### **Ripple Effects**

#### Making Waves in the Fight

Against Cancer

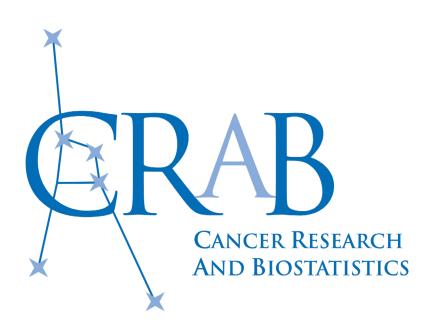
CANCER RESEARCH AND BIOSTATISTICS

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2023 Annual Report Cancer Research And Biostatistics



Cancer Research And Biostatistics (CRAB) is a non-profit organization whose purpose is to help conquer cancer and other diseases through the application of biostatistical principles and innovative data management methods.

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### MESSAGE FROM THE PRESIDENT Antje Hoering, PhD



This year signified a gradual return to normalcy after the pandemic. We slowly adjusted to post-pandemic office life, cautiously resumed in-office work, in-person meetings, and national and international travel to reconnect with colleagues not seen in nearly four years. Despite the pandemic's widespread impact, CRAB remained relatively unscathed thanks to secure NCI funding, a state-of-the art data center, and our adaptable and talented staff. The absence of in-person interaction was felt deeply, prompting efforts to restore our

connections and rebuild our organizational culture.

I'm proud of CRAB's many accomplishments during 2023. The results from the ctMoniTR project were presented at a Friends of Cancer Research (*Friends*) public meeting entitled "Establishing Evidence: New Advancements using ctDNA" showcasing the strong correlation between ctDNA levels and long-term outcomes in non-small cell lung cancer treated with tyrosine kinase inhibitor therapy. CRAB is proud to serve as the Independent Analysis Center for this *Friends*-led project. I cherish our regular meetings and lively discussions with our colleagues at *Friends*, the FDA, and all of the companies and research institutes involved in this effort.

Our global lung cancer staging project with the International Association for the Study of Lung Cancer (IASLC) made considerable advances, culminating in a presentation at the IASLC World Conference on Lung Cancer in Singapore. These findings will be published in the Ninth Edition of the IASLC Staging Handbook in Thoracic Oncology, a widely used resource which aids clinicians worldwide in treating lung cancer, mesothelioma, and thymic malignancies.

The SWOG Latin American Initiative, led by CRAB's co-founder Dr. John Crowley, reconvened in person in Bogotá, Colombia, marking significant progress in increasing knowledge and advancing care to clinical trials over the past decade. We are all grateful for the on-going support from The Hope Foundation to advance this impactful initiative.

With our SWOG colleagues at the Fred Hutch, CRAB launched three new "master" protocols: ComboMATCH, I-MATCH and MyeloMATCH, building on our LungMAP experience. These trials are part of the US National Cancer Institute's effort on Precision Medicine Oncology Research Activities. These activities promote research to discover unique therapies that treat an individual's cancer based on the specific genetic abnormalities of that person's tumor – and represent both compelling science and a unique opportunity to reduce the burden of cancer. CRAB is proud to be involved in this collaborative effort. I am also excited that we secured a new NCI grant with colleagues at the Fred Hutch to join the Statistics and Data Management Center (SDMC) for the Cancer Screening Research Network, which will evaluate emerging technologies for cancer screening. For the SDMC portion of the grant, Dr. Charles Kooperberg serves as the Principal Investigator, which plays a pivotal role in the President and First Lady's Cancer Moonshot initiative. This network's mission is to conduct rigorous, multi-center cancer screening trials and studies across diverse populations in various healthcare settings, with the aim of reducing cancer incidence and related morbidity and mortality.

Dr. John Crowley and I were honored to be invited by publisher Taylor & Francis to edit the fourth edition of our book, *Handbook of Statistics in Oncology*, with Dr. Megan Othus from the Fred Hutch joining our editorial team. This edition will reflect recent advances in the field, thanks to contributions from numerous colleagues.

We also ventured into novel territory with a newly formed collaboration with Dr. Graham Nichol at the University of Washington in prehospital emergency care. We were introduced to Dr. Nichol and immediately saw great synergy to contribute CRAB's expertise in a number of areas. This collaboration has already yielded a couple publications and we look forward to contributing to clinical trials that test new interventions and advance the standard of care in this discipline.

I was recently elected to the American Statistical Association (ASA) board of governors as the publications' representative, a three-year term I am eager to serve, thanks to CRAB board member Dr. Steve Snapinn's nomination. As many of you may know, the ASA is a professional organization dedicated to promoting the practice and advancement of statistics.

Lastly, we welcomed Melissa Alvendia, Dr. Jonathan Sham, and Arthur Ross to the CRAB Board of Directors. I am grateful to all of CRAB's board members whose expertise and dedication are invaluable to our mission.

I would also like to extend my gratitude to our CRAB leadership team and to all our talented employees who make a difference every day in our fight against cancer!

Antje Hoering, PhD President, Chair & CEO

## NCI PROJECTS

#### **Cancer Screening Research Network**

This year CRAB received a notice of award for a compelling new project, which will examine the efficacy of screening for cancer using Multi-Cancer Detection assays (MCDs) that may facilitate earlier detection of cancer. By identifying cancer signatures at the molecular level, these tests detect specific proteins and circulating tumor DNA (ctDNA) that may indicate the presence of cancer in a patient.

The Fred Hutchinson Cancer Center in Seattle will serve as the coordinating and communications center for the Cancer Screening Research Network (CSRN) and CRAB will partner with biostatisticians at the Fred Hutch to form the Statistics and Data Management Center (SDMC).

While these emerging technologies are becoming commercially available, a variety of challenges exist in the design and conduct of randomized controlled trials that evaluate these tests. CRAB will partner with the Fred Hutch to evaluate the potential benefits and potential harms of these emerging technologies for cancer screening and to determine how best to incorporate these technologies into the standard of care.

#### NCTN and NCORP Study Activations

CRAB's study builders activated thirteen trials in 2023: S1900K, S2213, S2206, S2210, S2212, S2207, S2209, S1900G, S2205, S2302, EAY191-S3, S2114, S2010. Of these studies, S2302, (aka "Pragmatica"), is a first of its kind FDA study designed to be simpler in design, faster to activate and garner results in a shorter period of time frame through this "pragmatic" approach. Also notable is the activation of two Lung-MAP substudies, (S1900K and S1900G) with another substudy, (S1900J), set to activate in late summer of 2024.

#### **NCTN Resubmission**

This year we learned that the planned submission of an important grant from the U.S National Cancer Institute (NCI) will be delayed by a year. Every six to seven years Fred Hutch and CRAB submit competitive renewals for two of our pivotal grants for our work with SWOG Cancer Research Network. These two grants are through the NCI National Clinical Trials Network (NCTN) and the Community Oncology Research Program (NCORP). The NCTN submission will now occur in early 2025 and the NCORP submission later that same year. This development means the Fred Hutch and CRAB will continue to operate on the established grant during the prior grant period. This consistency in financial support allows us to maintain our momentum in cancer research.

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#### SWOG Recruitment & Retention DEI activities

Providing support for diverse participant recruitment to SWOG clinical trials. CRAB's Clinical Trial Recruitment and Retention Specialist, Jamie Sundstrom, works collaboratively with the SWOG Cancer Research Network's staff, DEI leadership and Recruitment and Retention Committee (RRC) to advise on practices and actions to increase participation and representation in SWOG clinical trials. The RRC advises on methods to increase participant accrual to SWOG trials, with a focus on inclusion of underrepresented participants. The RRC sponsors the "TAKE ACTION" educational symposiums convening experts to share information about underrepresented populations during the SWOG semi-annual Group Meetings. The symposiums identify evidence-based practical strategies to promote access and equity in SWOG clinical trials. In 2023, "Reducing Structural Barriers, Ensuring Equity in Clinical Research" and "Enhancing Community Engagement in Clinical Research" were presented.

#### SWOG Centralized Monitoring 2023

All SWOG studies with a registrational intent require central monitoring. In 2023, CRAB's central monitoring team concluded reviews for SWOG study S1800D, a Phase II/III Study examining the treatment strategy for individuals with Non-Small Cell Lung Cancer. A publication of the trial is now being prepared. Our central monitoring team utilizes a source document portal developed by the NCI's Cancer Trials Support Unit , which enhances communication with the clinical sites enrolling patients. It is anticipated that CRAB's central monitoring team will increase its participation in these innovative studies.

#### SWOG Latin America Initiative 2023

This year the SWOG Latin America Initiative (SLAI) partnered with the National Cancer Institute in Bogotá, Colombia, in a conference developing local capabilities for conducting clinical trials. The conference focused on infection-related cancers. The conference's morning sessions involved thematic lectures and were followed by hands-on afternoon workshops. Dr. John Crowley, Dacia Christin and Rachael Sexton were responsible with organizing many of the sessions and were able to attend in person. On the final day, SWOG researchers and local experts provided feedback on research proposals developed by our Colombian colleagues. The SLAI strives to create opportunities for investigators and patients in Latin America to participate in SWOG clinical trials.

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#### SWOG Lung-MAP and Pragmatica Lung Update

The unique Lung-MAP master protocol entered its 10th year in 2023, which included activation of two new biomarker-driven sub-studies. To support these sub-studies and adapt to the evolving landscape in diagnosis and treatment of non-small cell lung cancer, the screening protocol was updated to accept tumor sequencing results performed outside of the study in some cases. The study team is hard at work preparing for the next version of Lung-MAP, which will continue to broaden eligibility and allow various next-generation sequencing tests to be used for sub-study assignment.

Activated in March 2023, S2302 Pragmatica-Lung, a streamlined Phase III study following Lung-MAP's substudy S1800A in patients with advanced non-small cell lung cancer previously treated with chemotherapy and immunotherapy, enrolled more than half of its total accrual goal in the first year of activation! The study's unique pragmatic design and reduced burden on sites has made it attractive to patients and providers, easily surpassing the study team's monthly accrual goal every month since August 2023.

#### SWOG Group Meetings 2023

SWOG once again held hybrid Group Meetings in the Spring and Fall of 2023. The hybrid model facilitates attendance both in-person and remotely, increasing our audience and participation. CRAB data coordinators gave its annual Clinical Trials Training Course in the spring to 313 registered attendees. In the fall, CRAB staff led the ninth annual SWOG NCI Community Oncology Research Program (NCORP) Research Base Clinical Trials Workshop to 242 attendees. These workshops provide training and information on a variety of topics related to conducting research in the areas of therapeutic studies, cancer survivorship, palliative and end of life care, prevention and epidemiology, symptom control and quality of life and cancer care delivery. These workshops are made possible by generous funding from The Hope Foundation for Cancer Research, a public charity that supports SWOG.

#### SWOG and MATCH Studies

SWOG and CRAB continue to advance work in precision medicine and umbrella trials with three MATCH trials: ComboMATCH, iMATCH, and MyeloMATCH. ComboMATCH (Combination Therapy Platform Trial with Molecular Analysis for Therapy Choice) is a group of precision medicine cancer clinical trials, including a screening trial and numerous treatment clinical trials. SWOG activated its first ComboMATCH treatment trial this year. ImmunoMATCH, or iMATCH, is the NCI's first precision medicine trial focused on immunotherapy. The iMATCH pilot was launched by SWOG using CRAB systems in late 2022 and has started enrolling participants. MyeloMATCH will test treatments based on genetic changes in the cancer cells of people with acute myeloid leukemia (AML) and myelodysplastic syndromes (MDS). Both diseases are historically difficult-to-treat diseases for which progress over the past few decades has been limited. SWOG is the lead cooperative group responsible for the screening trial and has one treatment trial also in development. CRAB has been building the technical infrastructure for MyeloMATCH and collaborating with the NCI to integrate our systems with the NCI MATCHBox application. We look forward to its scheduled activation in 2024.

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### GENERATING BUZZ: Al and Data Analytics

#### Data Governance

In the past year, CRAB has continued to excel in the realm of Data Governance and Data Harmonization, which is an important aspect of our contribution to cancer research. We conduct these activities as an Independent Analysis Center for various partnerships, such as with the Friends of Cancer Research (*Friends*) and the International Association for the Study of Lung Cancer (IASLC). For our partnership with IASLC, we work closely with their Staging and Prognostic Factors Committee (SPFC) to collect, harmonize and analyze data from across the world to improve the current staging system for lung cancer, mesothelioma and thymic cancer. Our current database includes nearly 125,000 lung cancer cases provided by 75 cancer care institutes in 25 countries around the globe. The result of this work will inform the 9th Edition of the IASLC's Tumor, Node and Metastasis Classification for Thoracic Cancers.

For our partnership with *Friends*, we work together on the "ctDNA to Monitor Treatment Response (ctMoniTR Project"). This first-of-its-kind project involves collecting, harmonizing and analyzing clinical trials data from many sponsors to validate whether blood biomarkers, such as ctDNA, can be used to easily and more rapidly determine whether a drug is working.

These partnerships involve for-profit entities, research institutes, and universities, who entrust CRAB with a diverse array of critical data. Our commitment to data integrity is paramount; we ensure rigorous safeguarding and meticulous segmentation of this data, guaranteeing that no partner has access to another's information.

#### nCoup

SWOG continues its collaboration with nCoup, an organization that provides advanced technology solutions, to advance the automation of data transferred from Electronic Health Record to the Electronic Data Capture systems used in clinical research. Presently, ten SWOG trials employ this innovative technology, with additional trials under consideration. CRAB works closely with nCoup to implement their technology into RAVE. Early results demonstrate promising outcomes, with participating sites expressing appreciation for the time savings and improvements in data quality. We anticipate publishing a peer-reviewed article next year to share further insights into the observed enhancements in time efficiency and data integrity.

#### **SCT** Presentations

CRAB employees Chris Cook and Taylor Phillips presented at the 2023 Society for Clinical Trials conference in Baltimore, Maryland. This conference convenes members of the clinical trials community from academia, the pharmaceutical and device industries, government agencies, medical groups, clinical research entities, and other sectors. Chris Cook, CRAB's Chief Technology Officer, delivered an oral presentation called "Beyond Static Tables and Figures: Utilizing Technology to Enhance Tables and Figures Interactivity." Chris' presentation included a demonstration of CRAB's new data visualization capacity. Taylor Phillips, a CRAB Systems Analyst and Programmer, presented a poster on "Addressing the challenges of lab data collection and automation in the Lung-MAP study."

## GENER ATING BUZZ

#### ASH Clinical Training Institute

For the seventh-consecutive year, CRAB Chief Executive Officer Antje Hoering was invited to serve on the faculty for the American Society of Hematology's (ASH) Clinical Research Training Institute. The training is a year-long education and mentoring program for fellows and junior faculty specializing in hematology. As a member of the ASH faculty, Antje mentors young oncologists and physician scientists, providing individualized education and mentoring on clinical research methods, research collaborations, statistical analysis and career advancement. "This forum offers an excellent opportunity for hematologists to advance their careers, connect with new colleagues and build friendships. I am grateful for the opportunity to serve in this capacity."

#### CRAB CEO on ASA Board

Antje was recently elected to the American Statistical Association (ASA) board of governors as the publications' representative and now begins her three-year term. This nomination came from Dr. Steve Snapinn, a member of the CRAB Board of Directors. The ASA is a professional organization dedicated to promoting the practice and advancement of statistics. Currently, the field is experiencing swift transformations and challenges, particularly in the context of Artificial Intelligence, affecting peer-review processes and publications. Antje is looking forward to serving in this role.

#### ctMoniTR Module 1 - Dr. Hoering's Presentation at Fred Hutch

CRAB CEO, Antje Hoering presented at the Fred Hutch Cancer Center's Clinical Trials Affinity Group, focusing on "ctMoniTR – From the Perspective of the Independent Analysis Center (IAC)." CRAB serves as the IAC for the Friends of Cancer Research (*Friends*) ctDNA to Monitor Treatment Response (ctMoniTR) Project. This project seeks to assess whether changes in circulating tumor DNA (ctDNA) reflect response to cancer therapies and develop the necessary data to potentially support the use of ctDNA as an early endpoint for treatment response for regulatory decision making. Antje discussed this unique collaboration with *Friends* and the many partners and CRAB's role as the IAC and shared project's findings.

#### ctMoniTR Module 1 Analyses Presentation

On July 11th in Washington DC, the results from the ctMoniTR project were presented at a *Friends* public meeting entitled "Establishing Evidence: New Advancements using ctDNA". This meeting included panel discussions and keynote presentations with experts from the FDA, academia, patient advocacy groups, pharmaceutical and sequencing diagnostic companies. The results produced by CRAB as the ctMoniTR project's Independent Analysis Center illustrated a strong association between ctDNA levels and Overall Survival among advanced NSCLC receiving a targeted TKI therapy.

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#### **IASLC SPFC Meeting in Singapore**

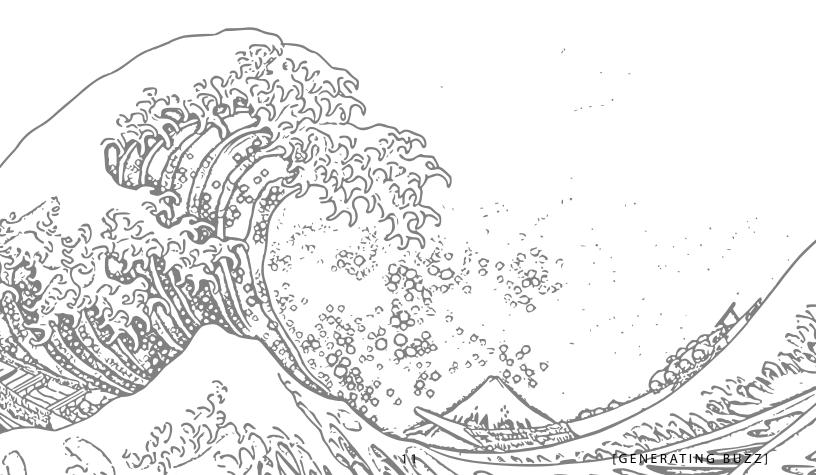
CRAB statisticians traveled to Singapore for the International Association for the Study of Lung Cancer (IASLC) World Conference on Lung Cancer to present the final results for the 9th Edition Staging and Prognostic Factors project. All analyses were conducted by CRAB statisticians. The new TNM Staging criteria for Lung Cancer, Mesothelioma, and Thymic Carcinomas were published shortly thereafter and will be adopted by the American Joint Committee on Cancer (AJCC) and the Union for International Cancer Control (UICC), to be used by clinicians worldwide starting in 2025.

#### Liquid Biopsy Conference

CRAB presented, sponsored, and hosted a table at the Annual Liquid Biopsy conference in San Diego in February 2023. Antje delivered a presentation on CRAB's collaboration with *Friends* for the ctMoniTR project. Chris Cook also attended the conference and hosted the table, providing additional information on the exciting research projects CRAB supports for Friends and other collaborators.

#### New Edition of Statistics in Clinical Oncology

CRAB Co-founder John Crowley and CRAB CEO Antje Hoering were invited by publishers Taylor and Francis to serve as editors for the fourth edition of their book, *"Handbook of Statistics in Oncology."* Drs. Crowley and Hoering invited Dr. Megan Othus from the Fred Hutchinson Cancer Center to their editorial team, enriching their collective expertise. This upcoming edition aims to capture the latest advancements in the field, made possible through the valuable contributions of many esteemed colleagues. The editors' goal is to ensure that the resource remains a comprehensive and up-to-date treatise for statistics in oncology clinical trials.



#### **CTP** Studies

SWOG Clinical Trial Partnerships (CTP) is the mechanism the SWOG Cancer Research Network uses to collaborate with industry partners on drug pipeline development or complex multi-arm platform trials. CRAB is a participant in SWOG CTP to build and deploy clinical trial software on behalf of SWOG and industry partners. These studies will utilize our proprietary CRAB Nebula® systems to securely capture, store, analyze and report data. Nebula™ includes customizable eCRFs, randomization, automated query tracking, robust edit checks, and many other features. In 2023, the Applications Development team at CRAB invested in significant effort to further expand the capabilities of Nebula to meet the needs and ensure success of the SWOG CTP trials. We're excited to be building and activating our first CTP trials in 2024.

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#### Data Monitoring Committee

CRAB remains committed to providing essential services that uphold the integrity and efficiency of clinical trials. One such service, acting as an independent analysis center as Data Monitoring Committee (DMC), is crucial for monitoring the safety and efficacy of clinical trials.

We are currently engaged with a client on a randomized Phase 2 trial in cancer, where CRAB's responsibilities encompass a comprehensive range of activities. This includes overseeing the DMC charter; developing programming for tables, listings, and figures; data analysis; report generation for DMC review; and facilitating effective and efficient meetings. In addition to these technical tasks, operational support is delivered through a dedicated project manager. This role is pivotal in organizing DMC meetings, documenting and finalizing minutes and serving as a liaison among CRAB's statistical team, the DMC and the study sponsor.

#### Friends of Cancer Research

CRAB continues its partnership with *Friends* as the Independent Analysis Center for the "ctDNA for Monitoring Treatment Response" (ctMoniTR) project. As in the pilot project, the current Step 2 project continues to investigate ctDNA as a biomarker for tumor response, and has expanded the scope to investigate its utility is multiple treatment settings (chemotherapy, anti-PD-(L)1 Immuno-Oncology agents, and Targeted Kinase Inhibitors (TKI)) among advanced Non-Small Cell Lung Cancers (NSCLC) and in other solid tumors. Results from the first phase of the project (NSCLC treated with TKI) were recently submitted for publication, with additional analyses currently underway.

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[COLLABORATIONS]

#### **IASLC 9th Edition**

CRAB, in partnership with the International Association for the Study of Lung Cancer (IASLC) and the Staging and Prognostic Factors Committee (SPFC), has continued its longstanding commitment to improving the Tumor, Node, Metastasis (TNM) classification system for lung cancer, mesothelioma, and thymic malignancies. Our collective goal has been to develop proposals for refinement of the TNM systems for these diseases, to better serve patients and clinicians.

In 2023, CRAB statisticians co-authored nine original research articles on proposals for the staging of lung cancer, mesothelioma, and thymic malignancies. In September 2023, CRAB's team of statisticians traveled to Singapore to present findings to the full committee leading to the recommendations for the 9th edition of TNM. Eight additional papers have been accepted for publication in 2024. Recommendations for lung cancer reflect an increased emphasis on tumor burden relative to location, and the proposed staging of mesothelioma incorporates pleural thickness measurements based on imaging.

Our statisticians collaborate with thoracic oncology clinicians, researchers, and scientists from around the world in this endeavor, and are supported by our applications development, information technology, project management, and data management teams, using our proprietary CRAB Nebula<sup>®</sup> electronic data capture program.

#### UAMS NYU Myeloma Project

CRAB continued its collaboration with investigators at the Perlmutter Cancer Center at New York University Langone Health to study and compare the mutational signatures, genetic patterns, microbiomic features, and rates of disease progression between African Americans and European Americans with smoldering myeloma. 2023 saw the completion of the trial build utilizing the CRAB Nebula<sup>®</sup> system, as well as the first enrollments to the trial.

#### CRAB DEI COMMITTEE 2023



The CRAB DEI committee was able to accomplish great things in 2023. The committee started 2023 by providing implicit bias sessions to our employees. These sessions focused on educating employees' negative attitudes, of which one is not consciously aware, against a specific social group. The DEI committee also organized two community outreach events in 2023, serving lunch for YouthCare at the Orion Center and donating food and utensils to families for Mary's Place, two local charity organizations.

## **DERSHIP & OVERNANCE**

#### **New Board Members 2023**

CRAB is immensely grateful for the guidance and strategic direction provided by our dedicated Board of Directors.

Comprising entirely of volunteers, our directors play a pivotal role in steering our organization. They diligently review our strategic plans, offer insights on our objectives, strategies, and yearly benchmarks, oversee our finances, collaborate with our auditors to evaluate prospects and challenges, and play a crucial part in fostering connections within the cancer research community.

We are fortunate to announce three new members of CRAB's Board of Directors: Arthur Ross, Dr. Jonathan Sham and Melissa Alvendia. Arthur Ross is the Director of Technology at the Technology Access Foundation. Arthur brings extensive experience, initially as an electrical engineer with Xerox, where he designed digital control consoles for copiers during a time when computer chips were not yet developed. This early experience paved the way for his later endeavors. Arthur transitioned to owning and operating his own IT international consulting firm, which spanned 26 years and operated in the United States and internationally.

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Dr. Sham is a surgical oncologist at the University of Washington and Fred Hutchinson Cancer Center. His clinical expertise is in benign and malignant diseases of the liver, bile ducts, and pancreas. Dr. Sham's research focus is on improving outcomes after surgery for pancreas cancer and is funded in work involving biotechnology development and national clinical trials. Dr. Sham is an active member of the SWOG Cancer Research Network, receiving the 2022 Charles A. Coltman Award and is the national study chair of S2408, a multicenter randomized trial evaluating lanreotide for the prevention of postoperative pancreatic fistula.

Melissa Alvendia is the Director of Programs & Strategy of the Translational Data Science Integrated Research Center and Computational Biology Program at Fred Hutchinson Cancer Center. Her work focuses on fostering collaborations, promoting innovation directly related to the growth of the data science community and ensuring that data science is fundamentally integrated across labs at Fred Hutch. Melissa has spent the past 20+ years involved in the administration and operations of numerous healthcare and research programs. She is currently pursuing a DrPH at Johns Hopkins Bloomberg School of Public Health in Health Policy and Management and aims to improve public health programs and cancer care delivery.

## BOARD OF DIRECTORS



Antje Hoering, PhD President, Board Chair & CEO Cancer Research And Biostatistics



Tim Cummins Managing Partner & Chief Investment Officer Sonata Capital Group



Gary Goodman, MD, MS Senior Investigator Swedish Tumor Institute Fred Hutch Cancer Center



Michael LeBlanc, PhD Group Statistician Fred Hutch Cancer Center



John J. Crowley, PhD Chief of Strategic Alliances Cancer Research And Biostatistics



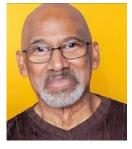
Melissa Alvendia, MS Director of Programs & Strategy Fred Hutch Cancer Center



Frank X. Curci, JD Attorney & Shareholder Buchalter



David Gray, PhD, MBA Consultant Oncology Research & Development



Arthur E. Ross, BS Director of Technology Technology Access Foundation



Jonathan G. Sham, MD, MBEE, FACS Assistant Professor of Surgery University of Washington School of Medicine



Roderic Davis, MBA Relationship Manager, Loan Officer Commerce Bank of WA



Patrick Heagerty, PhD, MS Biostatistics Professor UW School of Public Health



Steve Snapinn, PhD Independent Consultant

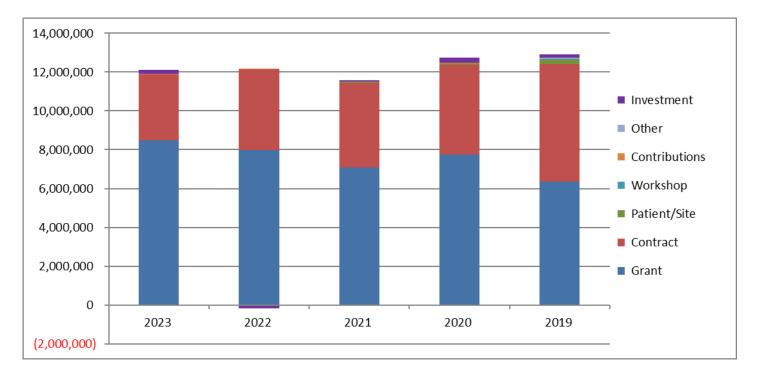
## F R I E N D S & SUPPORTERS

WE WOULD LIKE TO THANK THE MANY FRIENDS OF CRAB WHO MADE GENEROUS CONTRIBUTIONS IN SUPPORT OF OUR RESEARCH

- Kayla Burt
- Dacia Christin
- David Gray
- Kathleen Helfrich (*In memory of Martin McGuire*)
- \_ Antje Hoering
- \_ Amy Johnson
- \_ Alexander Rangel
- \_ Marsha Rosenthal

- American Online Giving
- Foundation
- Amazon Smile
- Charities Aid Foundation of America
- King County Employee
  Giving Program
- UKOGF Foundation

## AUDIT & FINANCIAL SUMMARY



2023 revenue grew 1% compared to the prior year. The increase in revenue was due to increases in SWOG grants. Revenue from all SWOG sources was 1% above the previous year reaching \$10,676,322 in 2023. Consistent funding led by our partners in the National Cancer Institute's National Cancer Trials Network sustained SWOG, and thus CRAB's federal funding in 2023; this was augmented by SWOG Clinical Trial Partner projects funded by pharma collaborators. Clinical and Statistical Research Program contract revenue continues to diversify revenues albeit at a lower level than previous years. Unrealized investment income in our reserves and interest on our cash investments was positive in 2023.

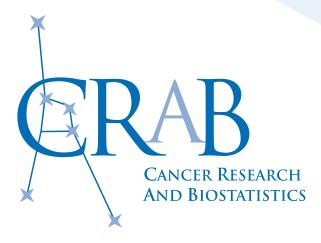
Support and Revenue							
	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>
Grant	8,468,545	7,987,013	7,080,797	7,739,288	6,347,985	6,329,347	6,445,862
Contract	3,400,028	4,157,141	4,353,449	4,655,815	6,074,878	6,700,740	5,452,502
Patient/Site		0	63 <i>,</i> 890	61,893	224,675	265,866	330,048
Workshop	28,018	12,735	0	0	21,010	23,008	25,467
Contributions	4,309	9,647	13,039	9,592	11,683	18,693	25,557
Other		0	101	12,832	81,441	(27,147)	42,512
Investment	224,087	( <u>173,406</u> )	84,733	256,965	148,338	14,000	101,471
	\$12,124,987	\$11,993,130	\$11,596,009	\$12,736,385	\$12,910,010	\$13,324,507	\$12,423,419
<b>Operating Expenses</b>							
	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>
Research	8,774,912	8,482,772	8,072,898	8,378,183	8,428,506	8,732,841	8,519,474
Workshops	26,797	12,063	3,308	832	21,011	23,008	25,466
Administration	3,726,140	3,628,826	3,711,171	2,902,275	3,769,381	4,270,035	3,267,703
	\$12,527,849	\$12,123,661	\$11,787,377	\$11,281,290	\$12,218,898	\$13,025,884	\$11,812,643

CANCER RESEARCH AND BIOSTATISTICS

# OUR MISSION

is to help conquer cancer using the tools and expertise we bring to oncology clinical development:

Biostatistical principles Oncology clinical trials expertise Data management/monitoring services Electronic data capture solutions Education, support and training







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