ICRP’s 2019 annual meeting brought together participants from across the world, united in a desire to advance cancer research more effectively by sharing strategies, ideas and exploring partnership opportunities. This year’s sessions focused on sharing best practice in setting up collaborative funding models, supporting early career investigators, promoting prevention, childhood cancer and survivorship research, sharing resources and measuring the impact of research efforts.

Dr Naba Bora (Congressionally Directed Medical Research Programs, USA & Chair, ICRP) extended a warm welcome to all attendees. Dr Bora shared the ICRP’s mission of bringing cancer research organizations together to work strategically, and highlighted the fact that the ICRP database now held over 240,000 cancer research projects totalling over $50bn in research investment, with analysis tools to underpin strategic planning. He welcomed the latest new members to the partnership: Fondation ARC in France, the Japan Agency for Medical Research and Development and the US Melanoma Research Alliance.

The first panel of the meeting focused on Collaborative funding models across different countries and sectors. Dr Shannon Gallagher-Colombo (AACR, USA), described how AACR works with funding partners to develop a collaborative grant program that suits each party’s interests and aligns their missions, highlighting a recent collaboration that had led to launching the AACR-Cancer Research UK Transatlantic Fellowships. She identified key elements for successful partnerships, including good communication, recognizing the collaboration as a true partnership and keeping the focus on the research community and the public as the ultimate beneficiaries. Dr Lucy Devendra (Cancer Research UK), described how Cancer Research UK had formed a partnership with the leading cancer charities in Italy (AIRC) and Spain (AECC) to fund Accelerator Awards supporting cross-institutional research teams and bringing together resources and expertise to accelerate progress in cancer research. Five trans-national projects had been funded in the first round, with further funding rounds planned for 2019 and 2020. Dr Marc Hurlbert (Melanoma Research Alliance, USA) noted that in addition to co-funding projects for young investigators, established investigators and team science awards, MRA had set up academic-industry partnerships to focus on metastatic disease in melanoma, enabling principal investigators to reach out to pharma to send innovative collaborative proposals. During the discussion session, the panellists highlighted the importance of having a clear scope, maintaining open, regular communications and having the flexibility to adapt funding models in building successful partnerships.

Opening the Promoting Early Careers in Cancer Research session, Dr Michelle Bennett (US National Cancer Institute) investigator (ESI) Next Generation Researchers Initiative, designed to support researchers in the decade after their last degree or clinical training. Analysis had shown that the time from degree to independent funding had increased significantly over the years. Work was underway to analyse what factors were good predictors of success in previous cohorts, to better inform future funding strategy and enhance career progression pathways. Dr Paul Jackson (Cancer Australia), explained that Australian national audits of cancer research had identified 70
national and international organizations that had provided funding to people support schemes. Investment overall had increased above inflation, and the majority of the schemes were targeted to early-stage investigators and senior investigators. Awards to early/mid-career and mid-career (5-15 years post-PhD) researchers accounted for the lowest proportion of awards. It had been suggested that mid-career awards presented an opportunity for collaborative funding and harmonizing the eligibility classification for fellowships across funders would help to provide a clear career pathway for cancer researchers. **Dr Jennifer King (Lung Cancer Alliance)** brought a non-profit perspective, describing the LCA’s partnership with the Conquer Cancer Foundation to encourage physicians to go into lung cancer research. To date, **3 young investigators had been funded** and mentored through the scheme and encouraged to involve patient advocates in their research. During Q&A, it was suggested that organizations share benchmarking data via the ICRP, and that it would be good to look at the impact of young investigator schemes more widely and explore ways to accelerate the transition to independent investigator status.

In a keynote presentation, ICRP welcomed **Dr Dauren Adilbay (Kazakh Institute of Oncology & Radiology)** who gave an overview of cancer research in Kazakhstan and described a regional initiative for joint research in the post-soviet states and more emerging countries. Cancer research in Kazakhstan was primarily funded by the government and conducted at Nazarbayev University, the **Kazakh Institute of Oncology and Radiology (KazIOR)** and the Medical Universities of Almaty and Karaganda. Research at KazIOR was focused on thyroid cancer prognosis, genetic profiling of colorectal cancer, epigenetics in colorectal and breast cancer, cytogenetics of B-cell lymphoma, prostate cancer prognostic tools, and identification of young-onset breast cancer susceptibility. Most pharma industry trials were carried out in Russia, Ukraine, Georgia, Belarus and Kazakhstan and Eurasian economic union rules had been in place since 2018 for drug registration. Dr Adilbay outlined some of the challenges for cancer researchers in the region, notably a lack of infrastructure, basic researchers and visibility of research publications in the international community. An exciting new initiative - the **Eurasian Cancer Research Council (ECRC)** – had been set up with the objective of promoting collaborative cancer research, coordinate trials and outcomes research. Proposals had been prepared for several pilot studies, with good support from centers in Belarus, Russia, Kazakhstan and India.

**Dr Jan-Willem van de Loo (European Commission)** presented remotely on person-centered cancer research priorities for the **European Commission**. Given the global challenge of a growing burden of cancer, the EU approach was to address prevention, cure, care and uptake of research ideas within health systems, through adding value, generating partnerships and fostering innovation. Prevention research included global programs to address HPV vaccination and cervical screening, smoking cessation, electronic breath testing and improved CT scanning for early diagnosis, and personalizing breast cancer screening based on risk. The **European Network for Cancer Care (ENCCA)** in children and adolescents had been established, as a platform for innovative translational and clinical research. The **Survivorship Passport** - a single electronic document summarizing patients’ cancer-related medical history and long-term care plan - was in the process of being phased into pediatric hospitals across Europe. Several initiatives had been set up to improve survivorship and quality of life in adults as well as children. Future **Horizon Europe** priorities included but were not limited to personalization, innovation in trial design and transdisciplinary research.

**Dr Ian Lewis (NCRI, UK)** described the UK’s approach to setting **research priorities for people Living With and Beyond Cancer** and presented a **video** about the NCRI’s process. The number of people surviving cancer was predicted to rise to 4m people in the UK by 2030, care & survivorship investment was relatively low and there was a perception that research was fragmented. NCRI had worked with **James Lind Alliance** on priority setting and a survey of patients, professional and carers had generated over 3000 research questions. These had been distilled down to 10 priority questions, of which the first was about management of care. The next phase of the project was to enthuse research organizations about funding research in this area, encourage front-line healthcare staff to propose research studies and create a one-stop shop for addressing LWBC priorities through the UK’s Clinical Study Groups. UK funding organizations had already started to respond to the research questions: with both Tenovus and Sarcoma UK launching
calls based on these. During the discussion session, it was noted that it would be useful to talk to non-cancer funders about common themes (e.g., chronic pain and fatigue), and start the conversation on collaborating to address questions that were common to all countries.

Dr Joanne Salcido (Pediatric Brain Tumor Foundation, USA) highlighted the importance of driving progress collaboratively for childhood cancer. PBTF is part of the Coalition Against Childhood Cancer (CAC2), an alliance of funders working together across all areas of pediatric cancer research. While outcomes for most childhood cancers had significantly improved, improving survival in rare tumors was a priority along with reducing negative treatment side effects – it was encouraging to note that care & survivorship research received a higher percentage of research funding than cancer in general. PBTF’s research priorities encompassed discovery, translational and clinical research, in addition to building capacity and raising childhood cancer awareness. Priorities included ensuring that pediatric biology was considered a lot earlier in research questions, funding early career development grants to boost the workforce, supporting an immunotherapy research initiative as well as the Pediatric NeuroOncology Consortium (PNOC). In Diffuse Intrinsic Pontine Glioma (DIPG) platforms had been built for open data, and a public-private partnership established to fill gaps in translational/pre-clinical to re-purpose existing drugs. Further partnerships were welcomed!

The Research Outcomes and Impact session was packed with presentations from partners and external speakers.

Dr Monika Dunbar and Dr Christine Burgess (Digital Science) gave an overview of Digital Science’s products for research funders, including Dimensions which now has the CSO as a search category. Digital Science also provided webinars for funders on research impact. Outcomes measures included publications, academic impact analysis in addition to Altmetrics which allowed researchers to monitor impact via social media, news and blogs etc., far earlier than citations. Funders were also able to use this intelligence to assess their social media engagement effectively. Altmetrics and Dimensions were also used for portfolio analysis of breast cancer therapies, and network visualization of outputs. In terms of career-tracking, Digital Science’s tools could be used to see the impact of cancer grant funding on young investigators and the profile of their research publications.

Ms Kim Badovinac (Canadian Cancer Research Alliance) described CCRA’s breadth of activities, from distilling data on cancer research in Canada into investment reports to providing strategic information on infrastructure and funding for young Investigators. CCRA’s research impact studies combined qualitative (case studies / surveys) and quantitative (bibliometric) information to track metrics such as knowledge production, research system, and informing policy development (using CPAC’s cancer guidelines database to assess impact). Living up to the presentation title “Perils and Pitfalls of Bibliometrics” Kim highlighted the fact that despite great strides in data in recent years, lack of funder information imposed significant limitations on trend analysis. Disambiguation of funder information was a significant issue!

Dr Kari Wojtanik (Susan G. Komen) described a novel product tracking system to track research impact and measure progress towards reducing breast cancer deaths by 50% by 2026. The two major goals were to achieve community health equity and find breakthroughs for incurable breast cancers (including technologies for early detection, novel treatments for aggressive subtypes of breast cancer and metastatic breast cancer). The system already included over 500 products and would allow Komen to see how hard products (such as drugs/devices, diagnostic tests etc.) or soft products (such as genes, biomarkers etc.) were helping to progress research towards patient benefit. During the discussion session there was a lively debate about the benefits of incentivizing research based on products and outputs.
Dr Naba Bora (CDMRP, DoD) described a storyboard approach to tracking MEK inhibitor research progress in Neurofibromatosis-related malignancies. Like more than 30% of human malignancies, NF1 mutations activated Ras pathways. A literature review of clinical trial publications had looked at MEK inhibitor trials to see what inhibitors had been trialled and to see who had funded preclinical and discovery work. A robust methodology had been developed using Dimensions to find MEK inhibitor studies and to classify these to basic or clinical research. The project had illustrated that the pathway from discovery to clinical trials was long and that progress could not be made without multiple funders cooperating and playing distinct, but complementary roles.

Mr Mike Willey (Elsevier) summarized Elsevier’s sophisticated tools to measure the innovation cycle and how research translates to growth. Research metrics for institutions enabled funders to understand strengths and make budgetary decisions based on different levels of researcher, funder and institution metrics. PLUM metrics offered insights into the ways people interact with individual pieces of research output (such as articles, conference proceedings, book chapters, and many more) in the online environment, especially where demonstrating return on investment was important.

Dr Eddie Billingslea (NCI Center for Research Strategy), highlighted a new centralized repository of NCI’s tools and resources, many of which were available at no or low cost to help early career researchers and under-represented groups needing effective research tools especially. Attendees were encouraged to advertise the database – containing a wide range of resources from databases to mouse models, statistics packages, reagents and compounds and a field guide for team science, with a structured search capability. Researchers and funders were encouraged to get in touch to add any new resources to the repository.

Dr Mhel Kavanaugh-Lynch (California Breast Cancer Research Program). Concluding the presentations, Mhel described CBCRP’s efforts to increase compliance with open access. CBCRP had surveyed grantees to assess knowledge and barriers to compliance. Results had indicated that grantees weren’t aware of the policy, therefore three interventions were tested to increase compliance: enforcement (refusing further funding) had been most effective, whereas incentives (social media promotion, gift cards) had been less effective! CBCRP is now seeing improved compliance, facilitated by regular email reminders.

What’s next for ICRP?
ICRP will be publishing its ten-year trend analysis of cancer research this year, and evaluating research capacity in childhood cancer, prevention research and survivorship research. ICRP is an alliance of cancer research funding organizations, collaborating to enhance global co-ordination of research. We share information about cancer research awards in a publicly-accessible database, and promote co-operation among funding organizations to maximize resources. We welcome new members!

CONTACT US to be included on the mailing list for the 2020 ICRP Annual Meeting
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