



2024

Department of Clinical Research Annual Report

LEADERSHIP & ADMINISTRATION



Head: Dr. Stephen Chia; Division Head, Medical Oncology, UBC

In 2021, Dr. Stephen Chia was appointed Head of the Clinical Research Department at the BC Cancer Research Institute. With extensive experience in clinical trials and a broad range of clinical research activities, Dr. Chia helped establish the department and a support team to enhance administrative and grant facilitation. His efforts have helped implement BC Cancer's Research Strategic Plan, with a focus on "supporting clinical research, optimizing clinician-investigator time, overseeing and advancing clinical trials, and strengthening connections between regional centers and the research community."

Deputy Head: Dr. Bernie Eigl; Director, Provincial Clinical Trials

Scientific Leads

Dr. Caroline Holloway, Clinical Research Unit, BC Cancer – Victoria

Dr. Jasna Deluce, Clinical Research Unit, BC Cancer – Abbotsford

Dr. Sarah Baker, Clinical Research Unit, BC Cancer – Fraser Valley

Dr. Robert Olson, Clinical Research Unit, BC Cancer – Prince George

Dr. Zahi Mitri, Clinical Research Unit, BC Cancer – Vancouver

Admin

- Alexandra Lasquite
Administrative Lead
- Brittaney Yu
Human Resources
- Angela Jung
General administrative activities

Grants Support

- Xining (Linda) Yang
Grant facilitation and consultation
- Emily Lee
Project activities administration

Finance

- Joshua Yip
Finance Lead
- Andrew Cho & Robert Mclachlan
Grant funding management
- Edward He
Accounts receivable
- Grace Wang
Purchasing and accounts payable

Statistical Support

- Thi (Le) Nghiem
- Richard Musoke

NEW INITIATIVES

[Grant Writing Workshop](#) – CIHR RCT Panel by Drs. Jonathan Loree and Stephen Chia in July 2024

[Funding Opportunities Database](#) – Real-time resource with 300+ funding opportunities

["All You Need to Know for CIHR Project Grant"](#) – A meticulously curated one-stop guide to streamline grant preparation and enhance funding success

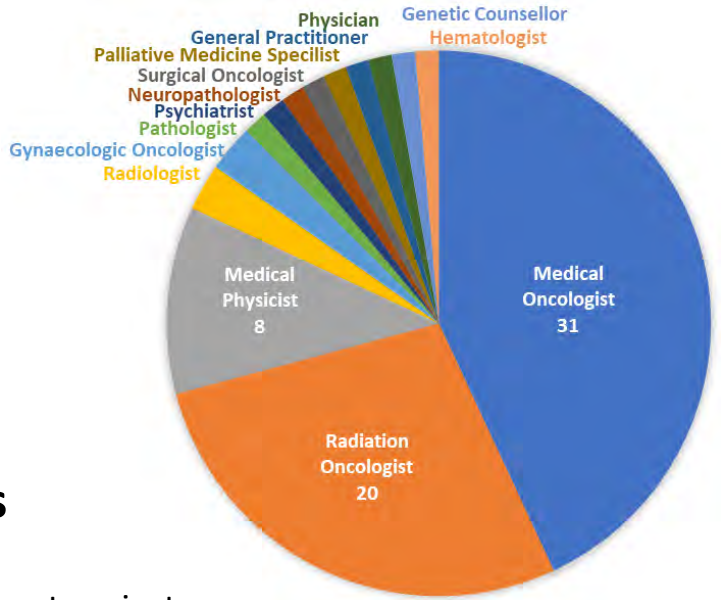
[Clinical Research Annual Report](#) – Showcased the department's academic achievements & impact

[Department-wide shared folder and distribution list](#) – Enhanced communication channels

2024 CLINICAL RESEARCH FACTS

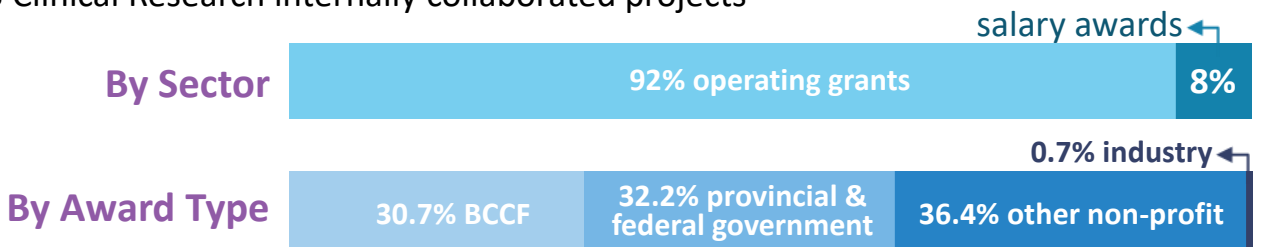
73 Clinician Investigators

6 cancer sites
11 BC Cancer departments



23.6M Research Grants

72 new projects
14.5M in 52 Nominated Principal Applicant projects
23 Clinical Research internally collaborated projects



302 Refereed Publications

88 first- or last-authored

Selective High Impact Journals

1 Lancet	4 N Eng J Med
1 JAMA	2 Nat Med
12 J Clin Oncol	1 Lancet Oncol
1 JAMA Oncol	1 Ann Oncol
7 Blood	3 Neuro-Oncol
2 Lancet Haematol	4 Nat Commun

20 Awards & News

27 newly appointed leadership positions

85 invited talk/participation
113 conference proceedings
34 international,
32 national and
7 local conferences

AWARDS & NEWS 2024

EXTERNAL AWARDS	
Dr. Bernie Eigl	2024 Clinical Trials BC Awards: Service & Support Award
Dr. Robert Olson	2024 Clinical Trials BC Awards: Leadership & Advocacy Award
Dr. Juanita Crook	2024 CARO Annual Scientific Meeting: Jean Roy Lecture
Dr. Mira Keyes	2024 CARO Annual Scientific Meeting: Gold Medal and Gordon Richardson Lecture
UBC AWARDS	
Dr. Alina Gerrie	Division of Medical Oncology, Department of Medicine Competency Based Assessment Teaching Award
	Faculty of Medicine Outstanding Academic Performance for 2023
Dr. Daniel Renouf	Faculty of Medicine Outstanding Academic Performance for 2023
Dr. Jessica Chan	Department of Surgery Clinical Faculty Research Support Award
Dr. Maryam Soleimani	Department of Medicine Donald M. Whitelaw Award for Outstanding Grand Rounds
Dr. Paris-Ann Ingledew	Killam Scholar Teaching Award
Dr. Sarah Baker	Department of Surgery H. Johnson Early Career Investigator Award
PHSA AWARDS	
Dr. Paris-Ann Ingledew	Outstanding Medical Staff Award
Dr. Ren Yuan Trainee: Ali Silver	BC Cancer 2023 Outstanding Trainee Publication Awards: Clinical Research 1st Prize
Dr. Jonathan Loree Trainee: Tharani Krishnan	BC Cancer 2023 Outstanding Trainee Publication Awards: Clinical Research 2nd Prize
Dr. Alan Bates Trainee: John-Jose Nunez	BC Cancer 2023 Outstanding Trainee Publication Awards: Cancer Control Research and Health Services Research 2nd Prize
NEWS	
Dr. John-Jose Nunez	CBC Radio One's On the Coast with Gloria Macarenko – Featured a new publication on AI-driven prediction of cancer patients' psychosocial needs
Dr. Kerry Savage	OncoLive's <i>Women in Oncology</i> Series – Upcoming episode on "Peripheral T-Cell Lymphomas," featuring female experts on gender disparities and career challenges
Dr. Mark Carey	CBC News - New research offers hope for young endometrial cancer patients – A “novel approach” to preserve fertility by avoiding hysterectomies
	Global News Morning BC – BC Cancer treatment helps preserve fertility – A successful treatment of early-stage endometrial cancer while preserving fertility
Dr. Stephen Yip	Physician Leadership Program at UBC's Sauder School of Business – Leading a project to streamline molecular testing for lung cancer patients in BC

RESEARCH GRANTS 2024

JANUARY

BC Cancer 2023 Radiation Oncology Grant:

Dr. Juanita Crook, “Moderate versus ultra hypo fractionation or brachytherapy for Primary Oligo Metastatic Prostate cancer Treatment (PROMPT)”. \$294,496.80 (2-years)

Dr. Wei Liu, “A Randomized Study of High versus Standard Dose Radiotherapy for Palliation”. \$268,000 (2-years)

Dr. Sarah Baker, “Stereotactic ablative radiotherapy versus low dose palliative radiotherapy for oligoprogressive metastatic cancers (SABR)”. \$235,000 (2-years)

“Development and external validation of a nomogram to predict polymetastatic progression-free survival in patients treated with SABR for oligometastases”. \$3,000 (2-years)

“An international survey of practice patterns in stereotactic ablative radiotherapy for oligoprogressive cancer”. \$1,500 (2-years)

BC Cancer Provincial RT Program Grants:

Dr. A Bang with Drs. **Robert Olson, Mitchell Liu, Alan Nichol, Mira Keyes, Stephen Chia, Nathalie LeVasseur** et al., “SABR-PRIMeR”. \$150,000 (2-years)

Dr. N Shahid with Drs. **Robert Olson** et al., “ELISA phase III clinical trial”. \$125,000 (2-years)

Dr. T Berrang with Drs. **Robert Olson, Alan Nichol** et al., “RHEAL phase III trial”. \$125,000 (2-years)

Dr. KL Campbell and S Neil-Sztramko with Drs. **Alan Bates, Nathalie LeVasseur, Robert Olson** et al. received the Canadian Cancer Society Challenge Grant for the project titled “The Supportive Care Oncology Practice ECHO (SCOPE) to address the challenge of under resourced supportive care services for people living with breast cancer”. The award amount is \$521,791 for 2-years.

Dr. C Steidl with Drs. **Kerry Savage** et al. received the Canadian Cancer Society Challenge Grant (CHA-24) for the project titled “The cellular ecosystem of mediastinal gray zone lymphoma”. The award amount is \$349,938 for 2-years.

Dr. S Gorski with Drs. **Jonathan Loree** et al. received the Neuroendocrine Research Foundation (NETRF) funding for the project titled “Glycomic characterization of pancreatic neuroendocrine neoplasms”. The award amount is \$121,720 for 1-year.

FEBUARY

BC Cancer Clinician Researcher Start Up Grants - Round 1:

Drs. Emily Jackson and Stephen Chia, “Understanding and overcoming disparity in care of breast cancer patients in rural British Columbia: Development of a virtual nurse-led model of care”. \$262,027 (2-years)

Dr. Jean-Michel Lavoie, “Predictive biomarkers for patients with genitourinary cancers receiving checkpoint inhibitors: new insights into gamma-delta T-cells”. \$298,368 (2-years)

Dr. Jessica Chan, “Developing the Linguistic Indicators of Framing Tool: creating equity-oriented language to improve cultural safety in cancer care for First Nations, Inuit, and Métis peoples”. \$300,000 (2-years)

Drs. Jonathan Loree and M Bleszynski, “Liver transplantation in metastatic colorectal cancer (CRC) – a pilot study (Prometheus) and correlative analysis characterizing tumour heterogeneity to inform ctDNA assays in CRC”. \$295,386.97 (2-years)

Dr. Justin Oh, “Population-based outcomes of stereotactic radiation treatment for brain metastasis”. \$93,264 (2-years)

Dr. Lucia Nappi, “Unveiling B-cell receptor heterogeneity to predict immunotherapy response in patients with metastatic renal cell carcinoma”. \$245,408.13 (2-years)

Dr. Mathieos Belayneh, “Methadone to treat painful chemotherapy-induced peripheral neuropathy: A randomized double-blind controlled trial”. \$266,378 (2-years)

Dr. Ren Yuan, “Artificial Intelligence Models to Predict Response and Survival in Advanced NSCLC Patients with PD-L1 \geq 50% Receiving 1st-Line Pembrolizumab Monotherapy”. \$277,000 (2-years)

Dr. Robert Olson, “Phase II Single vs Hypofractionated Irradiation For Timely access to Partial Breast Radiotherapy: SHIFT-PB”. \$280,665 (2-years)

Dr. Ying Wang, “Mitigation of lung cancer decline with Virtual platforms to deliver Exercise therapy across British Columbia (MoVE-BC) – Phase Two”. \$223,249 (2-years)

Drs. A Lytle and **Kerry Savage**, “Multiomic characterization of TFH lymphomas and PTCL-NOS for biomarker discovery”. \$300,000 (2-years)

Dr. J McGinnis with Drs. **Jessica McAlpine** et al. received the BC Cancer funding for the project titled “Advancing Gynecologic Cancer Survivorship through Digital Innovation”. The award amount is \$53,600 for 2-years.

RESEARCH GRANTS 2024

MARCH

Dr. S Gorski with Drs. **Daniel Renouf** et al., received the Canadian Institute of Health Research (CIHR) Project Grant Fall 2023 award for the project titled “Targeting adaptive autophagy to enhance treatment response in pancreatic cancer”. \$994,500 (5-years)

APRIL

BC Cancer Foundation Sprakkar Physics Research Award: **Dr. Amy Frederick**, “The Impact of Radiation Dose to Regional Lymph Nodes on Clinical Outcomes after Breast Radiotherapy”. \$20,000 (20-months)

Dr. Gurpreet Sandhu, “Evaluating stress, burnout and job satisfaction in Medical Physicists in Canada”. \$9,050 (20-months)

Dr. Samantha Lloyd, “Surface guided breast radiation therapy in BC – Improving patient experience”. \$20,000 (20-months)

Dr. Juanita Crook was awarded the Prostate Cancer Fight Foundation – Ride for Dad grant for the project titled “Multi-omic Approach to Study High Dose Rate (HDR) Brachytherapy (BT) as Monotherapy for Favorable and Intermediate Risk Prostate Cancer (Brachy Tracks) - (an extension of the High Dose Rate (HDR) Brachytherapy for Prostate Cancer project)”. The award amount is \$80,000 for 1-year.

Dr. Justin Oh was awarded the University of British Columbia Department of Surgery Seed Grant for the project titled “Radiomic Analysis for Brain Tumors”. The award amount is \$15,000 for 2-years.

JUNE

Dr. Jessica McAlpine was awarded the Canadian Medical Association, MD Financial Management and Scotiabank Health Care Unburdened Grant Program for the project titled “Survivor Advisor: Advancing Cancer Survivorship Care through Digital Innovation”. The award amount is \$1,214,400 for 2-years.

Dr. Steven Thomas was awarded the Varian Medical Systems, Inc. funding for the project titled “Comparison of Motion Management Strategies for Cardiac SBRT”. The award amount is \$172,676 for 2.5-years.

Dr. Wei Liu was awarded the BC Cancer 2024 Radiation Oncology Grant for the project titled “A randomized study of high versus standard dose radiotherapy for palliation”. The award amount is \$200,000 for 2-years.

JUNE

Kendrew Wong, under the supervision of **Dr. Paris-Ann Ingledeew**, was awarded the Canadian Association of Radiation Oncologist CROF Summer Student Research Grant for the project titled “An evaluation of proton radiation resources for patients”. The award amount is \$3,000 for 6-weeks.

JULY

MSHRBC Health Professional-Investigator Awards: **Dr. Carol Cremin**, “BC Familial Pancreatic Cancer Program-Improving access to germline testing at time of diagnosis”. \$450,000 (5-years)

Dr. Gang Wang, “Toward an immunohistochemical model for molecular subtyping and predicting of treatment response in bladder cancer”. \$450,000 (5-years)

Dr. Jessica Chan, “Developing equity-centered language with First Nations, Inuit, and Métis peoples to reduce anti-Indigenous discrimination in healthcare”. \$450,000 (5-years)

Dr. Stephen Chia, “Understanding and Overcoming Disparity in Care of Breast Cancer Patients in Rural British Columbia”. \$450,000 (5-years)

Plunge for the Cure via Gynecologic Cancer Initiative:

Drs. A Bashashati and **Yvette Drew**, “Role of AI-driven histopathology image analysis in predicting response to PARP inhibitors (PARPi) in high grade serous ovarian cancer”. \$125,000 (2-years)

Drs. A Roth and **Yvette Drew**, “Mapping the evolution of resistance to cytotoxic and non-cytotoxic chemotherapies in high grade serous ovarian cancer”. \$125,000 (2-years)

Dr. Alan Nichol was awarded the BC Ministry of Health Innovation Pathway Program funding for the project titled “CAN-TRI-NLP: A CANcer TRIage system to expedite care with Natural Language Processing”. The award amount is \$110,000 for 9-months.

Dr. Jessica McAlpine was awarded the VGH & UBC Hospital Foundation funding for the project titled “Endometrial Cancer: Ensuring access to molecular classification for all newly diagnosed patients”. The award amount is \$2,214,285 for 5-years.

RESEARCH GRANTS 2024

JULY

Dr. Jonathan Loree was awarded the Canadian Neuroendocrine Tumor Society (CNETS) funding for the project titled "Identification of CHIP as a biomarker in patients with NETs receiving PRRT". The award amount is \$15,000 for 2.5-years.

Dr. Yvette Drew was awarded the Cancer Research Society Bridging the Gap for Ovarian Cancer Treatments grant for the project titled "HGSOE evolution under pressure of targeted therapy in the phase 2 NEOCATS trial". The award amount is \$600,000 for 3-years.

Dr. M St-Laurent with Drs. **Bernie Eigl, Ren Yuan** et al. received the CIHR-Strategy for Patient-Oriented Research (SPOR) - Catalyst Grant: SPOR Innovative Clinical Trials funding for the project titled "Active surveillance vs definitive local therapy for patients showing clinical complete response following neoadjuvant cisplatin-based chemotherapy". The award amount is \$200,000 for 1-year.

AUGUST

Terry Fox Research Institute Technology Development Funds:

Dr. E Tsang with Drs. **Daniel Renouf** et al., "Plasma Whole Genome Sequencing in Pancreatic and Biliary Cancers". \$249,939 (1.5-years)

Dr. A Mes-Masson with Drs. **Mark Carey** et al., "Metabolomics standardization process". \$250,000 (1-year)

Dr. R Ouellette with Drs. **Mark Carey** et al., "PEA: A High-Plex Quantitative Approach for Proteomic Analysis of Plasma Liquid Biopsies to Explore Profiles of Treatment Response and Mechanisms of Resistance across Cancer Types". \$250,000 (1-year)

Dr. G Zogopoulos with Drs. **Janessa Laskin** et al., "Orthogonal pangenome sequencing to unveil genetic cancer susceptibility diagnostic odysseys: a Return of Results Working Group new technology assessment study". \$249,998 (1.5-years)

SEPTEMBER

Dr. R Kridel with Drs. **Kerry Savage** et al. received the Leukemia and lymphoma Society of Canada grant for the project titled "Elucidation of the immune-malignant crosstalk and identification of therapeutic targets in post-transplant lymphoproliferative disorder". The award amount is \$200,000 for 2-years.

SEPTEMBER

BC Cancer Clinician Researcher Start Up Grants - Round 2:

Dr. Alan Nichol, "Predicting upgrades from non-invasive core biopsy specimens to invasive ductal carcinoma in surgical specimens using histology-based DNA organization analysis". \$300,000 (2-years)

Dr. Alison Weppler, "The utility of ctDNA to detect and monitor minimal residual disease in resected stage IIB-IV melanoma". \$297,550 (2-years)

Dr. Bernie Eigl, "Evaluation of early ctDNA reduction as a surrogate marker of response in urothelial cancer". \$293,632 (2-years)

Dr. Deepesh Lad, "Impact of Inner Engineering Yoga (No Mind-Body) program on Distress in Recipients undergoing Hematopoietic Cell Transplantation (IMNoT)". \$27,875 (2-year)

Dr. Diego Villa, "Characterization of the Intestinal Microbiome in Patients with Mantle Cell Lymphoma". \$60,000 (2-years)

Dr. Juanita Crook, "Multi-omic Approach to Study High Dose Rate (HDR) Brachytherapy as Monotherapy for Favorable and Intermediate Risk Prostate Cancer (Brachy Tracks)". \$295,699 (2-years)

Dr. Mathieos Belayneh, under the supervision of **Dr. Pippa Hawley**, was awarded the Canadian Cancer Society Research Training Awards for Master's Students funding for the project titled "Methadone to treat painful chemotherapy--induced peripheral neuropathy (METACIN): A double-blind randomized controlled trial". The award amount is \$65,000 for 2-years.

Michael Diaz-Stewart, under the supervision of **Dr. Jonathan Loree**, was awarded the Canadian Institutes of Health Research CANTRAIN-CTTP funding for the project titled "Circulating Tumor DNA Analysis Informing Adjuvant Chemotherapy in Stage III Colorectal Cancer: A Randomized Phase III Trial (DYNAMIC-III/CO.29)". The award amount is \$17,500 for 1-year.

RESEARCH GRANTS 2024

OCTOBER

Canadian Institute of Health Research (CIHR) Project Grant Spring 2024:

Drs. Amy Jamieson and Jessica McAlpine, “STRIVE study: STRatification of Vulvar squamous cell carcinoma by HPV and p53 status to guide Excision”. \$1,166,628 (8.5-years)

Drs. D Brenner, R Hilsden and J Tinouth with Drs.

Jonathan Loree et al., “The REFRAME Project – Rapid Evaluation FRAMework for the Modification of Cancer ScrEening Guidelines”. \$100,000 (1-year)

Dr. T Velenosi with Dr. **Karen Gelmon et al.**, “Characterizing and validating diacetylspermine as a metabolic biomarker of drug response and precision treatment in triplenegative breast cancer”. \$979,200 (5-years)

Dr. J Dancey with Drs. **Kerry Savage et al.**, “Fecal microbiota transplantation in combination with immune checkpoint blockade in patients with advanced melanoma: A randomized phase II trial”. \$1,556,667 (3-years)

Dr. M Ong with Drs. **Kim Chi, Maryam Soleimani et al.**, “TRIPLE-SWITCH: A Randomized Clinical Trial for the Addition of Docetaxel to Androgen Receptor Pathway Inhibitors (ARPI) and Androgen Deprivation Treatment (ADT) in Patients with Metastatic Castration-Sensitive Prostate Cancer (mCSPC) and Suboptimal PSA Response”. \$2,487,015 (7-years)

Drs. Jessica McAlpine et al. received the UBC Division of Gynaecologic Oncology funding for the project titled “Molecular stratification of cervical carcinoma: prognostic and predictive refinement”. The award amount is \$40,000 for 2-years.

Dr. Yvette Drew was awarded the VGH & UBC Foundation Sumiko Kobayashi Marks Memorial Research Grants for the project titled “Investigating the expression of trophoblast cell surface antigen 2 (TROP2) in vulvar squamous cell carcinomas and its relationship to immune biomarkers and survival outcomes”. The award amount is \$150,000 for 2-years.

NOVEMBER

2024 BC Cancer Emerging Multidisciplinary Research Programs:

Drs. Kerry Savage, J Lum and Alison Weppler, “Metagenomics, metabolomics and immune profiling in melanoma: An integrative analysis platform for patients receiving immunotherapy.” \$1,200,000 (3-years)

Drs. Maryam Soleimani and N Fonseca, “The BC Cancer Provincial von Hippel Lindau Registry and Biobank.” \$1,115,083 (3-years)

Dr. Nicole Chau, “Minimal Residual Disease Detection and Recurrence Disease Monitoring Using ctDNA in Head and Neck Cancers as part of PATH (Personalized Approaches in the Treatment of Head and Neck Cancer).” \$1,200,000 (3-years)

Drs. **Mark Carey et al.** received the Ovarian Cancer Canada/Strategic Science Fund for the project titled “Establishing a national rare gynecologic cancer registry – a pilot study of clear cell and mucinous ovarian carcinomas”. The award amount is \$60,000 for 16-months.

DECEMBER

Ovarian Cancer Canada – Research Models Competition:

Dr. Mark Carey, “Patient-derived xenograft models of estrogen receptor-positive ovarian cancers”. \$68,038 (2-years)

Dr. D Cook with Drs. **Mark Carey, et al.**, “Molecular and Functional characterization of a patient-derived organoid platform for ovarian cancer”. \$120,700 (2-year)

Dr. Stephen Chia was awarded the Breast Cancer Canada AstraZeneca Research Grant Competition 2024: NeoAdjuvant Equity and Outcomes funding for the project titled “Understanding and Overcoming Disparity in the Use of Neoadjuvant Systemic Therapy for Eligible Early Stage Breast Cancer Patients Living in Non-Large Urban Regions of British Columbia”. The award amount is \$100,000 for 1-year.

Dr. Zahi Mitri was awarded the BC Cancer Foundation Karen Gelmon Clinical & Research Excellence Endowment Fund for the project titled “Clinical and Molecular Characterization of Young Women Breast Cancers Treated in British Columbia”. The award amount is \$51,462 for 1-year.

We thank you
for your ongoing
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Acknowledgements

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