

2020 ANNUAL REPORT

WORKING TOGETHER TO CURE CANCER



CANCER RESEARCH AND BIostatISTICS

OUR VALUES

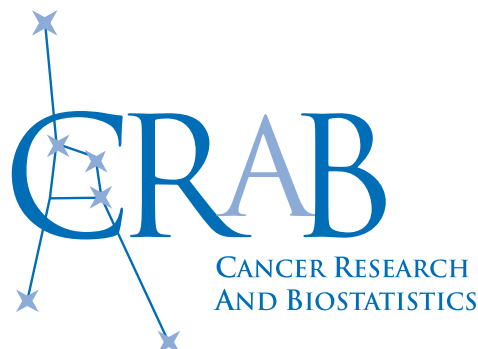
TEAM PLAYER

OPEN COMMUNICATION

POSITIVE ATTITUDE

INTEGRITY

COMPASSION





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 has been dominated by the challenges that COVID-19 presented to all of us. In March 2020, we appreciated the danger presented by the virus. Following advice from scientists at Fred Hutch and the University of Washington, who made it clear that it was best to limit contact, staff at CRAB began doing so by the first week in March. This smooth transition was facilitated by a robust Information Technology infrastructure that had prioritized remote access capabilities for personnel based at the Fred Hutch, thus allowing quick initiation of remote work by CRAB employees. With the impressive effort from our Information Technology team and cooperation from everyone, we were all working from home offices, living rooms, kitchens and elsewhere by mid-March with the exception of a few staff members who perform essential work at CRAB's offices.

I truly appreciate all of our staff's willingness to adapt to this new reality; conquer the many facets of challenges in their own way; and still produce high-quality work with grace. When we first moved to remote work we didn't expect to be doing so for the remainder of the year and beyond. We had to adapt throughout the year.

Our organization moved to Zoom meetings as the main mode of communication and had more regular All Staff Meetings than in previous years. Our CRAB Committees came up with inventive ways to use this platform even for fun activities. Throughout the year, we have used technology and perseverance to continue to embody the "Working Together to Improve Cancer Outcomes" theme of this report, focusing on the patients and their loved ones facing this terrible disease. We are proud to continue our high-quality support for cancer research and we are encouraged that the trend of cancer survivorship depicted on the cover continues to improve, though significant challenges lie ahead.

Our alliance and work within the SWOG Cancer Research Network proceeded to support cancer research in collaboration with colleagues at Fred Hutch. Under the leadership of Mike LeBlanc, PhD, work at the Statistics and Data Management Center continued with virtual meetings to support cancer trials at a near-normal pace. Our productivity was robust. Our Applications Development team opened fourteen SWOG studies and our Data Management team continued supporting our SWOG clinical sites from their remote locations. Patient accrual to SWOG trials was lower than normal until mid-May, when the trend moved closer to pre-pandemic activity levels by November.

In January several of us went to Washington DC where we kicked off a new collaboration with Friends of Cancer Research (*Friends*), a non-profit organization that supports the creation and implementation of policies that ensure high quality and safe treatments for patients. *Friends* partnered with pharmaceutical

and academic research teams to determine the feasibility of harmonizing clinical data with circulating tumor DNA (ctDNA) data from several lung-cancer trials and assays to ultimately investigate whether changes in ctDNA may be early indicators for treatment response. Throughout the year, CRAB served as the Independent Analysis Center (IAC) for this project. This was a demanding project with weekly calls to update our collaborators on analysis results and culminating in a final Zoom presentation and panel discussion which was attended by over 900 attendees. Our results, discussed later in this report, were very encouraging and we hope to continue as the IAC for expanded work on this project.

Through our collaboration with the International Association for the Study of Lung Cancer (IASLC), CRAB's statistics team continued to collect and harmonize lung cancer cases from around the world, including molecular data, which are important in the area of targeted and immune-therapies. Working with IASLC scientists, we continued this effort to optimize staging criteria for the ninth edition of a lung cancer staging treatise.

Our business remained strong in 2020, in spite of the challenges related to COVID-19. We sent best wishes to one of our long-term leaders, Tammy Buist, Chief Business Development Officer, who moved on to another challenge. We welcomed Kayla Burt as Director of Business Development. We expect 2021 to continue to be a strong year.

We are grateful that our staff members, who are our colleagues and friends, are all safe and well. Along with their professional and accomplished work, many staff members contribute to the outside community through volunteer effort. Many also provide support and guidance to our organization through contributions in committees and support staff appreciation, CRAB values, lunch and learn speakers, wellness activities, and outreach and educational opportunities to non-profits organizations that similarly address the burden of cancer. Together, we support diversity, equity and inclusion (DEI) while opposing actions and events that harm, disrespect or limit the rights of anyone. We plan to initiate DEI training and other activities in 2021 to continue this journey.

We are also grateful for and appreciate the on-going commitment of our Board of Directors. This group of professionals selflessly shares their expertise, experience and time to help CRAB be a successful non-profit organization. We salute our governance board later in this report.

While most of us have worked virtually during much of 2020, we have continued to work as a team in this vibrant organization, focusing our efforts to improve cancer outcomes. We look forward to collaborating in person again in the New Year.



SWOG-CRAB Statistical Tools updated

In 2020, CRAB continued to improve the interface of the SWOG-CRAB Statistical Tools (<https://stattools.crab.org/>). A new utility was added to easily convert between survival probabilities and hazard rates and additional survival outputs were added to the Two Arm Survival calculator. We also streamlined the Two Arm Binomial calculator interface and converted the underlying calculations to use the R programming language. Additionally, Monica Chaudhari, PhD, John Crowley, PhD and Antje Hoering, PhD extended the two-stage phase II design to allow for early stopping for efficacy during the interim analysis. This work was submitted for publication to the journal of Statistics in Biopharmaceutical Research and the Two Stage calculator was augmented to incorporate the new rules.

SWOG Central Monitoring uses Remote Source Data Portal

The CRAB central monitoring team continued use of the source document portal, developed by the National Cancer Institute's Cancer Trials Support Unit to evaluate source documentation for SWOG trials. In 2020, new Lung Cancer and Bladder Cancer studies were selected for Central Monitoring. The source document portal allows for remote auditing of original data to ensure the accuracy of clinical trial data entered in our trial database. The portal became an extremely useful application for the SWOG Audit Team this year, since they were unable to travel due to COVID-19.

SWOG Latin America Initiative hosts virtual symposium

The SWOG Latin America Initiative (SLAI) continued to foster collaborative cancer research between the SWOG Cancer Research Network and collaborators in Mexico, Colombia, Peru, Chile, Uruguay and Brazil. The highlight this year was a four-day, international meeting conducted virtually from November 9 to November 13. The successful meeting was coordinated by CRAB staff and included presentations by CRAB statisticians. CRAB personnel also moderated the meetings and break-out sessions and managed the complex virtual platform. Nearly 100 attendees from across Latin America attended the four-day conference. The meeting was held in collaboration with the Chilean Cooperative Group for Oncological Research (GOCCHI). The conference provided a comprehensive description of SWOG's approach to conducting clinical trials, prevention studies (in the U.S. and Latin America), cancer surveillance (collecting and analyzing data on new cancer cases, extent of disease, screening tests, treatment, survival, and cancer deaths), palliative case studies and statistical analyses. Monitoring and Evaluation data collected after the conference indicated that the participants expressed strong satisfaction with the course and saw it as contributing to their understanding of SWOG and of clinical trials generally.



New Stat Tools interface



SWOG is funded by the NIH



Recruitment & Retention Committee addresses diversity, equity & inclusion in SWOG trials

The SWOG Recruitment and Retention Committee (RRC) advises on methods to increase patient accrual to SWOG trials, focusing particularly on including underrepresented patients. CRAB's Jennifer Maeser, Clinical Trial Recruitment and Retention Specialist, provides support and guidance to the RRC committee. The RRC and Patient Advocacy Committee members developed diversity training that includes a TeamScience module on Improving Diversity and Representativeness of Clinical Trial Participants (TeamScience is a series of modules to provide guidance and advice on supporting patient advocate engagement across the life cycle of a research study); a program "Realizing Diversity, Equity, and Inclusion in SWOG Cancer Research Network Trials"; and a SWOG fellowship program support by The Hope Foundation and Genentech. A publication on catchment area, authored by RCC members, was published in *Cancer Health Equity Research*.

SWOG hosts virtual group meetings

SWOG Cancer Research Network held two annual meetings, one in the Fall and one in the Spring. Due to the COVID-19 pandemic this year, both of these meetings were held virtually. Although we missed seeing each other in person, the virtual format created opportunities for us to invite more individuals to participate from a broader geographic area. Leveraging the videoconference platform during the Fall meeting, CRAB staff led the sixth annual NCI Community Oncology Research Program (NCORP) workshop, where investigators and clinical research professionals develop skills necessary to conduct research into cancer survivorship, prevention and epidemiology, cancer care delivery research, and symptom control and quality of life. These workshops are not possible without generous funding from The Hope Foundation for Cancer Research, a public charity that supports SWOG.

Lung-MAP enrollment progresses

The Lung-MAP Master Protocol and its sub-studies continued to enroll patients at an excellent rate, including better-than-expected accrual during the COVID-19 pandemic. Like all SWOG Cancer Research Network studies, CRAB plays a collaborative role in bringing Lung-MAP trials to fruition. These clinical studies are supported by CRAB's Data Management, Applications Development and Central Monitoring teams. Two biomarker-driven sub-studies were activated in early 2020, and one them (S1900C) completed accrual within the year -- demonstrating again the power of the Lung-MAP infrastructure to quickly identify and enroll patients on genomic-defined trials. The non-match sub-study S1800A also completed accrual in late 2020, and three primary manuscripts (S1400, S1400A, S1400K) were published. Publications can be found at the [Clinical Trials Publication](#) page on the SWOG site.

2020 trial activity

The SWOG Cancer Research network opened 14 new cancer studies in 2020, all developed by CRAB's Application Development team, including: Breast (S2007); Gastrointestinal (S2001); Genitourinary (S1931); Leukemia (S1905, S1925); Lung (S1827, S1900B, S1900C, S1914, S1929, S1933); Melanoma (S2000); and Prevention (S1823, S1904). Web forms development began for 12 additional studies expected to be activated in 2021: Cancer Care Delivery (S1912CD); Early Therapeutics (S2012); Gastrointestinal (S2104); Genitourinary (S1937, S2011); Lung (S1900E, S1934); Lymphoma (S1918); Melanoma (S2015); Myeloma (S2005, S2105); and Symptom Control/QOL (S2013).





The Hope Foundation announces John Crowley, PhD Award for Statistical Excellence in Clinical Trials

In May 2020, CRAB proudly announced a new funding program from The Hope Foundation for Cancer Research: The John Crowley, PhD Award, encouraging statistical excellence in clinical trials. In honor of Dr. Crowley's history with the SWOG Cancer Research Network and The Hope Foundation, the Crowley Award builds on Dr. Crowley's legacy of mentorship and innovation by launching a biostatistical residency program. The award provides a unique opportunity to work with experts at the SWOG Statistics and Data Management Center (SDMC), co-located at Fred Hutch and CRAB, for one month. This interactive mentorship program will be a collective effort between CRAB, the SWOG SDMC, and The Hope Foundation.

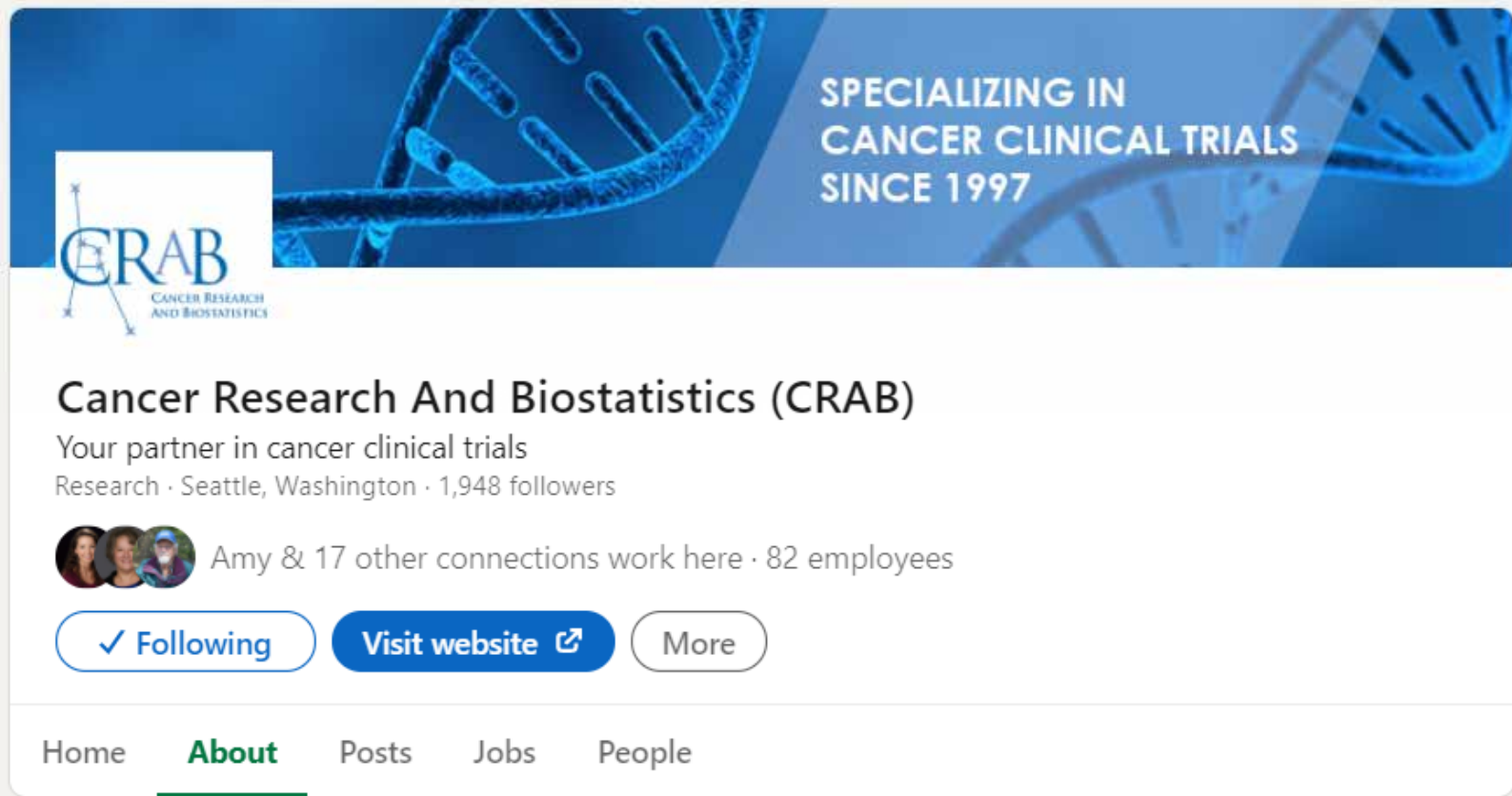
"I am very grateful to the SWOG Cancer Research Network and The Hope Foundation for creating this program in my name," says John Crowley, CRAB's founder and current Chief of Strategic Alliances. "The one-month residency is a great opportunity for early- to mid-career investigators to interact with statisticians in SWOG and to learn of the rich resource which constitutes the SWOG database. I expect that many fruitful collaborations will result."

Throughout his career Dr. Crowley has been a central force in SWOG and has made a significant impact on the field of biostatistics. Dr. Crowley served as the SWOG Group Statistician and Director of the Statistical Center from 1984 to 2012; Dr. Crowley and his wife, Dr. Cay Crowley, founded CRAB in 1997. Dr. Crowley is known for his focus on design of cancer clinical and translation trials as well as his development of sophisticated tools for survival data. Dr. Crowley's credentials include prestigious fellowships from the American Statistical Association, the Society for Clinical Trials and the American Association for the Advancement of Science; the Mortimer Spiegelman Award for Outstanding Young Biostatistician; the Marvin Zelen Award for Leadership in Statistical Science; and the Norman Breslow Lectureship. Dr. Crowley continues to be active in SWOG, particularly with the SWOG Latin American Initiative.

Visit the [Hope website](#) for full details on the John Crowley, PhD Award.

THE HOPE
FOUNDATION
FOR CANCER RESEARCH

<GENERATING BUZZ>



Cancer Research And Biostatistics (CRAB)
Your partner in cancer clinical trials
Research · Seattle, Washington · 1,948 followers

Amy & 17 other connections work here · 82 employees

✓ Following Visit website More

Home About Posts Jobs People

CRAB kicks off social media presence

CRAB assembled a Social Media Team to review CRAB’s social media presence and opportunities. Results of the analysis emphasized the need for CRAB to focus on the professional network LinkedIn (<https://www.linkedin.com/company/cancer-research-and-biostatistics>). Since then, the CRAB Social Media Team has updated our profile to include new graphics, taglines, as well as content featuring our organization and expertise. The team regularly posts new content on CRAB’s LinkedIn profile from job postings, to partnerships, services and events. Follow us today!

CRAB CEO mentors fellows at hematology clinical research training workshop

For the fourth-consecutive year, CRAB President and CEO Antje Hoering, PhD was invited to serve on the faculty for the American Society of Hematology’s (ASH) Clinical Research Training Institute (CRTI). The training is a year-long education and mentoring program for fellows and junior faculty specializing in hematology. CRTI faculty provide individualized education and mentoring for hematology fellows on clinical research methods, research collaborations, statistical analysis and career advancement. All trainings, courses and meetings were provided virtually for the 2020 CRTI program.

CRAB CEO moderates panel on Women & Diversity in Precision Medicine Panel at 2020 World CB CDx Conference

CRAB President and CEO Antje Hoering, PhD, joined the Women & Diversity in Precision Medicine pre-conference day for a panel discussion. The digital event convened leaders of the scientific and business community—from pharma, diagnostic companies and academic institutions—to foster collaboration, advocate mentor-ship and derive actionable solutions to help improve inclusion across the industry.

Through dynamic panels, including The Collective Benefits and Practical Application of Mentoring Schemes, this event facilitated meaningful connections on a conversation key to accelerating progress in the fast-paced precision medicine industry. This panel explored the benefits of developing a balanced team perspective through diversified management and mentorship schemes. Dr. Hoering served as the panel chair along with panelists from AstraZeneca, Seuss+, Origami Therapeutics and Blueprint Medicines.

“This forum allowed for an exchange on information on this timely and important topic,” said Dr. Hoering.

Following the Women & Diversity in Precision Medicine pre-conference day, the Digital Clinical Biomarkers & World CDx 3-day digital conference addressed the critical lessons learned both from personalized therapy case studies and the response to the pandemic, allowing for teams to more effectively deliver for patients in need across existing therapeutic areas.

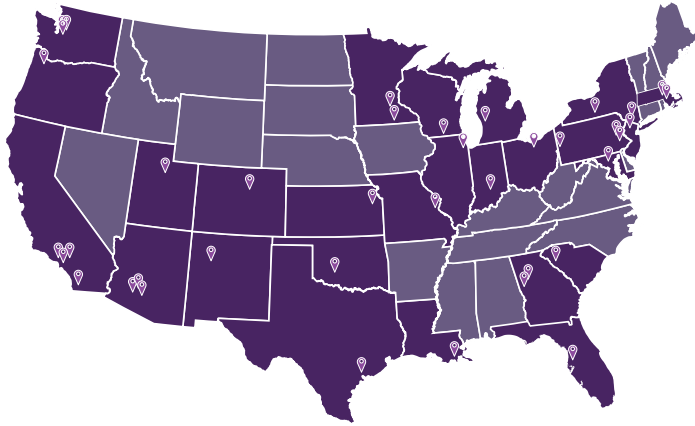
CRAB CEO presents at Clinical Trials Methods Training & Workshop at OHSU

In January 2020, Dr. Antje Hoering, CRAB President and CEO, was invited for the fifth year by the Biostatistics Shared Resource (BSR) team at the Oregon Health and Science University (OHSU) Knight Cancer Institute to present at the Clinical Trials Methods Training and Workshop. The collaboration combined CRAB’s expertise in designing clinical trials, oncology analytics, identification of genetic markers and targeted designs with the OHSU Knight Cancer Institute’s pioneering work in personalized cancer medicine and proficiency in early detection of cancer.

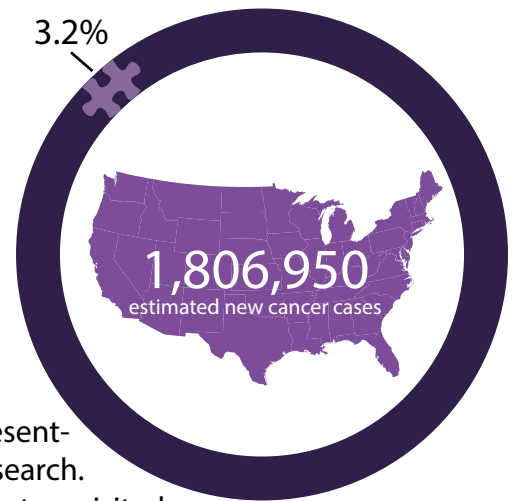
“I’m impressed by the ever-improving quality of this workshop at the Knight Cancer Institute,” said Dr. Hoering. “It’s hugely popular and draws many participants each year.”



📍 PCRT sites in the U.S.



PANCREATIC CANCER
ACCOUNTS FOR 3.2% OF
ALL NEW CANCER CASES IN THE
U.S., BUT IS THE THIRD LEADING
CAUSE OF CANCER DEATHS



PCRT exhibits at ASCO GI Symposium

In January, at the ASCO Gastrointestinal Cancer Symposium in San Francisco, CRAB's Pancreatic Cancer Research Team (PCRT) exhibited and presented the strengths and opportunities PCRT brings to pancreatic cancer research. Pharmaceutical companies, prospective collaborators and PCRT investigators visited the booth to learn about PCRT and CRAB services and to interact with Tammy Buist, CRAB's Vice President and Chief Business Development Officer, and Curt Malloy, CRAB's Vice President and Chief Operations Officer. Meetings with clinical research organizations, physicians and pharmaceutical companies were held, allowing for important conversations to advance research in this challenging cancer.

PCRT hosts 17th Annual Meeting virtually

The Pancreatic Cancer Research Team (PCRT) conducted a successful virtual conference in late May 2020. Twenty investigators from the PCRT, including physician scientists across the United States and as far as Spain, attended the half-day teleconference. Company sponsors this year were Novocure, Geistlich, and FujiFilm. Novocure and Geistlich gave presentations on their novel treatments. The keynote speaker was Brian Wolpin, MD, Harvard University, who presented his research on the use of personalized medicine in pancreatic cancer.

Analysis of advanced pancreatic cancer study data

CRAB first began its collaboration with Berg Health, LLC in 2015, with the initiation of a Phase 2 multicenter, open-label, non-randomized study examining the compound BPM31510 (ubidecarenone) for second-line treatment of advanced pancreatic cancer. The study included an evaluation of BPM31510 alone as well as in combination with gemcitabine. The database was locked in late 2020 and data analysis is on-going. Results will be released in 2021.

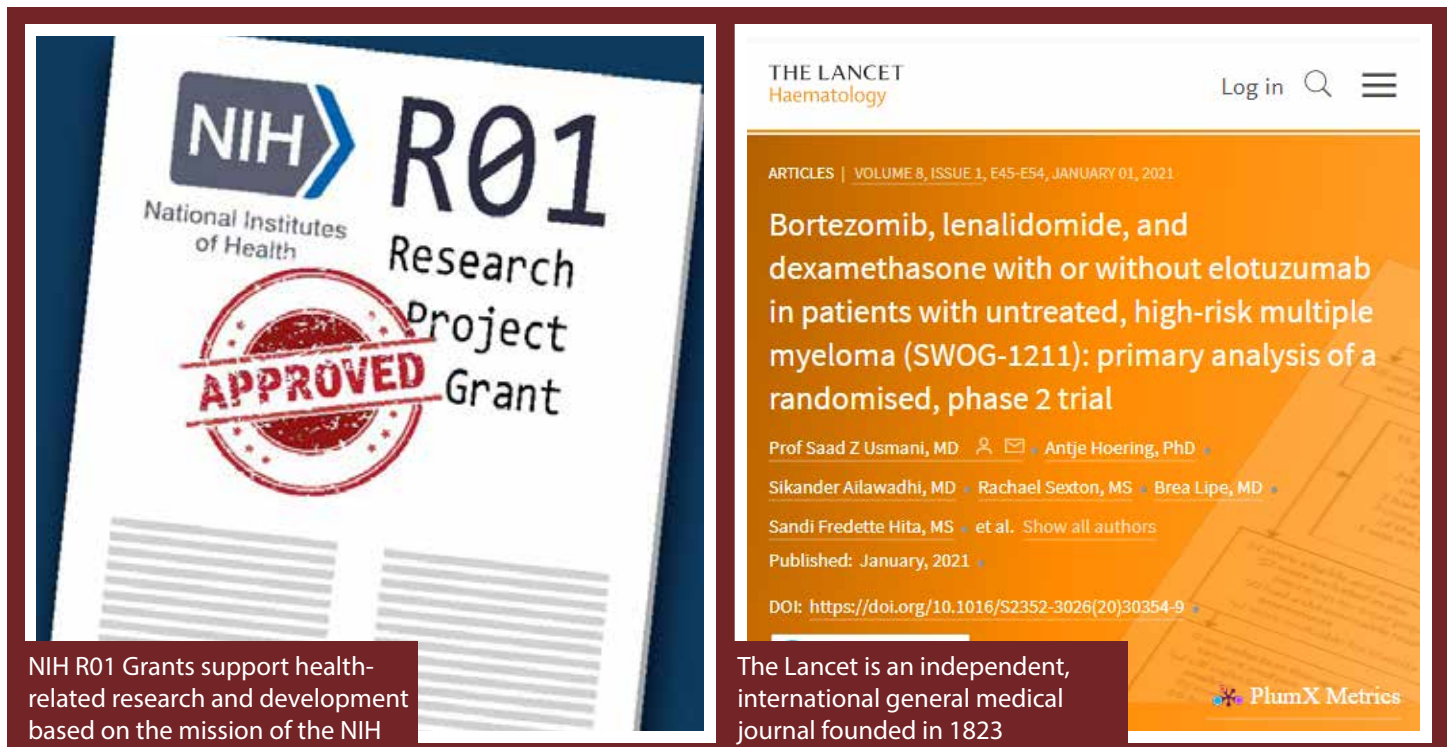
< MYELOMA >

CRAB develops grant for smoldering myeloma trial in collaboration with New York University

The CRAB statistical team collaborated with researchers with New York University (NYU) Langone Health on the development of an R01 grant for a trial in smoldering myeloma. The primary objective of this study is to compare the rate of progression to Myeloma between European Americans and African Americans and investigate key features such as mutational signatures, cytogenetic features, microbiome characterizations and epidemiologic factors to better understand the difference in progression rates between those patient groups.

CRAB and SWOG publish manuscript in Lancet Journal

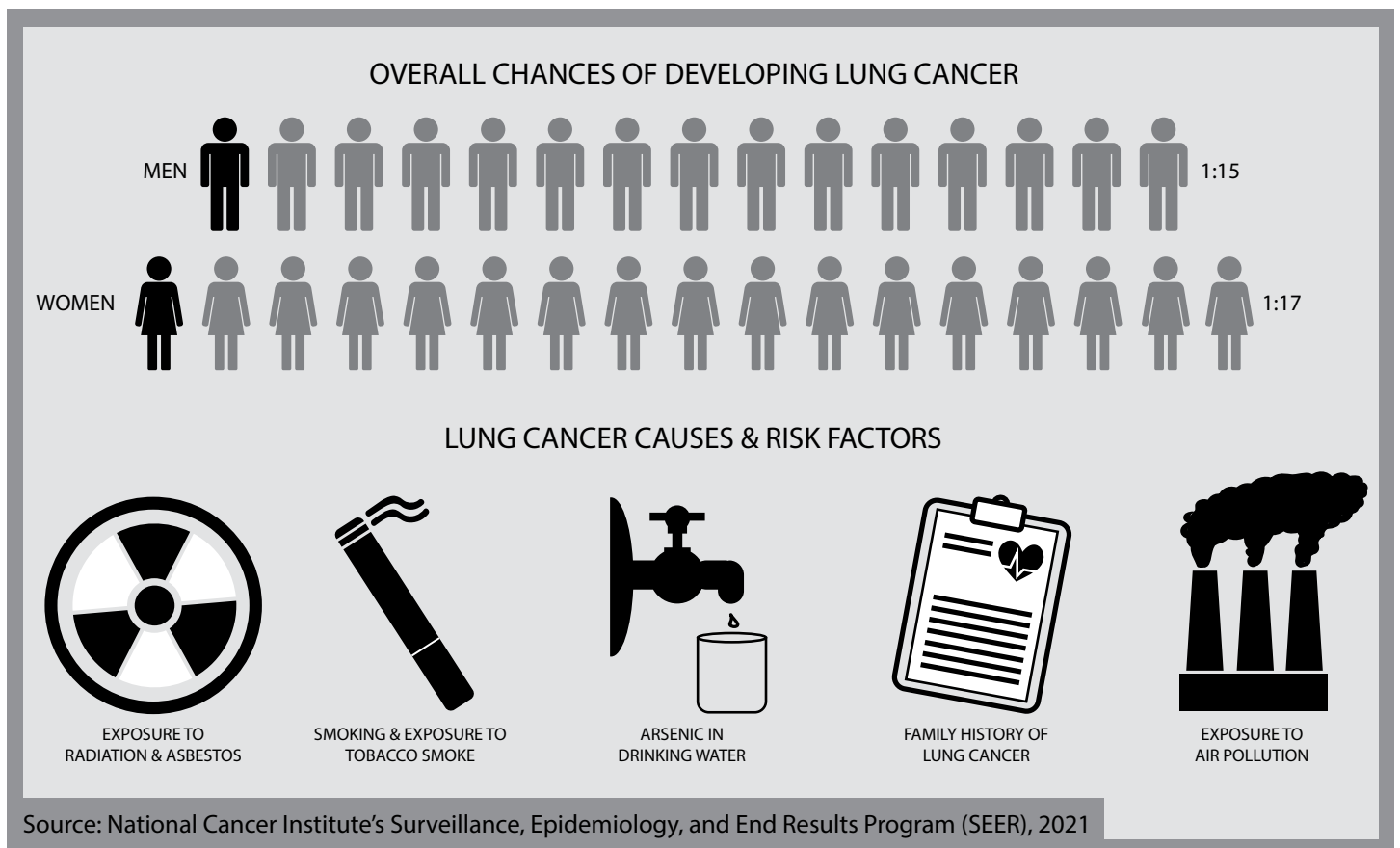
S1211 is a Phase I/II trial in which previously untreated patients with high-risk myeloma were randomized to bortezomib plus lenalidomide, with or without elotuzumab. After nearly a decade since CRAB/SWOG statisticians, Dr. Antje Hoering and Rachael Sexton, first began designing S1211 with study chair, Dr. Saad Usmani, the primary study results were published in the Lancet Haematology in January 2021, making it the first randomized study of high-risk myeloma to be reported at that time. The study results showed no indication that the addition of elotuzumab improved patient outcomes, though notably, patients on both arms did better than expected.



CRAB & IASLC progress on Tumor, Node, Metastasis classification

CRAB continued its long-standing collaboration with the International Association for the Study of Lung Cancer (IASLC) and the Staging and Prognostic Factors Committee (SPFC) through work on the ninth edition of the Tumor, Node, Metastasis (TNM) classification system. The CRAB effort is led by statisticians with support from our applications development, information technology, project management and data management teams. Case data on lung cancer, mesothelioma, and thymic malignancies diagnosed from 2011-2019 have been collected internationally through our proprietary CRAB Nebula electronic data capture system and through uploaded datasets.

Due to the COVID-19 pandemic, the SPFC met virtually over four weeks in January 2021 for its annual meeting, which was originally planned in person over two days in Singapore. CRAB statisticians participated in 16 subcommittee meetings, each tasked with revising specific components of staging, a method to determine the extent of cancer bulk and spread in a patient's body using TNM, for malignancies originating in the thoracic cavity. CRAB statisticians Katherine Nishimura, PhD, and Dorothy Giroux, MS, were co-authors on a journal article (by Osaragiogbon, et al.) regarding the potential for including molecular attributes of lung cancers in the staging system, which was accepted by the Journal of Thoracic Oncology for publication in 2021. Work is underway toward informing the ninth edition of the TNM classification system for these diseases, to be enacted in 2024.



< COLLABORATIONS >

CRAB selected as independent data analysis center for circulating tumor DNA project

In December 2019, CRAB was selected by Friends of Cancer Research (*Friends*) to be the Independent Analysis Center for the ctMoniTR project. The kick-off meeting was held in *Friends*' offices in Washington DC in January 2020 and included academic and pharma collaborators. CRAB harmonized data from five studies and executed statistical analyses to assess if changes in circulating tumor DNA (ctDNA) could be an early indicator of a patient's response to treatment with PD-L1 Immune Checkpoint Inhibitors. The results were very promising and were presented in a webinar conference with over 900 participants. The manuscript is in progress and plans are underway for a collaboration for the next phase of this project.

"We are excited to work with *Friends* on this project," said Dr. Antje Hoering, CRAB President and CEO. "Learning more about ctDNA may lead to more ways of assessing treatment options for cancer patients."

CRAB provides Data Safety Monitoring Board services for a Razor Encore Oncocyte phase II/III trial

CRAB began supporting Razor Encore Oncocyte's (REO) Data Safety Monitoring Board (DSMB) for a phase II/III Non-Squamous Non-Small Cell Lung Cancer therapeutic drug candidate. CRAB serves as the Independent Statistical Center (ISC) for REO and prepares and presents all analyses to the DSMB. CRAB also supports REO with meeting coordination, management of DSMB member timesheets and payments, and liaising with all DSMB stakeholders. The study is currently accruing and expected to be complete in 2024.



CRAB provides clinical monitoring services for Ivy Brain Institute

CRAB provided Clinical Monitoring services for an investigator sponsored early phase (0/II) clinical trial conducted by a well-known research institute specializing in brain cancer in Seattle. Monitoring and review of patient trial data to ensure accuracy began shortly prior to the COVID-19 pandemic. In early March, monitoring for three participating study sites was limited to central monitoring with no on-site visits. CRAB's central monitor utilized the site's electronic case report forms and their electronic data capture system to conduct the review.

CRAB and OHSU Knight Cancer Institute collaborate on statistical excellence in cancer clinical trials

This past year marked the 6th year of the collaboration between CRAB and the Biostatistics Shared Resource (BSR) of the Knight Cancer Institute at the Oregon Health and Sciences University in Portland which was mostly remote. The fourth Clinical Trials Methods Training & Workshop event was held in person at the Knight Cancer Institute in January 2020.



Ivy Brain Tumor Center campus in Phoenix, AZ



OHSU Knight Cancer Institute in Portland, OR

< OUR EMPLOYEES >



Dani Weatherbee awarded the 2020 Cay Crowley Award for Excellence

CRAB Project Manager Dani Weatherbee was awarded the 2020 Cay Crowley Award for Excellence. CRAB President and CEO Antje Hoering, PhD, presented the award to Ms. Weatherbee at CRAB's All Staff meeting in January 2020. Dr. Hoering cited several examples of Ms. Weatherbee's key contributions to CRAB, including the creation of processes for RAVE study builds which are comprehensive, flexible and helpful for a multitude of users. Ms. Weatherbee was instrumental in preparing SWOG to open trials that are compliant with CDASH, a standardized method to consistently collect data across studies and sponsors. She also presented her work to the SWOG Cancer Research Network at the 2019 SWOG Fall Group Meeting. The Cay Crowley Award for Excellence was named after CRAB's co-founder and former vice president and Chief Financial Officer, Cay Crowley, PhD. Previous winners are Dr. Crowley (2015), Yoko Rivers (2016), Karen Anderson (2017), Laura Kingsbury (2018), and Brent Watkins (2019).



CRAB staff institute work group to ensure a safe and healthy workplace

"In response to the COVID-19 pandemic, CRAB offices were closed for most in-person use in early March, with a small number of essential staff allowed on site. To help ensure that CRAB proceeds safely and equitably when opening up the office to general use, a working group, Safely Opening CRAB Office (SOCO), was launched and tasked with implementing response to positive exposures, establishing protocols and guidelines, and communicating decisions and announcements to CRAB staff.

Wellements Committee promotes health and wellness amongst staff

Wellements seeks to help staff improve and maintain their overall health and well-being through education and support. Activities are offered to appeal to diverse interests. Throughout 2020 CRAB's employee intranet and monthly calendar were regularly updated with events, health information and resources. With the start of the pandemic in March, Wellements used virtual strategies to help employees stay well. Activities included a 6-week healthy living challenge, a virtual wall for placing gratitude messages, a virtual "walk" from Seattle to Chicago (the location of the Fall SWOG Group Meeting), and sharing of photos on staying healthy.

Lunch & Learn Committee seeks to improve the remote work experience

The Lunch & Learn Committee is dedicated to providing dynamic speakers and nutritious meals. Due to the COVID-19 pandemic, only one of the usual four events took place in 2020. The July event, hosted virtually, aimed to introduce tools and strategies attendees could use to improve their remote work experience. Three CRAB staff members presented their expertise and proficiencies with SharePoint and its functionalities, Microsoft OneNote, and "being mindful of your wellbeing at home." Staff were invited to bring their own meals to the Zoom table.

Staff Appreciation Committee pivots to remote activities

After many of us began working from home, CRAB employees began to miss our daily interactions with colleagues. To help fill that gap, our Staff Appreciation Committee hosted a series of virtual events to help lift our spirits and maintain social connections. CRABbies "zoomed" into some fun random chat sessions and enjoyed playing some bingo, trivia quizzes, video games and a clever game created by our in-house game designer, Adam Rosenthal. These activities helped to bring us all together, though we all are longing for the return of real, in-person conversations.

Values Committee commences annual photo contest

The CRAB Values Committee selected the winners of our first annual employee photo contest and the five winning photos were framed and displayed at CRAB for the year. The theme of the contest was the CRAB value "Team Player." The committee continued to recognize exceptional individual contributions and examples of core values being demonstrated at CRAB through two major initiatives: collecting and reviewing nominations for the Cay Crowley Award for Excellence; and the monthly selection of a recipient of the "Red Crab of Appreciation" award, given monthly to an employee who had received "kudos" from colleagues.





< COMMUNITY CONNECTIONS >

CRAB Cares raises funds for lung health and blood cancer research

In June, CRAB Cares raised \$1,052 for the 2020 Leukemia and Lymphoma Society's (LLS) Big Climb event to support the LLS vision of curing blood cancers. While the usual event, interrupted by the COVID-19 Pandemic, involves participants scaling 69 flights of stairs at the Columbia Tower in Seattle, CRAB employees trained individually and climbed in their own social-distance fashion.

CRAB Cares also joined forces virtually with Lung Force to walk in support of lung cancer advocacy. Contributions from members and supporters put the CRAB Cares team in first place for all participating companies. The team was led by CRAB's Clinical SAS Programmer, Julie Fox, and raised \$1,135 to support lung cancer research, patient care and public policy/advocacy.

CRAB Cares organizes virtual awareness-raising campaigns for staff

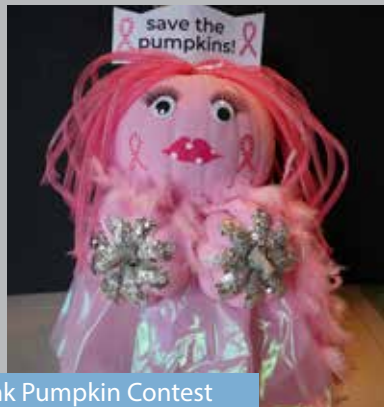
In October, in recognition of Breast Cancer Awareness Month, the CRAB Cares Committee invited CRAB staff, families and friends to learn more about breast cancer, risk factors and most-at-risk groups. The event also brought attention to organizations in the greater Seattle Community that combat breast cancer and support breast cancer survivors. CRAB Cares organized a Pink Pumpkin Contest during which 13 staff members, families and friends decorated pumpkins in pink and shared them in their neighborhoods and communities.

In November, CRAB Cares invited staff, families and friends to learn more about food justice and to participate in a remote food drive in their local communities. The committee presented information on the CRAB's intranet describing the concept of food justice and providing resources for interested staff to learn more. The webpage also included a virtual table to track the food donated by participants. In total, 24 CRAB staff members shared food items or monetary donations with nearly 30 different food banks and organizations supporting food and nutrition-insecure clients.

In December, CRAB Cares, colleagues, families, and friends joined together to support Mary's Place, a Seattle nonprofit dedicated to providing safe, inclusive shelter and housing services to support families transitioning out of homelessness. The committee coordinated efforts to share gifts and goods in an attempt to help families celebrate the joy of the holiday season. Together, participants donated toys, art kits, blankets, clothing, sports gear, watches and spa kits and other gifts for children and their parents. Several monetary donations were also made to Mary's Place.



Pink Pumpkin Contest
1st Place Winner



Pink Pumpkin Contest
2nd Place Winner



Pink Pumpkin Contest
3rd Place Winner

< LEADERSHIP & GOVERNANCE >

CRAB welcomes Tim Cummins and Dr. Steve Snapinn to join the Board of Directors

The CRAB Board of Directors added two new members in 2020, Tim Cummins and Steve Snapinn, PhD. Tim Cummins joined the CRAB BoD as a Founder and Chief Investment Officer at Sonata Capital, Tim oversees all of Sonata's investment actions. Dr. Snapinn holds a Doctorate in Biostatistics from the University of North Carolina at Chapel Hill. He is currently an independent consultant and previously he held senior leadership positions throughout his career at Alder Biopharmaceuticals, Amgen and Merck.

CRAB temporarily transitions to remote work in response to the COVID-19 Pandemic

On March 6, in response to the SARS-CoV-2 (COVID-19) pandemic, CRAB followed recommendations from the US Centers for Disease Control and Prevention and Washington State Department of Health, by transitioning its workforce from its offices in the Westlake Union Center to working remotely from home and/or other safe-and-social-distance settings. With special thanks to CRAB's IT Department, our transition to remote work fell together seamlessly, with little to no disruption to CRAB's work. A small number of essential staff, including administration, finance, human resources, and IT were permitted onsite to assure necessary functions remained operational.



CRAB Values Committee
2019 Photo Contest Winners

< FRIENDS & SUPPORTERS >

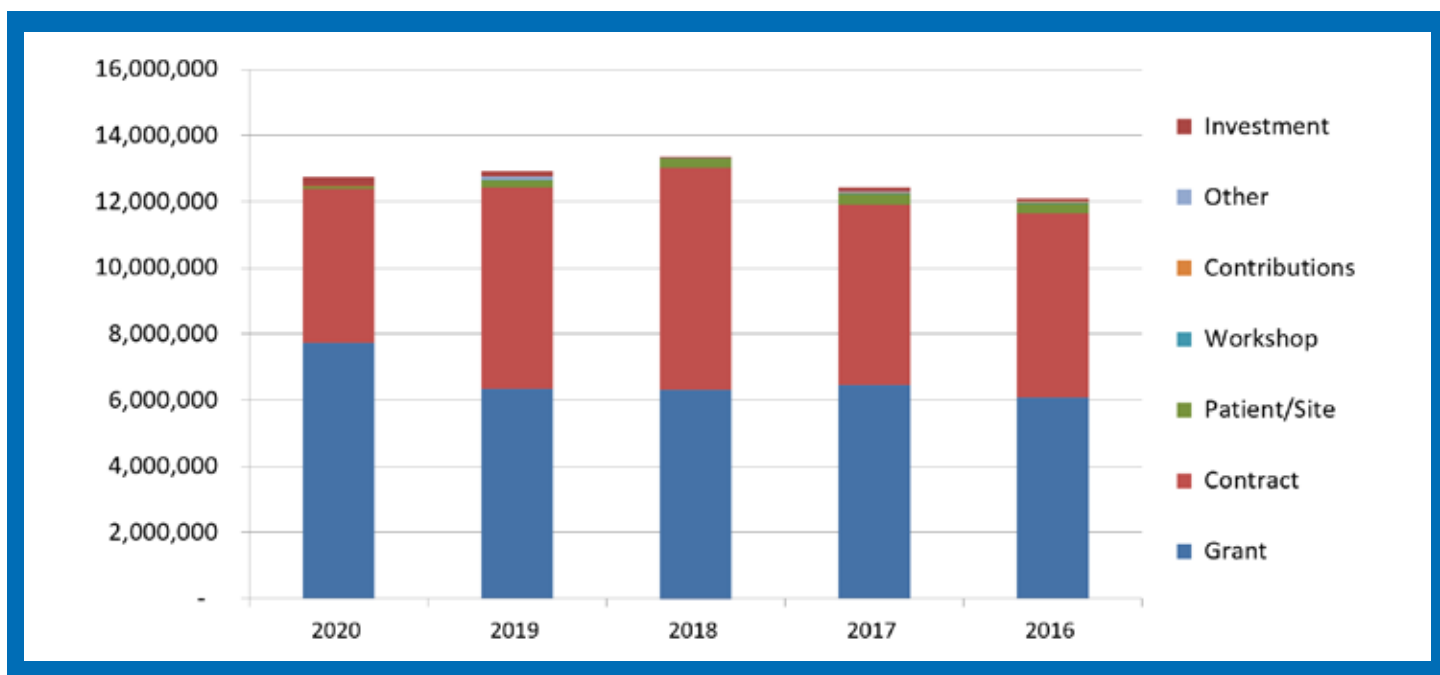
WE WOULD LIKE TO THANK THE MANY FRIENDS OF CRAB WHO MADE GENEROUS CONTRIBUTIONS IN SUPPORT OF OUR RESEARCH

- < Aaron Schechter
- < Amazon Smile
- < Antje Hoering
- < BenevityFund
- < CAF America
- < Costco UW Campaign
- < Cynthia Adkins
- < Dani Weatherbee
- < David Gray
- < Frank Curci
- < Kayla Burt
- < Keith Goodman
- < King County Employees
- < Kroger Donations
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<FINANCIAL SUMMARY>



CRAB's 2020 revenue shrank 1% compared to the previous year. The minor decline in revenue is due to decreases primarily in private funding activity. Revenue from all SWOG sources are 22% above the previous year and 102% above a low of \$5,435,678 in 2013 reaching \$10,971,192 in 2020. 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 2020, augmented by SWOG Clinical Trial Partner projects funded by pharma collaborators. Clinical and Statistical Research Program contract revenue continues to diversify revenues albeit a lower level than previous years, including Clinical Trial Consortia pass-through patient and site revenue/expenditures which are less significant than in prior years. Investment income has grown over prior years.

Support & Revenue	2020	2019	2018	2017	2016
Grant	7,739,288	6,347,985	6,329,347	6,445,862	6,085,317
Contract	4,655,815	6,074,878	6,700,740	5,452,502	5,560,549
Patient/Site	61,893	224,675	265,866	330,048	306,634
Workshop		21,010	23,008	25,467	22,039
Contributions	9,592	11,683	18,693	25,557	24,519
Other	12,832	81,441	(27,147)	45,512	33,704
Investment	<u>256,965</u>	<u>148,338</u>	<u>14,000</u>	<u>101,471</u>	<u>72,762</u>
	\$12,736,385	\$12,910,010	\$13,324,507	\$12,423,419	\$12,105,524

Operating Expenses	2020	2019	2018	2017	2016
Research	8,378,183	8,428,506	8,732,841	8,519,474	8,596,078
Workshops	832	21,011	23,008	25,466	22,039
Administration	<u>2,902,275</u>	<u>3,769,381</u>	<u>4,270,035</u>	<u>3,267,703</u>	<u>3,077,494</u>
	\$12,218,898	\$12,218,898	\$13,025,884	\$11,812,643	\$11,695,611

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OUR MISSION

OUR MISSION IS TO HELP CONQUER
CANCER USING THE TOOLS AND
EXPERTISE WE BRING TO ONCOLOGY
CLINICAL DEVELOPMENT:

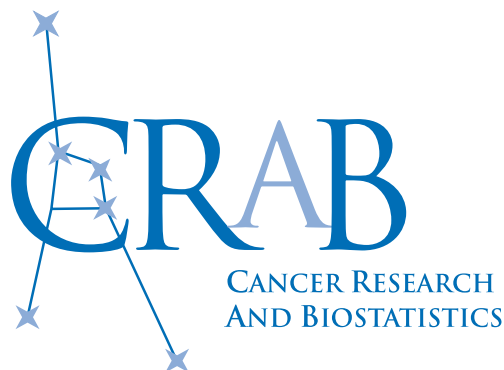
BIOSTATISTICAL PRINCIPLES

ONCOLOGY CLINICAL TRIALS EXPERTISE

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