

2023-2-3 Executive Team Meeting Notes

Date

03 Feb 2023

Attendees

Committee Member	Present	Absent
Kuffel, Gina (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

SharePoint Site

<https://nih.sharepoint.com/sites/NCI-CBIIT-FNL-ICDC-ICDCLeadershipGroups>

Outstanding Action Items

Agenda

Item	Who	Talking Points
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DGAB Updates	Kuffel, Gina (NIH/NCI) [C]	<p>ICDC Studies in the Queue</p> <ul style="list-style-type: none"> • UBC03 <ul style="list-style-type: none"> ◦ Approved by SAC on 8/13/22 ◦ "Transcriptomic analyses of early stage bladder cancer in Scottish Terriers detected through screening" ◦ Purdue University ◦ 19 cases ◦ Status: Submitters generating template-based data loading files • OSA02 <ul style="list-style-type: none"> ◦ Approved by SAC on 9/21/22 ◦ "Immune Pathways and TP53 missense mutations are associated with longer survival in canine osteosarcoma" ◦ Colorado State University ◦ 108 cases ◦ Status: Submitters generating template-based data loading files • ORGANOIDS01 <ul style="list-style-type: none"> ◦ Approved by SAC on 12/5/22 ◦ "Characterization of healthy and diseased canine tissues and organoids" ◦ Iowa State University ◦ Status: Submitters generating template-based data loading files • UBCO4 <ul style="list-style-type: none"> ◦ Approved by SAC on 12/22/22 ◦ "Whole exome sequencing analysis of canine urothelial carcinomas without BRAF V595E mutation" ◦ North Carolina State University ◦ 36 cases ◦ Status: Onboarding kick-off call on 1/5/23 • PRECINCT01 <ul style="list-style-type: none"> ◦ Approved by SAC on 6/28/22 ◦ "Inhaled IL-15 Immunotherapy for Treatment of Lung Metastases" ◦ UC Davis ◦ 21 cases ◦ Status: Data not yet available • PRECINCT02 <ul style="list-style-type: none"> ◦ Approved by SAC on 12/8/22 ◦ "Novel treatments for Diffuse large B cell lymphoma (DLBCL) in dogs" ◦ Tufts University ◦ 47 cases ◦ Status: Data not yet available • PANCAN01 <ul style="list-style-type: none"> ◦ Approved by SAC on 11/8/21 ◦ "Canine tumor mutational burden is correlated with TP53 mutation across tumor types and breeds" ◦ University of Georgia ◦ 684 cases ◦ Status: Submitters generating template-based data loading files • UMCVM <ul style="list-style-type: none"> ◦ Approved by SAC on 4/19/21 ◦ "Comparative analysis of genome-wide DNA methylation identifies patterns that associate with conserved transcriptional programs in osteosarcoma" ◦ University of Minnesota ◦ 44 cases ◦ Status: On hold until FTE is designated
BPSC Updates	Kuffel, Gina (NIH/NCI) [C]	<ul style="list-style-type: none"> • 2022 BPSC Review Article <ul style="list-style-type: none"> ◦ Jeff Trent reached out relevant journal contacts ◦ Feedback received will require us to emphasize the connection between dogs and humans and the value of canine as a comparative model ◦ The paper has a genomic focus, however the comparative trials that exist are drug focused ◦ Ideally we can site papers and studies that highlight relevant mechanisms with a genomic facet

Upcoming Steering Committee Meeting	Unknown User (parchmentr)	<ul style="list-style-type: none"> • Tuesday February 28, 2023 • Proposed Agenda: <p>Updates – Debbie</p> <p>Data Governance Advisory Board (DGAB) - Warren</p> <ul style="list-style-type: none"> • Genomic Data Guidelines – Elaine • Study Nominations/Data Submissions - Gina <p>Best Practices Subcommittee (BPS) – Jeff</p> <ul style="list-style-type: none"> • White Paper/Publication – Jeff • Genomics Working Group - Elaine, Debbie • Imaging Working Group - Amy, Paula <p>Presentations, New Collaborations, Opportunities - all</p> <p>Possible expansion of the Steering Committee</p> <p>Other Topics – all</p> <p>Administrative Topics – Ralph</p>
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Minutes (Not Verbatim)

TH - Look at drug responses and the tumor itself to determine if there is a biomarker based on genomic expression. In the Intro of the BPSC paper, we could give examples of things that can be done based upon existing drug trial studies.

AL - In general, there is such a scarcity of credentialed biology in tumor progression. Drug mechanisms can be highlighted with an imaging reporter.

DK - Pre and post biopsies were attempted in Vemurafinib trial

AL - Until we have DBs to refer to and a more stable reference genome it is difficult to make progress.

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)

TH - Circulating tumor DNA is a strong candidate for the next phase of the ICDC.

CS - There is a grant under the mammalian models from Cheryl London and co.

Action items