We’ll go anywhere to fight 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.
My second year as President and Chief Executive Officer of CRAB was a stabilizing year. We continued to strengthen our existing partnerships with SWOG, the Myeloma Institute at the University of Arkansas for Medical Science (UAMS), the International Association for the Study of Lung Cancer (IASLC), and Berg.

The theme of this year’s cover emphasizes travel and outreach within as well as outside the US. Employees at CRAB together with our colleagues from the SWOG Statistics and Data Management Center (SDMC), the SWOG Operations office and the SWOG Group Chair’s office traveled to Mexico, Colombia and Peru in support of the SWOG Latin America Initiative to share expertise with researchers who want to conduct trials in the prevention and treatment of cancers that are prevalent in their regions.

CRAB continues to play a critical role in the SWOG Lung-MAP (S14000) trial and has taken a leadership role in support of SWOG’s registration trials that could lead to new drug approvals. FDA requirements for data standards and validation for registration trials are strict and complex and have led to the implementation of new processes at CRAB.

CRAB submitted a Proposal for Request for Qualification as the UAMS Myeloma Institute Biostatistical Study Design & Statistical Analysis Center. I am very excited that we won this competitive nation-wide search, renewing our long-term commitment as the statistical center for the UAMS Myeloma Institute.

CRAB also presented an update to the tumor, node and metastasis (TNM) staging system for lung cancer with the Eighth Edition of the TNM Classification for Lung Cancer at the IASLC meeting in Vienna. Please find more information about these and other activities and accomplishments in this report.

Our employee base remains strong and I’m humbled and proud every day by their tireless effort, commitment and dedication to our mission. I continue learning from them in my department luncheons as well as project meetings and everyday interactions. It’s our employees who make CRAB what it is today.

As CEO I continually strive to improve and hone my skillset to help CRAB thrive. With this goal in mind I was excited to be admitted to the 2017 Executive Development Program at the Foster Business School at the University of Washington with a scholarship from them. This nine-month program with its fundamental Executive MBA topics such as leadership, accounting, economics and marketing together with more current topics including change management, communication and entrepreneurship, provided a nicely balanced curriculum and a great complement to my scientific background. The in-person weekly classes and weekend retreats, with their focus on learning from faculty and one another, provided a great learning environment.

There were some changes in our Governance and Leadership in 2016. We happily welcomed Kari Knudson, CFP, Relationship Manager with the Commerce Bank of Washington, to our Board of Directors. We will benefit from her more than 25 years in the finance industry and her experience in working with non-profit organizations. Ms. Knudson’s skills compliment similar contributions from our other Directors listed on the last page of this report and in more detail on our website. I am very grateful for the many hours that the outstanding members of our Board of Directors put into supporting our organization.

At the Vice President level, Evonne Lackey, CCRP, Chief Data Management Officer, who has worked with CRAB from its beginnings and previously with SWOG under our founder John Crowley, PhD, decided to pursue other opportunities. A story is included in this report. Evonne built a strong team in data management and I decided to fill her leadership role with a Vice President and Chief Operating Officer. Recruitment for this position began in 2016.

As the cover art suggests, we travel in support of cancer research worldwide. In addition to the trips to Latin America in support of SWOG, we traveled to Austria, Canada and Scotland in 2016. These trips remind us that cancer is a global problem. We’re proud that our work contributes at home and abroad.
Evonne Lackey: Three Decades of Quality Research Data

After more than 30 years of designing and promoting quality data management, most of them with SWOG and CRAB, Evonne Lackey, First Vice President and Chief Data Management Officer, has decided to pursue other opportunities. Evonne joined the SWOG Statistical Center, established at Fred Hutch in mid-1984, as a Data Coordinator (DC) to support the mission to improve the practice of medicine in preventing, detecting and treating cancer. Evonne has held many roles in her SWOG career, most recently as the Coordinating Center Manager, and has worked on the Breast and Lymphoma disease committees and as a floater DC for other committees.

Evonne not only trained and mentored many Data Management staff at CRAB over the years, but she also spent much time and effort mentoring partnering staff at clinical research study sites nationally and internationally on good clinical trial practices for SWOG studies. She also worked closely with clinical research site staff in the early days of SWOG to encourage them to become more involved as a group to hold their own business and educational meetings and to take on SWOG leadership roles. As part of the efforts to provide education and training to new site staff, Evonne implemented the SWOG Clinical Trials Training Course.

Evonne has been a vital leader and resource within the SWOG Statistics and Data Management Center and has much influence and involvement in coordinating research efforts between the NCI National Clinical Trials Network, SWOG Operations Office, Group Chairs Office, The Hope Foundation and Oncology Research Professionals Committee.

Evonne’s leadership will be missed at CRAB and SWOG but we will continue to apply what we have learned from her accomplishments and dedication in our research efforts. We wish her continued success and happiness in the future and thank her for her many years of service, leadership and contributions.
New Member Joins the Board; Chair Re-elected to 3-Year Term

The Board of Directors welcomed a new member, Kari Knudson, CFP, Relationship Manager with the Commerce Bank of Washington, at annual Spring Meeting in May. Ms. Knudson brings 25 years of experience in the finance industry to her role as a CRAB Director. She joined The Commerce Bank of Washington in 2014 continuing her career that has included roles with BNY Mellon Wealth Management, the Seattle Private Banking office for Columbia Bank, Rainier Bank’s Seattle Private Banking office, and the NW Corporate Group. She earned a Bachelor of Arts in Psychology from Pacific Lutheran University, and a Master of Arts in Counseling from City University. She is also a Certified Financial Planner®.

Frank Curci, JD, Gary Goodman, MD, and Cynthia Adkins, JD, also renewed their terms as Directors for an additional three years to the Spring Meeting of 2019.

John Crowley, PhD, CRAB co-founder and Chief of Strategic Alliances, was elected by the Board to extend his role as Board Chair for three more years. Dr. Crowley has served in this role since 1997 and will continue to serve in this role until the Spring Meeting of 2018.

Yoko Rivers Receives the 2016 Cay Crowley Award for Excellence

Yoko Rivers, Program Manager with Application Development, received the 2016 Cay Crowley Award for Excellence. The award was given with applause and cheers at CRAB’s first All Staff Meeting of 2016. Yoko accepted the honor from Cay Crowley, PhD, stating that she “could not believe it” and that she was “thrilled and grateful that CRAB recognized my work and I am so honored.” The Award was established to acknowledge an employee annually who embodies excellence in their work at CRAB. Yoko was chosen after a carefully-reviewed selection process, and was recognized for her commitment to, as Grace Powell stated, “delivering what is necessary to ensure staff at CRAB and those at the clinic sites can do their job as effectively as possible; all in the spirit of humility and without any expectation of recognition.” The award was named in honor of Dr. Crowley, CRAB co-founder and former Vice President and Chief Financial Officer, who was also the first recipient in 2015.
CRAB Attends Annual Governor’s Life Sciences Meeting

Doug Mounce, CRAB’s Grants and Contracts Manager, Frank X. Curci, Partner at Ater Wynne, LLP, and a member of the CRAB Board of Directors, and Joshua B. Fortenbery, intern at Ater Wynne, co-authored a paper entitled “Spotlight on Clinical Trial Sponsorship.” This paper was published by the Society of Research Administrators International (SRAI) in its Journal of Research Administration.

The paper addresses some of the responsibilities and liabilities associated with being the sponsor of a clinical trial. Mounce, Curci and Fortenbery review some of the U.S. Food and Drug Administration’s (FDA) regulations governing the sponsorship of clinical trials as well as certain U.S. court cases which have interpreted the sponsor’s obligations and liability.

Mr. Mounce and Mr. Curci, joined by Tammy Buist, CRAB VP and Chief Business Development Officer, presented this topic at the 2016 Western/Midwest Section Meeting of the Society of Research Administrators (SRA International) held in Portland in May. This presentation gave an overview on (1) Navigating the Waters of Clinical Trials, (2) Rules and Regulations that Impact Institutional Policies and Procedures, and (3) Legal Considerations that Impact Clinical Trial Sponsorship.

Tammy Buist, VP and Chief Business Development Officer, represented Cancer Research And Biostatistics (CRAB) at a Life Science Washington event, the 12th Annual Governor’s Life Sciences Summit & Annual Meeting presented by Life Science Washington. Ms. Buist said that this was “an exciting event with great attendance showing a commitment to the Life Sciences sector in Washington State.”

The annual meeting, held in October, was sponsored by a host of life science organizations from across Washington and featured presentations on life science industry trends. Governor Jay Inslee made some remarks and participated in a question-and-answer session. A panel discussion with state legislators focused on how Washington might help local life sciences companies to flourish and innovate. The history and future of drug development and cancer care was discussed, with cell-based therapies and immunotherapy highlighted as a positive and profound shift in cancer therapy led by Washington State companies.
CRAB CEO a Panelist in Blood Cancer Clinical Trials Discussion

Innovation in medicine and addressing unmet medical needs in the face of life-threatening illnesses were elements of a public meeting attended by CRAB President and CEO, Antje Hoering, PhD. Dr. Hoering served as a panelist in the discussion titled “Minimal Residual Disease as a Surrogate Endpoint in Hematologic Cancer Trials.” The day-long meeting was held in Washington, DC in September. The chief topic was the use of minimal residual disease (MRD) as a surrogate endpoint in clinical trials for blood cancers.

The discussion covered the regulatory background, statistical basis and evidence to support the use of MRD as a surrogate endpoint in clinical trials for new treatments of acute myeloid leukemia, acute lymphocytic leukemia, chronic lymphocytic leukemia, and multiple myeloma. Dr. Hoering spoke as a statistician on the myeloma panel at the event.

CRAB Hosts Training Event in Clinical Trial Design

As a leader in oncology clinical trials, CRAB biostatisticians were host to a clinical trial design workshop in April. The workshop, titled “Applying Advanced Methods in Clinical Trial Design,” was conducted by Cytel, a multinational company that seeks to improve the design and implementation of clinical trials through the innovative application of statistical science, operations research, and information technology.

CRAB and OHSU Speak on Power of Remote Collaboration

CRAB’s partnership with Oregon Health & Science University (OHSU) was represented at a panel discussion on remote-collaboration this summer. President and CEO, Antje Hoering, PhD, served as a panelist for an invited talk titled “Extraordinary Power of Remote Collaboration and Team Science.” The event was held at the Joint Statistical Meeting (JSM) in Chicago in August.

Topics of the discussion included critical factors of successful collaboration (building trust, shared vision and recognition, conflict resolution) and exploration of what makes remote, multi-disciplined scientific research teams healthy and productive. Antje Hoering from CRAB, and Motomo Mori, PhD, director of the Biostatistics Shared Resource at the OHSU Knight Cancer Institute, were selected as panelists due to their success in remote-team collaboration. They helped describe how statisticians can be effective leaders and facilitators for such teams.
In 2016, CRAB marked its third year of involvement in SWOG’s landmark S1400 Lung-MAP trial. Working in tandem with Mary Redmond, lead statistician for Lung-MAP, and other statisticians at Fred Hutch, CRAB teams continued work in application development, data management, risk-based monitoring, data access and security and database structure for the master screening protocol as well as an evolving set of therapeutic sub-studies.

Fred Hutch and CRAB make up the SWOG’s Statistics and Data Management Center housed jointly at both institutions. CRAB Data Management members also support accrual enhancement, coordinate communication efforts such as nationally-attended webinars that provide important study updates and site training, and co-direct the newly formed Lung-MAP Site Coordinators Committee (SCC) in partnership with SWOG Operations.

Lung-MAP is an umbrella trial that assigns patients to individualized therapy based on their tumor profile. Change has continued to be the name of the game for Lung-MAP, in terms of adjusting to newly approved therapies that impact standard of care or investigational priorities, and efficiently closing studies that show little early promise. During the year, three biomarker-driven sub-studies (S1400B, C, and D) and one non-match sub-study (S1400A) were completed, and groundwork was laid for the opening of the first new bio-marker-linked study since Lung-MAP inception (S1400G), which included changes to the study assignment algorithm and updates to Foundation Medicine’s related mechanism for reporting of genetic testing results. Other algorithm changes allowed patients who experience disease progression while enrolled on Lung-MAP to be reassigned to a new sub-study in an automated fashion, which ensures quick transfer to a new therapy. Lung-MAP continues to challenge our team to craft new and innovative ways of addressing ongoing and future changes in the trial.

Next Gen Networking and Server Environment Supports SWOG

Utilizing the latest software and hardware technology, CRAB information technology staff deployed a hyper-converged network and server environment in support of SWOG data management and analytics. The upgraded systems combine vSAN (virtual storage access network) software from VMware on high-end Dell servers on a 10 gigabit network infrastructure. Hyper-convergence is a software-centric architecture that tightly integrates computing, storage, networking and virtualization resources using commodity server hardware. For SWOG services, hyper-convergence, which moved SWOG systems from a centralized to a decentralized storage architecture, provides flexible scalability as well as simplified management of computing resources. Advantages of this system include: lower total cost of ownership, improved storage performance, and simplified and consolidated storage management. The reduced complexity provides for easier administrative management as well as aid in efficient troubleshooting.
The SWOG Latin America Initiative continued in 2016. The initiative aims to expand cancer research expertise in Latin America and to conduct trials in the prevention and treatment of cancers that are more prevalent in the region and among Hispanic and Native American populations in the United States. CRAB Founder and Chief of Strategic Alliances John Crowley, PhD, joined several CRAB employees and SWOG leadership in traveling to Mexico, Colombia and Peru to deliver training courses in the conduct of clinical trials in SWOG. Trips are planned for 2017 to Chile, Uruguay and Mexico. This initiative builds on CRAB’s longstanding experience in collaborating with Japanese investigators in the Japan Clinical Oncology Group and the Japan Multinational Trial Organization.

CRAB once again, as part of the SWOG Statistics and Data Management Center (SDMC), hosted the SWOG Young Investigators conference in late September, maintaining the commitment to foster leadership and innovation in early-career cancer research investigators. The conference featured six early-career investigators who met with and studied with SWOG executive leadership along with SDMC data managers at CRAB and biostatisticians at Fred Hutch. The conference formed an introduction to SWOG protocol development, maintenance, and administration.

The Young Investigators conference is held each autumn at CRAB, providing meeting space, materials and meals for the group. CRAB is proud to support SWOG’s work in mentoring new research scientists.

For more details about the event please visit the SWOG website.
Berg Project Survival and BPM 31510 studies continued

In 2016, CRAB continued the partnership with Berg Health, LLC, by continuing both the Project Survival prospective sample collection study and the Phase II interventional drug study using BPM31510 plus gemcitabine as second-line treatment for advanced pancreatic cancer patients.

In collaboration with Beth Israel Deaconess Medical Center, the Project Survival study approached about half of the enrollment goal in 2016. Our Partners at Berg Health have started to analyze the data that has been collected to date, and the team has published some initial results at a few Scientific Meetings this year. This study is collecting both initial and long-term (sequential) samples and data on pancreatic patients of all stages, and those with benign pancreatic cancer diseases such as pancreatitis and cystic neoplasms. This study will continue to collect samples through 2017-2019, with data analysis ongoing throughout the study.

The Phase II clinical trial of BPM31510 plus Gemcitabine continued in 2016 and is expected to continue through 2018. The study plans to expand up to 50 pancreatic cancer patients and add another treatment arm of monotherapy of the BPM 31510 agent alone in 2017.

PANCREATIC CANCER

There are an estimated 41,780 deaths each year

Survival in 5 years: 7.7%

#4 cancer killer

Source: National Cancer Institute’s Surveillance, Epidemiology, and End Results Program (SEER), 2016
PCRT Pancreatic Cancer Studies Finalize Enrollment

The CRAB team completed enrollment to two pancreatic cancer studies in 2016, which will both be soon published in peer-reviewed scientific journals. Both studies were funded with philanthropic dollars from the Seena Magowitz Foundation, who is named after Seena Magowitz, mother of Roger Magowitz who founded his philanthropic organization in 2001 after his mom passed away from pancreatic cancer. We named these two studies in honor of Seena Magowitz as Seena-1 and Seena 2 studies. For both studies, data is being completed and prepared for publications, which we expect to be published in 2017.

The Seena-1 study evaluated standard chemotherapy regimens for advanced pancreatic cancer administered in sequential order to determine whether the order of the drugs given would improve patients’ overall survival or progression free survival. This study combined Abraxane/gemcitabine with FOLFIRINOX (or FOLFIRI), for a total of 12 month chemotherapy treatment, followed by molecular profiling of the patient’s tumor at the end of the chemotherapy treatment to determine the next possible treatment.

The Seena-2 study combined Cisplatin with Abraxane/Gemcitabine to assess its efficacy as an induction regimen before going onto another treatment. This study has shown some preliminary positive results that will warrant further study using this triplet combination in the advanced pancreatic cancer population and possibly with earlier stages of pancreatic cancer patients as well.

Pancreatic Cancer the Focus of Precision Medicine Initiative

A precision medicine trial designed to transform outcomes for patients with pancreatic cancer was announced by the Pancreatic Cancer Action Network (PanCAN) in October. CRAB agreed to provide statistical and data management expertise for the multi-partnered initiative with the goal of bringing together clinicians, researchers and drug developers to investigate treatment options centered on an individualized treatment approach based on the molecular profile of a patient and their tumor. PanCAN is a national organization with a mission to create hope in a comprehensive way through research, patient support, community outreach and advocacy for a cure of pancreatic cancer.
AML Trial Reaches Milestone with FDA Pre-NDA Meeting

A successful trial in acute myeloid leukemia (AML) for high-risk patients reached an important milestone in 2016 with a pre new drug application (Pre-NDA) meeting with the Federal Drug Administration (FDA) towards approval for use of VYXEOS™ (CPX-351) in patients with AML. Celator, whose mission is to extend and improve the lives of cancer patients through innovation in combination therapy, presented their findings at the 2016 annual meeting of the American Society of Clinical Oncology (ASCO) held in Alexandria, VA in June. They demonstrated improvement in overall survival and induction response rate in this Phase III trial for VYXEOS™ in patients with high-risk AML.

For CRAB, this VYXEOS™ trial represents our first fully-validated registration clinical trial that has reached a successful conclusion with significant, positive results. With a 12-person team, CRAB provided electronic data capture, data management, project management, and statistical analysis for this Phase III clinical trial. CRAB’s team included biostatisticians, program and project managers, regulatory and quality assurance managers, data managers, application developers, and project specialists. With this project, CRAB demonstrated its capacity and talent to run Phase III registration trials, which is a notable achievement for the organization.

CRAB’s President and CEO, Antje Hoering, PhD, accompanied the trial sponsor to Washington, DC for the Pre-NDA meeting. She noted that the results of this clinical trial are exciting developments for CRAB as it continues its mission to conquer cancer, and, most importantly, for AML patients for whom there has been limited progress in the development of treatments.

Jazz Works with CRAB After Celator Acquisition

Following its agreement to acquire Celator Pharmaceuticals in May, Jazz Pharmaceuticals worked with CRAB to complete a trial to improve treatment for high-risk patients with acute myeloid leukemia (AML) with treatment that includes VYXEOS™ (CPX-351), a Celator therapy. Jazz Pharmaceuticals is an international biopharmaceutical company focused on improving patients’ lives by identifying, developing, and commercializing meaningful products that address unmet medical needs.
Lung

Statisticians Make Plans in Vienna for Continued Collaboration with the IASLC

A group of statisticians from CRAB attended a meeting of the International Association for the Study of Lung Cancer (IASLC) Staging and Prognostic Factors Committee in Vienna, to plan the next phase of cooperation between the IASLC and CRAB. Plans to revise the existing international lung cancer database were formulated and funding was secured for the project through 2024. CRAB designs, maintains, and analyzes the international database as part of the multidisciplinary effort to inform the TNM staging system for lung cancer as well as other thoracic malignancies such as malignant pleural mesothelioma. The IASLC-CRAB collaboration provided the material for the thoracic chapters of the 7th and 8th editions of the American Joint Committee on Cancer and Union for International Cancer Control cancer staging manuals, and as planned in Vienna, the work will continue toward the next revision.

LCRT Trial in Progress for Small Cell Lung Cancer

Physicians from the Lung Cancer Research Team (LCRT) are continuing work on the Phase II portion of the study of Carfilzomib and irinotecan for small cell lung cancer patients who have progressed on prior platinum-based chemotherapy. Currently, the team is about halfway through enrollment into this study, and the study continues to show progress for patients.

Prostate

Survival Study in Prostate Cancer Extended

A prostate cancer study, known as the Transformer Trial, continued at CRAB in 2016 with an extension into 2017 with the award of a renewed grant. CRAB provides support this randomized study to compare treatment for men with metastatic castrate-resistant prostate cancer using testosterone versus treatment with enzalutamide. CRAB provides data coordinating center activities, statistical support, data management, and the electronic data capture system. The trial is supported by a grant from the Department of Defense with collaboration between CRAB and the Johns Hopkins University. The objective of the study is to collect data from 180 men to assess whether testosterone improves progression free survival (time to disease relapse or death).
Myeloma

SWOG and Celgene Collaborate on Myeloma Research

With a goal of improving treatment for patients with myeloma, SWOG teamed up with Celgene in 2008 to conduct S0777, a randomized Phase III trial for newly diagnosed multiple myeloma aged 18 years and older. The trial results, released at the end of 2015, found that the addition of the drug bortezomib to the standard two-drug course of dexamethasone and lenalidomide for multiple myeloma patients significantly lengthened the lives of impacted patients. The announcement of the results at the 57th American Society of Hematology Annual Meeting in December 2015 and publication the December 2016 edition of The Lancet mark milestones for the long-term collaboration between SWOG and Celgene. The relationship continued through 2016 with further collection of data and monitoring of participating sites. The trial was conducted between February 2008 and February 2012 at institutions of the National Cancer Institute’s National Cancer Trials Network. The trial enrolled 471 eligible and analyzable adult patients, ages 28 to 87. For more information, please see Celgene’s press release.

SWOG Myeloma Trial Results Published in The Lancet

As a highlight to end of the year, the exciting results of the SWOG clinical trial on myeloma treatment, S0777, were published in December edition of The Lancet. The trial results showed that the addition of the drug bortezomib to the standard two-drug course of dexamethasone and lenalidomide for multiple myeloma patients significantly lengthened the lives of impacted patients.

CRAB CEO Antje Hoering, PhD, and biostatistician Rachael Sexton, MS, both CRAB and SWOG biostatisticians, were instrumental in the design and analysis of this trial along with many other SWOG and CRAB personnel, including many from Fred Hutch. CRAB contributed to the trial with statistical, data management, and technology support as a member of the SWOG Statistics and Data Management Center housed at Fred Hutch and CRAB.

Patients receiving bortezomib, along with lenalidomide and dexamethasone, in their first six months of treatment had a median remission time of 43 months compared to a median remission of 30 months for patients who received lenalidomide and dexamethasone alone. Researchers also found that patients who received bortezomib lived a median of 75 months, or about six years, after their initial treatment. Patients who received the standard two-drug treatment lived a median of 64 months, or about five years, after initial treatment.

CRAB has long enjoyed a successful partnership with SWOG in clinical trial work, and looks forward to great collaborations in 2017. For more information about the publication in The Lancet, please visit www.swog.org, or see SWOG’s press release at this link. The Lancet is a highly-respected scientific journal which has been published since 1823 which an objective to apply scientific knowledge to improve health and advance human progress.

UAMS Myeloma Institute and CRAB Continue Collaboration

Research on Myeloma continued in 2016 with the renewal of CRAB’s long-standing collaboration with the UAMS Myeloma Institute. The relationship was extended following the successful submission of a proposal in response to the institute’s Request for Qualification as the UAMS Myeloma Institute Biostatistical Study Design & Statistical Analysis Center. This was a competitive nation-wide search initiated by UAMS, the State of Arkansas and Gareth Morgan, M.D. FRCP, FRCPath, PhD, Professor of Medicine, who serves as the Director of the Myeloma Institute at UAMS. Following review, which included oversight from the legislature, CRAB was renewed to continue our long-term commitment as the statistical center for the UAMS Myeloma Institute.
CRAB Joins Forces with OHSU to Advance Cancer Research

OHSU’s Knight Cancer Institute, a pioneer in precision cancer medicine, signed a memorandum of understanding with CRAB to collaborate in clinical and translational research using advanced biostatistics methods. The alliance enhanced both organizations’ capacity for data management and statistical analyses for “omics” studies, precision medicine clinical trials, and early detection intervention trials. CRAB and Knight biostatisticians agreed to work in tandem to support investigators through study design, analysis plan, clinical trial electronic data capture systems, data management and statistical analyses.

CRAB and OHSU Knight Cancer Center Biostatisticians Hold Joint Conference

Information exchange and brainstorming was the focus of the third joint conference between biostatisticians at CRAB and OHSU Knight Cancer Center Biostatistics Shared Resource (BSR). The workshop was held over two days at CRAB in June. The CRAB and Knight BSR collaboration seeks to improve the OHSU Knight Cancer Institute’s capacity for data management and statistical analyses for “omics” studies, precision medicine clinical trials, and early detection intervention trials.

OHSU’s Knight Cancer Institute, a pioneer in precision cancer medicine, signed a memorandum of understanding with CRAB to collaborate in clinical and translational research using advanced biostatistics methods. CRAB and Knight biostatisticians support investigators through study design, analysis plan, clinical trial electronic data capture systems, data management and statistical analyses.

CRAB CEO Antje Hoering, PhD, remarked that “oncology is a fast-moving field and this newly-formed partnership makes us a strong team as we utilize our combined expertise and talents to contribute to cutting-edge cancer research with the ultimate goal of conquering this disease.”

Swedish Cancer Institute and CRAB Agree to Statistics Collaboration

CRAB and the Swedish Cancer Institute (SCI) at the Swedish Medical Center in Seattle agreed in principle to a partnership whereby CRAB would become the statistical center for SCI. This agreement followed a needs assessment for the SCI, done by Dr. Crowley at the behest of Dr. Tom Brown, Swedish Cancer Institute Director.
CRAB Supports Seattle’s Homeless Youth

CRABCares is an employee-led program launched in 2013 to promote staff participation in events that align with the CRAB mission and represents our compassionate culture. In July, CRABCares volunteers provided and served a nutritious lunch to over forty at-risk youth at the James W. Orion Center Emergency Shelter.

The Orion Center, located a block away from CRAB at Denny and Stewart, is operated by YouthCare, a non-profit organization that serves Seattle's at-risk and vulnerable population of homeless youth with medical care, educational assistance, food, shelter, and basic services. The Orion Center is the only short-term emergency shelter in Seattle for homeless youth aged 12-24, and provides this vulnerable population with basic needs, including meals, clothing, supplies, a safe place to rest, and social service referrals. In addition, the Center provides educational opportunities and employment training.

For the second consecutive year, CRAB staff volunteered their time to organize, purchase, prepare, and clean up after the lunch. Tammy Buist, Chief Business Development Officer, generously donated the food. In the weeks leading up to the event, many CRAB employees also donated items in high demand by homeless youth, such as personal hygiene products, underwear, socks, and first aid supplies.

We are fortunate to be part of a greater community that gives back, pays it forward, and is committed to improving the lives of others. Together, we perform an important community service while having fun and enjoying each other’s company in the process!
Friends and Supporters

We would like to thank the many friends of CRAB who made generous contributions in support of our research.

Alan Mitchell
Allstate
Amazon
Amy Stoll D’Astice
Antje Hoering
Myrtle L. Atkinson Foundation
Benevity
Bill Charters
Boeing
Combined Federal Campaign (CFC)
  Chapters throughout the U.S.
Curtis Malloy
Dani Weatherbee
David Gray
Diane Wies
Frank Curci
Gary Goodman
Glenn Chinn
JC Penney Company, Inc.
John and Cay Crowley
John Hall
Karen Anderson
Keith Goodman
King County Employee Giving
Kari Knudson
Kroger
Laura Kingsbury
Michael LeBlanc
Monica Yee
Morgan Stanley
Patricia Ware
Sarah Basse
Tammy Buist
Taylor Joosten
Terry Lynch
TRUiST Costco
UW Campaign
In memory of Roy G. Powell
  • Gary Reinert
  • Leslie Strickland
  • Mary Humboldt
  • Stephen Gill
  • Sterling Pointe Owners Association
  • Cay and John Crowley
  • Diana Lowry
In memory of Don Evans
  • Susan Finneran
2016 revenue grew 13% year over year and has returned to above 2010 levels, although Grant revenue has not fully returned to pre-financial crisis levels. The overall gain in revenue is due to continued increases in federal and private funding activity. Revenue from all SWOG sources grew 43% from a low of $5,435,678 in 2013 to $7,752,832 in 2016. The steady continued growth in funding led by our partners in the National Cancer Institute’s National Cancer Trials Network increased SWOG and thus CRAB’s federal funding in 2016, augmented by additional SWOG Clinical Trial Initiative projects supported by pharma collaborators. Clinical and Statistical Research Program contract revenue continues to expand, including Clinical Trial Consortia pass-through patient and site revenue/expenditures insignificant in prior years.

2016 Audit and Financial Summary

### Support & Revenue

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**Total Support & Revenue**: $12,105,524, $10,737,192, $10,078,584, $9,523,335, $9,790,010

### Operating Expenses

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<td>7,469,156</td>
<td>7,485,583</td>
</tr>
<tr>
<td>Workshops</td>
<td>22,039</td>
<td>47,133</td>
<td>29,105</td>
<td>20,764</td>
<td>32,318</td>
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<tr>
<td>Administration</td>
<td>3,077,494</td>
<td>3,047,027</td>
<td>2,496,891</td>
<td>2,903,616</td>
<td>2,821,290</td>
</tr>
</tbody>
</table>

**Total Operating Expenses**: $11,695,611, $11,018,428, $9,938,583, $10,393,536, $10,339,191
Remembering Don Evans, Former Director

One of CRAB’s first Board Members is remembered for his contributions during the early days of the organization. Don Evans served on the Board of Directors 2005 – 2006 and was a mentor to CRAB co-founders John and Cay Crowley.

Cay recalls Don's patience in helping her and other officers to build CRAB’s first Strategic Plan, a request from the Board that seemed overwhelming at the time. "We could hardly develop an ‘elevator speech’ describing ourselves to strangers,” she said. “How could we possibly be expected to develop a strategic plan?”

Don offered to help. “In an hour, he shared with me ideas not only how to structure a plan around the uniqueness of CRAB but how to engage the entire company in an exercise to define our contributions, our strengths and our dreams for the future of CRAB and its employees,” Cay recalled. “His prescient guidance led to a plan that led the company in its early days, and which has evolved to serve CRAB well to this day. Although he could not stay on the Board long, Don’s contribution was deep and lasting.”

Don attended the University of Oregon on a full football scholarship and received his MBA in Finance from UC Berkeley. Careers in finance and operations lead to leadership roles in Washington and Oregon, where he raised two daughters and a son. In 2005, he married Pamela McClaran, the love of his life, and they settled on Bainbridge Island. Pamela served as CRAB’s attorney to the Board from 1997 through 2015. Don’s quick wit and quiet presence will be deeply missed.

HIS PRESCIENT GUIDANCE LED TO A PLAN THAT LED THE COMPANY IN ITS EARLY DAYS, AND WHICH HAS EVOLVED TO SERVE CRAB WELL TO THIS DAY.
Board of Directors

John J Crowley, Ph.D.
Board Chair
Chief of Strategic Alliances
Cancer Research And Biostatistics

Antje Hoering, Ph.D.
President and Chief Executive Officer
Cancer Research And Biostatistics

Angie Schroeder
Director of Program Operations, Biostatistics, Bioinformatics and Epidemiology Program
Fred Hutch

Cynthia Adkins, J.D.
Managing Member
Adkins, Plant, Elvins & Black, PLLC

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John Hall
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Assistant Vice President
Merrill Lynch

Kari Knudson, CFP
Relationship Manager
Commerce Bank of Washington

Michael LeBlanc, PH.D.
Group Statistician
Fred Hutch
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
Experienced research professionals
Education, support and training
We'll go anywhere to fight cancer!