
 8. Develop biomarkers of response and resistance in humans by analyzing the responses and genomic signatures in dogs.

Previous Meeting Minutes (Not Verbatim)

DK- Data may be coming into ICDC from the Promislow and Rod Page from Colorado State.

TH- In the Aging study are they looking at specific breeds?

DK- Several represented. Working heavily with the Broad and data made available there. The cancer data may be available to be deposited into ICDC.

EK- One of the reasons we pushed for user research on canine is we have a lot of flexibility to make improvements. It will be interesting to do this at this stage and then possibly again in the future. Please send relevant questions for the study if they exist.

RP- We may need NCI to take a look that the MTA once it is drafted. Claudia Hayward has been working with this on us.

TH- I can make arrangements for that.

RP- Not an acquisition, just a reimbursement.

TH- NCI should at least take a look and give their approval. Regarding tech transfer, will commercial companies use this data? Is there an issue with a commercial company using ICDC data to make a product?

EK- Data use guidelines are coming soon.

TH- Keep these policies consistent with other data commons.

TH- Need to start seriously thinking about the next Task Order. We need a small group to brainstorm and present to the Executive Committee and then the Steering Committee. Not sure if Debbie can be involved because she is external. I propose myself, Connie, Erika, and Ralph. I'm not getting any feedback from anyone about what they think we should be doing.

CS- Maybe include Elaine, to include a non-cancer perspective.

TH- Let's plan for mid-November. Can we talk more with John Otridge and determine his role. What about Anju? I will reach out to Anju.

TH- All authors working with canines will now know if they have additional data.

AL- We have many folks in the SC that may have pipelines that exist, others may be willing to share their pipelines.

CS- I have a grantee that we should talk with about sharing pipelens

AL- Not many people understand molecular implications of canine lymphoma, little cross-validation of IHC. Not fair to say they don't match, the right set of tools is needed. 30% of case load is Lymphoma. Such a diverse disease.

Action items