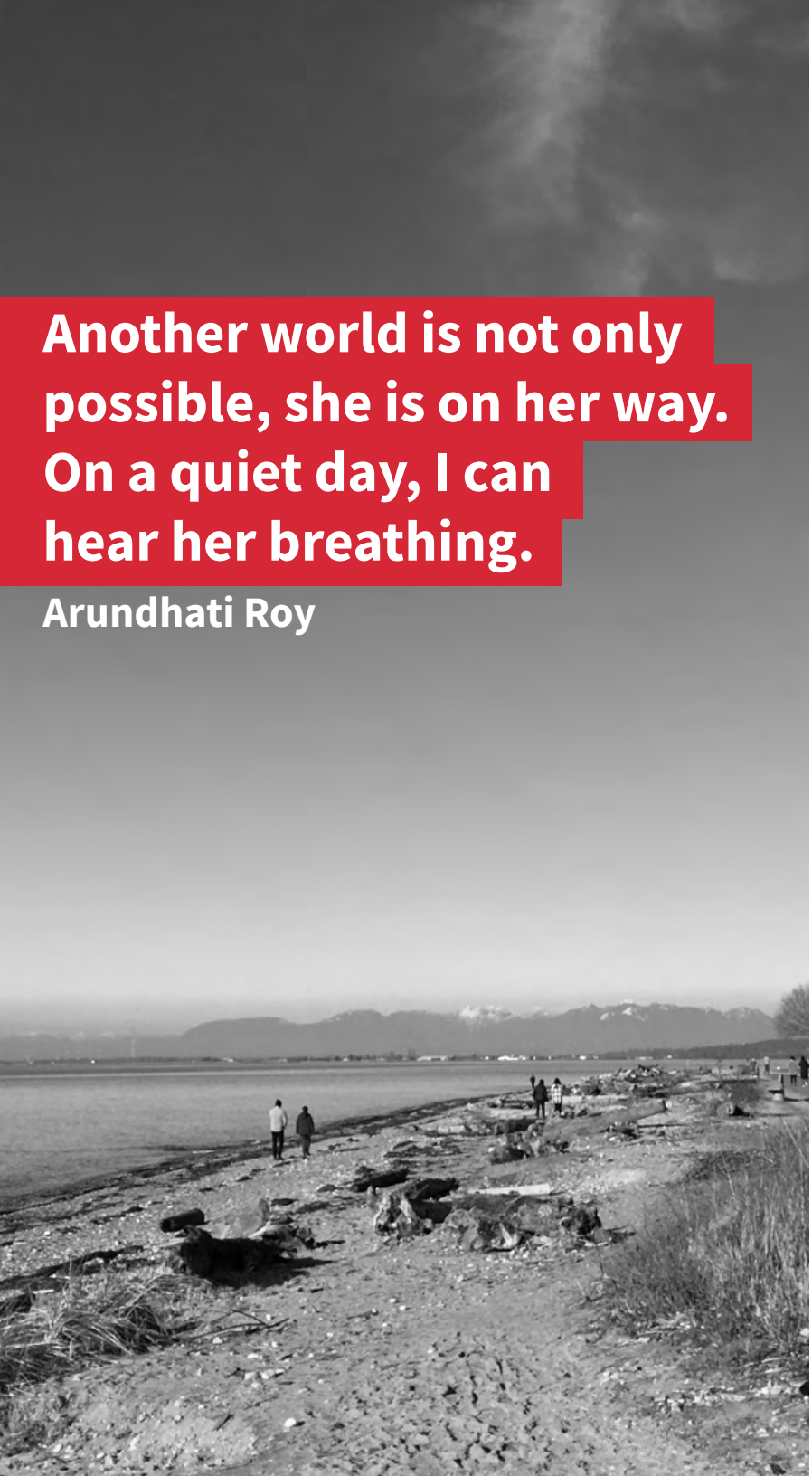


# RADIUS at 10



*Based at Simon Fraser University's Beedie School of Business, RADIUS operates on the unceded and ancestral territories of the Squamish (Sḵw̱x̱wú7mesh Úxwumixw), Tsleil-Waututh (səlilw̱ ətaʔt), and Musqueam (xʷməθkʷəy̑ əm) Nations.*

*We also acknowledge the lands on which SFU resides and operates: the xʷməθkʷəy̑ əm (Musqueam), Sḵw̱x̱wú7mesh (Squamish), səlilw̱ ətaʔt (Tsleil-Waututh), q̑ ícəy̑ (Katzie), kʷikʷəłəm (Kwkwetlem), qiqéyt (Qayqayt), qʷa:n̓ λ'ən̓ (Kwantlen), Səmyámə (Semiahmoo), s̓əwaθən (Tsawwassen), and Stó:lō Nations.*



**Another world is not only possible, she is on her way. On a quiet day, I can hear her breathing.**

**Arundhati Roy**

**RADIUS was founded 10 years ago** on the belief that a radically better economy was possible and that, perhaps, we could contribute to such an economy by accelerating new ways of doing things and supporting those committed to shifting stuck and harmful social and economic systems.

We can't help but look back and feel that getting behind these agents of change was the right bet, whether helping build systems leadership capacity, incubating new initiatives and ventures, collaborating to identify new ways to intervene in broken and oppressive systems, or weaving new networks and relationships. While our programming and approaches have evolved dramatically since 2013, we have directly supported **1200+ community and student innovators**, delivered **\$1,000,000+ in direct funding**, provided training for **4000+ students and professionals**, and worked with **200+ organisational partners** across the public, private, and social sectors.

We have also had no shortage of lessons about how to do this work well and how not to. How to shift harmful systems rather than celebrate “impact” that never really challenges them. How to build a culture that can better sustain and uplift our team and those we support. How to centre equity and show up authentically in relationships with community and collaborators while we are learning.

We are equal parts daunted by the systemic challenges before us all, inspired by the ideas and people we are so lucky to work with every day, and ever confident that real change is not only possible but inevitable while working alongside those working hard to bring it forth.

**We thank you** for your continued support, for leaning into these big questions with us, and for being a part of our systems change and social innovation journey.

*“When I think of RADIUS, I really think about the way they centre leadership with impacted communities. It’s so crucial that work happens in community, with individuals, in relationship. That is where the innovation happens.”*

**Andrea Nemtin, CEO—Social Innovation Canada**

# WHO IS RADIUS?

RADIUS is a community dedicated to (re)building a regenerative economy where all can flourish. We believe this transformed economy will be built by community-led solutions and the redistribution of leadership, centring those who are historically and persistently marginalised.

To support our vision, we deliver programs to collaboratively develop, test, and advance innovative responses to tough socioeconomic problems and offer consulting and training services that draw on this leading-edge work.

We recognize the unique position we hold to share our experiences and learnings from working alongside diverse, racialized communities all while embedding and centring the following Justice, Equity, Diversity, and Inclusion (JEDI) principles into our work:

# OUR PRINCIPLES

---

Centre equity in our design, strategy, and daily work.

---

Value the knowledge, experiences, and histories in the margins of any given system.

---

Engage in reciprocal relationship building.

---

Be an open, learning organization.

---

Know future systems will draw on the new and the old.

---

Balance this ambitious work with honouring our limits.

# A DECADE OF LEARNING

## RADIUS was founded in 2013

to contribute to a more just, resilient, sustainable, and dynamic economy. While our core focus has not changed, we have evolved our approach many times over.

The most crucial lessons guiding our path forward for the next 10 years are drawn from the evolution of our work supporting innovation and systems change alongside community.



*“When I think about RADIUS, I really think about its ability to truly shift power.”*

**Sifat Yusuf, Program Manager—  
Mariam Assefa Fund as part of  
World Education Services**

**2013** **From our roots** at SFU and the Beedie School of Business, we established one of Canada’s first social venture incubators with core support from Vancity, while building out social innovation education and leadership programming for community members and SFU students. Hundreds of social entrepreneurs and social impact ventures were supported, but while our team and impact grew substantially, it was also clear that no number of brilliant social ventures or better prepared individuals could truly change harmful systems on their own.

**2015** **In deep collaboration** with Ecotrust Canada, RADIUS co-delivered the Local Economic Development Lab (LEDlab), a place-based initiative in Vancouver’s Downtown Eastside that generated, implemented, and scaled innovative community-designed and -driven ideas for a vibrant and inclusive local economy, while providing 30 paid full-time graduate student internships. This was a pivotal program that drove a significant strategic shift to deeply incorporate social innovation lab methodologies and more intentional approaches to shifting socioeconomic systems.

**2018** **Drawing from LEDlab learnings**, we fully integrated our labs and venture work in a strategy we called “entrepreneurship in service of systems change.” We focused on only supporting ventures in a lab context and structuring these labs to work at multiple levels by connecting the energy and insights generated by entrepreneurial actors who were creating on-the-ground solutions with the key people, organisations, and systems’ influencers who could help identify and tackle larger systems challenges.

This was also when RADIUS began to lean into harder questions about our role in perpetuating systemic racism, colonialism, and white supremacy as a white led organisation pursuing “systems change” in predominantly white social innovation, social economy, and entrepreneurship sectors. This resulted in hiring external assistance to complete an organisational equity assessment in 2019 which provided recommendations for change and a real shift in our organisational culture.



## 2019 – Present

In the past 4 years, RADIUS has structured multiple new labs and witnessed the emergence of hundreds of visionary leaders as well as dozens of ventures, initiatives, and campaigns that aim to fundamentally shift harmful systems. We have been learning what it means to build authentic and reciprocal relationships in community while influencing the broader systems in which we live and operate. We are also continually learning how to counter the tendency for programs meant to support all which end up perpetuating racism, sexism, able-ism, age-ism—rather than dismantling them; and we are learning how to dismantle white supremacy, which too often comes at the expense of Black, Indigenous, and racialized staff and community.

Programs, policies, and practices need to be re-designed in ways that centre the voices of those who have been historically, persistently, and systemically marginalised. Call this deep equity systems change, decolonial approaches, unlearning to learn. For RADIUS, this has meant steps including auditing and redesigning human resource practices, investing in support to make our practices and policies more equitable, financially supporting our team members in their journey of healing and learning, reimagining program constructs and how we might support participants, and co-designing new foundational principles for the organisation. It has also meant slowing down the furious start-up pace to create the spaciousness needed to truly process equity-based challenges and rethinking what genuine reciprocity between grassroots organisations and colonial institutions represent.

While the reckoning work never ends, **2023 feels different.** Our RADIUS programs and our teams feel more solid, aligned, and most importantly, healthier.



*“Operating within the social innovation space has actually given me the language and experience needed to articulate how certain actions work or don’t work when it comes to creating impact. I think about the people I work with and the superb way in which they create true impact, and I do think they have emboldened me to loudly challenge the ways social innovation continues to perpetuate oppression.”*

**Véronik Campbell, Associate Director, Labs  
—RADIUS**



# THE RADIUS WAY



## RADIUS programming works toward long-term change.

Our programming tackles complex societal, intergenerational challenges around economic reconciliation, regeneration, and liberation. We currently work across four overlapping areas, all centred on the intersection of Deep Equity and Socioeconomic Systems Change:

- Community Innovation Labs
- Education, Consulting, and Training
- Research & Knowledge Mobilization
- Incubation & Acceleration

*“I like that RADIUS takes a systems-approach to social innovation. The idea (as wonderful as it would be) that one person, one idea, or one venture could change the world—I believe realistically, we need systems to change (at all levels), in order to see change.”*

**Jessie Bennett,**  
Communications and  
Recruitment Manager—  
RADIUS



# COMMUNITY INNOVATION LABS

All RADIUS labs are multi-year commitments working in reciprocal relationships with communities most impacted by the challenges being addressed. Our labs aim to build shared power to influence unjust socioeconomic systems, advance the solutions prioritised by community, and co-identify and advance interventions for broader systems change. Each lab, moreover, plays a role in challenging RADIUS to grow and do better.



**The Health Equity Lab** provides a collaborative space for community leaders and individuals from, or connected to, communities disproportionately impacted by health inequities to incubate, validate, and accelerate innovative health system interventions. Since 2016, the Health Equity Lab primary programming has been Reimagine Health (incubate), Trampoline - Ideas into Action (validate), and Slingshot (accelerate).

**160**  
INNOVATORS  
SUPPORTED

**1200**  
HEALTH EQUITY  
CHANGEMAKERS  
ENGAGED

*“This experience really highlighted for me the need for more programs that centre the experiences that are often marginalised in the healthcare space. I hope that Reimagine Health is the beginning of many more spaces and programs to bring diverse groups together to enrich, nurture, and mentor each others’ ideas for change.”*

**2020 Reimagine Health Participant**



**The Refugee Livelihood Lab** was conceived to uplift racialized refugee and migrant leaders in Canada, especially in light of increased refugee resettlement from 2016 to today. The lab works to increase society's capacity to generate innovative responses to socio-economic inclusion by, for, and with refugee and immigrant communities and is part of a growing movement supporting deep shifts in the systems which govern migrant and immigrant lives towards equity, dignity, and sustainability. The lab works with urgency and commitment to move from innovation that simply improves systems towards disrupting patterns and transforming systems. Since 2018, the Refugee Livelihood Lab's primary programming has been the Migrant Systems Change Leadership Certificate and Trampoline - Ideas into Action.

*"My work is always moving and evolving based on community conversations and global-local events. With each iteration of a program, or when strategizing for the near to long-term future, I am always taking new factors into consideration as I am learning along the way. Specifically, widening the scope of my work beyond just program delivery has opened possibilities to advancing systems change, such as through policy and advocacy work, partnering with other organisations, or nurturing the foundations of up and coming changemakers who will potentially have a wider reach in different community groups."*



**Yara Younis, Project  
Manager, Refugee  
Livelihood Lab**  
—RADIUS

**114**  
PARTICIPANTS

**1500**  
MIGRANT  
COMMUNITY  
MEMBERS ENGAGED



**The First Peoples Enterprise Accelerator Program** (FPEAP) aims to create a decolonized economy created for and by Indigenous people alongside deep and meaningful partnerships. The lab contributes to this vision by cultivating deep, values-aligned relationships with Indigenous led partners to co-create entrepreneurship programming that recognizes the whole individual, centring Indigenous wisdom and worldviews. This has included supporting EntrepreNorth to build renowned programming for Indigenous entrepreneurs across the North and the design and delivery of the Fireweed Fellowship's inaugural cohort of 24 participants in the first ever national Indigenous entrepreneurship accelerator program. FPEAP has also collaborated closely with Dr. Dara Kelly at SFU to support the creation of Indigenous business case studies that bring decolonial practices and Indigenous content to business education, to share and reveal Indigenous ingenuity, wisdom, and worldview through story work to shift perspectives on Indigenous business.



*“As RADIUS as an organisation and its people have evolved, the FPEAP programming and projects have deepened their connection to community, and have a stronger cultural integrity when it comes to how and why the work is done, and who it is for. With more autonomy in leading the program and aligned values from RADIUS as a whole, the First Peoples Enterprise Accelerator Program is successfully meeting the needs of those who our programs and projects are designed for.”*

**Candice Day, Manager, First Peoples Enterprise Accelerator Program  
— RADIUS**



Kim Wheatley, Fireweed Fellowship



Leigh Joseph, Fireweed Fellowship

# EDUCATION: STUDENTS & EMERGING SYSTEMS CHANGE LEADERS

RADIUS has always made education, training, and learning opportunities for students and other emerging leaders a core part of our mission, and we are proud of our contributions through SFU curricular and co-curricular opportunities, regional leadership development, and dozens of paid internships across our programming areas.



**The Fellowship Program** is a premier professional development opportunity for emerging regional and national systems change makers and aims to create a space for self-inquiry, personal and professional development, and relationship building. It is grounded in the belief that profound self-reflexive and cohort-based learning can be a catalyst for personal and social transformation. Most Fellows are now building impactful social impact careers across the region and many still drawing on the relationships built in the program.

9  
COHORTS

183  
FELLOWS

*“The RADIUS Fellowship... models the future of developing people in a way that transcends oppressive systems. Relationship building and inner work must happen before we can know how we should contribute to the world, and the RADIUS Fellowship has gently guided me through that process.”*

2020 Fellow

**SFU Change Lab** - In this program, undergraduate students worked in interdisciplinary teams for a full term to learn about systemic challenges and to build sustainable interventions alongside community. Students regularly described it as the most transformative program of their undergraduate career.

17  
COHORTS

290  
STUDENTS

*“As much as change-making is about creating impactful solutions in the community, it is equally about a transformation within yourself and a continuous learning journey. Impact work is hard and humbling work. I am leaving Health Change Lab with more questions to answer than I had coming in, and I think that is absolutely beautiful.”*

2020 Health Change Lab Student

**Social Innovation Seed Fund** - RADIUS has partnered with Embark Sustainability to develop and lead this SFU focused fund, providing seed grants to student and recent alumni social innovation projects, ventures, and initiatives. This program focuses on fueling student impact and supporting a robust SFU social innovation landscape.

82  
PROJECTS

\$80,000  
IN FUNDING

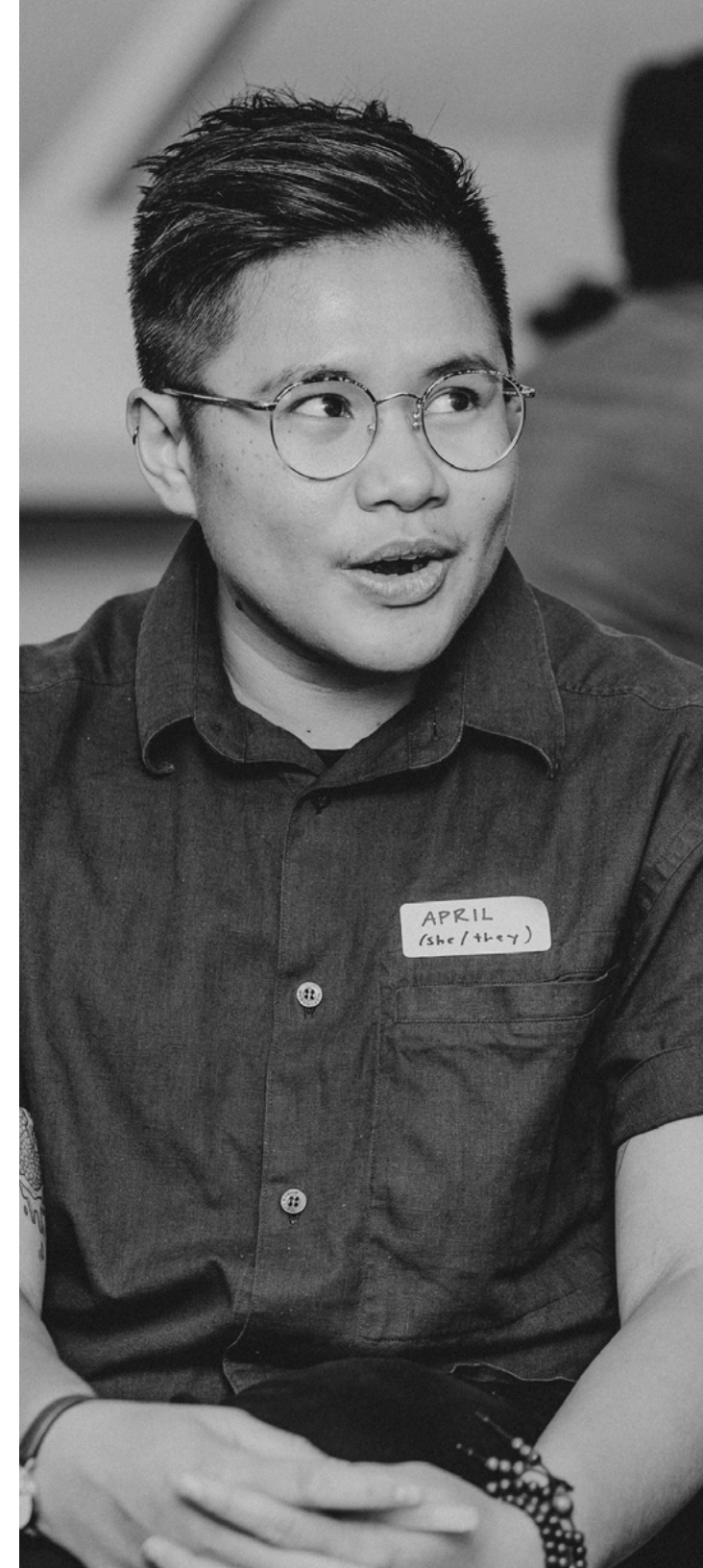
*"Since receiving seed funding, we have won three awards through the Charles Chang Institute for Entrepreneurship Opportunity Fest: Sustainable Innovation category, Entrepreneurs Choice, and the Grand Prize! In addition, we created an original silicon zero-waste candle jar and have officially started selling our candles."*

2021 Social Innovation Seed Fund Recipients

**Internships & Work Opportunities** RADIUS has hired 54 active graduate and undergraduate students from SFU and partner institutions into a variety of roles to advise and support our programming, providing approximately \$500,000 in wages. We have additionally hired 10 recent SFU alumni into their first full time career opportunities in the social innovation, systems change field, with most moving on to impact centred careers building upon their RADIUS experience.

54  
STUDENTS HIRED

\$500,000  
IN WAGES PAID





**“My understanding of social issues and impact has grown immensely. I have a deeper understanding of how social enterprise looks on the ground, and how challenging that can be.”**

**This is a priceless opportunity that you must be courageous to take.”**

Local Economic Development Lab  
Graduate Student Intern

## Consulting and Training

**Services** is RADIUS' equity-centred consulting portfolio in pursuit of building individual and institutional capacity to collectively respond to complex challenges of our time. We work towards this vision by training, coaching, and delivering projects around community engagement, organisational development, and problem-solving using liberatory, inclusive design and anti-racism approaches.

105  
CLIENTS

175+  
SESSIONS

3625  
PARTICIPANTS

*"It was a pleasure working with RADIUS who designed our first custom workshop on "Inclusive Design for Climate Action" at SFU. We reached out to them for this work because we knew that their expertise on inclusive design was unparalleled... They really delivered! The training was well informed... and grounded all the learning in a context that was relevant and actionable at our university. I was so impressed by how they were able to bring our workshop vision to life and seamlessly make connections that can often be difficult for many to grasp. This workshop is a major stepping stone for our working groups, who left the training with a practical understanding of how they can ensure that equity is a part of all... processes. Would highly recommend RADIUS for your organisation's inclusive design training needs"*

**Rita Steele, Manager, Campus Sustainability—SFU**

*"RADIUS facilitated a session on centring equity within all our design processes, and it was a rewarding session for our team, both personally and professionally. The session gave us an opportunity to sit with big questions that re-energized us to look at our work differently"*

**President's Office—University of Victoria**



# RESEARCH AND KNOWLEDGE MOBILIZATION

RADIUS has long focused on how to invest in the authentic co-creation of knowledge with the communities we work alongside by hosting many large conferences to build and exchange knowledge; regularly publishing knowledge products ranging from case studies to methodology guides and advocacy based research reports; and collaborating with researchers exploring related questions to our work.

In 2023, we are exploring an exciting new collaboration to build a shared learning cohort around the intersection of community engaged research and deep equity, engaging our team and aligning with community and institutional researchers.

*“I learned a lot from [the] design sprint; I’ve incorporated some of [the] tools and techniques into an upcoming session I’m planning, and I have [RADIUS] to thank for several great ideas!”*

**Wayne Cousins—BC Hydro**

## CASE STUDY

### RADIUS & DIVERSEcity Inclusive Design Project

A case study and exploration of opportunities, tensions, and lessons in implementing inclusive design for more equitable and community-led solutions.



*“[The RADIUS] ReframeWork [event] did a very good job of helping us shift our understanding of the future of work and connected the network in a thoughtful way. As a result of this gathering, the people who came together can help support each other in their work.”*

**Jeremy Higgs, Chief Labour Market Economist—Government of BC**

## INCUBATION & ACCELERATION

Our Incubation & Acceleration programming has historically focused on supporting impact entrepreneurs pursuing social ventures in themes such as Migrant Justice, Health Equity, and Economic Reconciliation. Throughout the past 10 years, RADIUS has supported well over 500 for- and non-profit social ventures across 30+ cohort programs. We have also directly invested \$300,000 into participants in our accelerator programming in collaboration with Vancity Community Foundation. Many of these companies continue to thrive in the local impact venture ecosystem, and we continue to keep in contact with such incredible systems change makers—we are proud to call them RADIUS alumni.

**30+**  
COHORTS

**500+**  
VENTURES

**\$300,000**  
DIRECTLY INVESTED



*“RADIUS’s Slingshot program gave me an opportunity to engage with a cohort driven by social impact. I had no business training and Slingshot gave me the opportunity to learn about a core set of principles, understand social enterprise practices, and work with mentors who really cared and continue to care about my success.”*

**RADIUS Slingshot Accelerator Participant**





**“INEQUITIES EXIST BY DESIGN AND ONLY INTENTIONAL ACTS CAN DISMANTLE THEM.”**

**CREATIVE ACTION LAB**



## RADIUS: WHAT'S NEXT?

**Adopting and practising equity centred design** processes means intentionally involving and engaging with impacted and historically marginalised community groups to problem solve. It also means taking a pause, to stop and reflect on a journey—in our case, the RADIUS journey—to dig deeper and ask ourselves about our positionalities, identities, and social and institutional contexts; to understand our power, or lack thereof; to reflect on the barriers that we ourselves may face or push others to face; and to think critically about the systems in which we exist or may, intentionally or unintentionally, create. We asked ourselves why mostly white, cisgender, able-bodied males were accessing, creating, and leading our accelerator programming, and in turn, realised we needed to pause - to take the

time to learn, unlearn, and reimagine what it means to run venture support programming from an intentional and real equity centred foundation.

This strategic equity pause gave us time to think about and reflect on why we have had a strong engagement of equity deserving communities in our early stage ideation and incubation programming; however, when it came to our accelerator programming, there has consistently been a lack of Black, Indigenous, and racialized representation and leadership.

In 2021, we took a pause on these offerings and conducted a deep review, beginning with an extensive internal assessment and report from an external social economy consultant. This research and report helped identify a meaningful ecosystem gap around equity centred supports for intersectional,

racialized founders and teams. The report provides 47 recommendations to move toward more equity centred approaches to social venture support, such as

- **Ceding power to BIPOC Leaders by securing permanent leadership positions;**
- **Paid educator and mentor positions for BIPOC community;**
- **Decolonising access to resources;**
- **Offering cash stipends or forgivable loans for participants to build their start ups;**
- **Subsidising dependent care;**
- **Fostering intentional BIPOC-led and informed community of practices; and**
- **Creating wrap-around supports for all.**



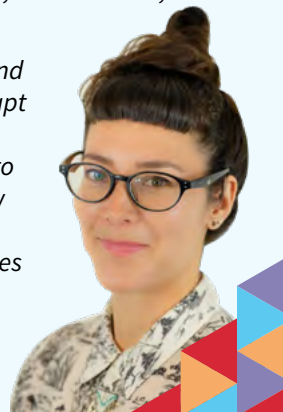
We followed this report with local and national community consultations with Black, Indigenous, and racialized entrepreneurs, RADIUS alumni, and individuals working in the social venture and impact investing ecosystem including incubators, accelerators, and investment funds, to explore the structure and design of potential equity centred support systems. Findings and feedback continued to consistently highlight a very significant lack of safe and supportive spaces for entrepreneurs and innovators, with few program offerings created or co-created, and led or co-led by leaders and innovators from Black, Indigenous, or racialized communities. Correspondingly, a very small percentage of venture funding goes to these founders and organisations.



*“I came into the social innovation space at a turning point in its history, and it had me question whether I wanted to be associated with its historically white, privileged, disconnected, and fragile community.*

*Much has changed over a few short years, but I draw real inspiration and hope from the younger generation. As current leaders in this space adapt or move on, the younger generation is miles ahead and not waiting for their “turn” at leadership. They understand systems better and lean into the tough conversations. They are action oriented and understand how urgent a lot of the issues we’re up against —socially, environmentally and economically. I see the impact they’re already making and this gives me a lot of hope for the future of the social innovation space.”*

**Candice Day, Manager, First Peoples Enterprise Accelerator Program  
— RADIUS**





The goal of our review, research, and consultations is to transform the development of the regional and national social economies toward centring justice, equity, diversity, and inclusion in pursuit of an economy that re-centres the priorities, wealth, power, and stewardship of historically and persistently marginalised communities. **The Equity X Accelerator** (ExA) is our response. Built upon this input and ongoing consultations, this program will intersect with other areas of RADIUS to centre those who have been harmed the most by economic and social systems.

Our soon-to-be launched ExA programming will focus on tackling systemic challenges to entrepreneurship. It will ensure those most harmed are given access to and influence over economic systems to generate new

ideas, to re-generate those that already exist, and to (re)develop their own solutions to economic problems. The ExA will also be a space to reimagine the traditional accelerator by centring joy, rest, healing, restoration, and other holistic supports for the entrepreneur and by exploring a broader range of possible “ventures,” including for- and non-profits, coops, policy and advocacy innovations, movement building, funding vehicles, models, and other expressions of systems innovation. The ExA will centre equity into every sphere of its programming, while aiming to dismantle oppressive systems and building just, equitable, thriving communities.

*“By prioritising racial justice, psychological safety of aspiring social entrepreneurs and staff, by decolonizing access to resources and networks, and most importantly by ceding power to BIPOC leaders, an equity-centred incubator would support diverse founders that address the needs of BIPOC communities through their social enterprises, that create alternative, reciprocal, sustainable economic relationships that benefit the environment and the diverse communities of our society. A just economy supports the needs of all, not just the privileged few.”*

**Elena Yugai, Recommendations for Equity Centred Support for Social Enterprise StartUps (Internal Report prepared for RADIUS)**

*“The shifting political, social and economic trends happening with each passing year have further exacerbated systemic barriers for already marginalised communities - the traditional responses have been slower and not driven by community needs or consultation. That said, the social innovation space has allowed us to dream and create new solutions and interventions to systemic issues. Social innovation rooted in systems change is a slow and non-linear process, but I believe the eventual outcomes are long-lasting and improve the livelihoods of impacted communities on a far more profound scale.”*

**Yara Younis, Project Manager, Refugee Livelihood Lab  
—RADIUS**



**We invite you to follow along, connect, collaborate on, or partner with us as we continue to strive for a future centring equity for ALL.**

**It takes a village of dedicated humans and allies to do this work. It is up to us all, including RADIUS, to reach out beyond our silos and build lasting relationships between communities, government, higher education institutions, and businesses that leverage our respective strengths.**

**In the true nature of collaboration, we can work together to redistribute wealth and resources to communities facing barriers, so that they can build internal capacity and leadership to create, own, and lead social entrepreneurship solutions that matter to them.**

# ACKNOWLEDGEMENTS

Over the last 10 years, the work at RADIUS has been made possible by a variety of stakeholders including dedicated and passionate staff, contractors, mentors, community partners, and funding partners. This spirit of collaboration and partnerships has fuelled the impact we have seen in the last 10 years and which we hope will continue in the future.

In addition to foundational support from SFU and SFU's Beedie School of Business, we would especially like to acknowledge and show gratitude to the following partners:

- BC Ministry of Social Development and Poverty Reduction
- BCAA
- BDC
- Canada Mortgage and Housing Corporation
- Canadian Western Bank
- Charles Chang Institute for Entrepreneurship
- City of Surrey
- City of Vancouver
- CityStudio
- Columbia College
- Community Foundations of Canada
- Definity Insurance Foundation
- Discovery Foundation
- Djavad Mowafaghian Foundation
- Ecotrust Canada
- Employment and Social Development Canada
- EntrepreNorth
- Future Skills Centre
- Genome BC
- Global Agents for Change
- Gore Mutual Foundation
- Helder Ventures
- HSA Equality and Action Fund
- Immigration, Refugees and Citizenship Canada
- Innoweave
- JW McConnell Family Foundation
- LifeLabs
- Mariam Assefa Fund
- MaRS
- MEC
- Mitacs
- Nada El Masry
- Pacific Blue Cross Foundation
- Public Health Agency of Canada
- Raven Indigenous Capital Partners
- RBC Foundation
- RBC Future Launch
- Scotiabank
- Scott Shaw
- Seniors Services Society of BC
- Shaw Community Foundation
- Skookum Lab
- Social Innovation Canada
- Tosan Omatsola
- Vancity
- Vancity Community Foundation
- Vancouver Foundation
- Vesta Properties

